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UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

For Annual and Transition Reports Pursuant to Sections 13

or 15(d) of the Securities Exchange Act of 1934

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

For the Fiscal Year Ended December 31, 2001

OR

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

Commission File Number: 0-27352

HYBRIDON, INC.

(Exact name of Registrant as specified in its certificate of incorporation)

Delaware **(State or other jurisdiction of incorporation or organization)**	**04-3072298** **(I.R.S. Employer Identification No.)**
345 Vassar Street **Cambridge, Massachusetts** **(Address of principal executive offices)**	**02139** **(Zip Code)**

(617) 679-5500

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act: None

Securities registered pursuant to Section 12(g) of the Act:

Common Stock, $.001 par value

Preferred Stock Purchase Rights
(Title of Class)

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

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

The approximate aggregate market value of the voting stock held by non-affiliates of the registrant was $54.5 million as of March 27, 2002.

As of March 27, 2002, the registrant had 45,697,637 shares of Common Stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant's Proxy Statement with respect to the Annual Meeting of Stockholders to be held on June 19, 2002	Items 10, 11, 12 and 13 of Part III.

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FORM 10-K

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

PART I.

Item 1. *Business*

Overview

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

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

Antisense. We were founded in 1989 to explore the pioneering work of Paul Zamecnik, M.D., a member of our board of directors, who is regarded by many as the father of antisense. We remain a leader in antisense to this day, particularly in the key area of developing the novel chemical structures on which advanced, or second generation, antisense drug candidates are based.

The advanced antisense chemistries developed by us serve as the basis for second generation antisense drug candidates, which we believe have the following potential advantages over earlier antisense drug candidates:

- fewer side effects;
- greater stability in the body;
- greater potency; and
- greater potential for multiple routes of administration, including oral delivery.

We believe that our antisense technology is potentially applicable to a wide variety of therapeutic indications. We are currently focusing our antisense efforts on cancer and infectious diseases.

IMOs. Our IMO technology has evolved from our clinical experience with antisense oligonucleotides, segments of DNA, in which we learned that some types of oligonucleotides can act as potent immune modulators. Our early insights and those of others showed that oligonucleotides containing specific nucleotide segments, or motifs, mimic in the human body the immune stimulating effects of bacterial DNA. Using our DNA chemistry, we have designed and are developing a new, proprietary class of IMO compounds. We believe these compounds, which we refer to as second generation IMO compounds, may offer a number of potential advantages over earlier immunomodulatory oligonucleotides including:

- greater potency;
- greater specificity because second generation IMO compounds may be designed to induce different parts of the human immune system;
- reduced manufacturing costs; and
- the possibility of composition of matter patent protection.

We believe that our IMO compounds may be used as monotherapies in the treatment of conditions such as cancer, asthma/allergy and infectious diseases, as well as in combination therapies with antibodies, vaccines and chemotherapeutics.

Cancer Therapy Potentiation. Our cancer therapy potentiation technology is based on our discovery in preclinical studies that when oligonucleotides are administered in combination with certain marketed anticancer drugs, such as irinotecan, the activity of the co-administered anticancer drug is greatly improved. In the case of irinotecan, which is marketed in the United States under the name Camptosar®, we have observed increased antitumor activity in over 10 different animal tumor models. We recently commenced a Phase I/ II clinical trial combining our second generation antisense compound GEM 231 with irinotecan to determine whether the effects observed in animals can be achieved in humans.

Strategy. We plan to exploit our therapeutic technologies in several ways. In the near term, we intend to seek collaborations with pharmaceutical or biotechnology companies covering some of our product candidates which will allow us to share in the potential success of the product candidates through upfront payments, development milestones and royalties on net sales, without incurring significant additional development costs. Also, in the near term, we plan to advance the balance of our product pipeline by continuing the clinical development of GEM 231 and by bringing our lead IMO preclinical candidate HYB 2055 into the clinic ourselves. Over the longer term, we plan to continue to exploit our technologies through collaborations, but also to increase the number of products we develop and ultimately market on our own.

Our Product Pipeline

We are developing products based on three of our therapeutic technologies. The table below summarizes these products, the therapeutic use of these products and the development status of these products.

Product Description	Therapeutic Use	Development Status
IMO™		
HYB 2055 — second generation IMO for use as a monotherapy	Cancer	Preclinical candidate
HYB 2055 — second generation IMO for use in combination therapies	In combination with Vaccines, Antibodies	Preclinical candidate
Antisense		
GEM 231 — second generation antisense drug candidate targeted to PKA	Cancer	Phase I/ II
GEM 92 — second generation antisense drug candidate targeted to the gag region of HIV-1	HIV	Phase I
ORI-1001 — second generation antisense drug candidate targeted to HPV6[1]	Human Papillomavirus (HPV)	Phase I
GEM 240 — second generation antisense compound targeted to MDM2	Cancer	Preclinical candidate
GEM 220 — second generation antisense compound targeted to Vascular Endothelial Growth Factor (VEGF)	Cancer	Preclinical candidate
Cancer Therapy Potentiation		
GEM 231 — second generation antisense drug used to potentiate the antitumor activity of irinotecan	Cancer	Phase I/ II

1. Being developed by OriGenix Technologies, a Canadian company which we formed with an investor group. We owned approximately 25% of the capital of OriGenix as of March 15, 2002.

Developments in 2001 and Early 2002

In 2001 and early 2002, we focused our business activities on obtaining additional cash to fund the continued development of our technologies and product pipeline, reducing our debt, simplifying our capital

structure, strengthening our management team and seeking to enter into licensing and development collaborations.

Increased Cash Resources; Debt Reduction

Through a series of transactions over the course of 2001, we increased our cash resources from $8.5 million at December 31, 2000, which included $5.0 million of restricted cash, to $31.8 million at December 31, 2001 and reduced our debt from $15.3 million at December 31, 2000 to $1.6 million at December 31, 2001.

Collaboration and License Agreement with Isis Pharmaceuticals

In May 2001, we entered into a collaboration and license agreement with Isis Pharmaceuticals, Inc. Under the agreement, we licensed to Isis our antisense chemistry and delivery patents and patent applications. We retained the right to use these patents and patent applications in our own drug discovery and development efforts and in collaborations with third parties. In consideration of the license, Isis agreed to pay us $15.0 million in cash plus shares of Isis common stock in four installments intended to have an aggregate value of $19.5 million based on the stock price of the Isis common stock on the dates of issuance of the shares. In 2001, Isis paid $15.0 million to us in cash and issued to us 857,143 shares of its common stock having an aggregate fair market value on the dates on which title to the shares was received of $17.3 million. The remaining $4.5 million installment is due in 2003, subject to possible acceleration depending on the price of Isis' common stock.

In addition, under the agreement, we licensed from Isis specified antisense patents and patent applications. In return, we agreed to pay Isis a total of $6.0 million in cash or in shares of our common stock in three equal annual installments of $2.0 million beginning in May 2002. The license permits us to use the patents and patent applications licensed to us by Isis in our drug discovery and development efforts and in specified types of collaborations with third parties.

Early Conversion of Convertible Preferred Stock, Warrants and 8% Notes

In 2001, we significantly simplified our capital structure by exchanging shares of our common stock for all of our Series B preferred stock, several classes of our warrants and substantially all of our 8% notes. As a result of the exchange of our common stock for warrants as part of this program, the number of shares of our common stock underlying our outstanding warrants as a percentage of the number of shares of our common stock outstanding declined from 71% at December 31, 2000 to 13% at December 31, 2001.

New Chief Executive Officer

In August 2001, Stephen R. Seiler joined us as our Chief Executive Officer. Prior to joining us, Mr. Seiler served as Executive Vice President, Planning Investment & Development for Elan Corporation plc and was based in Elan's headquarters in Dublin, Ireland. Before joining Elan, Mr. Seiler had served as head of pharmaceutical investment banking at Paribas Capital Markets in London.

Commencement of Clinical Trial Combining GEM 231 with Irinotecan (Camptosar®)

In January 2002, we commenced a Phase I/ II clinical trial combining our second generation antisense compound GEM 231 with irinotecan. We are conducting the trial at Vanderbilt University Medical Center and the University of Chicago Medical Center.

EpiGenesis Collaboration

In April 2001, we commenced a collaboration with EpiGenesis Pharmaceuticals, Inc. under which we licensed antisense patents, patent applications and technology to EpiGenesis and agreed to collaborate with EpiGenesis on the development of up to five antisense drugs for the treatment of respiratory diseases. Under the collaboration, EpiGenesis will be responsible for all development and commercialization activities. We

received an upfront license fee from EpiGenesis and are entitled to annual minimum royalties, running royalties on product sales and a portion of any sublicense income.

Immunomodulatory Oligonucleotide (IMO™) Technology

Introduction

The human body's immune system protects the body against viruses, bacteria and other infectious agents. It also acts to identify and eliminate abnormal cells, such as cancer cells. The immune system acts through a variety of white blood cells which recognize pathogens and abnormal cells and initiate a series of interactions that activate specific genes to respond to the pathogens or abnormal cells.

It has been known for over a century that DNA from infectious agents, such as bacteria, is recognized by the immune system and boosts immune protection. In the past few years, scientists have identified the specific sequences in bacterial DNA that are recognized by the immune system. These sequences are recognized by a specific protein receptor called TLR9. Protein receptors are molecules on the surface or inside of cells that are sensitive to foreign entities. Once this recognition occurs, scientists generally believe that TLR9 triggers an immune response against the bacterial DNA through a cascade of cell signals which ultimately leads to the release of cytokines, chemokines, immunoglobulins and additional white blood cells to attack the infection.

IMOs are synthetic DNA that contain the specific sequences recognized by TLR9 alone or with other receptors and mimic bacterial DNA. As such, IMOs are recognized as bacterial DNA by the receptor TLR9, alone or with other receptors. As a result of this recognition by the receptors, IMOs can trigger an immune response similar to the immune response triggered by bacterial DNA.

Therapeutic Potential of IMO™s

Because IMOs generate immune responses in a variety of ways, they may provide therapeutic benefits in a number of areas:

- *Cancer.* Cancer cells are recognized as abnormal cells and trigger an immune response. However, this response is notoriously weak. The benefits of immunostimulation by bacterial DNA in cancer patients have been long recognized. For example, bacterial DNA is currently used to treat bladder cancer. IMOs may strengthen the immune response to cancer cells because they trigger a strong cellular immune response that targets and kills cancerous cells.

- *Vaccines and Antibody Therapies.* IMOs have the potential to be used in combination with vaccines or antibody therapies because the immune response initiated by IMOs increases the production of specific antibodies.

- *Asthma/ Allergies.* Certain white blood cells called cytokines are produced as a result of the activation of immune cells by IMOs. Cytokines suppress immune responses that result from asthmatic and allergic conditions while simultaneously promoting an immune response that further alleviates asthmatic and allergic conditions. As a result, IMOs have potential for use in the treatment of asthma, allergies and other diseases which result from an overreaction by the immune system.

- *Infection.* IMOs activate an immune defense against pathogens that is of a general nature and not directed at any specific microorganism. As a result, IMOs have the potential to be used prophylactically to ward off the danger of infection or to boost the immune response to an early-stage or ongoing infection.

IMO™ Chemistry

IMOs increase the expression of many proteins and affect the behavior of several kinds of cells. The profile of changes produced by IMOs is complex and varies somewhat from one oligonucleotide to another. Effects depend on the sequence and structure of the IMO.

Based on our extensive experience with DNA chemistry, we are developing a portfolio of second generation IMOs which have improved immunomodulatory properties compared with first generation IMOs. Our second generation IMOs contain specific sequences which have different effects on the immune system. These specific sequences contain synthetic motifs referred to as YpG and CpR. Studies in cell culture and in mice involving our YpG and CpR IMOs have revealed that certain modifications in the chemical make-up of the IMO can result in increased or decreased immunostimulatory activity. With the knowledge from these DNA medicinal-chemistry studies, we are designing second generation IMOs that induce specific cytokines to target specific disease indications. We are creating a portfolio of these second generation IMOs that can provide custom-designed IMOs as drug candidates for a variety of therapeutic or prophylactic uses.

IMO™ Drug Discovery and Development

As part of our strategy to commercialize our IMOs, we plan to enter into collaborations with other biotechnology and pharmaceutical companies that can use our IMOs, either in combination with other drugs or drug candidates owned by the potential collaborator, or as monotherapies. As a first step in the commercialization process, we have entered into a number of material transfer agreements with potential collaborators. These potential collaborators range in size from small biotechnology companies to global pharmaceutical companies.

Under the material transfer agreements, these companies are allowed to use our IMOs in their own experimental disease models. Once the experiments are complete, these companies share the results with us. Based on the results achieved to date by these third parties in *in vitro* and *in vivo* animal models, we believe our IMO compounds are effective in inducing immune responses. We are working on converting these relationships into collaborations.

In 2002, we selected HYB 2055 as the lead preclinical candidate in our IMO program. We are designing and conducting the preclinical studies necessary to submit an investigational new drug application, or IND, for HYB 2055, and expect to submit the IND by the end of 2002. We selected HYB 2055 because of the potency it demonstrated in *in vitro* and *in vivo* models. We anticipate that the first clinical program for HYB 2055, will be for use as a monotherapy in the treatment of cancer and in combination with vaccines and antibodies. We believe HYB 2055 also may have use as a monotherapy for other therapeutic indications, such as asthma and allergies and infectious diseases, and in combination therapies with chemotherapeutics.

Antisense Technology

Introduction

The heart, brain, liver and other organs in the human body function together to support life. Each microscopic cell within these organs produces proteins that affect how that cell functions within the organ, and ultimately how efficiently each organ functions within the body.

A normal cell produces a given set of normal proteins in the right amount for the body to function properly. A diseased cell produces inappropriate or mutant proteins, or produces the wrong amount of normal proteins. A cell produces inappropriate types or amounts of proteins when its DNA changes, either through mutation, as in many types of cancer cells, or by infection with a virus. In some instances, inappropriate proteins act directly to cause or support a disease. In other instances, inappropriate proteins interfere with proteins that prevent or combat disease. Most traditional drugs are designed to interact with protein molecules that are already present in the body and that cause or support disease. Antisense drugs are designed to work at an earlier stage to inhibit production of disease-causing or disease-supporting proteins.

The full complement of human genes, known as the human genome, contains the information required to produce all human proteins. A copy of the complete human genome is present in each cell, and each cell makes proteins based on its copy of the genome. The information that controls a cell's production of a specific protein is contained in the gene relating to that protein. Each gene is made up of two intertwined strands of DNA that form a structure called a "double helix." Each strand of DNA consists of a string of individual DNA building blocks called nucleotides, arranged in a specific sequence. It is the sequence of nucleotides that

contains genetic information. One of the paired strands of the double helix contains the information that directs the composition of a specific protein, and is called the "coding" strand. The other strand, the "non-coding" strand, contains a different but complementary sequence of nucleotides.

Cells make proteins in a two-stage process. First, the cell creates a molecule of messenger RNA consisting of a string of nucleotides in a sequence that is the exact mirror image of, or complementary to, the sequence of the coding strand of DNA in the double helix. This messenger RNA strand is called the "sense" sequence. In the next step, the cell produces proteins based on the information contained in the messenger RNA.

Conventional Drugs

Most drugs are chemicals that stimulate or suppress the function of a particular molecule, usually a protein, which causes a disease. The drug acts by binding to the target molecule, often at as few as two or three points of contact with the target molecule. Once the binding takes place, the disease-causing activity of the target molecule is stopped.

Frequently, however, sites on other non-target molecules present in the body resemble the target-binding site of a disease-causing molecule enough to permit the conventional drug to bind to some degree to those non-target molecules. Most drug side effects arise due to this drug interaction with molecules other than the target molecule. This lack of selectivity can result in unwanted side effects, potentially requiring lower doses of the drug, and thus, decreased effectiveness.

Another characteristic of conventional drugs is that developing them is a time-consuming and expensive process. For every compound that is found to be effective and have tolerable side effects, thousands may be investigated and rejected. In the traditional drug discovery process, this may take many years and millions of dollars.

Antisense Drugs

A synthetic DNA molecule with a sequence exactly complementary to the sense sequence of the messenger RNA of a specific gene can bind to and inhibit the function of that messenger RNA. This exact complement of the sense messenger RNA sequence is referred to as an "antisense" sequence. By inhibiting the function of the relevant messenger RNA, it is possible to decrease or eliminate the production of disease-causing or disease-supporting proteins. Moreover, the nucleotide sequence of an antisense synthetic DNA complementary to its target sequence on the messenger RNA can be designed in a manner such that the antisense synthetic DNA forms a large number of bonds at the target site, typically 30 or more, as compared to as few as two to three bonds for conventional drugs. This allows it to form a strong bond with the messenger RNA.

Antisense drug development technology involves the design and synthesis of synthetic DNA to bind and inhibit the activity of messenger RNA which codes for the production of disease-associated proteins. We believe that drugs based on antisense technology may be more effective and cause fewer side effects than conventional drugs because antisense drugs are designed to intervene in a highly specific fashion in the production of proteins, rather than after the proteins are made.

Recent years have seen a dramatic increase in the understanding of the role of genes in producing proteins associated with disease. This knowledge has come from many sources, including the human genome project and the work being done by academic institutions and pharmaceutical companies all over the world. As a consequence, we believe that the pharmaceutical industry is increasingly becoming an environment that is rich in potential drug targets. The challenge for the future will be to create drugs effective against these newly discovered gene targets. We believe that the increase in the number of potential targets provides us with increasing opportunities to employ our antisense technology. Once a gene associated with a disease-associated protein is identified, it should be possible to design a synthetic DNA with an antisense mechanism and to improve the pharmaceutical effects of that synthetic DNA by chemical modification.

Hybridon Antisense Technology

Our antisense technology is based on our advanced chemistries, which enable us to alter the chemical makeup of the synthetic DNA backbone in a manner designed to make synthetic DNA safer and more stable without adversely affecting its ability to inhibit the production of disease-associated proteins. A synthetic DNA backbone is the linkage between the nucleosides in a strand of DNA. Oligonucleotides which contain a natural backbone are not suitable for use as drugs because they are rapidly degraded by enzymes before they reach the intended target. To be an effective antisense agent, the oligonucleotide must be chemically modified to increase its stability against these enzymes.

We and other companies have developed oligonucleotides which are chemically modified by replacing certain oxygen atoms on the backbone with sulfur atoms. We refer to oligonucleotides with this modification as first generation antisense compounds. Although one of our competitors in the antisense field currently markets a first generation antisense drug to treat a viral infection through local delivery and two other first generation antisense drugs are in late-stage clinical trials for cancer, we believe that the first generation antisense chemistry in these drugs limits their applicability because first generation antisense compounds are relatively toxic, degrade in the human body quickly and are less suitable for oral administration.

We have designed and created families of advanced synthetic DNA chemistries, including DNA/ RNA combinations, called hybrid or mixed backbone chemistries. We believe that antisense compounds based on these advanced chemistries, which we refer to as second generation antisense compounds, will show favorable pharmaceutical characteristics and significantly improved therapeutic utility as compared to first generation antisense compounds. We believe that second generation antisense compounds may exhibit the following desirable characteristics in comparison with first generation compounds:

- fewer side effects;
- greater stability in the body, enabling patients to take doses less frequently;
- greater potency, permitting patients to take lower doses; and
- greater potential for multiple routes of administration, including by injection, orally or topically.

Antisense Drug Development and Discovery

We believe that our antisense technology is potentially applicable to a wide variety of therapeutic indications. We are focusing our drug development and discovery efforts on developing second generation antisense drugs for cancer and infectious diseases. We currently have two antisense compounds in the clinical phase of development and a number of other compounds in preclinical development.

Clinical Development

GEM 231 for the Treatment of Cancer. GEM 231 is a second generation antisense compound for the treatment of cancer. We are currently conducting Phase I/ II clinical trials of GEM 231 as both a monotherapy and a combination therapy with currently marketed cancer therapies including irinotecan, which is marketed in the United States under the name Camptosar®, paclitaxel, which is marketed in the United States under the name Taxol®, and docetaxel, which is marketed in the United States under the name Taxotere®. The trials are intended to evaluate the safety and pharmacokinetics of GEM 231 as a monotherapy and as a combination therapy.

GEM 231 is an inhibitor of the RIa subunit of protein kinase A. Protein kinase A is a protein that plays a key role in the control of the growth and differentiation of mammalian cells. Studies have shown that levels of protein kinase A are increased in the cells of many human cancers and that high levels of protein kinase A correlate with unfavorable clinical outcomes in patients with breast and ovarian cancers.

We have previously conducted a Phase I clinical trial of GEM 231 to evaluate its safety in multiple doses in oncology patients. The trial explored the maximum tolerated dose of GEM 231 for both single doses and multiple doses. Even in high doses, GEM 231 did not show the side effects normally associated with most

current cancer treatments or with first generation antisense compounds. We believe that this trial was the first systemic administration of a second generation antisense compound to oncology patients.

GEM 92 for the Treatment of HIV-1. GEM 92 is a second generation antisense compound that is targeted to the gag region of the human immunodeficiency virus HIV-1. Based on the clinical experience we gained with GEM 91, our first generation antisense compound that also targeted the gag region of HIV-1, we created chemical modifications to improve the side effects profile and to enhance the stability of the compound. In 1997, we completed a pilot Phase I clinical study in Europe of GEM 92. All doses given in the pilot study were well tolerated by the patients. Further, GEM 92 was detected in the blood after both oral dosing and injection, suggesting that GEM 92 could be developed as an oral drug. Both GEM 92's medicinal approach and genetic target are unique in that no antisense drug has been approved for the treatment of AIDS, and no other drug has the same target on the HIV-1 genome. We are currently seeking to out-license GEM 92 to a third party for further development and do not plan to continue its development on our own.

Preclinical Development

We have a number of antisense compounds in the preclinical testing phase of development. The two principal antisense compounds which we have in preclinical development are:

- GEM 220 is a second generation antisense compound directed against Vascular Endothelial Growth Factor or VEGF. VEGF is a growth factor that contributes to the growth of new blood vessels, which is a process called angiogenesis. In diseases such as cancer, the growth of new blood vessels is critical to the growth of tumors. Because GEM 220 is designed to inhibit VEGF, we believe GEM 220 can inhibit angiogenesis in malignant tumors and in other disease states such as macular degeneration and psoriasis.

- GEM 240 is a second generation antisense compound designed to inhibit mdm2. Mdm2 is a protein found in increased levels in many human cancers. Mdm2 binds to tumor suppressor protein p53, which results in reduced suppression of tumor cells by p53 and thereby contributes to the growth of cancer cells. In animal studies, GEM 240 has been shown to decrease levels of mdm2 in many types of cancer cells, including colon cancer cells, breast cancer cells and brain cancer cells, and in turn to stabilize p53 levels in these cells.

Cancer Therapy Potentiation

Despite the number of advances that have been made in the treatment of human cancers, currently marketed anticancer therapies often fail to produce sustained antitumor benefits to a cancer patient. In addition, standard therapies available to treat malignancies, such as drugs that work due to their toxicity to cells, and other damaging treatments, like radiation, often produce substantial toxic side effects. To address these problems, oncologists have increasingly employed treatment regimens that include a combination of therapies, each of which has demonstrated antitumor activity.

As part of our efforts to develop antisense drugs which could be used as part of cancer combination therapies, we discovered that the combination of oligonucleotide compounds with certain types of anticancer therapies, such as the anticancer prodrug irinotecan (Camptosar®), could enhance or potentiate the antitumor activity of the anticancer therapy included in the combination. These types of anticancer therapies are known as prodrugs because after administration they are metabolized by the body to produce their most active forms.

We are focusing a significant portion of our antitumor research efforts on the combination of an antisense oligonucleotide with irinotecan. Irinotecan is a prodrug that is altered primarily in the liver to generate an active product designated as SN38. SN38 is considered to be the molecule responsible for most of the antitumor activity of irinotecan. SN38 is also implicated in production of the major side effects encountered clinically with irinotecan. When we tested irinotecan in animals in combination with several different oligonucleotides, we noted both incremental non-antisense and antisense specific tumor activity. In addition, in over ten animal tumor models, the co-administration of GEM 231 with irinotecan resulted in enhanced and prolonged suppression of tumor growth in comparison with irinotecan alone.

As part of our ongoing Phase I/ II clinical trials of GEM 231, described under "Antisense Technology — Antisense Drug Discovery and Development — Clinical Development — GEM 231 for the Treatment of Cancer," we are studying the combination of GEM 231 and irinotecan in patients with solid tumors. We are conducting the trials at Vanderbilt University Medical Center and the University of Chicago Medical Center.

Cyclicons

With the advent of the human genome project, researchers have identified thousands of genes whose functions have not yet been established. In order to design drugs targeting these genes, it is important to understand the role of each gene in normal and disease conditions.

We have an established program in which our synthetic DNA can be used to determine if a specific gene is a good target for drugs. Our synthetic DNA, designed as antisense molecules, is especially useful in these studies because of its enhanced ability to interact with very specific targets.

We have developed a novel circular-structured oligonucleotide, which we refer to as a Cyclicon, for use in drug target validation, drug discovery and as a probe and primer in PCR amplification. PCR amplification is an important process that is widely used in academic laboratories and the biopharmaceutical industry to produce many DNA copies from a single strand of DNA. We have designed our Cyclicons so that when the circular-structured oligonucleotide binds to messenger RNA, the circular structure of the oligonucleotide is disrupted and fluorescence is emitted. As a result, drug developers can use our Cyclicons as a tool to measure when and where reactions between an antisense sequence and messenger RNA occur.

Research and Development

For the years ended December 31, 2001, 2000 and 1999, we spent approximately $4.9 million, $3.5 million and $4.8 million, respectively, on company-sponsored research and development activities. In addition, for the years ended December 31, 2000, and 1999, we spent approximately $82,500 and $965,000, respectively, on customer-sponsored research and development activities with funds provided by third parties.

Patents, Proprietary Rights and Licenses

Patents and Proprietary Issues

Our success depends in part on our ability to obtain and maintain proprietary protection for our product candidates, technology and know-how, to operate without infringing the proprietary rights of others and to prevent others from infringing our proprietary rights. Our policy is to seek to protect our proprietary position by, among other methods, filing U.S. and foreign patent applications related to our proprietary technology, inventions and improvements that are important to the development of our business. We also rely on trade secrets, know-how, continuing technological innovation and in-licensing opportunities to develop and maintain our proprietary position.

As of March 15, 2002, we owned or exclusively licensed 76 issued U.S. patents and 60 U.S. patent applications and 114 corresponding foreign patents and over 140 corresponding foreign patent applications. The issued patents held or exclusively licensed by us include composition of matter patents on our own advanced DNA chemistries covering the use of these chemistries with various genes or sequences, patents covering therapeutic targets, patents covering immune modulation and patents covering oral and other routes of administering our synthetic DNA. These issued patents expire at various dates ranging from 2006 to 2019.

The patent positions of companies like ours are generally uncertain and involve complex legal and factual questions. Our ability to maintain and solidify our proprietary position for our technology will depend on our success in obtaining effective claims and enforcing those claims once granted. We do not know whether any of our patent applications or those patent applications which we license will result in the issuance of any patents. Our issued patents and those that may issue in the future, or those licensed to us, may be challenged, invalidated or circumvented, and the rights granted thereunder may not provide us proprietary protection or competitive advantages against competitors with similar technology. Furthermore, our competitors may independently develop similar technologies or duplicate any technology developed by us. Because of the extensive time required for development, testing and regulatory review of a potential product, it is possible

that, before any of our products can be commercialized, any related patent may expire or remain in force for only a short period following commercialization, thus reducing any advantage of the patent, which could adversely affect our ability to protect future drug development and, consequently, our operating results and financial position.

Because patent applications in the United States and many foreign jurisdictions are typically not published until eighteen months after filing and because publications of discoveries in the scientific literature often lag behind actual discoveries, we cannot be certain that we were the first to make the inventions claimed in each of our issued patents or pending patent applications, or that we were the first to file for protection of the inventions set forth in these patent applications.

Litigation may be necessary to defend against or assert claims of infringement, to enforce patents issued to us, to protect trade secrets or know-how owned by us, or to determine the scope and validity of the proprietary rights of others. In addition, interference proceedings declared by the U.S. Patent and Trademark Office may be necessary to determine the priority of inventions with respect to our patent applications. Litigation or interference proceedings could result in substantial costs to and diversion of effort by us, and could have a material adverse effect on our business, financial condition and results of operations. These efforts by us may not be successful.

Trade Secrets

We may rely, in some circumstances, on trade secrets to protect our technology. However, trade secrets are difficult to protect. We seek to protect our proprietary technology and processes, in part, by confidentiality agreements with our employees, consultants, scientific advisors and other contractors. There can be no assurance that these agreements will not be breached, that we will have adequate remedies for any breach, or that our trade secrets will not otherwise become known or be independently discovered by competitors. To the extent that our employees, consultants or contractors use intellectual property owned by others in their work for us, disputes may also arise as to the rights in related or resulting know-how and inventions.

Licenses

We are a party to a number of royalty-bearing license agreements under which we have acquired rights to patents, patent applications and technology of third parties. Our principal license agreement is with University of Massachusetts Medical Center. Under the terms of our license agreement with University of Massachusetts Medical Center, we are the worldwide, exclusive licensee under several U.S. issued patents and various patent applications owned by University of Massachusetts Medical Center relating to antisense 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.

Seventeen of the issued U.S. patents and 28 of the issued foreign patents licensed by us from University of Massachusetts Medical Center broadly claim the use of our hybrid antisense oligonucleotides and ribozymes. The other issued U.S. patents covered by the license agreement include claims covering composition and uses of oligonucleotides based on advanced chemistries, and compositions of certain modified oligonucleotides that are useful for diagnostic tests or assays. The patents licensed to us by University of Massachusetts Medical Center expire at dates ranging from 2006 to 2019. This license expires upon the expiration of the last to expire of the patents covered by the license.

Other license agreements under which we are the licensee include:

- an exclusive license agreement with McGill University covering patent applications relating to synthetic DNA and DNA Methyltransferase,
- an exclusive license agreement with Massachusetts General Hospital covering patents and patent applications jointly owned by us and Massachusetts General Hospital directed to compositions and use of antisense applied to Alzheimer's disease,
- an exclusive license agreement with Louisiana State University covering patents and patent applications jointly owned by us and Louisiana State University relating to MDM2,

- a non-exclusive license agreement with Genzyme Corporation covering patents and patent applications relating to MDM2,
- a non-exclusive license agreement with Integrated DNA Technologies, Inc., covering patents and patent applications that broadly claim chemical modifications to synthetic DNA, and
- an exclusive license agreement with Dr. Yoon S. Cho-Chung covering patents and patent applications relating to protein kinase A.

Under these licenses we are obligated to pay royalties on net sales by us of products or processes covered by a valid claim of a patent or patent application licensed to us. We also are required in some cases to pay a specified percentage of any sublicense income that we may receive. These licenses impose various commercialization, sublicensing, insurance and other obligations on us. Our failure to comply with these requirements could result in termination of the licenses. Each of these licenses terminates upon the expiration of the last to expire of the patents covered by the license.

Corporate Alliances and Spinouts

An important part of our business strategy is to enter into research and development collaborations, licensing agreements and other strategic alliances, primarily with biotechnology and pharmaceutical corporations, to develop and commercialize drugs based on our technologies. We have also established spinout companies in order to obtain external funding for the continued development of our antisense technology in specific disease fields.

Isis Pharmaceuticals, Inc.

In May 2001, we entered into a collaboration and license agreement with Isis. Under the agreement, we granted Isis a license, with the right to sublicense, to our antisense chemistry and delivery patents and patent applications. We retained the right to use these patents and patent applications in our own drug discovery and development efforts and in collaborations with third parties. In consideration of the license, Isis agreed to pay us $15.0 million in cash plus shares of Isis common stock in four installments intended to have an aggregate value of $19.5 million based on the stock price of the Isis common stock on the dates of issuance of the shares. In 2001, Isis paid $15.0 million to us in cash and issued to us 857,143 shares of its common stock having an aggregate fair market value on the dates on which title to the shares was received of $17.3 million. The remaining $4.5 million is due in 2003, subject to possible acceleration depending on the price of Isis' common stock. Isis has also agreed to pay us a portion of specified sublicense income it receives from specified types of sublicenses of our patents and patent applications.

Under the agreement, we licensed from Isis specified antisense patents and patent applications, principally Isis' suite of Rnase H patents. We have the right under the agreement to use these patents and patent applications in our drug discovery and development efforts and in specified types of collaborations with third parties. In consideration of this license, we agreed to pay Isis a total of $6.0 million in cash or in shares of our common stock in three equal annual installments of $2.0 million beginning in May 2002. We also agreed to pay Isis a nominal annual maintenance fee and a modest royalty on sales of products covered by specified patents and patent applications sublicensed to us by Isis.

The licenses granted under the Isis agreement terminate upon the last to expire of the patents and patent applications licensed under the agreement. We may terminate at any time the sublicense by Isis to us of the patents and patent applications for which we have maintenance fee and royalty obligations.

EpiGenesis Pharmaceuticals, Inc.

In April 2001, we commenced a collaboration with EpiGenesis under which we licensed antisense patents, patent applications and technology to EpiGenesis and agreed to collaborate with EpiGenesis on the

development of up to five antisense compounds for the treatment of respiratory diseases. Under the collaboration, EpiGenesis will be responsible for all development and commercialization activities. We received an upfront license fee from EpiGenesis and are entitled to annual minimum royalties, running royalties on product sales and a portion of any sublicense income. The agreement may be terminated by either party upon a material breach of the agreement or by EpiGenesis at any time upon 90 days prior written notice.

OriGenix Technologies Inc.

In January 1999, we and three Canadian institutional investors formed OriGenix to develop and market drugs for the treatment of infectious diseases, with an initial focus on viral diseases. In connection with the formation of OriGenix, we made a cash investment in OriGenix and granted to OriGenix an exclusive, royalty-free worldwide license to our antisense patents, patent applications and technology for the treatment of human papilloma virus, or HPV, and hepatitis B virus infections. In consideration for the cash investment and the license, we received shares of capital of OriGenix. As of March 15, 2002, we owned approximately 25% of the outstanding shares of OriGenix.

HPV infection can cause a variety of warts, including benign genital warts. HPV infection can also lead to cervical cancer. Hepatitis B infections can lead to liver cirrhosis and cancer of the liver. OriGenix has conducted a Phase I clinical trial of ORI-1001 in 30 human volunteers to evaluate the safety of ORI-1001. The results of the trial indicated that ORI-1001 did not cause irritation in the volunteers.

Prior to the sale of Hybridon Specialty Products, or HSP, to Avecia Biotechnology, we were the sole and exclusive supplier of oligonucleotides to OriGenix. In September 2000, in connection with the sale of HSP to Avecia, we and Avecia agreed that for so long as our supply agreement is in effect with Avecia, OriGenix would have the right to purchase oligonucleotides from Avecia on the same terms as we do.

MethylGene Inc.

In 1996, we and three Canadian institutional investors formed MethylGene Inc. In connection with the formation of MethylGene, we made a cash investment in MethylGene and granted to MethylGene an exclusive, royalty-free worldwide license to antisense patents, patent applications and technology owned or exclusively licensed by us from University of Massachusetts Medical Center and McGill University to develop and market the following:

- antisense compounds which inhibit the production of DNA methyltransferase for any indication;
- other methods of inhibiting DNA methyltransferase for any indication; and
- antisense compounds to inhibit up to two additional molecular targets for any indication.

In consideration for the cash investment and the license, we received shares of capital of MethylGene. In 2001, we sold all of our shares in MethylGene for an aggregate purchase price of $7.2 million.

Prior to the sale of HSP to Avecia, we were the sole and exclusive supplier of oligonucleotides to MethylGene. In September 2000, in connection with the sale of HSP to Avecia, we and Avecia agreed that for so long as our supply agreement is in effect with Avecia, MethylGene would have the right to purchase oligonucleotides from Avecia on the same terms as we do.

Academic and Research Collaborations

We have entered into a number of collaborative research relationships with independent researchers, leading academic and research institutions and U.S. government agencies. These research relationships allow us to augment our internal research capabilities and obtain access to specialized knowledge and expertise.

In general, our collaborative research agreements require us to pay various amounts to support the research. We usually procure the synthetic DNA for the collaboration, which the collaborator then tests. If in the course of conducting research under its agreement with us a collaborator, solely or jointly with us, creates any invention, we generally have an option to negotiate an exclusive, worldwide, royalty-bearing license to the

invention. Inventions developed solely by our scientists in connection with a collaborative relationship generally are owned exclusively by us. Most of these collaborative agreements are nonexclusive and can be cancelled with limited notice.

Government Regulation

The testing, manufacturing, labeling, advertising, promotion, export, and marketing, among other things, of drugs are extensively regulated by governmental authorities in the U.S. and other countries. In the U.S., the FDA regulates pharmaceutical products under the Federal Food, Drug, and Cosmetic Act, or FDCA, and other laws. Both before and after approval is obtained, violations of regulatory requirements may result in various adverse consequences, including the FDA's delay in approving or refusal to approve a drug, suspension or withdrawal of an approved product from the market, operating restrictions, and the imposition of civil or criminal penalties.

The steps required before a product may be approved for marketing in the U.S. generally include (i) preclinical laboratory tests and animal tests, (ii) the submission to the FDA of an IND for human clinical testing, which must become effective before human clinical trials may begin, (iii) adequate and well-controlled human clinical trials to establish the safety and efficacy of the product, and (iv) satisfactory completion of an FDA inspection of the manufacturing facility or facilities at which the product is made to assess compliance with the FDA's good manufacturing practices regulations, or GMP.

Preclinical tests include laboratory evaluation of the product, as well as animal studies to assess the potential safety and efficacy of a drug. The results of the preclinical tests, together with manufacturing information and analytical data, are submitted to the FDA as part of an IND, which must become effective before human clinical trials may be commenced. The IND will automatically become effective 30 days after its receipt by the FDA, unless the FDA before that time raises concerns or questions about the conduct of the trials as outlined in the IND. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before clinical trials can proceed. We cannot be sure that submission of an IND will result in the FDA allowing clinical trials to begin.

Clinical trials typically are conducted in three sequential phases, but the phases may overlap or be combined, and certain phases may be eliminated. In Phase I, the initial introduction of the drug into human subjects, the drug is usually tested for safety (adverse effects), dosage tolerance, and pharmacologic action. Phase II usually involves studies in a limited patient population to (i) evaluate preliminarily the efficacy of the drug for specific, targeted conditions, (ii) determine dosage tolerance and appropriate dosage and (iii) identify possible adverse effects and safety risks. Phase III trials generally further evaluate clinical efficacy and test further for safety within an expanded patient population. We, or the FDA, may suspend clinical trials at any time on various grounds, including a finding that the patients are being exposed to an unacceptable health risk.

The results of the preclinical and clinical studies, together with other detailed information, including information on the manufacture and composition of the product, are submitted to the FDA as part of a new drug application for approval prior to the marketing and commercial shipment of the product. The FDA may deny a new drug application if all applicable regulatory criteria are not satisfied or may require additional clinical, toxicology or manufacturing data. Even after a new drug application results in approval to market a product, the FDA may withdraw product approval if compliance with regulatory standards is not maintained or if safety problems occur after the product reaches the market. In addition, the FDA requires surveillance programs to monitor the consistency of manufacturing and the safety of approved products that have been commercialized. The agency has the power to require changes in labeling or to prevent further marketing of a product based on new data that may arise after commercialization. Also, new federal, state, or local government requirements may be established that could delay or prevent regulatory approval of our products under development.

We will also be subject to a variety of foreign regulations governing clinical trials and sales of our products. Whether or not FDA approval has been obtained, approval of a product by the comparable regulatory authorities of foreign countries must be obtained prior to the commencement of marketing of the product in those countries. The approval process varies from country to country and the time may be longer or

shorter than that required for FDA approval. For marketing outside the U.S., we are also subject to foreign regulatory requirements governing human clinical trials and marketing approval for products. The requirements governing the conduct of clinical trials, product licensing, pricing, and reimbursement vary greatly from country to country.

In addition to regulations enforced by the FDA, we are also subject to regulation under the Occupational Safety and Health Act, the Toxic Substances Control Act, the Resource Conservation and Recovery Act, and other present and potential future federal, state, or local regulations. Our research and development activities involve the controlled use of hazardous materials, chemicals and various radioactive compounds. Although we believe that our safety procedures for handling and disposing of such materials comply with the standards prescribed by state and federal regulations, the risk of accidental contamination or injury from these materials cannot be completely eliminated. In the event of such an accident, we could be held liable for any damages that result and any such liability could exceed our resources.

Manufacturing

Until September 2001, when we sold HSP to Avecia, we manufactured on our own all of the oligonucleotide compounds that we needed for research, preclinical and clinical purposes. As part of the sale, we entered into a supply agreement with Avecia under which we may purchase our requirements for oligonucleotide compounds from Avecia at a preferential price until March 2003.

We expect that, following the termination of the supply agreement with Avecia, we will seek to enter into arrangements with Avecia or other third-party manufacturers to supply us with the oligonucleotide compounds that we need for our research, preclinical, clinical and commercial supply purposes.

Competition

We expect that our product candidates will address several different markets defined by the potential indications for which these product candidates are developed and ultimately approved by regulatory authorities. For several of these indications, these product candidates will be competing with products and therapies either currently existing or expected to be developed, including IMO compounds and antisense oligonucleotides developed by third parties.

Competition among these products and therapies will be based, among other things, on

- product efficacy,
- safety,
- reliability,
- availability,
- price, and
- patent position.

The timing of market introduction of our products and competitive products will also affect competition among products. We also expect the relative speed with which we can develop products, complete the clinical trials and approval processes and supply commercial quantities of the products to the market to be an important competitive factor. Our competitive position will also depend upon our 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, preclinical and clinical and commercial activities relating to technologies and products that are similar to our technologies and products, including large pharmaceutical companies with programs in IMOs or antisense technology and biotechnology companies with similar programs, such as Isis, Genta Incorporated,

Coley Pharmaceutical Group and Dynavax Technologies Corp. Many of our competitors, particularly the pharmaceutical and large biotechnology companies with which we compete, have substantially greater financial, technical and human resources than we have. In addition, many of our competitors have significantly greater experience than we have in undertaking preclinical studies and human clinical trials of new pharmaceutical products, obtaining FDA and other regulatory approvals of products for use in health care and manufacturing, marketing and selling approved products.

Employees

As of March 15, 2002, we employed 22 individuals full-time, including 14 employees in research and development. Sixteen of our employees had M.D.s and/or Ph.D.s. None of our employees is covered by a collective bargaining agreement, and we consider relations with our employees to be good.

Item 2. *Properties*

We lease approximately 26,000 square feet of laboratory and office space, including 6,000 square feet of specialized preclinical lab space, in Cambridge, Massachusetts under a lease that expires April 30, 2007. We believe these facilities are adequate to accommodate our needs for the near term.

Item 3. *Legal Proceedings*

We are not party to any material legal proceedings.

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

No matters were submitted to a vote of security holders in the quarter ended December 31, 2001.

Executive Officers of Hybridon

The following table sets forth the names, ages and positions of our executive officers and significant employees as of March 15, 2002:

Name	Age	Position
Stephen R. Seiler	45	Chief Executive Officer and Director
Sudhir Agrawal, D. Phil	48	President, Chief Scientific Officer and Director
Robert G. Andersen	51	Chief Financial Officer, Vice President of Operations, Treasurer and Secretary
R. Russell Martin, M.D.	66	Senior Vice President of Drug Development
Jinyan Tang, Ph.D.	58	Vice President of Chemistry

Stephen R. Seiler was appointed our Chief Executive Officer and elected to our board of directors on September 1, 2001. Prior to joining us, Mr. Seiler served as Executive Vice President, Planning Investment & Development at Elan Corporation plc from 1995 to 2001. From 1991 to 1995, Mr. Seiler worked as an Investment Banker at Paribas Capital Markets in both London and New York. He was founder and head of Paribas's pharmaceutical investment banking group. Mr. Seiler received a J. D. from Georgetown University with Honors in 1980 and a B.A. summa cum laude in History from the University of Notre Dame in 1977. He is a member of the bar in New York, Arizona, and Missouri.

Dr. Sudhir Agrawal joined us in 1990 and has served as our Chief Scientific Officer since January 1993, our Senior Vice President of Discovery since March 1994, our President since February 2000 and as a director since March 1993. Prior to his appointment as Chief Scientific Officer, he served as our Principal Research Scientist from February 1990 to January 1993 and as our Vice President of Discovery from December 1991 to January 1993. He served as Acting Chief Executive Officer from February 2000 until September 2001. Prior to joining us, 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 D. Phil in chemistry in 1980, an M.Sc in organic chemistry in 1975 and a B.Sc. in chemistry, botany and zoology in 1973

from Allahaban University in India. Dr. Agrawal is one of the most published researchers in the field of antisense technology. He is a member of the editorial board of Antisense Research & Development Journal, Trends in Molecular Medicine, Investigational Drug Journal, and Current Cancer Drug Targets, and is associate editor of Molecular Biotechnology.

Robert G. Andersen joined us in November 1996 and has served as our Vice President of Operations since 1997, our Treasurer since March 1998 and our Chief Financial Officer since February 2000. From November 1996 to 1997, he served as our Vice President of Systems Engineering and Management Information Systems. Mr. Andersen also serves as a director of OriGenix, Inc., our spin-off company based in Montreal, Canada. Prior to joining us, Mr. Andersen served in a variety of positions at Digital Equipment Corporation from 1986 to 1996, most recently as Group Manager of the Applied Objects Business Unit. From 1978 to 1986, Mr. Andersen held technical management positions at United Technologies Corporation, most recently as Director of Quality for Otis Elevator Company's European Operations and Worldwide Director of Controls. Mr. Andersen received his B.E.E. magna cum laude in Electrical Engineering from The City College of New York in 1972 and an M.S. in Management from Northeastern University in 1978. He is also a graduate of the United Technologies Advanced Studies Program.

Dr. R. Russell Martin joined us in 1994 and has served as our Senior Vice President of Drug Development since 1998. He served as our Vice President of Drug Development from 1996 through 1998 and our Vice President of Clinical Research from 1994 through 1996. Prior to joining us, Dr. Martin served in a variety of positions at Bristol-Myers Squibb from 1983 to 1993, most recently as Vice President of Infectious Diseases Clinical Research. Dr. Martin received an A.B. degree from Yale University in 1956 and a M.D. degree from the Medical College of Georgia in 1960. From 1971 to 1983, he was on the faculty of Baylor College of Medicine, most recently as Professor of Medicine, Microbiology and Immunology. He is a Fellow of the American College of Physicians and of the Infectious Diseases Society of America.

Dr. Jinyan Tang joined us in 1991 and has served as our Vice President of Chemistry since 2000. Dr. Tang was our Vice President of Process Research and Development from 1995 to 1997 and Vice President of Production from 1997 to 2000. Prior to joining us, Dr. Tang served as Visiting Fellow at the Worcester Foundation from 1988 to 1991. Dr. Tang served as Visiting Research Professor at the University of Colorado in 1988 and Associate Professor at the Shanghai Institute of Biochemistry, Chinese Academy of Sciences from 1985 to 1988 studying oligonucleotide chemistry. Dr. Tang received a B.Sc. in Biochemistry in 1965 and a Ph.D. of Biochemistry in 1978 from the Shanghai Institute of Biochemistry, Chinese Academy of Sciences.

PART II.

Item 5. *Market For Registrant's Common Equity and Related Stockholder Matters*

(a) Market Information

Our common stock is quoted on the OTC Bulletin Board under the symbol "HYBN.OB". Quotes on the OTC Bulletin Board may reflect inter-dealer prices, without retail markups, markdowns or commissions and do not necessarily represent actual transactions.

The following table sets forth, for the periods indicated, the high and low sales prices per share of our common stock during each of the quarters set forth below as reported on the OTC Bulletin Board since January 1, 2000:

	High	Low
2001		
First Quarter	$0.72	$0.41
Second Quarter	1.51	0.41
Third Quarter	1.30	0.70
Fourth Quarter	2.01	0.71
2000		
First Quarter	$6.88	$0.84
Second Quarter	3.44	0.75
Third Quarter	1.31	0.50
Fourth Quarter	1.02	0.28

The reported closing sales price of our common stock on the OTC Bulletin Board on March 15, 2002 was $1.54 per share.

The number of common stockholders of record on March 15, 2002 was 386.

We have never declared or paid cash dividends on our capital stock and we do not expect to pay any cash dividends on our capital stock in the foreseeable future. The indenture under which we issued 9% convertible subordinated notes in April 1997 limits our ability to pay dividends or make other distributions on our common stock or to pay cash dividends on our convertible preferred stock. As of March 15, 2002, $1.3 million in total principal amount of the 9% notes remained outstanding.

Our Series A preferred stock pays dividends at 6.5% per year, payable semi-annually in arrears. These dividends may be paid either in cash or in additional shares of Series A preferred stock, at our discretion subject to the restriction under the indenture described above. As of March 15, 2002, we have only paid these dividends in shares of Series A preferred stock.

(b) Sales of Unregistered Securities

Sales by us during the year ended December 31, 2001 of securities that were not registered under the Securities Act of 1933, as amended, consist of:

- During 2001, holders of 26,079 shares of our Series A preferred stock converted such shares into 613,624 shares of our common stock. We relied upon Section 3(a)(9) of the Securities Act of 1933, as amended, as an exemption from registration for the newly issued common stock.

- On April 9, 2001, we issued 46,429 shares of our common stock to Dr. Paul C. Zamecnik, a member of our board of directors, in lieu of $26,000 in director and consulting fees. On December 17, 2001, we issued 16,765 shares of our common stock to Dr. Zamecnik in lieu of $28,500 in director and consulting fees. We relied upon Section 4(2) of the Securities Act of 1933, as amended, as an exemption from registration for the newly issued common stock.

- Between May 14, 2001 and May 24, 2001,we issued 178,571 shares of our common stock in lieu of $100,000 in consulting fees due to an affiliate of Mr. Youssef El Zein and Mr. Nasser Menhall, two members of our board of directors. We relied upon Section 4(2) of the Securities Act of 1933, as amended, as an exemption from registration for the newly issued common stock.

- On July 27, 2001, holders of 78,259 shares of Series B preferred stock converted such shares of Series B preferred stock into 19,564,500 shares of common stock. We relied upon Section 4(2) of the Securities Act of 1933, as amended, as an exemption from registration for the newly issued common stock.

- Between July 27, 2001 and November 20, 2001, holders of approximately $456,000 of 8% notes converted these notes into 1,140,448 shares of common stock. We relied upon Section 4(2) of the Securities Act of 1933, as amended, as an exemption from registration for the newly issued common stock.

- Between July 27, 2001 and October 17, 2001, holders of warrants to purchase an aggregate of 7,661,893 shares of our common stock with exercise prices ranging between $0.60 and $2.40 per share exercised and/or converted such warrants for 4,669,808 shares of our common stock. We relied upon Section 4(2) of the Securities Act of 1933, as amended, as an exemption from registration for the newly issued common stock.

- On October 2, 2001, we issued 50,000 shares of common stock to Dr. James B. Wyngaarden, a member of our board of directors, for services provided to us. On December 17, 2001, we issued 6,765 shares of common stock to Dr. Wyngaarden in lieu of $11,500 in director and committee meeting fees. We relied upon Section 4(2) of the Securities Act of 1933, as amended, as an exemption from registration for the newly issued common stock.

Item 6. ***Selected Financial Data***

The selected financial data presented below have been derived from our consolidated financial statements, as adjusted to reflect the disposition of HSP as discontinued operations, and have been audited by Arthur Andersen LLP, independent public accountants. The financial data should be read along with, and are qualified by reference to, "Management's Discussion and Analysis of Financial Condition and Results of Operations," our consolidated financial statements and notes thereto and the Report of Independent Public Accountants included elsewhere in this annual report on Form 10-K.

	Year Ended December 31,				
	2001	2000	1999	1998	1997
	(In thousands, except per share data)				
Statement of Operations Data:					
Revenues:					
Service revenue	$ —	$ 82	$ 365	$ 375	$ —
License fees	850	—	—	—	—
Research and development	—	179	600	1,100	945
Royalty and other income	134	83	123	—	—
Interest income	577	229	92	148	1,079
Total revenues	1,561	573	1,180	1,623	2,024
Operating expenses:					
Research and development	4,868	3,620	5,783	14,183	35,326
General and administrative	4,914	3,184	3,664	6,573	11,027
Stock-based compensation from repriced options	1,762	—	—	—	—
Interest	1,319	2,154	683	2,820	4,278
Restructuring	—	—	—	—	10,345
Total operating expenses	12,863	8,958	10,130	23,576	60,976
Gain on sale of securities, net	5,217	—	—	—	—
Loss before provision for income taxes	(6,084)	(8,385)	(8,950)	(21,953)	(58,952)
Provision for income taxes	500	—	—	—	—
Loss from continuing operations	(6,584)	(8,385)	(8,950)	(21,953)	(58,952)
Income (loss) from discontinued operations	2,663	5,462	(1,553)	(4,028)	(10,509)
Loss before extraordinary items	(3,921)	(2,923)	(10,503)	(25,981)	(69,461)
Extraordinary item:					
Gain on conversion of 9% convertible subordinated notes payable	—	—	—	8,877	—
Loss on conversion of 8% convertible subordinated notes payable	(1,412)	—	—	—	—
Net loss	(5,333)	(2,923)	(10,503)	(17,104)	(69,461)
Accretion of preferred stock dividend	(8,342)	(4,087)	(4,232)	(2,689)	—
Net loss applicable to common stockholders	$ (13,675)	$ (7,010)	$ (14,735)	$ (19,793)	$ (69,461)
Basic and diluted net loss per common share from:					
Continuing operations	$ (0.21)	$ (0.48)	$ (0.57)	$ (1.85)	$ (11.67)
Discontinued operations	0.09	0.31	(0.10)	(0.34)	(2.08)
Extraordinary gain (loss)	(0.05)	—	—	0.75	—
Net loss per share	(0.17)	(0.17)	(0.66)	(1.44)	(13.76)
Accretion of preferred stock dividends	(0.27)	(0.23)	(0.27)	(0.23)	—
Net loss per share applicable to common stockholders	$ (0.44)	$ (0.40)	$ (0.93)	$ (1.67)	$ (13.76)
Shares used in computing basic and diluted					

net loss per common share(1)	30,820	17,418	15,811	11,859	5,050
Balance Sheet Data:					
Cash, cash equivalents and short-term investments(2)	$ 31,834	$ 3,532	$ 2,552	$ 5,608	$ 2,202
Working capital (deficit)	27,259	(4,238)	(6,534)	(5,306)	(21,992)
Total assets	32,309	10,001	10,717	15,092	30,480
Restricted cash	—	5,000	—	—	3,051
Long-term debt and capital lease obligations, net of current portion	—	—	—	—	1,328
9% convertible subordinated notes payable	1,306	1,306	1,306	1,306	50,000
8% convertible subordinated notes payable	288	8,046	6,100	—	—
Accumulated deficit	(273,868)	(260,193)	(253,183)	(238,448)	(218,655)
Total stockholders' (deficit) equity	(33)	(7,530)	(6,072)	2,249	(46,048)

(1) Computed on the basis described in Note 2(k) of notes to consolidated financial statements appearing elsewhere in this annual report on Form 10-K.

(2) Short-term investments consisted of U.S. government and corporate bonds with maturities greater than ninety days but less than one year from the balance sheet date.

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Quarterly Operating Results (Unaudited)

The following table presents the unaudited statement of operations data for each of the eight quarters in the period ended December 31, 2001. The information for each of these quarters is unaudited, but has been prepared on the same basis as the audited financial statements appearing elsewhere in this annual report on Form 10-K. In the Company's opinion, all necessary adjustments, consisting only of normal recurring adjustments, have been made to present fairly the unaudited quarterly results when read in conjunction with the audited financial statements and the notes thereto appearing elsewhere in this document. These operating results are not necessarily indicative of the results of operations that may be expected for any future period.

	Three Months Ended							
	Dec. 31 2001	Sep. 30 2001	Jun. 30 2001	Mar. 31 2001	Dec. 31 2000	Sep. 30 2000	Jun. 30 2000	Mar. 31 2000
	(In thousands, except per share data)							
Statement of Operations Data:								
Revenues	$ 666	$ 344	$ 388	$ 164	$ 361	$ 60	$ 41	$ 112
Operating Expenses:								
Research and development	1,428	1,080	1,259	1,101	826	761	860	1,173
General and administrative	791	1,523	1,253	1,347	844	562	875	903
Stock-based compensation from repriced options	1,415	(577)	924	—	—	—	—	—
Interest	218	515	272	315	297	952	559	346
Total operating expenses	3,852	2,541	3,708	2,763	1,968	2,275	2,294	2,422
Gain (loss) on sale of securities, net	(502)	(1,171)	6,890	—	—	—	—	—
Income (loss) before provision for income taxes	(3,688)	(3,368)	3,570	(2,598)	(1,607)	(2,215)	(2,253)	(2,310)
Provision for income taxes	100	—	400	—	—	—	—	—
Income (loss) from continuing operations	(3,788)	(3,368)	3,170	(2,598)	(1,607)	(2,215)	(2,253)	(2,310)
Income (loss) from discontinued operations	695	1,968	—	—	170	5,868	(182)	(394)
Loss before extraordinary gain	(3,093)	(1,400)	3,170	(2,598)	(1,437)	3,653	(2,435)	(2,704)
Extraordinary item:								
Loss on conversion of 8% convertible subordinated notes payable	—	—	—	(1,412)	—	—	—	—
Net (loss) income	(3,093)	(1,400)	3,170	(4,010)	(1,437)	3,653	(2,435)	(2,704)
Accretion of preferred stock dividend	(1,040)	(5,113)	(1,181)	(1,008)	(975)	(1,021)	(1,021)	(1,071)
Net (loss) income applicable to common stockholders	$ (4,133)	$ (6,513)	$ 1,989	$ (5,018)	$ (2,412)	$ 2,632	$ (3,455)	$ (3,775)
Basic net (loss) income per share applicable to common stockholders	$ (0.09)	$ (0.16)	$ 0.11	$ (0.27)	$ (0.13)	$ 0.15	$ (0.20)	$ (0.23)
Diluted net (loss) income per share applicable to common stockholders	$ (0.09)	$ (0.16)	$ 0.04	$ (0.27)	$ (0.13)	$ 0.15	$ (0.20)	$ (0.23)
Shares Used in Computing Income (Loss) Per Common Share(1)								
Basic	45,559	40,211	18,854	18,489	18,380	17,923	17,243	16,261

Diluted	45,559	40,211	57,174	18,489	18,380	17,923	17,243	16,261

(1) Computed on the basis described in Note 2(k) of Notes to consolidated financial statements appearing elsewhere in this annual report on Form 10-K.

Item 7. ***Management's Discussion and Analysis of Financial Condition and Results of Operations***

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

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

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

We have incurred total losses of $273.9 million through December 31, 2001 and expect to incur substantial operating losses in the future. In order to commercialize our therapeutic products, we need to address a number of technological challenges and to comply with comprehensive regulatory requirements. We expect that our research and development and general and administrative expenses will be significant in 2002 as we use the cash resources that we obtained in 2000 and 2001 to advance more rapidly our discovery and development programs.

Developments in 2000 and 2001

During 2000 and 2001 we entered into a series of transactions that resulted in the disposition of some of our assets, a decrease in our outstanding debt from $15.3 million at December 31, 2000 to $1.6 million at December 31, 2001, and an increase in our cash, cash equivalents and short-term investments from $8.5 million at December 31, 2000 to $31.8 million at December 31, 2001.

HSP Sale. In September 2000, we sold HSP and related intellectual property to Avecia Biotechnology for $15.0 million. We received $12.0 million at the closing of the sale and the remaining $3.0 million in September 2001.

Our consolidated financial statements have been restated to reflect the financial results of HSP as a discontinued operation for the years ended December 31, 2000 and 1999. Reported revenues, expenses and cash flows exclude the operating results of the discontinued operations.

Exchange of 8% Notes. In March 2001, holders of $7.6 million of our 8% notes exchanged their notes for 76,046 shares of our Series B preferred stock. As part of the exchange, the 8% note holders released their security interest in $5.0 million of the proceeds from the sale of HSP, which had been held by them as collateral prior to the exchange.

Sale of MethylGene Shares and Payment of Loan. In April and May 2001, we sold our shareholdings in MethylGene which, at the time, represented 22% of the capital of MethylGene. We received total proceeds of $7.2 million from the sale. We used $3.0 million of the proceeds to reduce a $6.0 million loan from six of our stockholders. In September 2001, we paid off the remaining $3.0 million of this loan. In connection with the payoff of the $6.0 million loan, $0.8 million previously deposited to secure the loan was released.

Collaboration and License Agreement with Isis Pharmaceuticals. In May 2001, we entered into a collaboration and license agreement with Isis Pharmaceuticals, Inc. In consideration of the license, Isis agreed to pay us $15.0 million in cash plus shares of Isis common stock in four installments intended to have an

aggregate value of $19.5 million based on the stock price of the Isis common stock on the dates of issuance of the shares. In 2001, Isis paid $15.0 million to us in cash and issued to us 857,143 shares of its common stock having an aggregate fair market value on the dates on which title to the shares was received of $17.3 million. The remaining $4.5 million is due in 2003, subject to possible acceleration depending on the price of Isis' common stock. In addition, under the agreement, we licensed from Isis specified antisense patents and patent applications. In return, we agreed to pay Isis a total of $6.0 million in cash or in shares of our common stock in three equal annual installments of $2.0 million beginning in May 2002. In accordance with terms of our license agreement with University of Massachusetts Medical Center, we paid the University of Massachusetts Medical Center $1.2 million in respect of the consideration we received from Isis and have agreed to pay University of Massachusetts Medical Center an additional $0.2 million upon our receipt of the last $4.5 million installment from Isis.

Completion of Early Exercise Program. In the second half of 2001, we completed an "early exercise" program in which we exchanged shares of our common stock for shares of our Series B preferred stock, outstanding warrants and 8% notes. As part of this program:

- holders of our Series B preferred stock exchanged their shares of Series B preferred stock for 19,564,500 shares of our common stock;
- holders of warrants to purchase our common stock with exercise prices per share ranging between $0.60 and $2.40 exchanged their warrants for 4,669,808 shares of our common stock; and
- holders of $456,000 of our 8% notes exchanged such notes for 1,140,448 shares of our common stock.

Critical Accounting Policies

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

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

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

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

During 2001, we received a total of $32.3 million in cash and stock under our collaboration and license agreement with Isis Pharmaceuticals, Inc. This amount and future amounts due under this license agreement are non-refundable. We are recognizing the revenue on a straight-line basis over the 10-year term of the agreement. This deferral of revenue recognition is based on a combination of rights retained by us and a

continuing obligation contained in the license agreement which has been interpreted as neither inconsequential nor perfunctory according to SAB 101. The Company believes that the cost of performing the continuing obligation is not material.

Note 2 to our consolidated financial statements included in this report contains a full description of all our significant accounting policies.

Results of Operations

Years ended December 31, 2001, 2000 and 1999

Revenues

Total revenues increased by $1.0 million, or 180%, from $0.6 million in 2000 to $1.6 million in 2001. The increase was primarily due to license revenues from agreements entered into in 2001 with Isis and EpiGenesis. In connection with the Isis agreement, we recorded $0.8 million in revenues which is net of related costs. The service and research and development revenues in 2000 resulted from services performed by us under a license agreement with MethylGene, which terminated in that year. The increase in total revenues in 2001 also reflected increased interest income from higher cash balances as a result of the payments from Isis and EpiGenesis, the sale of our interest in MethylGene and the sale of HSP.

Total revenues decreased by $0.6 million, or 50%, from $1.2 million in 1999 to $0.6 million in 2000. The decrease was primarily due to a reduction in the services performed by us under our agreements with MethylGene and OriGenix and the termination of a collaboration agreement. These decreases were offset in part by higher interest income from higher cash balances as a result of the sale of HSP.

Research and Development Expenses

Research and development expenses increased by $1.3 million, or 36%, from $3.6 million to $4.9 million in 2001 compared to 2000 and decreased $2.2 million, or 38%, from $5.8 million to $3.6 million in 2000 compared to 1999. The increase in 2001 was primarily attributable to higher payroll costs associated with, among other things, additional personnel hired as we expanded our drug development efforts and higher patent prosecution costs. The decrease in 2000 from 1999 reflected reduced research and development activities as part of a company-wide program to conserve cash. The consolidation of our office and laboratory space into a single facility in Cambridge, Massachusetts and the sale of our Milford, Massachusetts facility, also contributed to the decrease in research and development expenses in 2000.

In 2001, our research and development expenses related primarily to the preclinical development of our IMO technology, including the development of HYB 2055. Although we participated in several clinical trials for GEM 231 in 2001, the trials were hospital-sponsored and the costs for these trials were primarily borne by third parties whose drugs were being tested in the trials in combination with GEM 231. In 2000 and 1999, our research and development expenses also related primarily to the preclinical development of our IMO technology. Given the technological and regulatory hurdles likely to be encountered in the development and commercialization of our products, the future timing and costs of our various research and development programs are uncertain.

General and Administrative Expenses

General and administrative expenses increased $1.7 million, or 53%, from $3.2 million to $4.9 million in 2001 compared to 2000 and decreased $0.5 million, or 16%, from $3.7 million to $3.2 million in 2000 compared to 1999. The increase in 2001 was primarily due to increased professional fees associated with our Early Exchange Program and additional licensing transactions and to increased payroll expenses. The decrease

in 2000 was primarily a result of the consolidation of our office and laboratory space as well as a reduction in business development, public relations, legal and accounting expenses.

Stock-Based Compensation

As a result of a repricing of our stock options in September 1999, some of our outstanding stock options are subject to variable plan accounting. As a result, we incurred a stock-based compensation expense of $1.8 million in 2001. We did not have a stock-based compensation charge prior to 2001 because the fair market value of our common stock at December 31, 2000 was below the exercise price of the repriced options and the accounting rules on repriced options were not effective in 1999.

Interest Expense

Interest expense decreased by $0.9 million, or 41%, from $2.2 million to $1.3 million in 2001 compared to 2000 and increased $1.5 million, or 214%, from $0.7 million to $2.2 million in 2000 compared to 1999. The 2001 decrease was primarily attributable to the conversion of $7.6 million of our 8% notes into Series B preferred stock and the repayment of a $6.0 million note payable to six stockholders. The increase in 2000 was primarily due to the issuance of the 8% notes in December 1999 and our borrowing of $1.0 million under a credit facility in 2000.

Gain on Sale of Securities

In May 2001, we received $7.2 million from the sale of our MethylGene shares and recorded a related gain of $6.9 million, which was net of $0.3 million in direct transaction costs. Also in 2001, we recorded a realized loss of $1.4 million attributable to a loss in the value of the Isis shares received under our agreement with Isis and a loss of $0.3 million relating to direct expenses associated with the agreement. This loss was primarily due to a decline in the value of the shares of Isis common stock following the dates of issuance of the shares to us.

Income (Loss) from Discontinued Operations

We realized gains from discontinued operations of $2.7 million and $5.5 million for 2001 and 2000, respectively, and incurred a loss from discontinued operations of $1.6 million in 1999. The 2001 gain primarily represents the receipt of a $3.0 million contingent payment from Avecia under the terms of the HSP sales agreement. The 2000 gain includes gain on the sale of HSP of $6.3 million and operating losses of $0.8 million.

Income Tax Expense

Income tax expense increased from zero in 2000 to $0.5 million in 2001 as a result of income subject to the Alternative Minimum Tax. During 1999, we did not have any income subject to the Alternative Minimum Tax. In March 2002, the National Economic Stabilization and Recovery Act temporarily rescinded the Alternative Minimum Tax as it applies to us. As a result, we will receive a $450,000 refund and recognize a $0.5 million credit to operations during 2002.

Extraordinary Gain (Loss)

We had an extraordinary loss of $1.4 million in 2001 resulting from the exchange of our Series B preferred stock for 8% notes. As a result, our net loss after extraordinary item was $5.3 million in 2001.

Preferred Stock Dividends

We pay dividends on our Series A preferred stock of 6.5% per annum. Between March and July 2001, when all of the Series B preferred stock was exchanged for our common stock, we paid dividends in the form of additional shares of Series B preferred stock of 8.0% per annum. Dividends paid increased from $4.1 million in 2000 to $8.3 million in 2001 mainly due to a $4.1 million charge to retained earnings related to the exchange of our Series B preferred stock for our common stock as part of our Early Exchange Program. The charge is

equal to the fair value of the common stock issued less the fair value of common stock that would have been issued pursuant to the original conversion terms of the Series B preferred stock.

Net Operating Loss Carryforwards

As of December 31, 2001, we had approximately $210.0 million and $4.0 million of net operating loss and tax credit carryforwards, respectively. The Tax Reform Act of 1986 contains provisions that may limit our 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. We have completed several financings since the effective date of the Tax Act, which, as of December 31, 2001, have resulted in ownership changes, as defined under the Tax Act, which will limit our ability to utilize all of our net operating loss carryforwards.

Liquidity and Capital Resources

We require cash to fund our operating expenses, to make capital expenditures and to pay debt service. We expect that our cash requirements for these uses will be substantial and will increase as we expand our operations. Historically, we have funded our operations with revenues from the sources described above, particularly in 2001 from our agreement with Isis, as well as from a variety of debt and equity financings, lease financings and the sale of our shareholdings in MethylGene. Our only committed external sources of funds are a $450,000 tax refund expected from the U.S. government in the first half of 2002 and the final $4.5 million payment due to us from Isis under our agreement with it based on relevant market conditions. This payment from Isis is due no later than May 2003 and may be made by Isis, at its option, in cash or with its common stock having a fair market value intended to approximate $4.5 million.

Cash Resources and Cash Flows

We had available cash, cash equivalents and short-term investments of $31.8 million at December 31, 2001, an increase of $28.3 million, from December 31, 2000.

During 2001, we increased our available cash resources through the following:

- $15.5 million in cash received from licensing transactions;
- $15.6 million in net proceeds from the sale of Isis stock obtained in the Isis transaction;
- $7.2 million from the sale of our MethylGene shares;
- $5.0 million in restricted cash that became available for general corporate purposes upon the exchange of our Series B preferred stock for 8% notes; and
- a contingent payment of $3.0 million from the sale of HSP.

During 2000, we increased our cash resources through the sale of HSP, from which we received $12.0 million, although $5.0 million of the $12.0 million was restricted under the terms of our loan agreement. We also borrowed $1.0 million under a credit facility which we subsequently repaid in 2000. During 1999, we raised cash through the issuance of $7.6 million in convertible notes. Principal uses of cash by us in all three years included funding of our operating loss. We also used $6.0 million of cash in 2001 to repay a loan to us from six of our stockholders.

We believe that our existing cash resources will be sufficient to fund our cash requirements through the end of 2003. Our actual cash requirements will depend on many factors, including particularly the scope and pace of our research and development efforts and our success in entering into strategic alliances.

We do not expect to generate significant additional funds internally until we successfully complete development and obtain marketing approval for products, either alone or in collaboration with third parties, which we expect will take many years. We expect to seek additional external funds periodically from collaborations with other biotechnology companies or pharmaceutical companies and from additional debt,

equity and lease financings. We believe that the key factors that will affect our internal and external sources of cash are:

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

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

Contractual Obligations

As of December 31, 2001, our outstanding indebtedness consisted of $0.3 million in principal amount of 8% notes maturing in November 2002 and $1.3 million in principal amount of 9% notes maturing in April 2004. These notes are unsecured. Our only lease commitment relates to our facility in Cambridge, Massachusetts. The $29.2 million in deferred revenue that we are amortizing over the 10-year term of the Isis agreement will not require that we expend any significant cash. We expect to make capital expenditures of approximately $500,000 in 2002, principally for leasehold improvements and for purchases of laboratory and computer equipment.

As of December 31, 2001, our contractual obligations were as follows:

	Payments Due by Period				
Contractual Obligations	Total	Less than 1 year	1-3 years	4-5 years	After 5 years
Debt	$ 1,594,000	$ 288,000	$1,306,000	—	—
Lease Commitments	$3,268,000	$ 620,000	$1,833,000	$815,000	—
External Collaborations	$ 293,000	$ 116,000	$ 177,000	—	—
Employment Agreements	$ 1,800,000	$ 360,000	$ 720,000	$720,000	—
Consulting Agreements	$ 98,000	$ 68,000	$ 30,000	—	—
Payments to Isis (1)	$ 6,000,000	$2,000,000	$ 4,000,000	—	—

(1) We have the option to make some or all of the payments to Isis in cash or in shares of our common stock.

RISK FACTORS THAT MAY AFFECT RESULTS

This annual report contains forward-looking statements, including statements about our growth and future operating results, discovery and development of drugs, strategic alliances and intellectual property. For this purpose, any statement that is not a statement of historical fact should be considered a forward-looking statement. We often use the words “believes,” “anticipates,” “plans,” “expects,” “intends” and similar expressions to help identify forward-looking statements.

There are a number of important factors that could cause our actual results to differ materially from those indicated or implied by forward-looking statements. Factors that could cause or contribute to such differences include those discussed below, as well as those discussed elsewhere in this annual report. We disclaim any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

Risks Relating to Our Business, Strategy and Industry

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

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

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

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

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

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

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

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

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

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

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

Regulatory Risks

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

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

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

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

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

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

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

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

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

We have only limited experience in filing and prosecuting the applications necessary to gain regulatory approvals. Moreover, the products that result from our research and development programs will likely be based on new technologies and new therapeutic approaches that have not been extensively tested in humans. The

regulatory requirements governing these types of products may be more rigorous than for conventional drugs. As a result, we may experience a longer regulatory process in connection with any product that we develop based on these new technologies or new therapeutic approaches.

Risks Relating to Our Financial Results and Need for Financing

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

We have incurred losses in every year since our inception. As of December 31, 2001, we had incurred operating losses of approximately $273.9 million. We expect to continue to incur substantial operating losses in future periods. We have received no revenues from the sale of drugs. To date, almost all of our revenues have been from collaborative and license agreements, interest income and manufacturing of synthetic DNA and reagent products by HSP prior to our selling HSP in September 2000.

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

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

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

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

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

Risks Relating to Collaborators

We need to establish collaborative relationships in order to succeed.

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

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

- we cannot effectively control whether our collaborators will devote sufficient resources to our programs or products;

- disputes may arise in the future with respect to the ownership of rights to technology developed with collaborators;
- disagreements with collaborators could delay or terminate the research, development or commercialization of products, or result in litigation or arbitration;
- contracts with our collaborators may fail to provide sufficient protection;
- we may have difficulty enforcing the contracts if one of these collaborators fails to perform;
- our collaborators may terminate their collaborations with us, which could make it difficult for us to attract new collaborators or adversely affect the perception of us in the business or financial communities;
- collaborators have considerable discretion in electing whether to pursue the development of any additional drugs and may pursue technologies or products either on their own or in collaboration with our competitors; and
- collaborators with marketing rights may choose to devote fewer resources to the marketing of our products than they do to products that they develop.

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

Risks Relating to Intellectual Property

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

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

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

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

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

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

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

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

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

Risks Relating to Product Manufacturing, Marketing and Sales

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

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

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

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

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

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

Reliance on third party manufacturers entails risks to which we would not be subject if we manufactured products ourselves, including reliance on the third party for regulatory compliance and quality assurance, the possibility of breach of the manufacturing agreement by the third party because of factors beyond our control

and the possibility of termination or nonrenewal of the agreement by the third party, based on its own business priorities, at a time that is costly or inconvenient for us.

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

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

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

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

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

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

Risks Relating to an Investment in Our Common Stock

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

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

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

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

Item 7A. *Quantitative and Qualitative Disclosures About Market Risk*

Historically, our primary exposures have been related to nondollar-denominated operating expenses in Europe. As of December 31, 2001, we have no assets and liabilities related to nondollar-denominated currencies.

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

Item 8. ***Financial Statements and Supplementary Data***

All financial statements required to be filed hereunder are filed as listed under Item 14(a) immediately after the signature page to this report on Form 10-K, and are incorporated herein by this reference.

Item 9. ***Changes in and Disagreements with Accountants on Accounting and Financial Disclosure***

None.

PART III.

The response to the Part III items incorporate by reference certain sections of Hybridon's Proxy Statement for the Annual Meeting of Stockholders to be held on June 19, 2002 (the "2002 Proxy Statement"). The 2002 Proxy Statement will be filed with the Securities and Exchange Commission (the "Commission") on or before April 30, 2002.

Item 10. ***Directors and Executive Officers of Hybridon***

The response to this item is contained under the following captions in the 2002 Proxy Statement: "Election of Directors," "Executive Officers" and "Section 16(a) Beneficial Ownership Reporting Compliance," which sections are incorporated herein by this reference.

Item 11. ***Compensation of Executive Officers***

The response to this item is contained in the 2002 Proxy Statement under the captions: "Certain Transactions," "Compensation of Executive Officers and Directors" and "Report of the Compensation Committee on Executive Compensation," which sections are incorporated herein by this reference

Item 12. ***Security Ownership of Certain Beneficial Owners and Management***

The response to this item is contained in the 2002 Proxy Statement under the caption "Security Ownership of Certain Beneficial Owners and Management," which section is incorporated herein by this reference

Item 13. ***Certain Relationships and Related Transactions***

The response to this item is contained in the 2002 Proxy Statement under the captions "Certain Transactions" and "Compensation of Executive Officers and Directors," which sections are incorporated herein by this reference.

PART IV.

Item 14. ***Exhibits, Financial Statement Schedules and Reports on Form 8-K***

(a)(1) *Financial Statements.*

(2) We are not filing any financial statement schedules as part of this Annual Report on Form 10-K because they are not applicable or the required information is included in the financial statements or notes thereto.

(3) The list of Exhibits filed as a part of this Annual Report on Form 10-K are set forth on the Exhibit Index immediately preceding such Exhibits, and is incorporated herein by this reference.

(b) *Reports on Form 8-K.* On December 21, 2001, Hybridon filed a Current Report on Form 8-K, reporting the adoption of a shareholder rights plan by its board of directors.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on this 26th day of March 2002.

Hybridon, Inc.

By: /s/ STEPHEN R. SEILER

Stephen R. Seiler
Chief Executive Officer

POWER OF ATTORNEY AND SIGNATURES

We, the undersigned officers and directors of Hybridon, Inc., hereby severally constitute and appoint Stephen R. Seiler 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 amendments to this Annual Report on Form 10-K, 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 Exchange Act of 1934, as amended, and all requirements of the Securities and Exchange Commission.

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ JAMES B. WYNGAARDEN, M.D. James B. Wyngaarden, M.D.	Chairman of the Board of Directors	March 28, 2002
/s/ STEPHEN R. SEILER Stephen R. Seiler	Chief Executive Officer and Director (Principal Executive Officer)	March 26, 2002
/s/ SUDHIR AGRAWAL, D. PHIL Sudhir Agrawal, D. Phil	President, Chief Scientific Officer and Director	March 28, 2002
/s/ ROBERT G. ANDERSEN Robert G. Andersen	Chief Financial Officer and Vice President of Operations, Treasurer and Secretary (Principal Financial Officer)	March 29, 2002
/s/ ARTHUR W. BERRY Arthur W. Berry	Director	March 26, 2002
/s/ CAMILLE CHEBEIR Camille Chebeir	Director	March 29, 2002
/s/ YOUSSEF EL-ZEIN Youssef El-Zein	Director	March 29, 2002

Signature	Title	Date
/s/ C. KEITH HARTLEY C. Keith Hartley	Director	March 29, 2002
/s/ NASSER MENHALL Nasser Menhall	Director	March 29, 2002
/s/ PAUL C. ZAMECNIK, M.D. Paul C. Zamecnik, M.D.	Director	March 29, 2002

Exhibit Index

Exhibit No.	Description
3.1(1)	Restated Certificate of Incorporation of the Registrant, as amended.
3.2(2)	Amended and Restated Bylaws of the Registrant.
4.1(2)	Specimen Certificate for shares of Common Stock, $.001 par value, of the Registrant.
4.2(3)	Indenture dated as of March 26, 1997 between Forum Capital Markets LLC and the Registrant.
4.3(4)	Certificate of Designation of Series A Preferred Stock, par value $.01 per share, dated May 5, 1998.
4.4(4)	Class A Warrant Agreement dated May 5, 1998.
4.5(4)	Class B Warrant Agreement dated May 5, 1998.
4.6(4)	Class C Warrant Agreement dated May 5, 1998.
4.7(5)	Rights Agreement dated December 10, 2001 by and between the Registrant and Mellon Investor Services LLC, as rights agent.
†10.1(2)	License Agreement dated February 21, 1990 and restated as of September 8, 1993 between the Registrant and University of Massachusetts Medical Center.
†10.2(2)	Patent License Agreement effective as of October 13, 1994 between the Registrant and McGill University.
†10.3(2)	License Agreement effective as of October 25, 1995 between the Registrant and the General Hospital Corporation.
†10.4(2)	License Agreement dated as of October 30, 1995 between the Registrant and Yoon S. Cho-Chung.
†10.5(2)	System Design and Procurement Agreement dated as of December 16, 1994 between the Registrant and Pharmacia Biotech, Inc.
10.6(2)	Registration Rights Agreement dated as of February 21, 1990 between the Registrant, the Worcester Foundation for Biomedical Research, Inc. and Paul C. Zamecnik.
10.7(2)	Registration Rights Agreement dated as of June 25, 1990 between the Registrant and Nigel L. Webb.
10.8(2)	Registration Rights Agreement dated as of February 6, 1992 between the Registrant and E. Andrews Grinstead, III.
10.9(2)	Registration Rights Agreement dated as of February 6, 1992 between the Registrant and Anthony J. Payne.
††10.10(2)	1990 Stock Option Plan, as amended.
††10.11(2)	1995 Stock Option Plan.
††10.12(2)	1995 Director Stock Plan.
††10.13(2)	1995 Employee Stock Purchase Plan.
††10.14(7)	Employment Agreement dated March 1, 1997 between the Registrant and Dr. Sudhir Agrawal.
††10.15(2)	Consulting Agreement dated as of February 21, 1990 between the Registrant and Dr. Paul C. Zamecnik.
10.16(6)	Registration Rights Agreement dated as of January 24, 1996 between the Registrant and G.D. Searle & Co.
10.17(8)	Registration Rights Agreement dated as of March 26, 1997 between Forum Capital Markets LLC and the Registrant.
10.18(8)	Warrant Agreement dated as of March 26, 1997 between Forum Capital Markets LLC and the Registrant.

Exhibit No.	Description
†10.19(9)	Amendment No. 1 to License Agreement, dated as of February 21, 1990 and restated as of September 8, 1993, by and between University of Massachusetts Medical Center and the Registrant, dated as of November 26, 1996.
†10.20(10)	Licensing Agreement dated March 12, 1999 by and between Hybridon, Inc. and Integrated DNA Technologies, Inc.
†10.21(11)	Licensing Agreement dated September 7, 1999 by and between Hybridon, Inc. and Genzyme Corporation.
10.22(12)	Form of Subscription Agreements dated as of December 13, 1999, by and among Hybridon and the purchasers of notes due 2002.
10.23(12)	License Agreement dated September 20, 2000 by and between Hybridon and Boston Biosystems, Inc.
10.24(12)	Assignment of Coexclusive License dated September 20, 2000 by and between Hybridon and the Public Health Service.
10.25(12)	Oligonucleotide Purification Patent License Agreement dated September 20, 2000 by and between Hybridon and Boston Biosystems, Inc.
10.26(13)	Asset Purchase Agreement dated June 29, 2000 by and between Hybridon and Boston Biosystems, Inc.
†10.27(12)	Assignment of Patent Rights dated September 20, 2000 by and between Hybridon and Boston Biosystems, Inc.
†10.28(12)	PNT Monomer Patent License and Option Agreement dated September 20, 2000 by and between Hybridon and Boston Biosystems, Inc.
†10.29(12)	Agreement Relating to Patents Forming Part of Acquired Assets but to be Licensed Back to Hybridon for the Purposes of OriGenix Agreements dated September 20, 2000 by and between Hybridon and Boston Biosystems, Inc.
10.30(14)	Agreement dated March 28, 2001 by and between Hybridon, Founders Financial Group, Pecks Management Partners L.T.D. and General Motors Investment Management Corporation, in its capacity as Trustee for the General Motors Employees Global Trust Group.
10.31(14)	Stock Purchase Agreement by and between Paul Capital Partners L.P. and PCP Associates and Hybridon dated March 30, 2001.
10.32(14)	Agreement and Mutual Release between Hybridon and MethylGene, Inc. dated March 21, 2001.
10.33(14)	Offer to Exchange Series B Preferred Stock of Hybridon, Inc. dated March 5, 2001.
10.34(15)	Amended and Restated 1997 Stock Incentive Plan.
†10.35(16)	Collaboration and License Agreement by and between Isis Pharmaceuticals, Inc., and Hybridon, Inc., dated May 24, 2001.
10.36(16)	Master Agreement relating to the Cross License of Certain Intellectual Property and Collaboration by and between Isis Pharmaceuticals, Inc. and Hybridon, Inc., dated May 24, 2001.
10.37(16)	Share Purchase Agreement between Hybridon, Inc. and Royal Bank Ventures, Inc., Fonds De Solidarite Des Travailleurs Du Quebec (F.T.Q.), and Ontario Teacher's Pension Plan Board, dated May 11, 2001.
††10.38(17)	Employment Agreement by and between Stephen R. Seiler the Company effective as of July 25, 2001.
10.39	Unit Purchase Agreement by and among Registrant and certain persons and entities listed therein, dated April 1, 1998.

Exhibit No.	Description
10.40	Offer to Exchange Hybridon Warrants and Shares of Series B Convertible Preferred Stock, dated July 29, 2001.
21.1	Subsidiaries of the Registrant.
23.1	Consent of Arthur Andersen LLP.
99.1	Letter to Securities and Exchange Commission from Hybridon pursuant to temporary Note 3T.

(1) Incorporated by reference to Exhibits to the Registrant's Amendment No. 1 to Form 8-A dated December 21, 2001. (File No. 0-27352)

(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 Exhibits to the Registrant's Current Report on Form 8-K dated April 2, 1997. (File No. 0-27352)

(4) Incorporated by reference to Exhibits to the Registrant's Quarterly Report on Form 10-Q for the period ended March 31, 1998. (File No. 0-27352)

(5) Incorporated by reference to Exhibits to the Registrant's Current Report on Form 8-K filed on December 21, 2001. (File No. 0-27352)

(6) Incorporated by reference to Exhibits to the Registrant's Annual Report on Form 10-K for the year ended December 31, 1995. (File No. 0-27352)

(7) Incorporated by reference to Exhibits to the Registrant's Annual Report on Form 10-K for the year ended December 31, 1996. (File No. 0-27352)

(8) Incorporated by reference to Exhibits to Registrant's Current Report on Form 8-K, dated April 2, 1997. (File No. 0-27352)

(9) Incorporated by reference to Exhibits to the Registrant's Quarterly Report on Form 10-Q for the period ended June 30, 1997. (File No. 0-27352)

(10) Incorporated by reference to Exhibits to the Registrant's Annual Report on Form 10-K for the year ended December 31, 1998. (File No. 0-27352)

(11) Incorporated by reference to Exhibits to the Registrant's Quarterly Report on Form 10-Q for the period ended September 30, 1999. (File No. 0-27352)

(12) Incorporated by reference to Exhibits to the Registrant's Registration Statement on Form S-1 (File No. 333-69649).

(13) Incorporated by reference to the Registrant's Proxy Statement dated August 8, 2000. (File No. 0-27352)

(14) Incorporated by reference to Exhibits to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2000. (File No. 0-27352)

(15) Incorporated by reference to Exhibits to the Registrant's Quarterly Report on Form 10-Q for the period ended March 31, 2001. (File No. 0-27352)

(16) Incorporated by reference to Exhibits to the Registrant's Quarterly Report on Form 10-Q for the period ended June 30, 2001. (File No. 0-27352)

(17) Incorporated by reference to Exhibits to the Registrant's Quarterly Report on Form 10-Q for the period ended September 30, 2001. (File No. 0-27352)

† 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.

HYBRIDON, INC. AND SUBSIDIARIES

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

December 31, 2001

REPORT OF INDEPENDENT PUBLIC ACCOUNTANTS

To Hybridon, Inc.:

We have audited the accompanying consolidated balance sheets of Hybridon, Inc. (a Delaware corporation) as of December 31, 2001 and 2000, 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, 2001. These financial statements are the responsibility of Hybridon, Inc.'s management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States. 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, 2001 and 2000, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2001, in conformity with accounting principles generally accepted in the United States.

/s/ ARTHUR ANDERSEN LLP

Boston, Massachusetts

February 21, 2002

HYBRIDON, INC. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

	December 31,	
	2001	2000
ASSETS		
Current Assets:		
Cash and cash equivalents	$ 20,923,295	$ 1,532,155
Short-term investments	10,910,987	2,000,000
Receivables	274,863	368,915
Prepaid expenses and other current assets	56,992	40,104
Total current assets	32,166,137	3,941,174
Property and equipment, net	143,298	90,678
Other assets:		
Deferred financing costs	—	969,631
Restricted cash	—	5,000,000
	$ 32,309,435	$ 10,001,483
LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIT)		
Current liabilities:		
Accounts payable	$ 498,642	$ 1,084,330
Accrued expenses	1,021,660	1,094,735
Current portion of long-term debt	288,028	6,000,000
Current portion of deferred revenue	3,098,654	—
Total current liabilities	4,906,984	8,179,065
9% convertible subordinated notes payable	1,306,000	1,306,000
8% convertible notes payable	—	8,046,420
Deferred revenue, net of current portion	26,129,725	—
Commitments and Contingencies (Note 10)		
Stockholders' equity (deficit):		
Preferred stock, $0.01 par value Authorized — 5,000,000 shares Series A convertible preferred stock Designated — 1,500,000 shares Issued and outstanding — 640,166 and 626,170 shares at December 31, 2001 and 2000, respectively	6,402	6,262
Common stock, $0.001 par value Authorized — 100,000,000 shares Issued and outstanding — 45,632,525 and 18,382,237 shares at December 31, 2001 and 2000, respectively	45,632	18,382
Additional paid-in capital	273,870,458	252,645,636
Accumulated deficit	(273,868,184)	(260,193,046)
Deferred compensation	(87,582)	(7,236)
Total stockholders' deficit	(33,274)	(7,530,002)
	$ 32,309,435	$ 10,001,483

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

HYBRIDON, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF OPERATIONS

	Years Ended December 31,		
	2001	2000	1999
Revenues:			
Service revenue	$ —	$ 82,500	$ 365,000
License fees	849,866	—	—
Research and development	—	179,277	600,000
Royalty and other income	134,225	82,826	122,544
Interest income	577,267	228,695	92,202
Total revenues	1,561,358	573,298	1,179,746
Operating expenses:			
Research and development	4,868,035	3,620,203	5,783,092
General and administrative	4,913,654	3,184,017	3,663,811
Stock-based compensation from repriced options (1)	1,761,657	—	—
Interest	1,319,387	2,153,831	683,134
Total operating expenses	12,862,733	8,958,051	10,130,037
Gain on sale of securities, net	5,217,451	—	—
Loss before provision for income taxes	(6,083,924)	(8,384,753)	(8,950,291)
Provision for income taxes	500,000	—	—
Loss from continuing operations	(6,583,924)	(8,384,753)	(8,950,291)
Income (loss) from discontinued operations	2,662,597	5,462,154	(1,552,751)
Loss before extraordinary item	(3,921,327)	(2,922,599)	(10,503,042)
Extraordinary item:			
Loss on conversion of 8% convertible subordinated notes payable	(1,411,876)	—	—
Net loss	(5,333,203)	(2,922,599)	(10,503,042)
Accretion of preferred stock dividends	(8,341,935)	(4,087,317)	(4,232,251)
Net loss applicable to common stockholders	$(13,675,138)	$ (7,009,916)	$(14,735,293)
Basic and diluted net loss per share (Note 14)	$ (0.44)	$ (0.40)	$ (0.93)
Shares used in computing basic and diluted net loss per common share	30,820,098	17,418,233	15,810,664
(1) The following summarizes the allocation of stock based compensation from repriced options			
Research and development	$ 1,060,404	$ —	$ —
General and administrative	701,253	—	—
Total	$ 1,761,657	$ —	$ —

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

Table of Contents

HYBRIDON, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)

	Series A Convertible Preferred Stock		Series B Convertible Preferred Stock		Common Stock					
	Number Of Shares	$0.01 Par Value	Number Of Shares	$0.01 Par Value	Number Of Shares	$0.001 Par Value	Additional Paid-In Capital	Accumulated Deficit	Deferred Compensation	Total Stockholders' Equity (Deficit)
Balance, December 31, 1998	641,259	$ 6,413	—	—	15,304,825	$ 15,305	$ 241,632,024	$ (238,447,837)	$ (957,127)	$ 2,248,778
Issuance of common stock to placement agents	—	—	—	—	460,000	460	999,540	—	—	1,000,000
Conversion of preferred into common stock	(21,076)	(211)	—	—	495,897	496	(285)	—	—	—
Issuance of warrants in connection with notes payable	—	—	—	—	—	—	547,328	—	—	547,328
Preferred stock dividends	41,673	416	—	—	—	—	4,231,835	(4,232,251)	—	—
Issuance of stock options to non-employees	—	—	—	—	—	—	402,889	—	—	402,889
Amortization of deferred compensation	—	—			—	—	—	—	231,744	231,744
Net loss	—	—	—	—	—	—	—	(10,503,042)	—	(10,503,042)
Balance, December 31, 1999	661,856	6,618	—	—	16,260,722	16,261	247,813,331	(253,183,130)	(725,383)	(6,072,303)
Exercise of common stock options	—	—	—	—	335,240	336	167,287	—	—	167,623
Retirement of common stock	—	—	—	—	(250,000)	(250)	—	—	—	(250)
Cancellation of stock options	—	—	—	—	—	—	(50,781)	—	50,781	—
Revaluation of stock options issued to non-employees	—	—	—	—	—	—	(449,665)	—	449,665	—
Preferred stock dividends	41,363	414	—	—	—	—	4,086,903	(4,087,317)	—	—
Issuance of stock options to non-employees	—	—	—	—	—	—	117,523	—	—	117,523
Issuance of warrants in connection with line of credit	—	—	—	—	—	—	731,136	—	—	731,136
Conversion of debt into common stock	—	—	—	—	214,043	214	230,953	—	—	231,167
Conversion of preferred into common stock	(77,049)	(770)	—	—	1,822,232	1,821	(1,051)	—	—	—
Amortization of deferred compensation	—	—	—	—	—	—	—	—	217,701	217,701
Net loss	—	—	—	—	—	—	—	(2,922,599)	—	(2,922,599)
Balance, December 31, 2000	626,170	6,262	—	—	18,382,237	18,382	252,645,636	(260,193,046)	(7,236)	(7,530,002)
Exercise of common stock options and warrants	—	—	—	—	4,965,715	4,966	312,228	—	—	317,194
Sale of common stock	—	—	—	—	510,000	510	427,890	—	—	428,400
Issuance of stock, stock options and warrants for services	—	—	—	—	298,530	298	898,269	—	(10,756)	887,811
Issuance of stock bonus	—	—	—	—	157,471	157	88,419	—	—	88,576
Issuance of stock options to employees	—	—	—	—	—	—	112,192	—	(112,192)	—
Amortization of										

deferred compensation	—	—	—	—	—	—	—	—	42,602	42,602
Conversion of 8% notes into stock	—	—	76,046	760	1,140,448	1,140	9,301,791	—	—	9,303,691
Preferred stock dividends	40,075	401	2,213	22	—	—	8,341,512	(8,341,935)	—	—
Conversion of preferred into common stock	(26,079)	(261)	(78,259)	(782)	20,178,124	20,179	(19,136)	—	—	—
Stock-based compensation from repriced options	—	—	—	—	—	—	1,761,657	—	—	1,761,657
Net Loss	—	—	—	—	—	—	—	(5,333,203)	—	(5,333,203)
Balance, December 31, 2001	640,166	$ 6,402	—	—	45,632,525	$ 45,632	$ 273,870,458	$ (273,868,184)	$ (87,582)	$ (33,274)

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

HYBRIDON, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years Ended December 31,		
	2001	2000	1999
Cash Flows From Operating Activities:			
Net loss	$ (5,333,203)	$(2,922,599)	$(10,503,042)
Income (loss) from discontinued operations	2,662,597	5,462,154	(1,552,751)
Loss from continuing operations, including extraordinary item	(7,995,800)	(8,384,753)	(8,950,291)
Adjustments to reconcile net loss to net cash used in operating activities —			
Extraordinary loss on exchange of 8% convertible subordinated notes payable	1,411,876	—	—
Gain on sale of property and equipment	(45,560)	—	—
Realized loss on trading securities	1,664,810	—	—
Stock-based compensation	1,850,233	117,523	—
Depreciation and amortization expense	37,703	115,403	394,381
Amortization of deferred compensation	42,602	217,701	634,633
Amortization of deferred financing costs	162,465	456,919	123,140
Issuance of common stock warrants	—	731,136	—
Non cash interest expense	912,224	151,077	65,485
Issuance of common stock for services rendered	177,786	—	—
Changes in operating assets and liabilities —			
Receivables	(243,351)	(140,875)	114,694
Prepaid expenses and other current assets	(6,301)	30,298	209,341
Note receivable from officer	—	—	(11,400)
Accounts payable and accrued expenses	(506,387)	(935,000)	(1,153,013)
Deferred revenue	12,654,116	—	—
Net cash provided by (used in) continuing operating activities	10,116,416	(7,640,571)	(8,573,030)
Net cash provided by (used in) discontinued operations	3,000,000	11,563,672	(130,581)
Cash Flows From Investing Activities:			
Increase in other assets	—	(101,401)	—
Purchases of marketable securities	(13,653,578)	(2,000,000)	—
Proceeds from sale and maturities of securities	20,227,470	—	—
Purchases of property and equipment	(90,322)	(35,572)	(8,303)
Proceeds from sale of property and equipment	45,560	—	—
Net cash provided by (used in) investing activities	6,529,130	(2,136,973)	(8,303)
Cash Flows From Financing Activities:			
Net proceeds from sale of common stock	428,400	167,623	—
Net borrowings under line of credit	—	231,167	—
Proceeds from exercise of common stock options and warrants	317,194	—	—
Proceeds from issuance of convertible notes payable and warrants	—	1,795,566	4,534,290
Proceeds from related party notes payable	—	—	1,500,000
Payments on long-term debt	(6,000,000)	—	—
Decrease (increase) in restricted cash and other assets	5,000,000	(5,000,000)	—
Increase in deferred financing costs	—	—	(378,587)
Net cash (used in) provided by financing			

activities	(254,406)	(2,805,644)	5,655,703
Net increase (decrease) in cash and cash equivalents	19,391,140	(1,019,516)	(3,056,211)
Cash and cash equivalents, beginning of period	1,532,155	2,551,671	5,607,882
Cash and cash equivalents, end of period	$ 20,923,295	$ 1,532,155	$ 2,551,671

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

HYBRIDON, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

December 31, 2001

(1) Organization

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

Since inception, the Company has been primarily engaged in research and development and manufacturing. To date, all revenues received by the Company have been from collaboration and licensing agreements, interest income on investment funds, and manufacturing of synthetic DNA and reagent products by the Company's Hybridon Specialty Products or HSP, business prior to its disposal in September 2000 (see Note 13).

(2) Summary of Significant Accounting Policies

(a) Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States 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.

The Company is subject to a number of risks and uncertainties similar to those of other companies of the same size within the biotechnology industry, such as uncertainty of clinical trial outcome, uncertainty of additional funding and history of operating losses.

(b) Principles of Consolidation

In 1999, the consolidated financial statements also reflect the results of the Company's subsidiary, Hybridon S.A. (Europe), a French corporation, prior to dissolution. All material intercompany balances and transactions have been eliminated in consolidation.

(c) Cash Equivalents and Short-Term Investments

The Company considers all highly liquid investments with maturities of 90 days or less when purchased to be cash equivalents. Cash and cash equivalents at December 31, 2001 and 2000 consist of cash and money market funds. The balance at December 31, 2000 excludes restricted cash of $5,000,000 that is included in other assets (see Note 4(c)).

Short-term investments have maturities of greater than three months and mature within one year of the balance sheet date. At December 31, 2001, the Company's short-term investments consisted of corporate and government bonds of approximately $8,929,000 and $1,982,000, respectively. All of the short-term investments mature prior to December 31, 2002. At December 31, 2000, short-term investments consisted of corporate bonds, which matured in January 2001. There were no long-term investments as of December 31, 2001 and 2000, respectively.

The Company accounts for investments in accordance with Statement of Financial Accounting Standards (SFAS) No. 115, *Accounting for Certain Investments in Debt and Equity Securities.* In accordance with

HYBRIDON, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

December 31, 2001

SFAS No. 115, investments that the Company has the positive intent and ability to hold to maturity are classified as "held to maturity" and reported at amortized cost, which approximates fair market value. Management determines the appropriate classification of marketable securities at the time of purchase and reevaluates such designation at each balance sheet date. All of the Company's short-term investments as of December 31, 2001 and 2000 are classified as "held-to-maturity."

Shares received in connection with the license agreement discussed in Note 5 were classified as trading securities in accordance with SFAS No. 115, as the Company's intent was to sell the securities in the short-term. Trading securities are reported at fair value with the changes to the fair value being reported in earnings. Upon execution of the hedging contracts discussed in Note 5, the gains or losses on these securities were offset completely by the losses or gains on the hedging contracts. The Company recorded approximately $306,000 in hedging contract expenses which were included in the gain on sale of securities. The Company also recognized $1,359,000 in losses on trading securities during 2001. There were no unrealized gains or losses at December 31, 2001.

(d) 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 and other	3 – 5 years

(e) Accrued Expenses

At December 31, 2001 and 2000, accrued expenses consist of the following:

	December 31	
	2001	2000
Payroll and related costs	$ 153,551	$ 127,856
Accrued expenses related to issuance of stock (Note 5)	362,561	—
Other	505,548	966,879
	$1,021,660	$1,094,735

(f) Reclassifications

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

(g) Revenue Recognition

Service and research and development revenue is recognized when the services are performed. These revenue categories include drug development, clinical research, bio-analytical work and information services, which include access to research, pre-clinical and clinical information and data from the Company.

In December 1999, the Securities and Exchange Commission issued Staff Accounting Bulletin (SAB) No. 101, *Revenue Recognition*. This bulletin summarizes views of the Staff on applying accounting principles generally accepted in the United States to revenue recognition in financial statements. The Company's current revenue recognition policy complies with SAB No. 101.

HYBRIDON, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

December 31, 2001

During 2001, Hybridon received a total of $32.3 million in cash and stock from its collaboration and license agreement with Isis Pharmaceuticals, Inc. This amount and future amounts due under this license agreement are non-refundable. The Company is recognizing the revenue on a straight-line basis over the 10-year term of the agreement. This deferral of revenue recognition is based on a combination of rights retained by the Company and a continuing obligation contained in the license agreement which has been interpreted as neither inconsequential nor perfunctory according to SAB 101. The Company believes that the cost of performing the continuing obligation is not material. See Notes 5 and 6.

(h) Financial Instruments

SFAS No. 107, *Disclosures About Fair Value of Financial Instruments,* requires disclosure of the estimated fair values of financial instruments. The Company's financial instruments consist of cash and cash equivalents, receivables and debt obligations. The estimated fair values of these financial instruments approximates their carrying values as of December 31, 2001 and 2000, respectively. The estimated fair values have been determined through information obtained from market sources and management estimates. As of December 31, 2001, the Company does not have any material derivative or any other financial instruments as defined by SFAS No. 133, *Accounting for Derivative and Hedging Instruments*.

(i) Concentration of Credit Risk and Significant Customers

As of December 31, 2000, financial instruments that subject the Company to the potential for concentrations of credit risk primarily consisted of receivables of approximately $337,000 relating to Avecia's minimum purchase requirement (see Note 13). As of December 31, 2001, all amounts due from Avecia were received in full. Receivables at December 31, 2001, primarily consisted of approximately $174,000 of interest receivable.

(j) Comprehensive Loss

The Company applies SFAS No. 130, *Reporting Comprehensive Income.* Comprehensive loss is defined as the change in equity of a business enterprise during a period from transactions and other events and circumstances from nonowner sources. The Company's comprehensive loss is the same as the reported net loss for all periods presented.

(k) Net Loss per Common Share

The Company applies 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 for all periods presented as the effects of the Company's potential common stock equivalents are antidilutive (see Note 14).

(l) Segment Reporting

The Company applies SFAS No. 131, *Disclosures About Segments of an Enterprise and Related Information.* SFAS No. 131 establishes standards for reporting information regarding operating segments in annual financial statements and requires selected information for those segments to be presented in interim financial reports issued to stockholders. SFAS No. 131 also establishes standards for related disclosures about products and services and geographic areas. To date, the Company has viewed its operations and manages its business as principally one operating segment. As a result, the financial information disclosed herein represents all of the material financial information related to the Company's principal operating segment. For all of the periods presented, all of the Company's revenues were generated in the United States. As of December 31, 2001 and 2000, all assets were located in the United States.

HYBRIDON, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

December 31, 2001

(m) Derivative Instruments and Hedging

The Company applies SFAS No. 133, *Accounting for Derivative Instruments and Hedging Activities,* as amended by SFAS Nos. 137 and 138. These statements establish accounting and reporting standards for derivative instruments, including derivative instruments embedded in other contracts and for hedging activities. In addition, the Emerging Issues Task Force (EITF) has issued a number of derivative-related tentative and final consensuses. The Company did not own any derivative instruments at December 31, 2001. During 2001, the Company did enter into hedging contracts, all of which expired prior to December 31, 2001 (see Note 5).

(n) Stock-Based Compensation

Effective January 1, 1996, the Company adopted the provisions of SFAS No. 123, *Accounting for Stock-Based Compensation*. The Company has elected to continue to account for employee stock options at intrinsic value, in accordance with Accounting Principles Board (APB) Opinion No. 25, Accounting for Stock Issued to Employees, with disclosure of the effects of fair value accounting on net loss and loss per share on a pro forma basis.

In March 2000, the Financial Accounting Standards Board (FASB) issued Interpretation No. 44 (FIN 44), *Accounting for Certain Transactions Involving Stock Compensation — an Interpretation of APB Opinion No. 25*. This interpretation clarified the application of Accounting Principles Board (APB) Opinion No. 25, *Accounting for Stock Issued to Employees* in specified situations, as defined. The interpretation was effective July 1, 2000, but covers specified events that occurred during the period between December 15, 1998 and July 1, 2000. The adoption of this interpretation did not have any effect on the Company's consolidated financial position or results of operations for the year ended December 31, 2000. See Note 9(f) for the effects of FIN 44 on the Company's 2001 financial statements.

(o) New Accounting Pronouncements

In August 2001, the FASB issued SFAS No. 144, Accounting *for the Impairment or Disposal of Long-Lived Assets*. This statement supercedes SFAS No. 121, *Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to Be Disposed Of*, and the accounting and reporting provisions of APB Opinion No. 30, *Reporting the Results of Operations — Reporting the Effects of Disposal of a Segment of a Business, and Extraordinary, Unusual and Infrequently Occurring Events and Transactions*. Under this statement, it is required that one accounting model be used for long-lived assets to be disposed of by sale, whether previously held and used or newly acquired, and it broadens the presentation of discontinued operations to include more disposal transactions. The provisions of this statement are effective for financial statements issued for fiscal years beginning after December 15, 2001, and interim periods within those fiscal years, with early adoption permitted. The Company believes this pronouncement will not impact its consolidated financial statements.

(3) Note Receivable from Officer

At December 31, 1999, the Company had a note receivable and accrued interest from a former officer of approximately $270,000, with an interest rate of 6.0% per annum. The Company forgave the note in 2000 and charged this amount to general and administrative expense.

(4) Long-Term Debt

(a) Note Payable

During 1998, the Company entered into a $6.0 million note payable with Founders Financial Group, L.P. (Founders), formerly Forum Capital Markets, L.L.C. and several other investors. The terms of the note

payable were as follows: (i) the maturity was November 30, 2003; (ii) the interest rate was 8%; (iii) interest was payable monthly in arrears, with the principal due in full at maturity of the loan; (iv) the note payable was convertible, at the holders' option, in whole or in part, into shares of common stock at a conversion price equal to $2.40 per share, a premium to fair value at date of issuance, and (v) the note required minimum liquidity, as defined, of $2.0 million. At December 31, 2000, the Company classified the $6.0 million outstanding balance as a current liability because it did not have the financing to remain in compliance with the financial covenants at that time.

On March 28, 2001, the Company entered into an agreement with the note holders whereby it paid, out of the proceeds of the sale of its MethylGene shares discussed in Note 7, $3.0 million to the note holders in partial satisfaction of the note. In addition, the Company deposited the sum of $821,250 in a money market fund for the purpose of securing payment of the balance remaining on notes. This arrangement was made to encourage the holders of these notes to release their security interest in the shares of MethylGene, Inc.

In addition, the Company agreed to reduce the conversion price of the note from $2.40 to $1.50 upon completion of the sale of 60% of the Company's holdings in MethylGene. The Company also agreed to further reduce the conversion price from $1.50 to $0.50 if the balance of the note was not paid in full by the Company before September 30, 2001. Pursuant to Emerging Issues Task Force Issue No. 98-5 (EITF 98-5) *Accounting for Convertible Securities with Beneficial Conversion Features or Contingently Adjustable Conversion Ratios* and EITF 00-27, *Application of Issue No. 98-5 to Certain Convertible Instruments*, since the Company had both the intent and ability to pay the remaining notes prior to September 30, 2001, the Company would measure and recognize any potential beneficial conversion amount only if the Company surrendered its unilateral right to avoid the reduction in the conversion price to $0.50. On September 27, 2001, the Company paid off the remaining $3.0 million to the holders in full satisfaction of the notes. The sum of $821,250 previously deposited to secure the notes held was released to the Company.

(b) 9% Convertible Subordinated Notes Payable

Under the terms of the 9% Convertible Subordinated Notes Payable (the 9% Notes), the Company must make semi-annual interest payments on the outstanding principal balance through the maturity date of April 1, 2004. 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. 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 issue price. As of December 31, 2001, $1,306,000 of the 9% Notes are outstanding.

(c) 8% Convertible Notes Payable

In March 2000, the Company completed an offering of 8% Convertible Notes Payable (the 8% Notes). As of December 31, 2000, the Company had received approximately $7.6 million with respect to the 8% Notes. Under the terms of the 8% Notes, the Company must make semiannual interest payments on the outstanding principal balance through the maturity date of November 30, 2002. If the 8% Notes are prepaid before the maturity date, all noteholders are entitled to receive a warrant to purchase the number of shares of common stock equal to the number of shares of common stock that would be issued using the Conversion Ratio. The 8% Notes are convertible at any time prior to the maturity date at a conversion price equal to $0.60 per share of common stock, subject to adjustment under specified circumstances, as defined.

In addition, in connection with the issuance of the 8% Notes, the holders of the $6.0 million note payable (see Note 4(a)) received a warrant to purchase 2,750,000 shares of the Company's common stock at $0.60 per share. The warrant was granted as consideration to the holders of the $6.0 million note for relinquishing their seniority upon liquidation of the Company to the holders of the 8% Notes. The Company computed the

HYBRIDON, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

December 31, 2001

value of the warrants to be $547,328, using the Black-Scholes option-pricing model. The Company recorded the $547,328 as a deferred financing cost, which was being amortized to interest expense over the term of the 8% Notes.

On July 10, 2000, the holders of the 8% Notes entered into an amendment to the Subordination and Intercreditor Agreement whereby all parties agreed to release their lien on the assets that were conveyed in the HSP sale (see Note 13). In return for this partial release, the Company agreed that it would set aside $5.0 million from the proceeds with which it would purchase a money market instrument and pledge the same as collateral to secure its obligation to the holders of the 8% Notes. The amount of the pledge was to be reduced as the Company's obligations were converted to equity or repaid.

On March 5, 2001, the Company made an offer to the holders of its 8% Notes to exchange their notes in a ratio of one share of a newly-designated class of Series B Convertible Preferred Stock (Series B Preferred Stock) for each $100 in principal amount of notes tendered. On March 30, 2001, holders of $7.6 million of the Company's 8% Notes exchanged their notes for 76,046 shares of Series B Preferred Stock. The Company recorded an extraordinary loss of $1.4 million related to the early extinguishment of the 8% Notes. The extraordinary loss represents the difference between the carrying value of the 8% Notes and the fair value of the Series B Preferred Stock, as determined by the fair market value of the common stock into which the Series B Preferred Stock was convertible and the write-off of deferred financing costs and related legal fees.

As a result of the exchange, the holders of the 8% Notes released their claim on $5.0 million of the HSP Sale proceeds, which was held as collateral prior to the exchange.

Prior to December 31, 2001, approximately $456,000 of the remaining 8% Notes were converted into 1,140,448 shares of common stock and all of the 78,259 shares of Series B Preferred Stock were converted into 19,564,500 shares of common stock. These conversions were based on a reduced conversion price of $0.40 per share which was agreed to with the holders of Series B Preferred Stock and 8% Note holders as part of the Company's early exercise program discussed in Note 9. In accordance with SFAS No. 84, *Induced Conversions of Convertible Debt*, the Company recorded a charge to interest expense of approximately $353,000. The charge was equal to the fair value of the common stock received less the fair value of common stock that would have been received pursuant to the original conversion terms of the 8% Notes.

As of December 31, 2001, $288,028 of the 8% Notes remained outstanding.

(d) Related Party Notes Payable

In connection with the exchange of shares of Series B preferred stock for 8% Notes, the Company converted a promissory note payable to a former officer of the Company with a balance of $196,897 into shares of Series B Preferred Stock and subsequently into shares of common stock on terms identical to those described above.

(e) $2.0 Million Line of Credit

On May 30, 2000, the Company entered into a $2.0 million line of credit agreement in order to provide working capital until the closing of the HSP sale. The Company drew down approximately $1.0 million through August 10, 2000.

The Company agreed to issue the following warrants to purchase common stock at an exercise price of $1.08 per share: (i) 500,000 shares to persons designated by Pillar, (ii) 1,000,000 shares to the lenders, proportionate to their respective interests in the $2.0 million line of credit. The Company computed the value of the warrants to be $731,136, using the Black-Scholes option-pricing model. The Company has amortized this amount to interest expense over the term of the $2.0 million line of credit.

Following the close of the HSP sale, the Company repaid approximately $0.8 million in cash and $0.2 million with 214,043 shares of common stock at $1.08 per share pursuant to the terms of the original agreement. The Company has no additional borrowing capacity under this line of credit.

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

On May 24, 2001, the Company and Isis Pharmaceuticals, Inc. (Isis) entered into a Collaboration and License Agreement (the Agreement). Under the Agreement, the Company granted Isis a license, with the right to sublicense, the Company's antisense chemistry and delivery patents and patent applications. Isis also agreed to pay the Company a portion of specified sublicense income it receives from specified types of sublicenses of our patents and patent applications. The Company has retained the right to use the patents and patent applications in its own drug discovery and development efforts and in collaboration with third parties. In consideration of the license granted by the Company, Isis has paid $15.0 million to us in cash and issued to us 857,143 shares of its common stock having an aggregate fair market value on the dates on which title to the shares was received of $17.3 million. The remaining $4.5 million installment is due in 2003, subject to possible acceleration depending on the price of Isis' common stock.

Under the terms of EITF 00-8, *Accounting by a Grantee for an Equity Instrument to Be Received in Conjunction with Providing Goods or Services*, the Company values the shares of common stock received from Isis at the time of entitlement. During 2001, 857,143 shares of Isis common stock were issued to Hybridon. The Company recorded $17.3 million once title to those shares was received, which represented the fair value of stock on the date title was received, as deferred revenue. The remaining number of shares of Isis stock issuable to Hybridon is based on specified market conditions, as defined in the Agreement and based on current market conditions, would have a fair market value of $4.5 million. If the stock is trading above or below defined ranges, the fair value of the stock could be materially different. The remaining shares of Isis common stock are payable in 2003, subject to possible acceleration depending on the price of Isis' common stock.

Following the receipt of 357,143 of these shares, the Company entered into a number of hedging contracts to protect against a decline in value of the Isis stock while the Company was awaiting registration of these shares which was necessary before the Company could sell the Isis stock. In accordance with SFAS No. 133, these hedging contracts were derivative instruments and were marked to fair market value with the corresponding changes in fair value recognized in earnings. In accordance with SFAS No. 115, the Company recorded an unrealized loss on the shares of approximately $902,000 prior to entering into these hedging contracts. On November 1, 2001, the Company received an additional 500,000 shares of Isis common stock. The Company did not enter into any hedging contracts in connection with the receipt of these shares and recorded realized loss of approximately $457,000 on the sale of these shares. In addition, the $306,000 in fees associated with the execution of the hedging contracts was also charged to expenses during 2001.

Isis has granted the Company a license to use specified antisense patents and patent applications, principally Isis' suite of RNase H patents. The Company has the right under the agreement to use these patents and patent applications in its drug discovery and development efforts and in specified types of collaborations with third parties. In consideration of this license, the Company agreed to pay Isis a total of $6.0 million in cash or in shares of its common stock in three equal annual installments of $2.0 million beginning in May 2002. The Company also agreed to pay Isis a nominal annual maintenance fee and a modest royalty on sales of products covered by specified patents and patent applications sublicensed to the Company by Isis. The number of shares of Hybridon stock issuable to Isis is based on certain market conditions, as defined in the Agreement, and, based on current market conditions, would have a fair market value of $6.0 million, if the stock remains in a certain price range as defined in the Agreement. If the stock is trading above or below these ranges the fair value of the stock could be materially different.

The Company will recognize revenue related to the Agreement ratably over the 10-year term of the license agreement. "Deferred revenue" on the accompanying consolidated balance sheet relates to the unrecognized portion of the $32.3 million of cash and Isis stock received in 2001, as discussed above. While the amounts received are not refundable under any circumstances and the Company does not believe that it will be required to expend any significant future resources under the Agreement, this revenue has been deferred based on SAB 101, which precludes revenue recognition in cases where future obligations are not interpreted to be "inconsequential and perfunctory". The combination of significant rights retained by the Company and an ongoing obligation of the Company to make two representatives available to attend semi-annual telephonic meetings of a collaboration committee with the licensee, led to the accounting treatment described above. Direct expenses related to the Agreement of approximately $2.4 million consist of professional fees, the fair value of warrants issued to a consultant (see Note 9(b)), and royalties (see Note 6). These expenses will be recognized over the term of the Agreement as a reduction in revenue. The Company will also amortize, as a reduction to revenue over the term of the Agreement, the estimated fair value of the Company's stock that will be paid to Isis, as discussed above. In addition, $343,000 in direct expenses were charged to operations prior to closing the agreement in 2001.

During the year ended December 31, 2001, the Company recognized approximately $781,000 of revenues under the Agreement. The amount recognized is net of approximately $138,000 and $363,000, which represent the amortization of direct costs and the amortization of the estimated value of the stock to be issued to Isis, respectively.

(6) Licensing Agreement

In 1993, the Company entered into a licensing agreement with the Worcester Foundation for Biomedical Research, Inc., which has merged with the University of Massachusetts Medical Center, under which the Company has received exclusive licenses to technology in specified 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. As a result of the Agreement with Isis Pharmaceuticals, Inc. (Note 5), the Company paid the University of Massachusetts Medical Center approximately $1,177,000 based on the cash received from Isis and the fair market value at the date of the agreement of the first three installments of stock issued to the Company in 2001, less the fair value of the Hybridon stock to be issued to Isis. In addition, the Company is obligated to pay approximately $177,000 upon the issuance of the fourth installment of Isis stock to the Company.

(7) Investment in MethylGene Inc.

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

The Company granted to MethylGene exclusive, royalty-free worldwide licenses to the Company's antisense patents, patent applications and technology to develop and market the following: (i) antisense compounds which inhibit the production of DNA methyltransferase for any indication; (ii) other methods of inhibiting DNA methyltransferase for any indication and (iii) antisense compounds to inhibit up to two additional molecular targets for any indication.

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. Subsequently, MethylGene raised additional proceeds from outside investors that reduced the Company's ownership interest to 22%.

In May 1998, the agreement between the Company and MethylGene was amended to grant MethylGene a nonexclusive right to use any and all 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 the Company or (iii) May 5, 2000. The amendment expired on May 5, 2000. As additional consideration for this nonexclusive right, MethylGene was required to pay the Company milestone amounts, as defined, and transfer 300,000 shares of MethylGene's Class B shares to the Company. The Company has placed no value on these shares. During 2000 and 1999, the Company recognized $72,500 and $285,000, respectively, of revenue related to this agreement.

Prior to the sale of its HSP business (Note 13), the Company supplied MethylGene with synthetic DNA supply needs and recognized during 2000 and 1999 approximately $26,000 and $1,642,000, respectively, of product revenue from sales to MethylGene in discontinued operations. The Company also sold MethylGene a worldwide, royalty free, paid-up license to manufacture their compounds. The Company recognized approximately $179,000 of revenue in 2000 related to this license sale.

On April 27, 2001, the Company closed the sale of 60% of its holding of shares of Class A and Class B stock of MethylGene to a group of private United States institutional investors. The Company had a 22% interest in MethylGene prior to the sale of its investment. On May 14, 2001, the Company closed the sale of the remaining 40% of its holding with three of MethylGene's other shareholders on terms similar to those agreed to by the institutional investors ($2.85 Canadian or approximately $1.84 US per share as of April 27, 2001). The Company received total proceeds of approximately $7.2 million (US), which was reduced by approximately $300,000 in professional fees. The Company recorded a net gain of approximately $6.9 million on these sales. This gain is included in other income on the accompanying consolidated statement of operations.

(8) OriGenix Technologies, Inc.

In January 1999, the Company and institutional investors formed a Quebec company, OriGenix, to develop and market drugs for the treatment of infectious diseases.

Hybridon received a 49% interest in OriGenix in exchange for specified research and development efforts previously undertaken by the Company that were made available to OriGenix and licensed specified antisense compounds and other technology to OriGenix. Subsequently, OriGenix has raised additional funds from institutional investors that reduced the Company's ownership interest to 28%. The institutional investors acquired a 51% interest in OriGenix for approximately $4.0 million. The Company accounted for its investment in OriGenix under the equity method, and the Company's investment has been reduced to zero at December 31, 2001. During 2000 and 1999, the Company recognized $10,000 and $80,000, respectively, of service revenue from sales of DNA products to OriGenix.

Prior to the sale of its HSP business (Note 13), the Company supplied OriGenix with its synthetic DNA needs. During 2000 and 1999, the Company recognized approximately $90,000 and $16,000, respectively, of product revenue from sales to OriGenix in discontinued operations. Also, the Company sold OriGenix a worldwide, royalty-free, paid-up license to manufacture their compounds.

(9) Stockholders' Equity

(a) Common Stock

The Company has 100,000,000 authorized shares of common stock, $.001 par value, of which 45,632,525 shares were issued and outstanding at December 31, 2001.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

December 31, 2001

Pursuant to the terms of a unit purchase agreement dated as of May 5, 1998, the Company issued and sold a total of 9,597,476 shares of common stock (the "Put Shares") at a price of $2.00 per share. Under the terms of the unit purchase agreement, the initial purchasers (the "Put Holders") of the Put Shares have the right (the "Put Right") to require the Company to repurchase the Put Shares. The Put Right may not be exercised by any Put Holder unless: 1) the Company liquidates, dissolves or winds up its affairs pursuant to applicable bankruptcy law, whether voluntarily or involuntarily; 2) all of the Company's indebtedness and obligations, including without limitation the indebtedness under the Company's then outstanding notes, has been paid in full; and 3) all rights of the holders of any series or class of capital stock ranking prior and senior to the common stock with respect to liquidation, including without limitation the Series A convertible preferred stock, have been satisfied in full.

The Company may terminate the Put Right upon written notice to the Put Holders if the closing sales price of its common stock exceeds $4.00 per share for the twenty consecutive trading days prior to the date of notice of termination. Because the Put Right is not transferable, in the event that a Put Holder has transferred Put Shares since May 5, 1998, the Put Right with respect to those shares has terminated. As a consequence of the Put Right, in the event the Company is liquidated, holders of shares of common stock that do not have Put Rights with respect to such shares may receive smaller distributions per share upon the liquidation than if there were no Put Rights outstanding.

As of December 31, 2001, 5,467,578 of the Put Shares continued to be held in the name of Put Holders. The Company cannot determine at this time whether the Put Rights with respect to the balance of the Put Shares have terminated.

(b) Early Exercise Program

In 2001, the Company began an "early exercise" program (the Early Exercise Program) to exchange its Series B Preferred Stock, several classes of its warrants, and its remaining 8% Notes for shares of the Company's common stock, in order to simplify the Company's capital structure and to reduce the number of outstanding securities which are exercisable for or convertible into shares of its common stock. The Company offered the holders of its Series B shares the right to convert such shares into common stock at a lower conversion price than that set forth in the Certificate of Designation governing the terms of their Series B shares. The Company offered the holders of various warrants the opportunity to immediately exercise their warrants for the purchase of shares covered by such warrants at a reduced exercise price, either by paying the lower exercise price for such shares in cash or by engaging in a "cashless" transaction, whereby they could receive a reduced number of shares of common stock in exchange for warrants of equivalent value. The value of the warrants was determined by the Company based on advice from the Company's investment bankers. The Company offered the holders of its remaining 8% Notes the opportunity to exchange the 8% Notes for shares of the Company's common stock at a reduced conversion price. As of December 31, 2001, the results of the program were as follows:

All holders of the Company's Series B Convertible Preferred Stock have exchanged their shares for 19,564,500 shares of the Company's common stock;

Holders of warrants priced between $0.60 and $2.40 have exchanged their warrants for approximately 4,669,808 shares of the Company's common stock; and

$456,221 in 8% notes was exchanged for 1,140,448 shares of common stock.

In accordance with SFAS No. 84, *Induced Conversions of Convertible Debt,* the Company recorded a charge to retained earnings of approximately $4,100,000 in connection with the conversion of Series B Preferred Stock. The charge was equal to the fair value of the common stock received less the fair value of common stock that would have been received pursuant to the original conversion terms of the Series B

HYBRIDON, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

December 31, 2001

Preferred Stock. This charge was recorded as accretion of preferred stock dividends on the accompanying statement of operations and as a component of the net loss available to common stockholders.

In accordance with SFAS No. 123, *Accounting for Stock-Based Compensation,* the Company did not record any charges related to the warrant exchange as the fair value of the warrants immediately prior to the exchange was equal to the fair value of the common stock issued to the holders as settlement of the warrants. For a discussion of the accounting for the conversion of the 8% Notes see Note 4(c).

(c) Warrants

The Company has the following warrants outstanding and exercisable for the purchase of common stock at December 31, 2001:

Expiration Date	Outstanding and Exercisable	Weighted Exercise Price Per Share
April 2, 2002	588,235	$ 4.25
December 31, 2002	1,997,188	0.60
May 4, 2003	3,260,731	4.10
November 30, 2003	173,333	3.00
March 31, 2006	500,000	0.50
	6,519,487	
Weighted average exercise price per share		2.74

Substantially all of such warrants expiring in 2002 and 2003 were issued in connection with various equity and debt financings described herein. During 2001, the Company issued warrants to purchase 500,000 shares of common stock to an individual who provided consulting services to the Company. The Company valued these warrants using the Black Sholes pricing model. The warrants' fair value of approximately $570,000 was accounted for as a direct cost of the Isis Agreement (see Note 5). Pursuant to EITF Issue 00-19, *Accounting for Derivative Financial Instruments Indexed to, and Potentially Settled in, a Company's Own Stock,* the Company believes that equity classification is appropriate for all outstanding warrants.

(d) Stock Options

In 1990, the Company established the 1990 Stock Option Plan which provides for the grant of incentive stock options and nonqualified stock options. Options granted under this plan vest over various periods and expire no later than 10 years from the date of grant. Under the 1990 Option Plan, in the event of a change in control, as defined, 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, 2001, options to purchase a total of 179,357 shares of common stock remained outstanding under the 1990 Option Plan.

In 1995, the Company established the 1995 Stock Option Plan which provides for the grant of incentive stock options and nonqualified stock options. Options granted under this plan vest over various periods and

expire no later than 10 years from the date of grant. A total of 700,000 shares of common stock may be issued upon the exercise of options granted under this 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% and 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 options which in the case of incentive stock options may not exceed 10 years. As of December 31, 2001, options to purchase a total of 504,350 shares of common stock remained outstanding under the 1995 Stock Option Plan.

In 1995, the Company adopted the 1995 Director Stock Option Plan. A total of 400,000 shares of common stock may be issued upon the exercise of options granted under the Director Plan. Under the terms of the Director Plan, as amended by shareholders at the 1999 Annual Meeting, options to purchase 5,000 shares of common stock are granted to each eligible director on May 1 of each year and upon appointment to the Board. All options 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, 2001, options to purchase a total of 155,000 shares of common stock remained outstanding under the Director Plan.

In 1997, the Company adopted the 1997 Stock Incentive Plan which has since been amended, most recently at the 2001 Annual Meeting. A total of 13,500,000 shares of common stock may be issued upon the exercise of options granted under the plan. The maximum number of shares with respect to which options may be granted during any calendar year to any employee under the 1997 Stock Incentive Plan is determined by dividing 1,500,000 by the fair market value of a share of the Company's common stock at the time of grant, and not to exceed an overall per participant annual limit of 5,000,000 shares. 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 those holding 10% or more of the voting power of the Company) 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, 2001, options to purchase a total of 7,399,229 shares of common stock remained outstanding under the 1997 Stock Incentive Plan.

As of December 31, 2001, 5,280,912 options remain available for grant under the 1995 Stock Option Plan, the 1995 Director Plan and the 1997 Stock Incentive Plan.

SFAS No. 123 requires the measurement of the fair value of stock options or warrants granted to employees 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 APB Opinion No. 25 and elect the disclosure-only alternative under SFAS No. 123.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

December 31, 2001

Stock option activity for the years ended December 31, 2001, 2000, and 1999 is summarized as follows:

	Number of Shares	Exercise Price Per Share	Weighted Average Price Per Share
Outstanding, December 31, 1998.	3,460,732	$1.25 – $65.60	$ 11.25
Granted	7,640,650	0.44 – 2.00	0.85
Terminated	(5,711,832)	0.44 – 65.60	7.53
Outstanding, December 31, 1999.	5,389,550	0.50 – 2.00	0.50
Granted	1,351,026	0.50 – 3.75	1.18
Exercised	(335,240)	0.50	.50
Terminated	(1,003,503)	0.50 – 57.85	.82
Outstanding, December 31, 2000.	5,401,833	0.50 – 2.00	0.67
Granted	9,515,987	0.50 – 1.18	0.78
Exercised	(295,907)	0.50 – 0.56	0.50
Terminated	(144,799)	0.50 – 0.56	0.51
Outstanding, December 31, 2001.	14,477,114	$ 0.50 – $ 2.00	$ 0.74
Exercisable, December 31, 1999	2,772,099	$ 0.50 – $ 2.00	$ 0.50
Exercisable, December 31, 2000	3,980,476	$ 0.50 – $ 1.25	$ 0.60
Exercisable, December 31, 2001	6,913,118	$ 0.50 – $ 2.00	$ 0.71

	Options Outstanding			Options Exercisable	
Exercise Prices	Number	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price Per Share	Number	Weighted Average Exercise Price Per Share
$ 0.50	3,734,680	6.46	$ 0.50	3,574,751	$ 0.50
0.56	2,538,697	9.24	0.56	625,255	0.56
0.71 – 0.83	2,800,000	9.56	0.80	690,000	0.81
0.84	3,150,000	9.56	0.84	126,000	0.84
0.93 – 2.00	2,253,737	8.65	1.14	1,897,112	1.13
	14,477,114	8.56	0.74	6,913,118	0.71

In accordance with EITF No. 96-18, *Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling Goods or Services,* the Company measures the fair value of non-employee options as they vest using the Black-Scholes option pricing model. The Company has recorded compensation expense of $13,516, $217,701 and $231,744 in 2001, 2000 and 1999, respectively, related to grants to non-employees.

The Company has computed the pro forma disclosures required by SFAS No. 123 for all stock options and warrants granted to employees after January 1, 1995, using the Black-Scholes option-pricing model. The assumptions used for the years ended December 31, 2001, 2000, and 1999 are as follows:

	2001	2000	1999
Average risk free interest rate	4.77%	6.39%	6.12%
Expected dividend yield	—	—	—
Expected lives	6 years	6 years	6 years

Expected volatility	90%	90%	60%
Weighted average grant date fair value of options granted during the period (per share)	$0.59	$0.98	$0.37

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

December 31, 2001

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 pro forma effect of applying SFAS No. 123 for the three years ended December 31, 2001 would be as follows:

	2001	2000	1999
Net loss applicable to common stockholders, as reported	$(13,675,138)	$(7,009,916)	$(14,735,293)
Pro forma net loss applicable to common stockholders, as adjusted for the effect of applying SFAS No. 123.	$(15,890,397)	$(8,389,005)	$(18,647,864)
Basic and diluted net loss per common shares —			
As reported	$ (0.44)	$ (0.40)	$ (0.93)
Pro forma	$ (0.52)	$ (0.48)	$ (1.18)

(e) Employee Stock Purchase Plan

In October 1995, the Company adopted the 1995 Employee Stock Purchase Plan, under which up to 100,000 shares of common stock may be issued to participating employees of the Company, as defined, or its subsidiaries.

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 Stock 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 Stock 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 that 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.

(f) Repricing

In September 1999, the Company's Board of Directors authorized the repricing of options to purchase 5,251,827 shares of common stock to $0.50 per share, which represented the market value on the date of the repricing. These options are subject to variable plan accounting (see Note 2(n)), as defined in FIN 44. The repriced options have been reflected as grants and cancellations in the stock option activity for the year ended December 31, 1999. FIN 44 became effective on July 1, 2000. The Company is following the provisions of FIN 44 and will remeasure the intrinsic value of the repriced options, through the earlier of the date of exercise, cancellation or expiration, at each reporting date. For the year ended December 31, 2001, the Company recognized approximately $1,762,000 as stock compensation from repriced options. The Company

had not recognized any compensation expense related to the repriced options as of December 31, 2000, as the fair market value of the Company's common stock at December 31, 2000 was below the exercise price of the repriced option.

(g) Preferred Stock

The Restated Certificate of Incorporation of the Company permits its Board of Directors to issue up to 5,000,000 shares of preferred stock, par value $0.01 per share, 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. During 1998, the Company designated 1,500,000 shares as Series A convertible preferred stock. During 2001, the Company designated 85,000 shares as Series B convertible preferred stock. As of December 31, 2001, there were no shares of Series B convertible preferred stock authorized or outstanding.

(h) Series A Convertible Preferred Stock

The rights and preferences of the Series A convertible preferred stock are as follows:

Dividends

The holders of the Series A convertible preferred stock, as of March 15 or September 15, are entitled to receive dividends payable at the rate of 6.5% per annum, payable semi-annually in arrears. Such dividends shall accrue from the date of issuance of such shares and shall be paid semi-annually on April 1 and October 1 of each year. Such dividends shall be paid, at the election of the Company, either in cash or additional duly authorized, fully paid and non assessable shares of Series A convertible preferred stock. In calculating the number of shares to be paid with respect to each dividend, the Series A convertible preferred stock shall be valued at $100.00 per share. During 2001 and 2000, respectively, total Series A dividend accretion was approximately $4,242,000 and $4,087,000, representing 40,075 and 41,363 shares, respectively.

Liquidation

In the event of a liquidation, dissolution or winding up of the Company, whether voluntary or involuntary, after payment or provision for payment of debts and other liabilities of the Company, the holders of the Series A convertible preferred stock then outstanding shall be entitled to be paid out of the assets of the Company available for distribution to its stockholders, an amount equal to $100.00 per share plus all accrued but unpaid dividends. If the assets to be distributed to the holders of the Series A convertible preferred stock shall be insufficient to permit the payment of the full preferential amounts, then the assets of the Company shall be distributed ratably to the holders of the Series A convertible preferred stock on the basis of the number of shares of Series A convertible preferred stock held. All shares of Series A convertible preferred stock shall rank as to payment upon the occurrence of any liquidation event senior to the common stock.

Conversion

Shares of Series A convertible preferred stock are convertible, in whole or in part, at the option of the holder into fully paid and nonassessable shares of common stock at $4.25 per share, subject to adjustment as defined.

During 2001, holders of 26,079 shares of Series A convertible preferred stock converted their shares into 613,624 shares of the Company's common stock.

During 2000, holders of 77,049 shares of Series A convertible preferred stock converted their shares into 1,822,232 shares of the Company's common stock.

During 1999, holders of 21,076 shares of Series A convertible preferred stock converted their shares into 495,897 shares of the Company's common stock.

Conversion and Redemption

The Company, at its option, may cause the Series A 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 if the closing bid price, as defined, of the common stock shall have equaled or exceeded 250% of the conversion price, $4.25, subject to adjustment as defined, 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 is referred to as the "Market Trigger."

The Company, at its option, may redeem the Series A convertible preferred stock for cash equal to $100.00 per share plus all accrued and unpaid dividends if the Market Trigger has occurred in the period ending three days prior to the date of notice of redemption.

(i) Series B Convertible Preferred Stock

As discussed in Note 4(c), the holders of $7.6 million of the Company's 8% notes converted their notes into 76,046 shares of Series B Preferred Stock in March 2001. All outstanding shares of Series B convertible preferred stock were converted into common stock during July 2001.

(10) Commitments and Contingencies

(a) Facilities

The Company leases its facility on Vassar Street in Cambridge, Massachusetts, under a lease that has a 10-year term, which commenced on May 1, 1997.

The Company vacated its Milford, Massachusetts facility in September 2000, following the HSP Sale (see Note 13) and moved its corporate facilities to the Vassar Street facility.

Future approximate minimum rent payments as of December 31, 2001, under existing lease agreements through 2007, are as follows:

December 31,	Amount
2002	$ 620,000
2003	611,000
2004	611,000
2005	611,000
2006	611,000
Thereafter	204,000
	$3,268,000

During 2001, 2000, and 1999, facility rent expense for continuing operations net of sublease revenue was approximately $293,000, $246,000 and $67,000, respectively.

(b) External Collaborations

The Company funds research efforts of various academic collaborators in connection with its research and development programs. Total future fixed commitments under these agreements approximate $124,000 and 177,000 in 2002 and 2003, respectively.

(c) Related-Party 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 shareholders and directors of the Company including Founders Financial Group, L.P., Pillar S.A., and Pillar Investment Limited. During 2001, 2000 and 1999, the Company paid $460,000, $74,000 and $336,000, respectively, under these agreements with related parties.

(d) Employment Agreements

The Company has entered into employment agreements with several of its executive officers that 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 year's base salary.

On September 1, 2001, the Company appointed a new Chief Executive Officer, whose employment agreement provides for the purchase of 510,000 shares of the Company's stock at a market value of $428,400. The agreement also provides for the grant of (1) 3,150,000 stock options that are exercisable at a market value of $0.84 per share, and vest over a five-year period, and (2) 490,000 stock options that are exercisable at $0.71 per share, and vest over a one-year period. The Company recorded deferred compensation of approximately $60,000 for the $0.71 stock option granted at an exercise price that was below market value. The Company is amortizing this amount as compensation expense over the vesting period.

(e) Contingencies

From time to time, the Company may be exposed to various types of litigation. The Company is not engaged in any legal proceedings that are expected, individually or in the aggregate, to have a material adverse effect on the Company's financial condition or results of operations.

(11) Income Taxes

During 2001, the Company accrued $500,000 for Alternative Minimum Tax (AMT) of which $450,000 was paid prior to December 31, 2001. The National Economic Stabilization and Recovery Act, enacted in March 2002, has temporarily rescinded the AMT as it applies to the Company. The Company will receive a $450,000 refund and recognize a $500,000 credit to operations during 2002 in accordance with SFAS No. 109, *Accounting for Income Taxes*.

The Company applies SFAS No. 109, *Accounting for Income Taxes*. Accordingly, a deferred tax asset or liability is determined based on the difference between the financial statement and tax basis of assets and liabilities, as measured by the enacted tax rates expected to be in effect when these differences reverse. At December 31, 2001, the Company had net operating loss and tax credit carryforwards for federal income tax purposes of approximately $210.0 million and $3.9 million, respectively, available to reduce federal taxable income and federal income taxes, respectively. The Tax Reform Act of 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 Tax Reform Act of 1986, which as of December 31, 2000, have resulted in ownership changes in excess of 50%, as defined under the Act and which will limit the Company's

ability to utilize its net operating loss carryforwards. Ownership changes in future periods may place additional limits on 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,		
2007	$ —	$ 136,000
2008	7,921,000	627,000
2009	25,670,000	689,000
2010	36,134,000	496,000
2011	44,947,000	493,000
2012	60,810,000	750,000
2018	21,366,000	500,000
2019	7,567,000	250,000
2020	5,544,000	50,000
	$209,959,000	$3,991,000

As of December 31, 2001 and 2000, the components of the deferred tax assets are approximately as follows:

	2001	2000
Operating loss carryforwards	$ 84,551,000	$ 94,177,000
Temporary differences	704,000	329,942
Tax credit carryforwards	3,991,000	4,186,000
	89,246,000	98,692,942
Valuation allowance	(89,246,000)	(98,692,942)
	$ —	$ —

The Company has provided a valuation allowance for its deferred tax asset due to the uncertainty surrounding the ability to realize this asset.

(12) Employee Benefit Plan

The Company has 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 contributing up to 3% of employee base salary, by matching 50% of the first 6% of annual base salary contributed by each employee. Approximately $44,000, $47,000, and $54,000 of 401(k) benefits were charged to continuing operation during 2001, 2000, and 1999, respectively.

(13) Sale of Hybridon Specialty Products

In September 2000, the Company completed the sale of its Hybridon Specialty Products (HSP) business, which manufactured and marketed oligonucleotides to Avecia Biotechnology, a subsidiary of Avecia, Inc. of Manchester, United Kingdom, for up to $15.0 million. In 2000, the Company recorded a gain of approximately $6.3 million on the HSP sale, comprised of net proceeds received during 2000 of approximately $12.0 million less transaction and other costs of approximately $1.2 million and the book value

of the net assets sold. The transaction costs primarily consist of legal and accounting fees, severance arrangements with certain employees, and other estimated costs associated with consummating the sale. Payment of the remaining $3.0 million was held back by Avecia since, as part of this transaction, the Company had entered into a supply agreement whereby it was committed to make minimum purchases during 2000 and 2001 on a “take or pay” basis if Avecia’s third-party sales did not meet specified goals. Hybridon was also required to make quarterly payments to cover purchasing shortfalls, based on an agreed upon formula. These payments were included in accounts receivable at December 31, 2000.

The gain on the Asset Sale is computed as follows:

Proceeds		$ 12,000,000
Property and equipment sold, net	$4,894,887	
Security deposit	90,000	
Net book value of assets sold	4,984,887	
Current liabilities assumed by the buyer	(88,969)	
Long-term liabilities assumed by the buyer	(324,555)	
Net assets sold		(4,571,363)
Transaction and other costs		(1,157,578)
Gain on sale		$ 6,271,059

On September 20, 2001, the Company received the $3.0 million contingent payment in full from Avecia. On June 30, 2001 and December 31, 2000, the Company had accrued receivables of approximately $1,032,000 and $337,000, respectively, for payments made to cover its purchasing shortfall. Upon receipt of the $3.0 million payment, the Company applied approximately $1,032,000 toward the satisfaction of this receivable and recognized the remaining $1,968,000 as a gain from the sale of the discontinued operations. In November 2001, the Company also received a refund of approximately $695,000 of the Company’s minimum payments to Avecia per the terms of the supply agreement. This refund increased the gain from discontinued operations during the year ended December 31, 2001 to approximately $2,663,000.

The consolidated financial statements of the Company have been restated to reflect the financial results of the HSP business as a discontinued operation for the years ended December 31, 2000 and 1999. Reported revenues, expenses and cash flows exclude the operating results of the discontinued operations. Revenues from discontinued operations for the years ended December 31, 2000 and 1999 are approximately $2,950,000 and $5,821,000, respectively. The 2000 gain includes the gain on sale as calculated above of $6.3 million as well as the $0.8 million operating loss from discontinued operations. The 1999 net loss relates solely to HSP’s operating results.

HYBRIDON, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

December 31, 2001

(14) Income (Loss) Per Share

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

	Years Ended December 31,		
	2001	2000	1999
Numerator:			
Loss from continuing operations	$ (6,583,924)	$ (8,384,753)	$ (8,950,291)
Income (loss) from discontinued operation	2,662,597	5,462,154	(1,552,751)
Extraordinary loss	(1,411,876)	—	—
Net loss	(5,333,203)	(2,922,599)	(10,503,042)
Accretion of preferred stock dividend	(8,341,935)	(4,087,317)	(4,232,251)
Numerator for basic and diluted (loss) applicable to common shareholders	$(13,675,138)	$ (7,009,916)	$(14,735,293)
Denominator for basic and diluted (loss) income per share	30,820,098	17,418,233	15,810,664
(Loss) Income per share — basic and diluted			
Continuing operations	$ (0.21)	$ (0.48)	$ (0.57)
Discontinued operations	0.09	0.31	(0.10)
Extraordinary loss	(0.05)	—	—
Net loss per share	(0.17)	(0.17)	(0.66)
Accretion of preferred stock dividends	(0.27)	(0.23)	(0.27)
Net loss per share applicable to common stockholders	$ (0.44)	$ (0.40)	$ (0.93)

For the years ended December 31, 2001, 2000, and 1999, diluted net loss per share from continuing operations is the same as basic net loss per common share, as the effects of the Company's potential common stock equivalents are antidilutive. Total antidilutive securities were 40,714,556, 49,098,529, and 45,557,695 for the years ended December 31, 2001, 2000, and 1999, respectively. They consist of stock options, warrants, convertible preferred stock and convertible debt instruments (on an as-converted basis) and are not included in the Company's calculation of diluted net loss per common share.

HYBRIDON, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

December 31, 2001

(15) Supplemental Disclosure of Cash Flow Information

Supplemental disclosure of cash flow information for the periods presented are as follows:

	Years Ended December 31,		
	2001	2000	1999
Supplemental disclosure of cash flow information:			
Cash paid for interest	$ 379,294	$ 641,132	$ 753,620
Cash paid for taxes	$ 450,000	$ —	$ —
Supplemental disclosure of non cash financing and investing activities:			
Exchange of 8% convertible notes payable for Series B preferred stock and common stock	$ 8,060,779	$ —	$ —
Accretion of Series A and Series B preferred stock dividends	$ 4,241,935	$4,087,317	$4,232,251
Dividend from induced conversion of Series B preferred stock	$ 4,100,000	$ —	$ —
Issuance of common stock for services	$ 140,358	$ —	$ 1,000,000
Interest paid in kind on 8% Notes	$ 305,180	$ —	$ —
Forgiveness of note receivable	$ —	$ 270,050	$ —
Conversion of Series A preferred stock into common stock	$ 614	$ 1,821	$ 496
Conversion of Series B preferred stock into common stock	$ 19,565	$ —	$ —
Conversion of line of credit into common stock	$ —	$ 231,167	$ —
Issuance of stock options to non-employees, net of terminations	$ 10,756	$ (50,781)	$ —
Issuance of warrants in connection with consulting services	$ 569,667	$ —	$ —
Cashless exercise of stock warrants	$ 4,443	$ —	$ —
Fair value of ISIS stock received	$17,284,288	$ —	$ —
Deferred compensation relating to issuance of stock options	$ 112,192	$ —	$ —
Sale and disposal of fully depreciated property and equipment	$ 2,525,535	$ —	$ —

(16) Shareholder Rights Plan

The Company adopted a shareholder rights plan in December 2001. Under the rights plan, one right was distributed as of the close of business on January 7, 2002 on each then outstanding share of the Company's common stock. The rights will automatically trade with the underlying common stock and ordinarily will not be exercisable. The rights will only become exercisable if a person acquires beneficial ownership of, or commences a tender offer for, 15 percent or more of the Company's common stock, unless, in either case, the transaction was approved by the Company's board of directors.

If the rights become exercisable, the type and amount of securities receivable upon exercise of the rights would depend on the circumstances at the time of exercise. Initially, each right would entitle the holder to purchase one one-thousandth of a share of the Company's newly created Series C Junior Participating Preferred Stock for an exercise price of $13.00. If a person acquires 15 percent or more of the Company's common stock in a transaction that was not approved by the Company's board of directors, then each right, other than those owned by the acquiring person, would instead entitle the holder to purchase $26.00 worth of

the Company's common stock for the $13.00 exercise price. If the Company is involved in a merger or other transaction with another company in which the Company is not the surviving corporation, or transfers more than 50% of its assets to another company, in a transaction that was not approved by the Company's board of directors, then each right, other than those owned by the acquiring person, would instead entitle the holder to purchase $26.00 worth of the acquiring company's common stock for the $13.00 exercise price.

The Company's board of directors may redeem the rights for $0.001 per right at any time until ten business days after a person acquires 15 percent or more of the Company's common stock. Unless the rights are redeemed or exchanged earlier, they will expire on December 10, 2011.

UNIT PURCHASE AGREEMENT

UNIT PURCHASE AGREEMENT (this "Agreement"), dated as of April 1, 1998, by and among HYBRIDON, INC., a Delaware corporation (the "Company") and the Persons listed on the signature pages hereof (the "Current Purchasers") and such other Persons that from time to time hereafter may become party hereto pursuant to Section 13.10, (the "Additional Purchasers" and collectively with the Current Purchasers, the "Purchasers").

The Company desires to issue and sell to Purchasers, and Purchasers desire to purchase from the Company, units consisting of an aggregate of up to $55,000,000 aggregate principal amount of Notes due 2007 (the "Notes") in substantially the form attached hereto as EXHIBIT A, together with certain warrants to purchase common stock of the Company (the "Note Units") or, if the Alternative Equity Closing Conditions referred to in Supplement #2 (as defined in Section 6.5) are met, the Alternative Equity Units referred to therein (the sale of such Alternative Equity Units being referred to herein as the "Alternative Offering"), upon and subject to the terms and conditions hereinafter set forth. As used herein, the terms "Unit Offering" and "Offering" shall mean the offering of Units by the Company during the Offering Period hereinafter referred to pursuant to this Agreement and substantially similar agreements, and the Unit Purchase Agreements in respect of Note Units previously entered into, and "Units" shall mean the Note Units or the Alternative Equity Units, as applicable.

Accordingly, in consideration of the premises and the mutual agreements contained herein, Purchasers and the Company hereby agree as follows:

1. PURCHASE AND SALE OF THE UNITS.

1.1. PURCHASE AND SALE OF THE UNITS. Subject to the terms and conditions set forth herein, the Company hereby agrees to issue and sell to Purchasers, and Purchasers, severally and not jointly, hereby agree to purchase from the Company, units ("Units"), each consisting, except as otherwise provided in the first paragraph of this Agreement in respect of the Alternative Offering, of (i) $100,000 principal amount of Notes and (ii) Equity Warrants in accordance with Section 2.2 hereof, at a Closing (as such term is defined in Section 2.1 hereof), provided however, that upon the occurrence of the Mandatory Conversion Event (as defined in the Note), Units will consist of the Series B Preferred Stock that would otherwise underlie such Notes and such Equity Warrants. The aggregate purchase price for the respective Units sold to each Purchaser pursuant to this Agreement shall be the product of (x) the aggregate number of Units purchased by such Purchaser set forth on the signature page hereto executed by such Purchaser and (y) $100,000. "Operative Documents" as used herein shall mean this Agreement, the Notes, the Certificate of Designation for the Series B Preferred Stock of the Company in substantially the form attached hereto as EXHIBIT B (the "Certificate of Designation") (such Preferred Stock, the "Conversion Securities"), the Warrant Agreement in substantially the form attached hereto as EXHIBIT C-1, the Alternative Equity Warrant Agreement in substantially the form attached hereto as EXHIBIT C-2, and the Negative Pledge Agreement in substantially the form attached hereto as EXHIBIT D.

1.2. REGULATION D OFFERING. The Company has retained placement agents to conduct, on a "best efforts" basis, a private placement offering of the Units in the United States in reliance on Regulation D (the "Regulation D Offering").

1.3. REGULATION S OFFERING. The Company has retained Pillar Investments Ltd. ("Pillar"), as placement agent (the "Placement Agent" and, together with any placement agent for the Regulation D Offering, the "Placement Agents"), to conduct, on a "best efforts" basis, a private placement offering of the Units in reliance on Regulation S (the "Regulation S Offering") for sale outside of the "United States" (as defined in Section 11.26 hereof).

2. DELIVERY OF UNITS.

2.1. DELIVERY OF UNITS.

(a) The Company shall offer for sale a minimum of 20 Units (the "Minimum Offering Amount") and an aggregate maximum of up to 400 Units (the "Maximum Offering Amount") (with an option (the "Placement Agents' Option") in favor of the Placement Agents for an additional 150 Units (plus warrants to be sold to the Placement Agents or their designees, for $0.01 per warrant, to purchase Units equal, in the aggregate, to 25% of the Units sold in the Unit Offering), except that, in the case of the Alternative Offering, the contrary information in Supplement #2 (as defined in Section 6.5) shall supersede the foregoing. Each Purchaser understands and acknowledges that such Purchaser has no discretion as to the receipt of Note Units or Alternative Equity Units; the securities constituting the Units will be determined based solely on whether the Alternative Equity Closing Conditions described in Supplement #2 have been satisfied. The offering period (the "Offering Period") for the Units in the Regulation S Offering began on January 15, 1998. The Company may conduct closings of Units (each, a "Closing") on an interim basis until the Maximum Offering Amount (and any additional amount, pursuant to the Placement Agents' Option) has been reached (the "Final Closing Date"; such term as used herein also referring to the closing date of the Alternative Offering). The Offering Period shall terminate at 12:00 noon (New York Time) on October 15, 1998, subject to extension at the sole option of the Placement Agents, for an additional 60 days (the "Termination Date").

(b) Contemporaneously with the execution and delivery of this Agreement by a Purchaser and pending the sale of Units at a Closing, such Purchaser will be required to deposit the Purchase Price in escrow with the Escrow Agent (as defined in the Escrow Agreement hereinafter referred to) by wire transfer of immediately available funds for the account of the Escrow Agent to "MeesPierson (Cayman) Limited, Escrow Agent, F/B/O Hybridon, Inc," pursuant to the terms of an escrow agreement in substantially the forms attached hereto as EXHIBIT E (the "Escrow Agreement").

(c) At a Closing, the funds required for the purchase of the Units by respective Purchasers will be released by the Escrow Agent from the escrow account in accordance with the terms of the Escrow Agreement. The Company will promptly deliver to Purchasers the Notes or Common Stock underlying the Units to be purchased on the date of a Closing as set forth in Article 1 hereof against the receipt by the Company of the Purchase Price from escrow in accordance with the Escrow Agreement. Each Purchaser hereby authorizes the Placement Agent to accept delivery of Notes (or other securities underlying Units) or certificates representing Common Stock on such Purchaser's behalf in Paris, France unless the Purchaser is in attendance at such Closing. The Notes shall be registered in the Purchasers' respective names or the name of the nominee(s) of such Purchasers in denominations of $1,000 and integral multiples thereof pursuant to instructions delivered to the Company not less than two days prior to a Closing. Interest on each Note sold in the Unit Offering shall accrue only from the date of issuance of such Note.

(d) Each Closing of the purchase and sale of the Units in the Regulation S Offering will take place at the offices of the Placement Agent at 28, Avenue de Messine, 75008 Paris, France. Any Unit to be sold by the Company under this Agreement must be sold outside of the United States.

2.2. EQUITY WARRANTS. Promptly following the Termination Date or at such earlier time as shall be determined by the Placement Agent, each Purchaser shall be entitled to be issued Unit Warrants (as defined below) as follows. All Units sold in the Offering will contain Unit Warrants (as defined below) to purchase up to the number of shares of Common Stock equal to 15% (rounded to the nearest whole share) of the number of shares of Common Stock underlying the Conversion Securities (as defined below) underlying the principal amount of Notes included in the number of Units purchased by such Purchaser in

the Offering (or underlying the Conversion Securities sold directly) (such number of shares of Common Stock, the "Common Equivalent Shares"). In addition, Units purchased prior to the date on which the Mandatory Conversion Event (as defined in the Note) occurs will contain Unit Warrants permitting the purchase of up to an additional 5 % of the Common Equivalent Shares (rounded to the nearest whole share). "Unit Warrants" shall mean warrants exercisable for a period of seven years from the Final Closing Date (as defined below) at an initial exercise price equal to the conversion price per share of Common Stock of the Conversion Securities as in effect on the Final Closing Date. The terms of the Unit Warrants shall be as more fully described in the Warrant Agreement between the Company and ChaseMellon Shareholder Services LLC, as Warrant Agent (the "Warrant Agreement"), a form of which is attached hereto as EXHIBIT C.

Furthermore, in the event that the Mandatory Conversion Event does not occur on or before the Termination Date, each Purchaser shall be entitled to receive additional warrants (the "Additional Warrants") to purchase, at an exercise price of $.001 per share of Common Stock, a number of shares of Common Stock equal to 100% (rounded to the nearest whole share) of the Common Equivalent Shares underlying the Units purchased by such Purchaser in the Offering, which Additional Warrants will be exercisable immediately; provided, however, that if by the Termination Date the Company has received proceeds, net of cash fees, commissions and expenses, of at least $20,000,000 but the Exchange Offer has not been open until the expiration of 20 (or, if required by law, 30) business days (i.e., the minimum period required by Federal law), such Additional Warrants will be exercisable beginning on the first day following the end of such statutory period unless the Mandatory Conversion Event (as defined in the Note) has occurred. After the occurrence of any Mandatory Conversion Event, upon the occurrence of a Reset Event (as defined in the Certificate of Designation), each Purchaser shall be issued additional Unit Warrants to purchase the number of shares of Common Stock equal to 50% of the product of (x) the number of Conversion Securities held of record by such Purchaser at such time, multiplied by (y) the difference between (1) the Conversion Rate (as defined in the Certificate of Designation) immediately following the Reset Event minus (2) the Conversion Rate immediately preceding the Reset Event. The Company shall not be required to issue any fractional shares upon exercise of the Unit Warrants or the Additional Warrants (collectively, the "Equity Warrants") or pay any cash in lieu thereof. Notwithstanding the foregoing, so long as any 9% Notes due 2004 ("9% Notes") of the Company remain outstanding, warrantholders may not exercise Equity Warrants to the extent that such exercise could, in the Company's judgment, either alone or in conjunction with other issuances or holdings of capital stock, other warrants or convertible securities of the Company, result in a Change of Control (as defined in the Indenture referred to in the Note). In the event of the Alternative Offering, in lieu of the foregoing, Purchasers will be entitled to the Alternative Equity Warrants described in Supplement #2.

3. CONDITIONS TO THE OBLIGATIONS OF PURCHASERS AT A CLOSING. The obligation of Purchasers to purchase and pay for the Units to be purchased by Purchasers at a Closing is subject to the satisfaction on or prior to the relevant Closing Date of the following conditions, which may only be waived by written consent of the Placement Agent.

3.1. REPRESENTATIONS AND WARRANTIES. The representations and warranties of the Company contained in this Agreement shall be true and correct in all material respects when made, and shall be true and correct in all material respects at and as of the date of such Closing as if they had been made on and as of such Closing.

3.2. PERFORMANCE OF COVENANTS. All of the covenants and agreements of the Company contained in this Agreement and required to be performed on or prior to the relevant

Closing Date shall have been performed in a manner reasonably satisfactory to

the Secured Party.

3.3. CLOSING DOCUMENTS. The Company shall have delivered to the Placement Agent the following:

(a) a certificate executed by the President or Chief Executive Officer of the Company dated the relevant Closing Date stating that the conditions set forth in Sections 3.1 and 3.2 have been satisfied; and

(b) a certificate of the Secretary or Assistant Secretary of the Company, dated the relevant Closing Date, certifying the attached copy of the By-laws of the Company, the authorization of the execution, delivery and performance of this Agreement, and the resolutions authorizing the actions to be taken by the Company under this Agreement.

3.4. NEGATIVE PLEDGE. Except in the case of the Alternative Offering, the Company shall have entered into the Negative Pledge Agreement with the Secured Party on behalf of Purchasers, in substantially the form of EXHIBIT D hereto, covering the intellectual property of the Company.

3.5. NO LEGAL ORDER PENDING. There shall not then be in effect any legal or other order enjoining or restraining the transactions contemplated by this Agreement.

3.6. NO LAW PROHIBITING OR RESTRICTING SUCH SALE. There shall not be in effect any law, rule or regulation prohibiting or restricting such sale or requiring any consent or approval of any person which shall not have been obtained to issue the Units (except as otherwise provided in this Agreement).

3.7. [Reserved]

3.8. LEGAL OPINION. If requested by the Placement Agent at a Closing, counsel to the Company shall have delivered to the Placement Agent for the benefit of such Placement Agent and the Purchasers at such Closing, a legal opinion concerning legal matters relating to this Agreement and the Term Sheet as the Placement Agent may require.

3.9. COMFORT LETTER. If requested by the Placement Agent at a Closing, the Company's auditors, Arthur Andersen LLP, shall have delivered to the Placement Agent for the benefit of the Placement Agent and the Purchasers at such Closing, a comfort letter to such effect as the Placement Agent may require.

3.10. PROCEEDINGS. All corporate and other proceedings taken or to be taken in connection with the transactions contemplated hereby to be consummated at each Closing and all documents incident thereto shall be reasonably satisfactory in form and substance to the Secured Party, including but not limited to the authorization of the issuance of the Conversion Securities, Equity Warrants, Placement and Advisory Warrants (as defined in Section 11.11) and the Unit-Underlying Common Stock (as defined in Section 11.24).

4. CONDITIONS TO THE OBLIGATIONS OF THE COMPANY AT A CLOSING. The obligation of the Company to issue and sell Units to Purchasers at a Closing is subject to the satisfaction of the following conditions, each of which may be waived by the Company:

4.1. REPRESENTATIONS AND WARRANTIES. The representations and warranties of each Purchaser contained in this Agreement shall be true and correct when made, and shall be true and correct at and as of the date of such Closing as if they had been made on and as of such Closing.

4.2. NO LAW PROHIBITING OR RESTRICTING SUCH SALE. There shall

not be in effect any law, rule or regulation prohibiting or restricting such sale or requiring any consent or approval of any person which shall not have been obtained to issue the Notes, if the Closing consists of Note Units and Common Stock, if the Closing consists of Alternative Equity Units (except as otherwise provided in this Agreement).

5. CREATION OF SECURITY INTEREST.

5.1. GRANT OF SECURITY INTEREST.

(a) The Company hereby grants and pledges to Amer Tabbah (or his designee) (the "Secured Party"), solely as agent for Purchasers and not in his individual capacity, a continuing security interest in all presently existing and hereafter acquired or arising assets and property of the Company described on EXHIBIT F hereto (the "Collateral") in order to secure prompt payment of the principal sum and interest evidenced by the Notes, and the performance by the Company of each of its obligations under this Agreement and the Notes. Such security interest shall automatically terminate upon the earlier of (i) the payment of principal and interest on the Notes and (ii) such time as the Notes are no longer outstanding (the "Security Interest Termination Date"). Purchasers hereby acknowledge and agree that the security interests granted hereby are subordinate and subject to any prior security interest in the Collateral granted by the Company and are subordinate and subject to any lien granted in the future to secure Senior Indebtedness of the Company. Purchasers and the Secured Party hereby agree not to exercise any of their rights with respect to the Collateral under this Agreement, at law, in equity or otherwise until the holders of Senior Indebtedness have been paid in full.

(b) Purchasers, by their acceptance of the benefits of this Agreement and the Notes, hereby irrevocably designate the Secured Party to act as Secured Party with respect to this Agreement and as specified in the other Operative Documents. Each Purchaser hereby irrevocably authorizes, and each holder of any Note, by such holder's acceptance of such Note, shall be deemed irrevocably to authorize, the Secured Party to take such action on its behalf under the provisions of this Agreement and the other Operative Documents and any other instruments and agreements referred to herein or therein and to exercise such powers and to perform such duties hereunder and thereunder as are specifically delegated to, or required of, the Secured Party by the terms hereof or thereof and such other powers as are reasonably incidental thereto. Each Purchaser, on behalf of itself and future holders of the Notes issued to such Purchaser, hereby authorizes and directs the Secured Party, from time to time in the Secured Party's discretion to take any action and promptly to execute and deliver on its behalf any document or instrument that the Company may reasonably request to effect, confirm or evidence the provisions of this Article 5, including, without limitation, the occurrence of the Security Interest Termination Date, any subordination agreement, or otherwise. In addition, Purchasers and Secured Party hereby covenant and agree promptly to execute and deliver any such document or instrument in respect of such subordination, and in respect of the occurrence of the Security Interest Termination Date, as the Company may reasonably request.

(c) This Section 5 shall be inapplicable in the case of the Alternative Offering.

5.2. DELIVERY OF ADDITIONAL DOCUMENTATION REQUIRED. The Company shall from time to time execute and deliver to Secured Party, at the request of Secured Party, all financing statements and other documents that Secured Party may reasonably request to perfect and continue perfected Secured Party's security interests in the Collateral and in order fully to consummate all of the transactions contemplated under this Agreement, it being understood and agreed by the Purchasers and the Secured Party that the Company need not deliver possession of any Collateral to the Secured Parry, take any action to perfect the security interest granted hereby other than the filing of financing statements under the Uniform Commercial Code or take any other action that would, in its sole judgment, conflict with the terms of or pertaining to any

Senior Indebtedness.

6. REPRESENTATIONS AND WARRANTIES OF PURCHASERS. Purchasers hereby severally represent and warrant to the Company as follows (for purposes of the Alternative Offering, "Notes" and "Conversion Securities" shall refer to Common Stock, and "Equity Warrants" shall refer to Alternative Equity Warrants unless the context shall otherwise require):

6.1. INVESTMENT INTENT. Each Purchaser recognizes that the purchase of the Units involves a high degree of risk including, but not limited to, the following: (i) the Company remains a development stage business with limited operating history and requires substantial

funds in addition to the proceeds of the Unit Offering; (ii) an investment in the Company is highly speculative, and only investors who can afford the loss of their entire investment should consider investing in the Company, the Units, the Notes, the Equity Warrants, or the shares of Conversion Securities of the Company issued on conversion of, or in lieu of, the Notes or the Unit-Underlying Common Stock, (iii) such Purchaser may not be able to liquidate his investment; (iv) transferability of the Notes, the Equity Warrants, any shares of Conversion Securities of the Company which may be issued upon conversion of, or in lieu of, the Notes and the Unit Underlying Common Stock is extremely limited; (v) in the event of a disposition of the Notes, the Equity Warrants, the Conversion Securities or the Unit-Underlying Common Stock, such Purchaser could sustain the loss of his entire investment and (vi) the Company has not paid any dividends since inception and does not anticipate the payment of dividends on the Common Stock or the Conversion Securities in the foreseeable future. Such risks are more fully set forth in the Term Sheet (as hereinafter defined) furnished by the Company to such Purchaser.

6.2. LACK OF LIQUIDITY. Each Purchaser confirms that he or it is able (i) to bear the economic risk of this investment, (ii) to hold the Notes, the Equity Warrants, any shares of Conversion Securities of the Company issued upon conversion of, or in lieu of, the Notes and any shares of Unit-Underlying Common Stock for an indefinite period of time, and (iii) presently to afford a complete loss of his or its investment; and represents that he or it has sufficient liquid assets so that the illiquidity associated with this investment will not cause any undue financial difficulties or affect such Purchaser's ability to provide for his or its current needs and possible financial contingencies, and that his or its commitment to all speculative investments is reasonable in relation to his or its net worth and annual income. Furthermore, each Purchaser acknowledges that the Equity Warrants and the Conversion Securities contain certain restrictions on exercise, voting, conversion and certain other rights, as more particularly set forth in the Warrant Agreement and the Certificate of Designation for the Conversion Securities, attached hereto as EXHIBITS C and B, respectively.

6.3. KNOWLEDGE AND EXPERIENCE. Each Purchaser hereby acknowledges and represents that such Purchaser has prior investment experience, including investment in securities that are non-listed, unregistered and are not traded on the Nasdaq National or SmallCap Market, nor on the National Association of Securities Dealers, Inc.'s (the "NASD ") automated quotation system, or such Purchaser has employed at its own expense the services of an investment advisor, attorney and/or accountant to request documents from the Company pursuant to Section 6.5 hereof and to read all of the documents furnished or made available by the Company to such Purchaser and to evaluate the investment, tax and legal merits and the consequences and risks of such a transaction on such Purchaser's behalf, that such Purchaser or such professional advisor has such knowledge and experience in financial and business matters and that such Purchaser or such professional advisor is capable of evaluating the merits and risks

of the prospective investment and, if applicable, satisfies the conditions set out in Rule 501(h) under the Securities Act.

6.4. PURCHASER CAPACITY. Each Purchaser hereby represents that such Purchaser either by reason of such Purchaser's business or financial experience, or the business or financial experience of such Purchaser's professional advisors (who are unaffiliated with, and who are not compensated by, the Company or any affiliate or selling agent of the Company, including the Placement Agent, directly or indirectly), has the capacity to protect such Purchaser's own interests in connection with the transaction contemplated hereby.

6.5. TERM SHEET. Each Purchaser hereby acknowledges receipt and careful review of (a) the Confidential Term Sheet of the Company attached hereto as EXHIBIT G-1 and Supplement #1 thereto attached hereto as EXHIBIT G-2 ("Supplement #1") and Supplement #2 thereto attached hereto as EXHIBIT G-3 ("Supplement #2"), as they may be further supplemented and amended, and the attachments and exhibits thereto, all of which constitute an integral part thereof (the "Term Sheet"), and (b) this Agreement and all attachments to it, and hereby represents that such Purchaser has been furnished by the Company during the course of this transaction with all information regarding the Company which such Purchaser or its representative has requested or desired to know, has been afforded the opportunity to ask questions of, and to receive answers from, duly authorized officers or other representatives of the Company concerning the terms and conditions of the Unit Offering, securities underlying the Units, the Conversion Securities and the Unit-Underlying Common Stock and the affairs of the Company and has received any additional information which such Purchaser or its representative has requested.

6.6. RELIANCE ON INFORMATION. Each Purchaser has relied solely upon the information provided by the Company in the Term Sheet and in this Agreement in making the decision to invest in the Units. To the extent necessary, each Purchaser has retained, at the sole expense of such Purchaser, and relied upon, appropriate professional advice regarding the investment, tax and legal merits and consequences of this Agreement and its purchase of the Units, the Notes, the Equity Warrants, the conversion of the Notes into, or the purchase of, the Conversion Securities and the conversion into or exercise for Unit-Underlying Common Stock hereunder. Each Purchaser acknowledges and agrees that (i) the Company has prepared the Term Sheet and that no other Person, including, without limitation, any of the Placement Agents, has supplied any information for inclusion in the Term Sheet other than information furnished in writing to the Company by the Placement Agents specifically for inclusion in the Term Sheet relating to such respective placement agent, (ii) the Placement Agents have no responsibility for the accuracy or completeness of the Term Sheet and (iii) such Purchaser has not relied upon the independent investigation or verification, if any, which may have been undertaken by the Placement Agents.

6.7. NO SOLICITATION. Each Purchaser represents that (i) such Purchaser was contacted regarding the sale of the Units by the Placement Agent (or an authorized agent or representative thereof) with whom such Purchaser had a prior substantial pre-existing relationship and (ii) no Units were offered or sold to such Purchaser by means of any form of general solicitation or general advertising, and in connection therewith no Purchaser (A) received or reviewed any advertisement, article, notice or other communication published in a newspaper or magazine or similar media or broadcast over television or radio whether closed circuit, or generally available; or (B) attended any seminar meeting or industry investor conference whose attendees were invited by any general solicitation or general advertising.

6.8. REGISTRATION. Each Purchaser hereby acknowledges that the Unit Offering has not been reviewed by the Securities and Exchange Commission or any state regulatory authority, since the Unit Offering is intended to be exempt from the registration requirements of Section 5 of the Securities Act pursuant to Regulation S. No Purchaser shall sell or otherwise transfer the Units, the

Notes, the Conversion Securities, the Equity Warrants or any Unit Underlying Common Stock unless such securities are registered under the Securities Act or unless an exemption from such registration is available.

6.9. PURCHASE FOR OWN ACCOUNT. Each Purchaser understands that neither the Units nor the Notes nor the Equity Warrants nor any shares of Conversion Securities issued or issuable upon conversion of, or in lieu of, the Notes nor any shares of Unit-Underlying Common Stock have been registered under the Securities Act by reason of a claimed exemption under the provisions of the Securities Act which depends, in part, upon such Purchaser's investment intention. In this connection, each Purchaser hereby represents that such Purchaser is purchasing Units for such Purchaser's own account for investment and not with a view toward the resale or distribution to others or for resale in connection with, any distribution or public offering (within the meaning of the Securities Act), nor with any present intention of distributing or selling the same and such Purchaser has no present or contemplated agreement, undertaking, arrangement, obligation or commitment providing for the disposition thereof. No Purchaser, if an entity, was formed for the purpose of purchasing the Units.

6.10. HOLDING PERIOD. Each Purchaser understands that there is no public market for the Notes, the Equity Warrants or any shares of the Conversion Securities issued upon conversion of the Notes and that no market is expected to develop for any such Notes, such Equity Warrants or such shares. Each Purchaser understands that even if a public market develops for such Notes, such Equity Warrants or such shares, reliance upon Rule 144 under the Securities Act for resales requires, among other conditions, a one-year holding period prior to the resale (in limited amounts) of securities acquired in a non-public offering without having to satisfy the registration requirements under the Securities Act. Each Purchaser understands and hereby acknowledges that the Company is under no obligation to register any of the Notes, any

Equity Warrants or any shares of the Conversion Securities under the Securities Act or any applicable non-United States, state securities or "blue sky" laws (but will be required to register the Common Stock included in the Alternative Equity Units). Each Purchaser shall hold the Company and its directors, officers, employees, controlling persons and agents (including the Placement Agents and their respective officers, directors, employees, counsel, controlling persons and agents) and their respective heirs, representatives, successors and assigns harmless from, and shall indemnify them against, all liabilities, costs and expenses incurred by them as a result of (i) any misrepresentation made by such Purchaser contained in this Agreement (including in Article 14 hereof), (ii) any sale or distribution by such Purchaser in violation of the Securities Act or any applicable non-United States, state securities or "blue sky" laws or (iii) any untrue statement made by such Purchaser.

6.11. LEGENDS. Each Purchaser consents to the placement of the legend set forth below on any certificate or other document evidencing the Notes:

> "THE TERMS OF THIS NOTE ARE SUBJECT TO THE TERMS OF A UNIT PURCHASE AGREEMENT, A COPY OF WHICH IS AVAILABLE FROM HYBRIDON, INC. (THE "COMPANY"). THE SECURITIES REPRESENTED BY THIS NOTE HAVE NOT BEEN REGISTERED UNDER THE UNITED STATES SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR ANY APPLICABLE STATE SECURITIES LAWS, AND MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED OR HYPOTHECATED OR OTHERWISE TRANSFERRED IN THE ABSENCE OF A REGISTRATION STATEMENT IN EFFECT WITH RESPECT TO THE SECURITIES UNDER THE SECURITIES ACT OR AN EXEMPTION FROM THE SECURITIES ACT. ANY SUCH TRANSFER MAY ALSO BE SUBJECT TO COMPLIANCE WITH APPLICABLE STATE SECURITIES LAWS AND THE LAWS OF OTHER APPLICABLE JURISDICTIONS."

Each Purchaser further consents to the placement of one or more restrictive legends on the shares of Conversion Securities, the Equity Warrants, Common Stock and the Unit-Underlying Common Stock as required by applicable securities

laws. Each Purchaser is aware that the Company will make a notation in its appropriate records with respect to the restrictions on the transferability of such Notes, Equity Warrants, Conversion Securities and Unit-Underlying Common Stock.

6.12. FINANCIAL REVIEW. Each Purchaser understands that the Company will review this Agreement and is hereby given authority by each Purchaser to call such Purchaser's bank or place of employment or otherwise review the financial standing of such Purchaser; and it is further agreed that the Company (with the consent of the Placement Agent) and the Placement

Agent, at its sole discretion, reserves the unrestricted right, without further documentation or agreement on the part of such Purchaser, to reject or limit any purchase, and to close the Unit Offering to such Purchaser at any time.

6.13. RESIDENCE OF PURCHASER. Each Purchaser hereby represents that the address of such Purchaser furnished by such Purchaser on the signature page hereof is such Purchaser's principal residence if such Purchaser is an individual or its principal business address if it is a corporation or other entity.

6.14. POWER AND AUTHORITY. Each Purchaser represents that such Purchaser has full power and authority (corporate, statutory and otherwise) to execute and deliver this Agreement and to purchase the Units, the Equity Warrants, the Notes, the shares of Conversion Securities issuable upon conversion of, or in lieu of, the Notes and any shares of Unit Underlying Common Stock. This Agreement constitutes the legal, valid and binding obligation of each Purchaser, enforceable against such Purchaser in accordance with its terms.

6.15. PLANS. If a Purchaser is a corporation, partnership, limited liability company, trust, employee benefit plan, individual retirement account or other entity, then subject to the terms contained in this Agreement (a) it is authorized and qualified to become an investor in the Company and the person signing this Agreement on behalf of such entity has been duly authorized by such entity to do so, and (b) it is duly organized, validly existing and in good standing under the laws of the jurisdiction of its organization.

6.16. NASD. Each Purchaser acknowledges that if he or she is a registered representative of an NASD member firm, he or she must give such firm the notice required by the NASD's Rules of Fair Practice, receipt of which must be acknowledged by such firm in Section 14.3 below.

6.17. SECURITIES LAWS. Each Purchaser acknowledges that at such time, if ever, as the Notes, the Equity Warrants, Conversion Securities, the Common Stock or Unit Underlying Common Stock are registered, sales of the Notes, the Equity Warrants the Conversion Securities and Unit-Underlying Common Stock will be subject to applicable nonUnited States and state securities laws, including those of the State of New Jersey which require any securities sold in New Jersey to be sold through a registered broker-dealer or in reliance upon an exemption from registration.

6.18. BROKERS. Each Purchaser represents and warrants that it has not engaged, consented to nor authorized any broker, finder or intermediary to act on its behalf, directly or indirectly, as a broker, finder or intermediary in connection with the transactions contemplated by this Agreement. Each Purchaser shall indemnify and hold harmless the Company from and

against all fees, commissions or other payments owing to any such person or firm acting on behalf of such Purchaser hereunder.

6.19. PLACEMENT AGENT. Each Purchaser acknowledges that (a) the Company has engaged, consented to and authorized the Placement Agent in

connection with the transactions contemplated by this Agreement, (b) the Company shall pay the Placement Agents certain advisory and restructuring fees and a commission and reimburse the Placement Agents' expenses in accordance with their respective placement agency agreements, and the Company shall indemnify and hold harmless such Purchaser from and against all fees, commissions or other payments owing by the Company to the Placement Agents or any other person or firm acting on behalf of the Company hereunder and (c) registered representatives of the Placement Agents and/or their respective designees (including, without limitation, registered representatives of the Placement Agents and/or their respective designees who participate in the Unit Offering or in the issuance of shares of the Conversion Securities upon conversion of the Notes) will be paid a portion of the commissions paid to the relevant placement agent including a portion of the Placement and Advisory Warrants (as defined in Section 11.11 hereof).

6.20. BENEFICIAL OWNER. Each Purchaser, whose name appears on the signature line below, will be the beneficial owner of the Units that such Purchaser acquires.

6.21. ACCREDITED INVESTOR. Each Purchaser represents that it is an "accredited investor" as such term is defined in Rule 501 of Regulation D.

6.22. RELIANCE ON REPRESENTATION AND WARRANTIES. Each Purchaser understands that the Units are being offered and sold to the undersigned in reliance on speck exemptions from the registration requirements of United States Federal and state securities laws and that the Company is relying upon the truth and accuracy of the representations, warranties, agreements, acknowledgments and understandings of the undersigned set forth herein in order to determine the applicability of such exemptions and the suitability of the undersigned to acquire the Notes, the Equity Warrants, the Conversion Securities, the Common Stock and the Unit-Underlying Common Stock.

6.23. LOCK-UP PERIOD. Subject to the proviso below, and to Section 7.1(c), from the date hereof and continuing for a period (the "Lock-Up Period") of nine (9) months from the effective date of the Registration Statement (as defined in Section 12.2 hereof) (the "Effective Date"), each Purchaser shall not, without the prior written consent of the Placement Agent, offer, pledge, sell, contract to sell, grant any option for the sale of, or otherwise dispose of, directly or indirectly, 75% of the Registrable

Securities (as defined in Section 12.1) purchased or acquired by each Purchaser, provided, however, that, following each three month period after the Effective Date, an amount of Registrable Securities equal to 25% of the number of Registrable Securities purchased or acquired by each Purchaser shall become exempt from the lock-up provisions contained in this sentence. For the sake of clarity, subject to Section 7.1(c), 25 % of the Registrable Securities will not be subject to any lock-up. All percentages referred to above apply separately to the Common Stock included in, and Common Stock underlying the warrants included in, the Alternative Equity Units. In addition, each Purchaser agrees that during the period from the date that such Purchaser was first contacted with respect to the potential purchase of Transfer Restricted Securities through the last date upon which such Purchaser holds any Transfer Restricted Securities (as defined in Section 12.1) or Registrable Securities, such Purchaser shall not, directly or indirectly, through related parties, affiliates or otherwise, (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 any transaction contemplated by this Agreement, that involves hedging of such Purchaser's position in any security of the Company.

6.24. CONVERSION SECURITIES CERTIFICATES. Each Purchaser consents to the placement of a statement on the face or back of any certificates representing Conversion Securities, in substantially the following form:

"Hybridon, Inc. (the "Corporation") will furnish without charge to each

stockholder who so requests the powers, designations, preferences and relative, participating, optional, or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights."

7. ADDITIONAL REPRESENTATIONS AND WARRANTIES RELATING TO REGULATION S.

7.1. Each Purchaser hereby additionally represents and warrants to the Company as follows:

(a) such Purchaser is not a U.S. Person or a Person. in the United States, is purchasing the Units for such Purchaser's own account and is not acquiring the securities comprising, or the securities underlying, the Units (collectively, the "Securities") for the account or benefit of any U.S. Person;

(b) such Purchaser understands and acknowledges that (i) none of the Securities have been registered under the Securities Act and that the Securities may not be offered or sold in the United States or to, or for the account or benefit of, any 'U.S. Person unless the Securities are registered under the Securities Act or such offer or sale is made pursuant to an exemption from the registration requirements of the Securities Act, (ii) the Units are being distributed pursuant to the terms of Regulation S, which permits securities to be sold to Persons outside the United States or to Persons that are not U.S. Persons in an "offshore transaction" (as

defined in the Securities Act Rule 902(i)), subject to certain terms and conditions and (iii) hedging transactions involving the Securities may not be conducted unless in compliance with the Securities Act;

(c) such Purchaser acknowledges that for a period of one year following the Final Closing Date (the "Restricted Period"), such Purchaser shall not (i) engage in any activity undertaken for the purpose of, or that could reasonably be expected to have the effect of, conditioning the market in the United States for the Securities or (ii) unless such Securities are registered under the Securities Act or an exemption from the registration requirements of the Securities Act is available, offer, sell or transfer any of the Securities in the United States or to, or for the account or benefit of, a U.S. Person. Such Purchaser understands that the Securities and any interest therein are only transferable on the books and records of the transfer agent and registrar of the Company. Such Purchaser further understands that such transfer agent and registrar will not register any transfer of the Securities which the Company believes may violate the restrictions set forth in this paragraph (c), and that the Company may place stop transfer orders with its transfer agent with respect to certificates representing Securities. The Company may require a certification satisfactory to it as a condition to such registration and transfer;

(d) the Purchaser did not receive any offer to purchase Units in the United States, no directed selling efforts were made to such Purchaser in the United States in contravention of the requirements of Regulation S and, at the time of both the offer and sale of the Units to such Purchaser, such Purchaser was outside the United States;

(e) to the best knowledge of the Purchaser, each distributor (as the term is defined in Regulation S) participating in the Regulation S Offering, if any, has agreed that all offers and sales of the Units prior to the expiration of a period of one year commencing on the Final Closing Date shall only be made in compliance with the safe harbor provisions contained in Regulation S and the Restricted Period, or pursuant to registration of the Securities under the Securities Act or pursuant to an applicable exemption from registration under the Securities Act;

(f) such Purchaser agrees that for a two year period following the Final Closing Date (the "Legend Period") the Notes shall bear the legend set forth below and the Conversion Securities, Equity Warrants, Alternative Equity

Warrants, Common Stock and Unit Underlying Common Stock shall bear a similar legend:

"THE TERMS OF THIS NOTE ARE SUBJECT TO THE TERMS OF A UNIT PURCHASE AGREEMENT, A COPY OF WHICH IS AVAILABLE FROM HYBRIDON, INC. (THE "COMPANY"). THE SECURITIES REPRESENTED BY THIS NOTE HAVE NOT BEEN REGISTERED UNDER THE UNITED STATES SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR ANY

APPLICABLE STATE SECURITIES LAWS, AND MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED OR HYPOTHECATED OR OTHERWISE TRANSFERRED IN THE ABSENCE OF A REGISTRATION STATEMENT IN EFFECT WITH RESPECT TO THE SECURITIES UNDER THE SECURITIES ACT OR AN EXEMPTION FROM THE SECURITIES ACT. ANY SUCH TRANSFER MAY ALSO BE SUBJECT TO COMPLIANCE WITH APPLICABLE STATE SECURITIES LAWS AND THE LAWS OF OTHER APPLICABLE JURISDICTIONS.

THIS NOTE MAY NOT BE OFFERED OR SOLD IN THE UNITED STATES OR TO A U.S. PERSON OR FOR THE ACCOUNT OR BENEFIT OF A U.S. PERSON PRIOR TO THE EXPIRATION OF THE RESTRICTED PERIOD (AS DEFINED IN THE PURCHASE AGREEMENT), AND NO TRANSFER OR EXCHANGE OF THIS NOTE MAY BE MADE UNTIL AFTER THE LATER OF THE DATE OF EXPIRATION OF THE RESTRICTED PERIOD AND THE DATE ON WHICH THE REQUIRED CERTIFICATION RELATING TO SUCH INTEREST HAS BEEN PROVIDED IN ACCORDANCE WITH THE TERMS OF THE PURCHASE AGREEMENT. HEDGING TRANSACTIONS INVOLVING THE NOTES MAY NOT BE CONDUCTED UNLESS IN COMPLIANCE WITH THE SECURITIES ACT.";

(g) each Purchaser requesting removal of any legend shall provide to the Company a written representation that, during the Restricted Period, neither Units nor Securities were sold or arranged to be sold in the United States or to a U.S. Person and that neither the Units nor any Securities will be used to cover a short sale or other borrowing of any securities of the Company in the United States made during the Restricted Period;

(h) such Purchaser is not purchasing the Units nor any Securities as part of any plan or scheme to evade the registration requirements of the Securities Act; and

(i) such Purchaser understands that, when exercising an Alternative Equity Warrant or Equity Warrant, the Purchaser will be required to give (a) written certification that it is not a U.S. Person and the Alternative Equity Warrant or Equity Warrant is not being exercised on behalf of a U.S. Person, or (b) a written opinion of counsel to the effect that the Alternative Equity Warrant or Equity Warrant and the securities delivered upon exercise thereof have been registered under the Securities Act or are exempt from registration thereunder.

7.2. FOREIGN STATUS. The Purchaser hereby represents that (a) such Purchaser (1) is not a citizen or resident of the United States, a corporation or partnership organized under the laws of the United States or any state thereof or a trust or estate whose income is includable in gross income for United States Federal income tax purposes regardless of its source and (2) has accurately completed the Form W-8 attached hereto as EXHIBIT H, or (b) such Purchaser will

promptly provide the Company with an accurately completed Form W-9 or substitute Form W-9 providing such Purchaser's U.S. taxpayer identification number. The Purchaser hereby consents to the withholding from payments otherwise due and payable by the Company of amounts required to be withheld under applicable tax law.

8. REPRESENTATION. Warranties and Covenants of the Company. Except as set forth on the Schedule of Exceptions attached hereto as EXHIBIT I,

the Company hereby represents, warrants and covenants to each Purchaser that:

8.1. ORGANIZATION, GOOD STANDING AND QUALIFICATION. The Company is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware and has the corporate power and authority to conduct its business as described in the Term Sheet. The Company is duly qualified to do business as a foreign corporation and is in good standing in Massachusetts and in each jurisdiction in which the nature of the business conducted, or as proposed to be conducted in the Term Sheet, by it or the properties owned, leased or operated by it, makes such qualification or licensing necessary and where the failure to be so qualified or licensed would have a material adverse effect upon the business, operations or financial condition of the Company.

8.2. CAPITALIZATION AND VOTING RIGHTS. The authorized, issued and outstanding capital stock of the Company, as of the date of the Term Sheet, is as set forth in the Term Sheet under the heading "Equity Capitalization and Indebtedness"; all issued and outstanding shares of capital stock of the Company are validly issued, fully paid and nonassessable. Except as set forth in the Term Sheet, as of the date of the Term Sheet, there are no outstanding options, warrants, agreements, convertible securities, preemptive rights or other rights to subscribe for or to purchase any shares of capital stock of the Company. Except as set forth in the Term Sheet, in this Agreement and as otherwise required by law, there are no restrictions upon the voting or transfer of the Transfer Restricted Securities (as defined in Section 12.1) pursuant to the Company's Certificate of Incorporation, as amended (the "Certificate of Incorporation"), Bylaws or other governing documents or any agreement or other instruments to which the Company is a party or by which the Company is bound.

8.3. AUTHORIZATION, ENFORCEABILITY. The Company has the corporate power and authority to enter into this Agreement and to consummate the transactions contemplated hereby. All corporate action on the part of the Company, its directors and stockholders necessary for the execution, delivery and performance of this Agreement by the Company, the sale, issuance and delivery of the Units contemplated hereby and the performance of the Company's obligations hereunder has been taken. This Agreement has been duly executed and delivered by the Company and constitutes a legal, valid and binding obligation of the Company, enforceable against the Company in accordance with its terms, subject to laws of general application relating

to bankruptcy, insolvency and the relief of debtors and rules of law governing specific performance, injunctive relief or other equitable remedies, and to limitations of public policy. Upon the issuance and delivery of the Conversion Securities and Registrable Securities, as contemplated by this Agreement, such securities will be duly and validly authorized and issued, fully paid and nonassessable. The issuance and sale of the securities contemplated hereby will not give rise to any preemptive rights or rights of first refusal on behalf of any person.

8.4. NO CONFLICT; GOVERNMENTAL CONSENTS.

(a) The execution and delivery by the Company of this Agreement and the consummation by the Company of the transactions contemplated hereby will not result in the violation of any law, statute, rule, regulation, order, writ, injunction, judgment or decree of any court or governmental authority to or by which the Company is bound, or of any provision of the Certificate of Incorporation or By-laws of the Company, and will not conflict with, or result in a material breach or violation of, any of the terms or provisions of, or constitute (with due notice or lapse of time or both) a material default under, any material lease, loan agreement, mortgage, security agreement, note, trust indenture or other agreement or instrument to which the Company is a party or by which it is bound or to which any of its properties or assets is subject nor result in the creation or imposition of any lien upon any of the properties or assets of the Company other than in favor of the Secured Party.

(b) No consent, approval, authorization or other order of any governmental authority or other third-party under any material agreement to which the Company is a party is required to be obtained by the Company in connection with the authorization, execution and delivery of this Agreement or with the authorization, issuance and sale of the Units, except such as have already been obtained, and such filings as may be required to be made with the Securities and Exchange Commission and with any state or foreign "blue sky" or securities regulatory authority.

8.5. GOVERNMENTAL AUTHORIZATIONS. Except as set forth in the Term Sheet, the Company has, on the date hereof and on the relevant Closing Date, all material licenses, permits and other governmental authorizations currently required for the conduct of its business or ownership of properties and is in all material respects complying therewith.

8.6. LITIGATION. Except as set forth in the Term Sheet, on the date hereof and on the relevant Closing Date, the Company knows of no pending or, to the knowledge of the Company, threatened legal or governmental proceedings against the Company which could materially adversely affect the business, financial condition or operations of the Company (other than proceedings with respect to overdue trade payables not exceeding $8 million, which payables were incurred in the ordinary course of business).

8.7. ACCURACY OF REPORTS. All reports required to be filed by the Company since and including the most recent filing of the Company's Annual Report on Form 10-K, to and including the relevant Closing Date, have been duly filed with the Securities and Exchange Commission, complied at the time of filing in all material respects with the requirements of their respective forms and were complete and correct in all material respects as of the dates at which the information was furnished, and contained (as of such dates) no untrue statement of a material fact or omitted to state a material fact necessary in order to make the statements contained therein, in light of the circumstances under which they were made, not misleading.

8.8. INVESTMENT COMPANY. The Company is not an "investment company" within the meaning of such term under the Investment Company Act of 1940, as amended, and the rules and regulations of the Securities and Exchange Commission thereunder.

8.9. PAYMENT OF NOTES. The Company shall pay the principal of and interest on the Notes on the dates and in the manner provided in the Notes and this Agreement. To the extent lawful, the Company shall pay interest (including post-petition interest in any proceeding under any Bankruptcy Law) on (i) overdue principal of the Notes at the rate borne by the Notes and (ii) overdue installments of interest at the same rate.

8.10. STAY, EXTENSION AND USURY LAWS. The Company covenants (to the extent that it may lawfully do so) that it will not at any time insist upon, plead, or in any manner whatsoever claim or take the benefit or advantage of, any stay, extension or usury law wherever enacted, now or at any time hereinafter in force, which may affect the covenants or the performance of the transactions contemplated by this Agreement; and the Company (to the extent it may lawfully do so) hereby expressly waives all benefit or advantage of any such law.

8.11. INSURANCE. The Company will at all times if and so long as Notes are outstanding maintain valid policies of worker's compensation and such other insurance with respect to its properties and business of the kinds and in amounts not less than is customarily maintained by corporations engaged in the same or similar business and similarly situated.

8.12. CORPORATE EXISTENCE; MAINTENANCE OF PROPERTIES. The Company will at all times, so long as Notes are outstanding, cause to be done all things necessary to maintain, preserve and renew its existence and will

preserve and keep in force and effect, all licenses, permits and authorizations necessary to the conduct of its business, the loss of which would have a material adverse effect on the business and operations of the Company. The Company will also maintain and keep its properties in good repair, working order and condition, ordinary wear and tear excepted, if and so long as Notes are outstanding.

8.13. TAXES AND LIENS. If and so long as Notes are outstanding, the Company will duly pay and discharge when payable, all taxes, assessments and governmental charges imposed upon or against the Company or its properties, or any part thereof or upon the income or profits therefrom, in each case before the same become delinquent and before penalties accrue thereon, as well as all claims for labor, materials or supplies which if unpaid might by law become a lien upon any of its property, unless and to the extent that the same are being contested in good faith and by appropriate proceedings and the Company has set aside on its books adequate reserves with respect thereto.

8.14. MERGER; SALE OF ASSETS. If and so long as Notes are outstanding, the Company shall not consolidate with or merge into, or sell, lease, convey or otherwise dispose of all or substantially all of its assets to, any Person in a single transaction or series of related transactions, without the consent of the Secured Party, unless:

(a) the Company is the continuing corporation or the Person formed by or surviving any such consolidation or merger (if other than the Company), or to which such sale, lease, conveyance or other disposition of assets shall have been made, is organized and existing under the laws of the United States, any state thereof or the District of Columbia and such Person (if other than the Company) expressly assumes by supplemental agreement executed and delivered to the Secured Party, all the obligations of the Company under the Notes and, in respect of the Notes, this Agreement;

(b) immediately before and immediately after giving effect to the transaction no Event of Default (as such term is defined in the Notes), and no event which, after notice or lapse of time, or both, would become an Event of Default (a "Default"), shall have occurred and be continuing; and

(c) immediately after giving effect to such transaction, the Notes and this Agreement (as supplemented by any such supplemental agreement) will be valid and enforceable obligations of the Company or such successor.

8.15. TERM SHEET DISCLOSURE. No information set forth in the Term Sheet contains, as of the date hereof or the relevant Closing Date, any untrue statement of a material fact or omits to state a material fact necessary in order to make the statements contained therein, in light of the circumstances under which they were made, not misleading.

8.16. RESERVATION OF SHARES; TRANSFER TAXES, ETC. The Company shall at all times reserve and keep available, out of its authorized and unissued shares of Conversion Securities, solely for the purpose of effecting the conversion of the Notes and the exercise of the Placement and Advisory Warrants, such number of shares of its Conversion Securities free of

preemptive rights as shall be sufficient to effect the conversion of all Notes from time to time outstanding and the exercise of all Placement and Advisory Warrants 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 Conversion Securities if at any time the number of shares of authorized, unissued and unreserved shares of Conversion Securities shall not be sufficient to permit the conversion of all the then-outstanding Notes and the exercise of all the then-outstanding Placement and Advisory Warrants. The Company shall not issue any Conversion

Securities other than to effect the conversion of the Notes or accrued interest thereon, Conversion Securities sold in lieu of Notes in the Offering and Conversion Securities issuable upon exercise of Placement and Advisory Warrants.

The Company shall pay any and all issue or other taxes (but in no event income taxes) that may be payable in respect of any issue or delivery of shares of Conversion Securities on conversion of the Notes or the exercise of the Placement and Advisory Warrants. 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 Conversion Securities (or other securities or assets) in a name other than that in which the Notes so converted, or the Placement and Advisory Warrants so exercised, 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.

8.17. LISTING. If the Company's Common Stock becomes traded on the Nasdaq National Market (the "Nasdaq"), the Company shall take such action as is necessary in accordance with the rules of the Nasdaq to enable the Registrable Securities (as defined in Section 12.1) to trade on the Nasdaq.

8.18. PROPRIETARY RIGHTS. Except as has been or will be reflected in the Term Sheet prior to the relevant Closing, the Company owns or possesses adequate and enforceable rights to use all patents, patent applications, trademarks, service marks, trade names, corporate names, copyrights, trade secrets, processes, mask works, licenses, inventions, formulations, technology and know-how and other intangible property used or proposed to be used in the conduct of its business as described in, or contemplated by, the Term Sheet (the "Proprietary Rights"). Except as has been or will be reflected in the Term Sheet prior to the relevant Closing, the Company or the entities from whom the Company has acquired rights has taken all necessary action to protect all of the Company's Proprietary Rights. Except as set forth in the Term Sheet, as of the relevant Closing: the Company has not received any notice of, and there are not any facts known to the Company that indicate the existence of (i) any infringement or misappropriation by any third party of any of the Proprietary Rights or (ii) any claim by a third party contesting the validity of any of the Proprietary Rights; the Company has not received any notice of any infringement, misappropriation or violation by the Company or any of its

employees of any Proprietary Rights of third parties, and, to the best of the Company's knowledge, neither the Company nor any of its employees has infringed, misappropriated or otherwise violated any Proprietary Rights of any third parties; and, to the best of the Company's knowledge, no infringement, illicit copying, misappropriation or violation of any intellectual property rights of any third party by the Company has occurred or will occur with respect to any products currently being sold by the Company or with respect to any products currently under development by the Company or with respect to the conduct of the Company's business as currently contemplated. Except as described in the Term Sheet, as of the relevant Closing, the Company is not aware that any of its employees are obligated under any contract (including licenses, covenants or commitments of any nature) or other agreement, or subject to any judgment, decree or order of any court or administrative agency, which would interfere with the use of the employee's best efforts to promote the interests of the Company or that would conflict with the Company's business as currently conducted or as proposed to be conducted. To the best of the Company's knowledge, as of the relevant Closing, neither the execution nor delivery of this Agreement, nor the carrying on of the Company's business by the employees of the Company, nor the conduct of the Company's business, as currently conducted or as proposed to be conducted, will conflict with, or result in, a breach of the terms, conditions or provisions of, or constitute a default under, any contract, covenant or instrument under which any such employee is now obligated. In addition, as of each Closing, all employees are required to assign intellectual property rights to the Company.

9. SUBORDINATION.

9.1. AGREEMENT TO SUBORDINATE. The Company covenants and agrees, and each Purchaser and any subsequent holder of a Note (each, a "Holder"), by such Holder's acceptance of a Note, likewise covenants and agrees, that, to the extent and in the manner hereinafter set forth in this Article 9, the indebtedness represented by the Notes and the payment of the principal of and interest on each and all of the Notes and the security interest given as security for the Notes are hereby expressly made subordinate and subject in right of payment to the prior payment in full of all Senior Indebtedness.

No provision of this Article 9 shall prevent the occurrence of any default or event of default hereunder.

9.2. PAYMENT OVER OF PROCEEDS UPON DISSOLUTION, ETC. In the event of (a) any insolvency or bankruptcy case or proceeding, or any receivership, liquidation, reorganization or other similar case or proceeding in connection therewith, relative to the Company or to its creditors, as such, or to its assets, or (b) any liquidation, dissolution or other winding-up of the Company, whether voluntary or involuntary and whether or not involving insolvency or bankruptcy, (c) any assignment for the benefit of creditors or any other marshalling of assets and

liabilities of the Company, then and in any such event the holders of Senior Indebtedness shall be entitled to receive payment in full of all amounts due or to become due on or with respect to all Senior Indebtedness, or provision shall be made for such payment in money or money's worth, before the Holders are entitled to receive any payment on account of principal of, or interest on, the Notes, and to that end the holders of Senior Indebtedness shall be entitled to receive, for application to the payment thereof, any payment or distribution of any kind or character, whether in cash, property or securities, which may be payable or deliverable with respect to the Notes in any such case, proceeding, liquidation, dissolution or other winding up or event.

In the event that, notwithstanding the foregoing provisions of this Section 9.2, any Holder shall have received any payment or distribution of assets of the Company of any kind or character, whether in cash, property or securities, before all Senior Indebtedness is paid in full or payment thereof provided for, then and in such event such payment or distribution shall be held in trust by such recipient and shall be paid over or delivered forthwith to the trustee in bankruptcy, receiver, liquidating trustee, custodian, assignee, agent or other Person making payment or distribution of assets of the Company for application in the form received to the payment of all Senior Indebtedness remaining unpaid, to the extent necessary to pay all Senior Indebtedness in full, after giving effect to any concurrent payment or distribution to or for the holders of Senior Indebtedness.

The consolidation of the Company with, or the merger of the Company into, another Person or the liquidation or dissolution of the Company following the conveyance or transfer of its properties and assets substantially as an entirety to another Person upon the terms and conditions set forth in Section 8.14 shall not be deemed a dissolution, winding-up, liquidation, reorganization, assignment for the benefit of creditors or marshalling of assets and liabilities of the Company for the purposes of this Section 9.2 if the Person formed by such consolidation or into which the Company is merged or the Person which acquires by conveyance or transfer such properties and assets substantially as an entirety, as the case may be, shall, as a part of such consolidation, merger, conveyance or transfer, comply with the conditions set forth in Section 8.14.

9.3. PRIOR PAYMENT TO SENIOR INDEBTEDNESS UPON ACCELERATION OF NOTES. In the event that any Notes are declared due and payable before their stated maturity, then in such event the holders of Senior Indebtedness outstanding at the time such Notes so become due and payable shall be entitled to receive payment in full of all amounts due or to become due on or with respect to such Senior Indebtedness, or provision shall be made for such payment

in money or money's worth, before the Holders are entitled to receive any payment by the Company on account of the principal of or interest on the Notes or on account of the purchase or other acquisition of Notes. The Holders shall provide notice to the holders of the Senior Indebtedness

of the occurrence of any default or Event of Default under the Notes at the time that such notice is provided to the Company.

In the event that, notwithstanding the foregoing, the Company shall make any payment to any Holder prohibited by the foregoing provision of this Section 9.3, then and in such event such payment shall be held in trust by such recipient and shall be paid over and delivered forthwith to the Company in the form received.

The provisions of this Section 9.3 shall not apply to any payment with respect to which Section 9.2 would be applicable.

9.4. NO PAYMENT WHEN SENIOR INDEBTEDNESS IN DEFAULT.

(a) In the event and during the continuation of any default in the payment of principal of or interest on any Senior Indebtedness beyond any applicable grace period with respect thereto, or in the event that any event of default with respect to any Senior Indebtedness shall have occurred and be continuing (or would arise by reason of a payment required hereunder by the Company with respect to the principal of or interest on the Notes) permitting the holders of such Senior Indebtedness (or a trustee on behalf of the holders thereof) to declare such Senior Indebtedness due and payable prior to the date on which it would otherwise have become due and payable, unless and until such event of default shall have been cured or waived or shall have ceased to exist or the Company shall have received written notice from an authorized representative of the Senior Indebtedness with respect to which such event of default relates approving payment on the Notes, then no payment shall be made by the Company with respect to the principal of or interest on the Notes or to acquire any of the Notes; provided that no such default will prevent any payment on, or with respect to, the Notes for more than 120 days after written notice of such default or Event of Default has been given to the Secured Party unless the maturity of such Senior Indebtedness has been accelerated. Not more than one such 120 day delay may be made in any consecutive 360 day period with respect to a covenant default, irrespective of the number of defaults with respect to Senior Indebtedness during such period.

In the event that, notwithstanding the foregoing, the Company shall make any payment to any Holder prohibited by the foregoing provision of this Section 9.4, then and in such event such payment shall be held in trust by such recipient and shall be paid over and delivered forthwith to the Company in the form received.

The provisions of this Section 9.4 shall not apply to any payment with respect to which Section 9.2 would be applicable.

9.5. PAYMENT PERMITTED IF NO DEFAULT. Nothing contained in this Article 9 or elsewhere in this Agreement or in any of the Notes shall prevent the Company, at any time except when any of the conditions described in Section 9.2, 9.3 or 9.4 exist, from making payments at any time of principal of or interest on the Notes.

9.6. SUBROGATION TO RIGHTS OF HOLDERS OF SENIOR INDEBTEDNESS. Subject to the payment in full of all Senior Indebtedness, Holders shall be subrogated to the extent of the payments or distributions made to the holders of such Senior Indebtedness pursuant to the provisions of this Article 9 (equally and ratably with the holders of all indebtedness of the Company which is not Senior Indebtedness and which is entitled to like rights of subrogation) to the

rights of the holders of such Senior Indebtedness to receive payments and distributions of cash, property and securities applicable to the Senior Indebtedness until the principal of and interest on the Notes shall be paid in full. For purposes of such subrogation, no payments or distributions to the holders of Senior Indebtedness of any cash, property or securities to which Holders would be entitled except for the provisions of this Article 9, and no payments over pursuant to the provisions of this Article 9 to the holders of Senior Indebtedness by Holders, shall, as among the Company, its creditors other than holders of Senior Indebtedness and Holders be deemed to be a payment or distribution by the Company to or on account of Senior Indebtedness.

9.7. PROVISIONS SOLELY TO DEFINE RELATIVE RIGHTS. The provisions of this Article 9 are and are intended solely for the purpose of defining the relative rights of the Holders on the one hand and the holders of Senior Indebtedness on the other hand. Nothing contained in this Article 9 or elsewhere in this Agreement or in the Notes is intended to or shall: (a) impair, as among the Company, its creditors other than holders of Senior Indebtedness and the Holders, the obligation of the Company, its creditors other than holders of Senior Indebtedness and the Holders, the obligation of the Company, which is absolute and unconditional (and which, subject to the rights under this Article 9 of the holders of Senior indebtedness, is intended to rank equally with all other general obligations of the Company), to pay to the Holders the principal of and interest on the Notes as and when the same shall become due and payable in accordance with their terms; or (b) affect the relative rights against the Company of the Holders and creditors of the Company other than the holders of Senior Indebtedness; or (c) prevent the Secured Party or any Holder from exercising all remedies otherwise permitted by applicable law upon default under this Agreement, subject to the rights, if any, under this Article 9 of the holders of Senior Indebtedness to receive cash, property and securities otherwise payable or deliverable to the Secured Party or such Holder.

9.8. SECURED PARTY TO EFFECTUATE SUBORDINATION. Each Holder of a Note by acceptance thereof authorizes and directs the Secured Party on such Holder's behalf to take such

action as may be necessary or appropriate to effectuate the subordination provided in this Article 9 and appoints the Secured Party as such Holder's attorney-in-fact for any and all such purposes.

9.9. NO WAIVER OF SUBORDINATION PROVISIONS. No right of any present or future holder of any Senior Indebtedness to enforce subordination as herein provided shall at any time in any way be prejudiced or impaired by any act or failure to act by the Company or by any act or failure to act, in good faith, by any such holder, or by any non-compliance by the Company with the terms, provisions and covenants of this Agreement, regardless of any knowledge thereof any such holder may have or be otherwise charged with. Without in any way limiting the generality of the foregoing paragraph, the holders of Senior Indebtedness may, at any time and from time to time, without the consent of or notice to Holders, without incurring responsibility to Holders and without impairing or releasing the subordination provided in this Article 9 or the obligations hereunder of Holders to the holders of Senior Indebtedness, do any one or more of the following: (i) change the manner, place or terms of payment or extend the time of payment of, or renew or alter, Senior Indebtedness, or otherwise amend or supplement in any manner Senior Indebtedness or any instrument evidencing the same or any agreement under which Senior Indebtedness is outstanding; (ii) sell, exchange, release or otherwise deal with any property pledged, mortgaged or otherwise securing Senior Indebtedness; (iii) release any Person liable in any manner for the collection of Senior Indebtedness; and (iv) exercise or refrain from exercising any rights against the Company and any other Person.

9.10. RELIANCE ON JUDICIAL ORDER OR CERTIFICATE OF LIQUIDATING AGENT. Upon any payment or distribution of assets of the Company referred to in this Article 9, the Secured Party and the Holders shall be entitled to rely upon any order or decree entered by any court of competent jurisdiction in which such

insolvency, bankruptcy, receivership, liquidation, reorganization, dissolution, winding-up or similar case or proceeding is pending, or a certificate of the trustee in bankruptcy, receiver, liquidating trustee, custodian, assignee for the benefit of creditors, agent or other Person making such payment or distribution, delivered to the Secured Party or to the Holders, for the purpose of ascertaining the Persons entitled to participate in such payment or distribution, the holders of the Senior Indebtedness and other indebtedness of the Company, the amount thereof or payable thereon, the amount or amounts paid or distributed thereon and all other facts pertinent thereto or to this Article 9.

9.11. CERTAIN CONVERSIONS DEEMED PAYMENT. For the purposes of this Article 9 only, (a) the issuance and delivery of Junior Securities upon conversion of Notes in accordance with Section 3 of the Notes or in lieu of cash interest in accordance with Section 1 of the Notes shall not be deemed to constitute a payment or distribution on account of the principal, of or interest on Notes or on account of the purchase or other acquisition of Notes and (b) the payment, issuance or delivery of cash, property or securities (other than Junior Securities) upon conversion of a Note shall be deemed to constitute payment on account of the principal of such

Note. Nothing contained in this Article 9 or elsewhere in this Agreement or in the Notes is intended to or shall impair, as among the Company, its creditors other than holders of Senior Indebtedness and the Holders, the right, which is absolute and unconditional, of a Holder to convert any Note in accordance with Section 3 of the Notes.

9.12. ALTERNATIVE OFFERING. This Article 9 shall be inapplicable in the case of the Alternative Offering.

10. SECURED PARTY'S RIGHTS AND REMEDIES

10.1. RIGHTS AND REMEDIES. Upon the occurrence and during the continuance of an Event of Default (as defined in the Note), the Secured Party may, in addition to the remedies pursuant to Section 6 of the Notes, at its election, without notice of its election and without demand, take any action permitted by law and not in contravention or inconsistent with Article 9. This Section 10.1 shall be inapplicable in the case of the Alternative Offering.

11. CERTAIN DEFINITIONS. For the purposes of this Agreement the following terms have the respective meanings set forth below:

11.1. "BUSINESS DAY" means a Monday through Friday on which banks are generally open for business in New York, Massachusetts and California. in Section 1.1.

11.2. "CERTIFICATE OF DESIGNATION" shall have the meaning ascribed to such term

11.3. "COMMON STOCK" means the Company's common stock.

Section 1.1.

11.4. "CONVERSION SECURITIES" shall have the meaning ascribed to such term in

11.5. "EXCHANGE OFFER" means the Company's offer to the holders of its 9 Convertible Subordinated Notes due 2004 to exchange such notes and all accrued interest thereon for preferred stock and warrants of the Company.

11.6. "JUNIOR SECURITIES" means (a) shares of any and all classes of capital stock of the Company and (b) securities of the Company which are subordinated in right of payment to Senior Indebtedness at the time of issuance or delivery of such securities to substantially the same extent as, or

to a greater extent than, the Notes are so subordinated as provided in Article 9.

11.7. "LIEN" means any mortgage, lien, deed of trust, charge, pledge, security interest or other encumbrance.

11.8. [Reserved]

11.9. "PERSON" means any individual, sole proprietorship, partnership, limited liability company, joint venture, trust, unincorporated organization, association, corporation, institution, public benefit corporation, firm, joint stock company, estate, entity or governmental agency.

11.10. "PLACEMENT AGENT" shall have the meaning ascribed to such term in Section 1.3 and "Placement Agents" shall mean the placement agents for the Regulation D Offering and the Regulation S Offering, referred to in Sections 1.2 and 1.3, respectively.

11.11. "PLACEMENT AND ADVISORY WARRANTS" shall mean the placement and advisory warrants to be granted to the Placement Agents and/or their respective designees pursuant to separate placement agency agreements and financial advisory agreements between the Company and the Placement Agents.

11.12. "REGULATION D" means Regulation D promulgated under the Securities Act.

11.13. "REGULATION D OFFERING" shall have the meaning ascribed to such term in

11.14. "REGULATION S" means Regulation S promulgated under the Securities Act.

11.15. "REGULATION S OFFERING" shall have the meaning ascribed to such term in Section 1.3.

11.16. "SECURED PARTY" shall have the meaning ascribed to such term in Section 5.1.

11.17. "SECURITIES ACT" means, as of any given time, the Securities Act of 1933, as amended, or any similar federal law then in force.

11.18. "SECURITIES AND EXCHANGE COMMISSION" includes any governmental body or agency succeeding to the functions thereof.

11.19. "SENIOR INDEBTEDNESS" means the principal of (and premium, if any) and accrued interest on (including all interest accruing subsequent to the commencement of any

bankruptcy or similar proceeding, whether or not a claim for post-petition interest is allowable as a claim in any such proceeding) (a) obligations of the Company under the Loan and Security Agreement, dated December 31, 1996, between Silicon Valley Bank and the Company, including any related notes, guarantees, collateral documents, instruments and agreements executed in connection therewith, and in each case as amended, modified, renewed, replaced, restated, supplemented, refunded or refinanced from time to time (provided that the principal amount does not exceed $7,500,000 and the maturity date is not advanced), (b) obligations of the Company, whether outstanding on the date of this Agreement or hereafter created, incurred or assumed, as lessee under leases required to be capitalized on the balance sheet of the lessee under generally accepted accounting principles and leases of property or assets made as part of any sale and leaseback transaction to which the Company is a party, (c) all reimbursement obligations and other liabilities (contingent or otherwise) with

respect to letters of credit, bank guarantees or bankers' acceptances, and (d) any amendments, renewals, extensions, modifications and refundings of any such indebtedness or obligation under clauses (a) (provided that the principal amount does not exceed $7,500,000 and the maturity date is not advanced), (b) or (c), above.

11.20. "SUBSIDIARY" means any person, corporation, firm or entity at least the majority of the equity securities (or equivalent interest) of which are, at the time as of which any determination is being made, owned of record or beneficially by the Company, directly or indirectly, through any Subsidiary or otherwise.

11.21. "TERM SHEET" shall have the meaning ascribed to such term in Section 6.5.

11.22. "TRADING DAY" means (i) if the applicable security is listed or admitted for trading on a national security exchange, a day on which such exchange is open for business, (ii) if the applicable security is quoted on the Nasdaq Stock Market, a day on which trades may be made thereon or (iii) if the applicable security is not so listed, admitted for trading or quoted, any Business Day.

11.23. "UNIT OFFERING", "OFFERING" and "UNITS" shall have the meaning ascribed to such terms in the first paragraph of this Agreement.

11.24. "UNIT-UNDERLYING COMMON STOCK" shall mean the Common Stock issuable upon conversion of any Conversion Securities, issuable upon conversion of, or in lieu of, Notes or upon exercise of any Equity Warrants or Alternative Equity Warrants, in each case including any such Conversion Securities or Equity Warrants issuable upon exercise of any Placement and Advisory Warrants or upon conversion of Notes issuable upon exercise of any Placement and Advisory Warrants.

11.25. (1) "U.S. PERSON" means:

(i) Any natural person resident in the United States;

(ii) Any partnership or corporation organized or incorporated under the laws of the United States;

(iii) Any estate of which any executor or administrator is a U.S. Person;

(iv) Any trust of which any trustee is a U.S. Person;

(v) Any agency or branch of a foreign entity located in the United States.

(vi) Any non-discretionary account or similar account (other than an estate or trust) held by a dealer or other fiduciary for the benefit or account of a U.S. Person;

(vii) Any discretionary account or similar account (other than an estate or trust) held by a dealer or other fiduciary organized, incorporated, or (if an individual) resident in the United States; and

(viii) Any partnership or corporation if: (A) organized or incorporated under the laws of any foreign jurisdiction; and (B) formed by a U.S. Person principally for the purpose of investing in securities not registered under the Securities Act, unless it is organized or incorporated, and owned, by accredited investors (as defined in Rule 501 (a) of the Securities Act) who are not natural persons,

estates or trusts.

(2) Notwithstanding clause (1) of this Section 11.25, any discretionary account or similar account (other than an estate or trust) held for the benefit or account of a non-U.S. Person by a dealer or other professional fiduciary organized, incorporated, or (if an individual) resident in the United States shall not be deemed a "U.S. Person."

(3) Notwithstanding clause (1) of this Section 11.25, any estate of which any professional fiduciary acting as executor or administrator is a U.S. Person shall not be deemed a U.S. Person if.

(i) An executor or administrator of the estate who is not a U.S. Person has sole or shared investment discretion with respect to the assets of the estate; and

(ii) The estate is governed by foreign law.

(4) Notwithstanding clause (1) of this Section 11.25, any trust of which any professional fiduciary acting as trustee is a U.S. Person shall not be deemed a U.S. Person if a trustee who is not a U.S. Person has sole or shared investment discretion with respect to the trust assets, and no beneficiary of the trust (and no settlor if the trust is revocable) is a U.S. Person.

(5) Notwithstanding clause (1) of this Section 11.25, an employee benefit plan established and administered in accordance with the law of a country other than the United States and customary practices and documentation of such country shall not be deemed a U.S. Person.

(6) Notwithstanding clause (1) of this Section 11.25, any agency or branch of a U.S. Person located outside the United States shall not be deemed a "U.S. Person" if:

(i) The agency or branch operates for valid business reasons; and

(ii) The agency or branch is engaged in the business of insurance or banking and is subject to substantive insurance or banking regulation, respectively, in the jurisdiction where located.

(7) The International Monetary Fund, the International Bank for Reconstruction and Development, the Inter-American Development Bank, the Asian Development Bank, the African Development Bank, the United Nations, and their agencies, affiliates and pension plans, and any other similar international organizations, their agencies, affiliates and pension plans shall not be deemed "U.S. Persons."

11.26. "UNITED STATES" means the United States of America, its territories and possessions, any state of the United States, and the District of Columbia.

12. REGISTRATION RIGHTS.

12.1. As used in this Article 12, the following terms shall have the following meanings:

(a) "AFFILIATE" shall mean, with respect to any Person (as defined below), any other Person controlling, controlled by, or under direct or indirect common control with, such Person (for the purposes of this definition "control," when used with respect to any specified Person, shall mean the power to direct the management and policies of such person, directly or indirectly, whether through ownership of voting securities, by contract or otherwise; and the terms "controlling" and "controlled" shall have meanings correlative to the

foregoing).

(b) "BUSINESS DAY" shall mean a day Monday through Friday on which banks are generally open for business in New York.

(c) "HOLDERS" shall mean the Purchasers and any person holding Registrable Securities or any person to whom the rights under Article 12 have been transferred in accordance with Section 12.10 hereof.

(d) "PERSON" shall mean any person, individual, corporation, limited liability company, partnership, trust or other non-governmental entity or any governmental agency, court, authority or other body.

(e) The terms "REGISTER," "REGISTERED" and "REGISTRATION" refer to the registration effected by preparing and filing a registration statement in compliance with the Securities Act, and the declaration or ordering of the effectiveness of such registration statement.

(f) "REGISTRABLE SECURITIES" shall mean (i) the Common Stock included in the Alternative Equity Units and the shares of Unit-Underlying Common Stock and (ii) any shares of Common Stock issued as (or issuable upon the conversion of any warrant, right or other security which is issued as) a dividend or other distribution with respect to or in replacement of the Transfer Restricted Securities (as defined below); provided, however, that securities shall only be treated as Registrable Securities if and only for so long as they (A) have not been disposed of pursuant to a registration statement declared effective by the Securities and Exchange Commission, (B) have not been sold in a transaction exempt from the registration and prospectus delivery requirements of the Securities Act so that all transfer restrictions and restrictive legends with respect thereto are removed upon the consummation of such sale, (C) are held by a Holder or a permitted transferee pursuant to Section 12.10 or (D) are not freely tradeable under applicable federal securities laws.

(g) "REGISTRATION EXPENSES" shall mean all expenses incurred by the Company in complying with Section 12.2 hereof, including, without limitation, all registration, qualification and filing fees, printing expenses, escrow fees, fees and expenses of counsel for the Company, blue sky fees and expenses and the expense of any special audits incident to, or required by, any such registration (but excluding the fees of legal counsel for any Holder).

(h) "REGISTRATION STATEMENT" shall have the meaning ascribed to such term in Section 12.2.

(i) "REGISTRATION PERIOD" shall have the meaning ascribed to such term in Section 12.4.

(j) "SELLING EXPENSES" shall mean all underwriting discounts and selling commissions applicable to the sale of Registrable Securities and all fees and expenses of legal counsel for any Holder.

(k) "TRANSFER RESTRICTED SECURITIES" means each Equity Warrant, Alternative Equity Warrant, each Note, each share of Conversion Securities or Common Stock, each share of Common Stock included in the Alternative Equity Units and, if such warrants have been exercised or such Conversion Securities have been converted, the Registrable Securities, until the earlier of (a) the date on which such security, as applicable, has been effectively registered under the Securities Act and disposed of pursuant to, and in accordance with, an effective Registration Statement, (b) the date on which such security, as applicable, is distributed to the public pursuant to Rule 144 or any other applicable exemption under the Securities Act without additional restriction upon public resale or (c) at such time as such security, as applicable, may be sold by a Holder under Rule 144(k).

12.2. The Company shall use its best efforts to file a "shelf" registration statement on the appropriate form (the "Registration Statement") with the Securities and Exchange Commission, by the earlier of (i) the expiration of sixty (60) days after the Final Closing Date and (ii) the date of the filing of any registration statement with the Securities and Exchange Commission in connection with the securities issued in the Exchange Offer, and shall use its best efforts to effect the registration, qualifications or compliances (including, without limitation, the execution of any required undertaking to file post-effective amendments, appropriate qualifications or exemptions under applicable blue sky or other state securities laws and appropriate compliance with applicable securities laws, requirements or regulations) as soon as practicable thereafter. Notwithstanding the foregoing, the Company shall not be obligated to enter into any underwriting agreement for the sale of any of the Registrable Securities. 12.3. All Registration Expenses incurred in connection with any registration, qualification or compliance pursuant to Section 12.2 shall be borne by the Company. All Selling Expenses relating to the sale of securities registered by or on behalf of Holders shall be borne by such Holders pro rata on the basis of the number of securities so registered; provided that if a Holder uses its own legal counsel in addition to one counsel for all of the Holders of securities registered on behalf of the Holders, such Holder shall bear the cost of such counsel.

12.4. In the case of the registration, qualification or compliance effected by the Company pursuant to this Agreement, the Company shall, upon reasonable request, inform each Holder as to the status of such registration, qualification and compliance. At its expense the Company shall:

(a) use its best efforts to keep such registration, and any qualification, exemption or compliance under state securities laws which the Company determines to obtain, continuously effective until the Holders have completed the distribution described in the registration statement relating thereto. The period of time during which the Company is required hereunder to keep the Registration Statement effective is referred to herein as the "Registration

Period. "Notwithstanding the foregoing, at the Company's election, the Company may cease to keep such registration, qualification or compliance effective with respect to any Registrable Securities, and the registration rights of a Holder shall expire, at such time as the Holder may sell under Rule 144(k) under the Securities Act (or other exemption from registration acceptable to the Company) in a three-month period all Registrable Securities then held by such Holder; and

(b) advise the Holders:

(i) when the Registration Statement or any amendment thereto has been filed with the Securities and Exchange Commission and when the Registration Statement or any posteffective amendment thereto has become effective;

(ii) of any request by the Securities and Exchange Commission for amendments or supplements to the Registration Statement or the prospectus included therein or for additional information;

(iii) of the issuance by the Securities and Exchange Commission of any stop order suspending the effectiveness of the Registration Statement or the initiation of any proceedings for such purpose;

(iv) of the receipt by the Company of any notification with respect to the suspension of the qualification of the Registrable Securities included therein for

sale in any jurisdiction or the initiation or threatening of any proceeding for such purpose; and

(v) of the happening of any event that requires the making of any changes in the Registration Statement or the prospectus included therein so that, as of such date, the statements therein are not misleading and do not omit to state a material fact required to be stated therein or necessary to make the statements therein (in the case of the prospectus, in the light of the circumstances under which they were made) not misleading;

(vi) make every reasonable effort to obtain the withdrawal of any order suspending the effectiveness of any Registration Statement at the earliest possible time;

(vii) furnish to each Holder, without charge, at least one copy of such Registration Statement and any post-effective amendment thereto, including financial statements and schedules, and, if the Holder so

requests in writing, all exhibits (including those incorporated by reference) in the form filed with the Securities and Exchange Commission;

(viii) during the Registration Period, deliver to each Holder, without charge, as many copies of the prospectus included in such Registration Statement and any amendment or supplement thereto as such Holder may reasonably request; and the Company consents to the use, consistent with the provisions hereof, of the prospectus or any amendment or supplement thereto by each of the selling Holders of Registrable Securities in connection with the offering and sale of the Registrable Securities covered by the prospectus and any amendment or supplement thereto. In addition, upon the reasonable request of the Holder and subject in all cases to confidentiality protections reasonably acceptable to the Company, the Company will meet with a Holder or a representative thereof at the Company's headquarters to discuss all information relevant for disclosure in the Registration Statement covering the Registrable Securities, and will otherwise cooperate with any Holder conducting an investigation for the purpose of reducing or eliminating such Holder's exposure to liability under the Securities Act, including the reasonable production of information at the Company's headquarters;

(ix) during the Registration Period, deliver to each Holder, without charge, (i) as soon as practicable (but in the case of the annual report of the Company to its stockholders, within 120 days after the end of each fiscal year of the Company) one copy of: (A) its annual report to its stockholders, if any (which annual report shall contain financial statements audited in accordance with generally accepted accounting principles in the United States of America by a firm of certified public accountants of recognized standing); (B) if not included in substance in its annual report to stockholders, its annual report on Form 10-K (or similar form); (C) each of its quarterly reports to its stockholders,

and, if not included in substance in its quarterly reports to stockholders, its quarterly report on Form 10-Q (or similar form); and (D) a copy of the full Registration Statement (the foregoing, in each case, excluding exhibits); and (ii) upon reasonable request, all exhibits excluded by the parenthetical to the immediately preceding clause (D), and all other information that is generally available to the public;

(x) prior to any public offering of Registrable Securities pursuant to any Registration Statement, register or qualify for offer and sale under the

securities or blue sky laws of such jurisdictions as any such Holders reasonably request in writing, provided that the Company shall not for any such purpose be required to qualify generally to transact business as a foreign corporation in any jurisdiction where it is not so qualified or to consent to general service of process in any such jurisdiction, and do any and all other acts or things reasonably necessary or advisable to enable the offer and sale in such jurisdictions of the Registrable Securities covered by such Registration Statement;

(xi) cooperate with the Holders to facilitate the timely preparation and delivery of certificates representing Registrable Securities to be sold pursuant to any Registration Statement free of any restrictive legends to the extent not required at such time and in such denominations and registered in such names as Holders may request at least three (3) business days prior to sales of Registrable Securities pursuant to such Registration Statement;

(xii) upon the occurrence of any event contemplated by Section 12.4(b)(v) above, the Company shall promptly prepare a post-effective amendment to the Registration Statement or a supplement to the related prospectus, or file any other required document so that, as thereafter delivered to purchasers of the Registrable Securities included therein, the prospectus will not include any untrue statement of a material fact or omit to state any material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; and

(xiii) use its best efforts to comply with all applicable rules and regulations of the Securities and Exchange Commission, and will make generally available to the Holders not later than 45 days (or 90 days if the fiscal quarter is the fourth fiscal quarter) after the end of its fiscal quarter in which the first anniversary date of the effective date of the Registration Statement occurs, an earnings statement satisfying the provisions of Section 11(a) of the Securities Act.

12.5. DELAY PERIODS, SUSPENSION OF SALES. Each Holder shall suspend, upon request of the Company, any disposition of Registrable Securities pursuant to the Registration Statement and prospectus contemplated by Section 12.2 during (i) any period not to exceed two 30-day periods within any one 12-month period the Company requires in connection with a primary underwritten

offering of equity securities and (ii) any period, not to exceed one 45-day period per circumstance or development, when the Company determines in good faith that offers and sales pursuant thereto should not be made by reason of the presence of material undisclosed

circumstances or developments with respect to which the disclosure that would be required in such a prospectus is premature, would have an adverse effect on the Company or is otherwise inadvisable.

12.6. The Holders shall have no right to take any action to restrain, enjoin or otherwise delay any registration pursuant to Section 12.2 hereof as a result of any controversy that may arise with respect to the interpretation or implementation of this Agreement.

12.7. (a) To the extent permitted by law, the Company shall indemnify each Holder, each underwriter of the Registrable Securities and each person controlling such Holder within the meaning of Section 15 of the Securities Act, with respect to which any registration, qualification or compliance has been effected pursuant to this Agreement, against all claims, losses, damages and liabilities (or action in respect thereof), including any of the foregoing incurred in settlement of any litigation, commenced or threatened (subject to Subsection 12.7(c) below), arising out of or based on any untrue statement (or alleged untrue statement) of a material fact contained in any registration statement, prospectus or offering circular, or any amendment or supplement thereof, incident to any such registration, qualification or compliance, or based on any omission (or alleged omission) to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, in light of the circumstances in which they were made, and shall reimburse each Holder, each underwriter of the Registrable Securities and each person controlling such Holder, for legal and other expenses reasonably incurred in connection with investigating or defending any such claim, loss, damage, liability or action as incurred; provided that the Company shall not be liable in any such case to the extent that any untrue statement or omission or allegation thereof is made in reliance upon and in conformity with information furnished to the Company by or on behalf of such Holder and stated to be specifically for use in preparation of such registration statement, prospectus or offering circular; provided that the Company shall not be liable in any such case where the claim, loss, damage or liability arises out of or is related to the failure of the Holder to comply with the covenants and agreements contained in this Agreement respecting sales of Registrable Securities, and except that the foregoing indemnity agreement is subject to the condition that, insofar as it relates to any such untrue statement or alleged untrue statement or omission or alleged omission made in the preliminary prospectus but eliminated or remedied in the amended prospectus on file with the Securities and Exchange Commission at the time the registration statement becomes effective or in the amended prospectus filed with the Securities and Exchange Commission pursuant to Rule 424(b) of the Securities Act or in the prospectus subject to completion and term sheet under Rule 434 of the Securities Act, which together meet the requirements of Section 10(a) of the Securities Act (the "Final Prospectus"), such indemnity agreement shall not inure to the benefit of any such Holder, any such underwriter or any such controlling person, if a copy of the Final Prospectus furnished by the Company to the Holder for delivery was not furnished to the person or entity asserting the loss, liability, claim or damage at or prior to the time such

furnishing. is required by the Securities Act and the Final Prospectus would have cured the defect giving rise to such loss, liability, claim or damage.

(b) Each Holder will severally, if Registrable Securities held by such Holder are included in the securities as to which such registration, qualification or compliance is being effected, indemnify the Company, each of its directors and officers, each underwriter of the Registrable Securities and

each person who controls the Company within the meaning of Section 15 of the Securities Act, against all claims, losses, damages and liabilities (or actions in respect thereof), including any of the foregoing incurred in settlement of any litigation, commenced or threatened (subject to Subsection 12.7(c) below), arising out of or based on any untrue statement (or alleged untrue statement) of a material fact contained in any registration statement, prospectus or offering circular, or any amendment or supplement thereof, incident to any such registration, qualification or compliance, or based on any omission (or alleged omission) to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, in light of the circumstances in which they were made, and will reimburse the Company, such directors and officers, each underwriter of the Registrable Securities and each person controlling the Company for reasonable legal and any other expenses reasonably incurred in connection with investigating or defending any such claim, loss, damage, liability or action as incurred, in each case to the extent, but only to the extent, that such untrue statement or omission or allegation thereof is made in reliance upon and in conformity with written information furnished to the Company by or on behalf of the Holder and stated to be specifically for use in preparation of such registration statement, prospectus or offering circular; provided that the indemnity shall not apply to the extent that such claim, loss, damage or liability results from the fact that a current copy of the prospectus was not made available to the Holder and such current copy of the prospectus would have cured the defect giving rise to such loss, claim, damage or liability. Notwithstanding the foregoing, in no event shall a Holder be liable for any such claims, losses, damages or liabilities in excess of the proceeds received by such Holder in the offering, except in the event of fraud by such Holder.

(c) Each party entitled to indemnification under this Section 12.7 (the "Indemnified Party") shall give notice to the party required to provide indemnification (the "Indemnifying Party") promptly after such Indemnified Party has actual knowledge of any claim as to which indemnity may be sought, and shall permit the Indemnifying Party to assume the defense of any such claim or any litigation resulting therefrom, provided that counsel for the Indemnifying Party, who shall conduct the defense of such claim or litigation, shall be approved by the Indemnified Party (whose approval shall not unreasonably be withheld), and the Indemnified Party may participate in such defense at such Indemnified Party's expense, and provided further that the failure of any Indemnified Party to give notice as provided herein shall not relieve the Indemnifying Party of its obligations under this Agreement, unless such failure is materially prejudicial to the Indemnifying Party in defending such claim or litigation. An

Indemnifying Party shall not be liable for any settlement of an action or claim effected without its written consent (which consent will not be unreasonably withheld).

(d) If the indemnification provided for in this Section 12.7 is held by a court of competent jurisdiction to be unavailable to an Indemnified Party with respect to any loss, liability, claim, damage or expense referred to therein, then the Indemnifying Party, in lieu of indemnifying such Indemnified Party thereunder, shall contribute to the amount paid or payable by such Indemnified Party as a result of such loss, liability, claim, damage or expense in such proportion as is appropriate to reflect the relative fault of the Indemnifying Party on the one hand and of the Indemnified Party on the other in connection with the statements or omissions which resulted in such loss, liability, claim, damage or expense as well as any other relevant equitable considerations. The relative fault of the Indemnifying Party and of the Indemnified Party shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission to state a material fact relates to information supplied by the Indemnifying Party or by the Indemnified Party and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission.

12.8. (a) Each Holder agrees that, upon receipt of any notice from the Company of the happening of any event requiring the preparation of a supplement or amendment to a prospectus relating to Registrable Securities so that, as thereafter delivered to the Holders, such prospectus will not contain an untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading, each Holder will forthwith discontinue disposition of Registrable Securities pursuant to the registration statement contemplated by Section 12.2 until its receipt of copies of the supplemented or amended prospectus from the Company and, if so directed by the Company, each Holder shall deliver to the Company all copies, other than permanent file copies then in such Holder's possession, of the prospectus covering such Registrable Securities current at the time of receipt of such notice.

(b) As a condition to the inclusion of its Registrable Securities, each Holder shall furnish to the Company such information regarding such Holder and the distribution proposed by such Holder as the Company may request in writing or as shall be required in connection with any registration, qualification or compliance referred to in this Article 12.

(c) Each Holder hereby covenants with the Company (i) not to make any sale of the Registrable Securities without effectively causing the prospectus delivery requirements under the Securities Act to be satisfied, and (ii) if such Registrable Securities are to be sold by any method or in any transaction other than on a national securities exchange, the Nasdaq National Market, Nasdaq SmallCap Market or in the over-the-counter market, in privately

negotiated transactions, or in a combination of such methods, to notify the Company at least five (5) business days prior to the date on which the Holder fast offers to sell any such Registrable Securities.

(d) Each Holder acknowledges and agrees that the Registrable Securities sold pursuant to the Registration Statement described in this Article 12 are not transferable on the books of the Company unless the stock certificate submitted to the transfer agent evidencing such Registrable Securities is accompanied by a certificate reasonably satisfactory to the Company to the effect that (i) the Registrable Securities have been sold in accordance with such Registration Statement and (ii) the requirement of delivering a current prospectus has been satisfied.

(e) Each Holder shall not take any action with respect to any distribution deemed to be made pursuant to such registration statement, which would constitute a violation of Regulation M under the Securities Exchange Act of 1934, as amended (the "Exchange Act") or any other applicable rule, regulation or law.

(f) At the end of the period during which the Company is obligated to keep the Registration Statement current and effective as described above, the Holders of Registrable Securities included in the Registration Statement shall discontinue sales of shares pursuant to such Registration Statement upon receipt of notice from the Company of its intention to remove from registration the shares covered by such Registration Statement which remain unsold, and such Holders shall notify the Company of the number of shares registered which remain unsold immediately upon receipt of such notice from the Company.

12.9. With a view to making available to the Holders the benefits of certain rules and regulations of the Securities and Exchange Commission which at any time permit the sale of the Registrable Securities to the public without registration, the Company shall use its reasonable best efforts:

(a) to make and keep public information available, as those terms are understood and defined in Rule 144 under the Securities Act, at all times;

(b) to file with the Securities and Exchange Commission in a timely manner all reports and other documents required of the Company under the Exchange Act; and

(c) so long as a Holder owns any unregistered Registrable Securities, to furnish to such Holder upon any reasonable request a written statement by the Company as to its compliance with Rule 144 under the Securities Act, and of the Exchange Act, a copy of the most recent annual or quarterly report of the Company, and such other reports and documents of the

Company as such Holder may reasonably request in availing itself of any rule or regulation of the Securities and Exchange Commission allowing a Holder to sell any such securities without registration.

12.10. The rights to cause the Company to register Registrable Securities granted to the Holders by the Company under Section 12.2 may be assigned in full by a Holder in connection with a transfer by such Holder of its Registrable Securities, provided that (i) such transfer may otherwise be effected in accordance with applicable securities laws; (ii) such transfer involves not less than the lesser of all or 5,000 shares of such Holder's Registrable Securities, (iii) such Holder gives prior written notice to the Company; and (iv) such transferee agrees to comply with the terms and provisions of this Agreement, and such transfer is otherwise in compliance with this Agreement. Except as specifically permitted by this Section 12.10, the rights of a Holder with respect to Registrable Securities as set out herein shall not be transferable to any other Person, and any attempted transfer shall cause all rights of such Holder therein to be forfeited.

12.11. With the written consent of the Company and the Holders holding at least a majority of the Registrable Securities that are then outstanding, any provision of this Article 12 may be waived (either generally or in a particular instance, either retroactively or prospectively and either for a specified period of time or indefinitely) or amended. Upon the effectuation of each such waiver or amendment, the Company shall promptly give written notice thereof to the Holders, if any, who have not previously received notice thereof or consented thereto in writing. Notwithstanding the foregoing or Section 13.1, a waiver or consent to depart from the provisions hereof with respect to a matter that relates exclusively to the rights of the Holders of Common Stock being sold pursuant to the Registration Statement and that does not directly or indirectly affect the rights of other Holders may be given by Holders of a majority of the shares of Common Stock included among such shares being sold.

13. MISCELLANEOUS.

13.1. AMENDMENTS AND WAIVERS. (a) This Agreement and all exhibits and schedules hereto set forth the entire agreement and understanding among the parties as to the subject matter hereof and merges and supersedes all prior discussions, agreements and understandings of any and every nature among them. This Agreement may be amended only by mutual written agreement of the Company and either by the holders of at least fifty percent (50%) or more in principal amount of outstanding Notes (or, in the case of the Alternative Offering, of the Common Stock included in the Alternative Equity Units sold in such offering) or by the Secured Party, and the Company may take any action herein prohibited or omit to take any action herein required to be performed by it, and any breach of any covenant, agreement, warranty or representation may be waived, only if the Company has obtained the written consent

or waiver of the holders of at least fifty percent (50%) in principal amount of outstanding Notes (or, in the case of the Alternative Offering, of the Common Stock included in the Alternative Equity Units sold in such

offering) or of the Secured Party; provided. however, that the holders of at least 50% in principal amount of Notes sold at any particular Closing (or of at least 50 of the voting power of any securities underlying such Notes or of the shares of Common Stock included in the Alternative Equity Units sold) may amend this Agreement or consent to or waive any covenant, agreement, warranty or representation on behalf of all Purchasers at such Closing that do not adversely affect the securities sold to Purchasers at any other Closing or such other Purchasers. No course of dealing between or among any persons having any interest in this Agreement will be deemed effective to modify, amend or discharge any part of this Agreement or any rights or obligations of any person under or by reason of this Agreement. To secure a consent of the Holders under this Section 13.1, it shall not be necessary for the holders to approve the particular form of any proposed amendment or waiver, but it shall be sufficient if such consent approves the substance thereof.

(b) Until an amendment or waiver becomes effective, a consent to it by a holder of a Note or other security is a continuing consent by such holder and every subsequent holder of a security or portion of a security that evidences the same debt or other security as such consenting holder's security, even if notation of the consent is not made on any security. However, prior to becoming effective, any such holder or subsequent holder may revoke the consent as to its securities or a portion thereof it the Company receives written notice of revocation before the consent of holders of the requisite aggregate principal amount of Notes or other security then outstanding has been obtained and not revoked.

The Company may, but shall not be obligated to, fix a record date pursuant to paragraph (c) for the purpose of determining the holders entitled to consent to any ,amendment or waiver. If a record date is fixed, then notwithstanding the provisions of the immediately preceding paragraph, those Persons who were holders at such record date (or their duly designated proxies), and only those Persons, shall be entitled to consent to such amendment or waiver or to revoke any consent previously given, whether or not such Persons continue to be holders after such record date. After an amendment or waiver becomes effective it shall bind every holder of a Note or other security. In such case, the amendment or waiver shall bind each holder of a Note or other security who has consented to it and every subsequent holder of a Note or other security that evidences the same debt or other security as the consenting holder's Note or other security.

(c) Whenever in this Agreement it is provided that the holders of a specified percentage in aggregate principal amount of the Notes or other security may take any action (including the making of any demand or request, the giving of any notice, consent or waiver or the taking of any other action), the fact that at the time of taking any such action, the holders of such specified percentage have joined therein may be evidenced (i) by any instrument or any

number of instruments of similar tenor executed by holders in person or by proxy appointed in writing or (ii) by the record of the holders voting in favor thereof at any meeting of holders. Whenever the Company solicits the taking of action by the holders, the Company may fix in advance of such solicitation a date as the record date for determining holders entitled to take such action. If a record date is fixed, those and only those Persons who are holders at the record date so fixed, or their proxies, shall be entitled to take action regardless of whether they are holders at the time of such action.

13.2. SUCCESSORS AND ASSIGN. Except as contemplated by Section 8.14, this Agreement may not be assigned by the Company except with the prior written consent of the holders of a majority of outstanding principal amount of the Notes or number of shares of Common Stock included in the Alternative Equity Units. This Agreement shall be binding upon and inure to the benefit of the Company and its permitted successors and assigns and Purchasers and their successors and registered assigns. The provisions hereof which are for Purchasers' benefit as purchasers or holders of the Notes are also for the

benefit of, and enforceable by, any subsequent registered holder of such Notes.

13.3. NOTICES. All notices, demands and other communications to be given or delivered under or by reason of the provisions of this Agreement shall be in writing and shall be deemed to have been given personally or when mailed by certified or registered mail, return receipt requested and postage prepaid, and addressed to the addresses of the respective parties set forth below or to such changed addresses as such parties may have fixed by notice; provided, however, that any notice of change of address shall be effective only upon receipt:

If to the Company:

Hybridon, Inc.
620 Memorial Drive
Cambridge, MA 02139
Attn: E. Andrews Grinstead, III

If to Purchasers:

c/o Amir Tabbah
28 Avenue de Messine
75008 Paris, France

13.4. GOVERNING LAW. The validity, performance, construction and effect of this Agreement shall be governed by the internal laws of the State of New York without giving effect to such State's principles of conflict of laws.

13.5. COUNTERPARTS. This Agreement may be executed in any number of counterparts and, notwithstanding that any of the parties did not execute the same counterpart, each of such counterparts (and facsimile copies thereof, if electronically delivered to the Placement Agent) shall, for all purposes, be deemed an original, and all such counterparts shall constitute one and the same instrument binding on all of the parties hereto. Delivery of an executed counterpart of a signature page to this Agreement by telecopier shall be as effective as delivery of a manually executed counterpart of a signature page of this Agreement.

13.6. HEADINGS. The headings of the Sections hereof are inserted as a matter of convenience and for reference only and in no way define, limit or describe the scope of this Agreement or the meaning of any provision hereof.

13.7. SEVERABILITY. In the event that any provision of this Agreement or the application of any provision hereof is declared to be illegal, invalid or otherwise unenforceable by a court of competent jurisdiction, the remainder of this Agreement shall not be affected except to the extent necessary to delete such illegal, invalid or unenforceable provision unless the provision held invalid shall substantially impair the benefit of the remaining portion of this Agreement.

13.8. EXCULPATION AMONG, PURCHASERS. Each Purchaser acknowledges and agrees that it is not relying upon any other Purchaser, or any officer, director, employee partner or affiliate of any such other Purchaser, in making its investment or decision to invest in the Company or in monitoring such investment. Each Purchaser agrees that no Purchaser nor any controlling person, officer, director, stockholder, partner, agent or employee of any Purchaser shall be liable for any action heretofore or hereafter taken or omitted to be taken by any of them relating to or in connection with the Company or the securities, or both.

13.9. ACTIONS BY PURCHASERS. Any actions permitted to be taken by holders or Purchasers of Notes (or subgroups thereof, as contemplated by Section 13.1 ("Consenting Subgroups")) and any consents required to be obtained

from the same under this Agreement, may be taken or given only by holders of at least fifty percent (50c) in principal amount of outstanding Notes (or as otherwise provided in Section 13.1 with respect to Consenting Subgroups) and if such holders or Purchasers constituting at least fifty percent (50%) (the "Majority Purchasers") take any action or grant any consent, such action or consent shall be deemed given or taken by all holders or Purchasers' who shall be bound by the decision or action taken by the Majority Purchasers without any liability on the part of the Majority Purchasers to any other holder or Purchasers of securities hereunder. This provision shall apply MUTATIS MUTANDIS to the Alternative Offering.

13.10. LIQUIDATION PUT. (a) Subject to the following provisions of this Section 13. 10, each Purchaser may require the Company to repurchase with cash (the "Liquidation Put") each of the shares of Common Stock included in the Alternative Equity Units purchased by such Purchaser.

(b) Each Purchaser covenants not to exercise the Liquidation Put unless (a) the Company liquidates, dissolves or winds up its affairs pursuant to applicable bankruptcy law, whether voluntarily or involuntarily, (b) all of the securities issued under the Indenture relating to the 9 % Notes referred to under the caption "Equity Capitalization and Indebtedness -- 9 Convertible Subordinated Notes Due 2004" in the Term Sheet have been paid in full and no obligations remain under such Indenture, (c) all other indebtedness and obligations of the Company (including, without limitation, the indebtedness under the Company's loan agreement with Silicon Valley Bank) has been paid in full, and (d) all rights of the holders of any series or class of capital stock ranking prior and senior to the Common Stock with respect to liquidation have been satisfied in full.

(c) The Liquidation Put right is not transferable. Any purported transfer of the Liquidation Put right shall be null and void and shall result in a forfeiture of the rights set forth in this Section 13.10.

(d) At any time after the fast anniversary of the Final Closing Date, the Company may cause the Liquidation Put right to be terminated if the last sale price of the Common Stock shall have exceeded 200% of the Common Stock Offering Price for the 20 consecutive trading days prior to the date of notice of termination. No greater than 60 nor fewer than 20 days prior to the date of any such mandatory termination, notice by first class mail, postage prepaid, shall be given to the Purchasers, addressed to such Purchasers as provided in Section 13.3. Each such notice shall specify the date fixed for termination. Any notice which is mailed as herein provided shall be conclusively presumed to have been duly given by the Company on the date hand-delivered or deposited in the U.S. Mail, whether or not any Purchaser receives such notice; and failure properly to give such notice, or any defect in such notice, to any Purchaser shall not affect the validity of the proceedings for the termination in any respect.

(e) With the written consent of the Company and the Purchasers holding at least a majority of the issued and outstanding Common Stock subject to a Liquidation Put, any provision of this Section 13.10 may be waived (either generally or in a particular instance, either retroactively or prospectively and either for a specified period of time or indefinitely) or amended. Upon the effectuation of each such waiver or amendment, the Company shall promptly give written notice thereof to the Purchasers, if any, who have not previously received notice thereof or consented thereto in writing in the manner provided in Section 13.10(d).

13.11. ADDITIONAL PURCHASERS. Upon the execution and delivery by any Person of this Agreement after the date hereof with the written consent of the Company, such Person shall be referred to as an Additional Purchaser and

shall become a Purchaser, and each reference in this Agreement to "Purchaser" shall also mean and be a reference to such Additional Purchaser.

14. CONFIDENTIAL INVESTOR QUESTIONNAIRE.

14.1. Each Purchaser represents and warrants that he, she or it comes within one of category A through H below. ALL INFORMATION IN RESPONSE TO THIS SECTION WILL BE KEPT STRICTLY CONFIDENTIAL. The undersigned agrees to furnish any additional information which the Company deems necessary in order to verify the answers set forth below.

Category A:	The undersigned is an individual (not a partnership, corporation, etc.) whose individual net worth, or joint net worth with his or her spouse, presently exceeds $1,000,000. EXPLANATION. In calculating net worth you may include equity in personal property and real estate, including your principal residence, cash, short-term investments, stock and securities. Equity in personal property and real estate should be based on the fair market value of such property less debt secured by such property.
Category B:	The undersigned is an individual (not a partnership, corporation, etc.) who had an individual income in excess of $200,000 in each of the two most recent years, or joint income with his or her spouse in excess of $300,000 in each of those years (in each case including foreign income, tax exempt income and full amount of capital gains and losses but excluding any income of other family members and any unrealized capital appreciation) and has a reasonable expectation of reaching the same income level in the current year.
Category C:	The undersigned is a director or executive officer of the Company which is issuing and selling the Units.
Category D:	The undersigned is a bank; a savings and loan association; insurance company; registered investment company; registered business development company; licensed small business investment company ("SBIC"); or employee benefit plan within the meaning of Title 1 of

	ERISA and (a) the investment decision is made by a plan fiduciary which is either a bank, savings and loan association, insurance company or registered investment advisor, or (b) the plan has total assets in excess of $5,000,000 or is a self directed plan with investment decisions made solely by persons that are accredited investors.
Category E:	E: The undersigned is a private business development company as defined in section 202(a)(22) of the Investment Advisors Act of 1940.
Category F:	F: The undersigned is either a corporation, partnership, Massachusetts business trust, or non-profit organization within the meaning of Section 501(c)(3) of the Internal Revenue Code, in each case not formed for the specific purpose of

	acquiring the Units and with total assets in excess of $5,000,000.
Category G:	G: The undersigned is a trust with total assets in excess of $5,000,000, not formed for the specific purpose of acquiring the Units, where the purchase is directed by a "sophisticated person" as defined in Regulation 506(b)(2)(ii) under the Securities Act.
Category H:	H: The undersigned is an entity (other than a trust) all the equity owners of which are "accredited investors" within one or more of the above categories. If relying upon this Category alone, each equity owner must complete a separate copy of this Agreement.

The undersigned agrees that the undersigned will notify the Company at any time on or prior to the Final Closing Date in the event that the representations and warranties in this Agreement shall cease to be true, accurate and complete.

14.2. MANNER IN WHICH TITLE IS TO BE HELD. (circle one)

(a) Individual Ownership

(b) Community Property

(c) Joint Tenant with Right of Survivorship (both parties must sign)

(d) Partnership*

(e) Tenants in Common

(f) Company*

(g) Trust*

(h) Other

*If Units are being subscribed for by an entity, the attached Certificate of Signatory must also be completed.

14.3. NASD Affiliation.

Are you affiliated or associated with an NASD member firm (please check one):

Yes _____ No _____

If Yes, please describe:

_____

_____

_____

*If Purchaser is a Registered Representative with an NASD member firm, have the following acknowledgment signed by the appropriate party:

The undersigned NASD member firm acknowledges receipt of the notice required by Article 3, Sections 28(a) and (b) of the Rules of Fair Practice.

Name of NASD Member Firm

By:

Authorized Officer

Date:

14.4. RELIANCE ON CONFIDENTIAL INVESTOR QUESTIONNAIRE. The undersigned is informed of the significance to the Company of the foregoing representations and answers contained in the Confidential Investor Questionnaire contained in this Article 14 and such answers have been provided under the assumption that the Company will rely on them.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year indicated.

[Signature Page for each Purchaser]

_____ Units at $ 100,000 per Unit, or an aggregate of $_____ (the "Purchase Price")

By its execution and delivery of this signature page, the undersigned Purchaser hereby joins in and agrees to be bound by the terms and conditions of the Unit Purchase Agreement (the "Purchase Agreement") by and among Hybridon, Inc. (the "Company") and the Purchasers (as defined therein), as to the aggregate number of Units set forth above and authorizes this signature page to be attached to the Purchase Agreement or counterparts thereof.

---	---
Signature	Signature (if purchasing jointly)
---	---
Name Typed or Printed	Name Typed or Printed
---	---
Entity Name	Entity Name
---	---
Address	Address
---	---
City, State and Zip Code	City, State and Zip Code
---	---
Telephone-Business	Telephone--Business
---	---
Telephone-Residence	Telephone--Residence
---	---

Facsimile-Business	Facsimile--Business
---	---
Facsimile-Residence	Facsimile--Residence
---	---

Tax ID # or Social Security # Tax ID # or Social Security #

Dated: _____ ____, 1998

This Agreement is agreed to and accepted as of , 1998.

HYBRIDON, INC.

By: _____

Name:
Title:

THE TERMS OF THIS NOTE ARE SUBJECT TO THE TERMS OF A UNIT PURCHASE AGREEMENT, A COPY OF WHICH IS AVAILABLE FROM HYBRIDON, INC. (THE "COMPANY"). THE SECURITIES REPRESENTED BY THIS NOTE HAVE NOT BEEN REGISTERED UNDER THE UNITED STATES SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR ANY APPLICABLE STATE SECURITIES LAWS, AND MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED OR HYPOTHECATED OR OTHERWISE TRANSFERRED IN THE ABSENCE OF A REGISTRATION STATEMENT IN EFFECT WITH RESPECT TO THE SECURITIES UNDER THE SECURITIES ACT OR AN EXEMPTION FROM THE SECURITIES ACT. ANY SUCH TRANSFER MAY ALSO BE SUBJECT TO COMPLIANCE WITH APPLICABLE STATE SECURITIES LAWS AND THE LAWS OF OTHER APPLICABLE JURISDICTIONS.

THIS NOTE MAY NOT BE OFFERED OR SOLD IN THE UNITED STATES OR TO A U.S. PERSON OR FOR THE ACCOUNT OR BENEFIT OF A U.S. PERSON PRIOR TO THE EXPIRATION OF THE RESTRICTED PERIOD (AS DEFINED IN THE PURCHASE AGREEMENT), AND NO TRANSFER OR EXCHANGE OF THIS NOTE MAY BE MADE UNTIL AFTER THE LATER OF THE DATE OF EXPIRATION OF THE RESTRICTED PERIOD AND THE DATE ON WHICH THE REQUIRED CERTIFICATION RELATING TO SUCH INTEREST HAS BEEN PROVIDED IN ACCORDANCE WITH THE TERMS OF THE PURCHASE AGREEMENT.

HYBRIDON, INC.

NOTE DUE 2007

No. _____

$ _____

[DATE OF ISSUANCE]

Hybridon, Inc., a Delaware corporation, (the "Company"), for value received, hereby promises to pay to _____ (the "Holder"), or registered assigns, the principal sum set forth above, with accrued but unpaid interest thereon at a rate equal to fourteen percent (14%) per annum, on December 31, 2007 (the "Maturity Date"); provided, however, that if the offering (the "Unit Offering") of units ("Units") consisting of Notes (as defined below) and Warrants is terminated before the Mandatory Conversion Event (as defined below) has occurred, then the interest rate will increase to eighteen percent (18%) per annum, effective as of the date the Additional Warrants become exercisable. Payment shall be made at such place as designated by the Company upon surrender of this Note, and shall be in such coin or currency of the United States of America as at the time of payment shall be legal tender for the payment of public and private debts. This Note is one of a duly authorized issue of Hybridon, Inc. Notes due 2007 (individually a "Note" and collectively the "Notes") in an aggregate original principal amount of up to $68,750,000 plus any Notes issued in lieu of cash interest on Notes, issued pursuant to a

Unit Purchase Agreement which is available from the Company (the "Purchase Agreement") and similar agreements. The Notes shall be senior in right of payment to the Company's 9% Convertible Subordinated Notes Due 2004 (the "9% Notes") to the extent provided in a First Supplemental Indenture, dated as of January 13, 1998, to an Indenture, dated as of March 26, 1997, pursuant to which such 9% Notes were issued. The Notes shall be subordinated in right of payment to all existing and future Senior Indebtedness of the Company. The Notes are secured by certain assets of the Company pursuant to the Purchase Agreement on a subordinated basis. Capitalized terms used herein without definition have the respective meanings specified therefor in the Purchase Agreement.

SECTION 1. INTEREST.

The Company will pay interest semi-annually in arrears on April 1 and October 1 of each year (each an "Interest Payment Date"), or if any such day is not a Business Day, on the next succeeding Business Day to the registered Holder hereof as of the preceding March 15 or September 15 (each, a "Record Date"). Interest on this Note will accrue from the most recent Interest Payment Date to which interest has been paid or, if no interest has been paid, from the date of its issuance set forth above; provided that if there is no existing Default in the payment of interest, and if this Note is authenticated between a Record Date, and the next succeeding Interest Payment Date, interest shall accrue from such next succeeding Interest Payment Date; provided, further, that the first Interest Payment Date shall be April 1, 1998 or, if interest is paid in cash, October 1, 1998. The Company may, with respect to each Interest Payment Date, at its option and in its sole discretion, in lieu of payment of interest on the Notes in cash, issue additional Notes ("Interest Notes") in an aggregate principal amount equal to the amount of interest not paid in cash on such Interest Payment Date. Each issuance of Interest Notes in lieu of the payment of cash interest on the Notes shall be made pro rata with respect to the outstanding Notes; provided, however, that the Company may at its option pay cash in lieu of issuing Interest Notes in any denomination of less than $1,000. Interest will be computed on the basis of a 360-day year comprised of twelve 30-day months.

SECTION 2. PREPAYMENT.

This Note (including interest accrued on the principal hereof) may be prepaid by the Company, at any time without penalty or premium.

SECTION 3. MANDATORY CONVERSION.

(a) MANDATORY CONVERSION. Upon the occurrence of a Mandatory Conversion Event (as hereinafter defined), and not before such occurrence under any circumstances, the Notes and all accrued interest thereon shall automatically convert into the number of shares of Series B Preferred Stock of the Company in substantially the form attached to the Purchase Agreement as Exhibit C (the "Conversion Securities") equal to the Conversion Amount (as defined below) divided by the then current Conversion Price (as defined below). The "Conversion Amount" shall be the Liquidation Amount (as defined below). The "Liquidation Amount" shall be the aggregate principal amount of, plus any accrued but unpaid interest on, the Notes held by such Holder. The "Conversion Price" shall initially be $100, subject to adjustment

as provided below, representing an initial conversion rate (subject to adjustment) of 10 shares of Conversion Securities per $1,000 of Conversion Amount (the "Conversion Rate").

A "Mandatory Conversion Event" shall be deemed to have occurred, effective immediately, when all of the following shall have occurred:

(i) the holders of $40,000,000 or more in aggregate principal

amount of the 9 % Convertible Subordinated Notes due 2004 (the "Subordinated Notes") issued pursuant to the Indenture between the Company and State Street Bank and Trust Company, as Trustee, dated as of March 26, 1997 (the "Indenture"), irrevocably exchange such Subordinated Notes and all accrued but unpaid interest thereon for Series A Preferred Stock of the Company and warrants to purchase Common Stock of the Company; and

(ii) the Company has received proceeds in the Unit Offering, net of cash fees, commissions and expenses, equal to or exceeding $20,000,000 in the aggregate.

(b) CONVERSION PROCEDURES. Such conversion shall be deemed to have been made automatically, irrevocably and immediately upon the occurrence of a Mandatory Conversion Event and, upon such Mandatory Conversion Event, Notes shall no longer be deemed outstanding and all rights whatsoever in respect thereof (including the right to receive interest thereon) shall terminate except as provided in the following sentence. The Company shall deliver to each Holder certificates evidencing the number of full shares of Conversion Securities to which such person shall be entitled as- provided in Subsection 3(a), subject to Section 4 hereof.

(c) [Reserved]

(d) RESERVATION OF SHARES; TRANSFER TAXES; ETC. The Company shall at all times reserve and keep available, out of its authorized and unissued shares of Conversion Securities, solely for the purpose of effecting the conversion of the Notes, such number of shares of its Conversion Securities free of preemptive rights as shall be sufficient to effect the conversion of all Notes 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 Conversion Securities if at any time the number of shares of Conversion Securities not outstanding shall not be sufficient to permit the conversion of all the then-outstanding Notes.

The Company shall pay any and all issue or other taxes (other than income taxes) that may be payable in respect of any issue or delivery of shares of Conversion Securities on conversion of the Notes. 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 Conversion Securities (or other securities or assets) in a name other than that in which the Notes 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.

(e) 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 holder of record of this Note 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 paragraph (e), as shall be determined by it, as evidenced by a resolution of the Board of Directors of the Company, 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.

SECTION 4. FRACTIONAL SHARES.

The Company shall not be required to issue fractions of shares of Conversion Securities or other capital stock of the Company upon conversion of

any Notes. If any fraction of a share would be issuable on conversion of any Notes (aggregating, for this purpose, all Notes held by a record holder), the number of shares of Conversion Securities issuable shall be rounded to the nearest whole share, with .5 of a share rounded upward.

SECTION 5. EVENTS OF DEFAULT DEFINED.

The following shall each constitute an "Event of Default" hereunder:

(a) the failure of the Company to make any payment of (i) principal of this Note when due and payable and such failure shall continue for five (5) or more days and (ii) interest on this Note when due and payable and such failure shall continue for thirty (30) or more days, whether or not such payment is prohibited by the subordination provisions of this Note or the Purchase Agreement;

(b) the failure of the Company to observe or perform any covenant in this Note or in the Purchase Agreement, and such failure shall have continued unremedied for a period of sixty (60) days after written notice as provided in the last paragraph of this Section 5;

(c) a default occurs (after giving effect to any applicable grace periods or any extension of any maturity date) in the payment when due of principal of, or an acceleration of, any indebtedness for money borrowed by the Company or any of its Subsidiaries (other than an Unrestricted Subsidiary (as defined below) which is not a Significant Subsidiary and provided there is no recourse against the Company or any other Subsidiary with respect to the obligations of such Unrestricted Subsidiary arising as a result of such default) in excess of $2 million, individually or in the aggregate, if such indebtedness is not discharged, or such acceleration is not annulled, within 30 days after written notice as provided in the last paragraph of this Section 5;

(d) the Company or any of its Significant Subsidiaries, pursuant to or within the meaning of any Bankruptcy Law:

(i) commences a voluntary case,

(ii) consents to the entry of an order for relief against it in an involuntary case,

(iii) consents to the appointment of a Custodian of it or for all or substantially all of its property, and such Custodian is not discharged within 30 days,

(iv) makes a general assignment for the benefit of its creditors, or

(v) admits in writing that it is generally unable to pay its debts as the same become due;

(e) a court of competent jurisdiction enters and order or decree under any Bankruptcy Law that:

(i) is for relief in any involuntary case against the Company or any Significant Subsidiary,

(ii) appoints a Custodian of the Company or any Significant Subsidiary or for all or substantially all of the property of the Company or any Significant Subsidiary, or

(iii) orders the liquidation of the Company or any Significant Subsidiary, and, in each case, the order or decree remains unstayed and in effect for 60 consecutive days.

The term "Bankruptcy Law" means Title 11 of the U.S. Code or any

similar federal, foreign or state law for the relief of debtors. The term "Custodian" means any receiver, trustee, assignee, liquidator, examiner or similar official under any Bankruptcy Law. The term "Significant Subsidiary" has the same meaning as significant subsidiary has under Regulation S-X under the Securities Act as in effect on the date hereof. "Unrestricted Subsidiary" means any Subsidiary of the Company which (i) is not wholly-owned by the Company, (ii) is designated as an Unrestricted Subsidiary by the Board of Directors of the Company and (iii) at the time of any investment by the Company in such Subsidiary, in the aggregate holds or comprises less than 20% of the Company's assets as shown on the Company's consolidated balance sheet prepared in accordance with generally accepted accounting principles consistently applied as at the time of such investment.

A Default under Subsection (b) of this Section 5 (other than a Default under Section 8.14 of the Purchase Agreement, which Default shall be an Event of Default with the notice but without the passage of time specified in Subsection (b) of this Section 5) or Subsection (c) of this Section 5 shall not be an Event of Default until (i) the holders of at least 25 % in aggregate principal amount of the Notes then outstanding shall have notified the Company of the Default and (ii) the Company shall have failed to cure the Default under such Subsection (b) within 60 days after receipt of the notice or under such Subsection (c) within 10 days after receipt of the

notice, respectively. Any such notice must specify the Default, demand that it be remedied and state that the notice is a "Notice of Default."

SECTION 6. REMEDIES UPON EVENT OF DEFAULT.

(a) If an Event of Default (other than an Event of Default specified in Subsections (d) and (e) of Section 5) occurs and is continuing, the Holders of at least 25% in aggregate principal amount of the Notes then outstanding (by notice to the Company and the Secured Party), may declare the unpaid principal of and accrued interest on all the Notes then outstanding to be due and payable. Upon any such declaration, such principal and accrued interest shall be due and payable immediately. If an Event of Default specified in Subsection (d) or (e) of Section 5 occurs, such an amount shall ipso facto become and be immediately due and payable without any declaration or other act on the part of any Holder. The Holders of at least fifty percent (50%) or more in aggregate principal amount of the Notes then outstanding may rescind an acceleration and its consequences if (a) the Company has paid a sum sufficient to pay (i) all overdue interest on all Notes then outstanding and (ii) the principal of the Notes then outstanding which have become due otherwise than by such declaration of acceleration and accrued interest thereon at a rate borne by the Notes and (b) the rescission would not conflict with any judgment or decree and if all existing Events of Default have been cured or waived except nonpayment of principal or interest that has become due solely because of acceleration. No such rescission shall effect any subsequent Default or impair any right consequent thereto.

(b) The Holders of at least fifty percent (50%) or more in aggregate principal amount of the Notes then outstanding may waive an existing Default or Event of Default and its consequences. Upon any such waiver, such Default shall cease to exist and any Event of Default arising therefrom shall be deemed to have been cured for every purpose of this Note and the Purchase Agreement; but no such waiver shall extend to any subsequent or other Default or impair any right consequent thereon.

(c) If the Company defaults in a payment of interest on the Notes, the Company shall pay defaulted interest (plus interest on such defaulted interest, to the extent lawful, at the rate borne by this Note) in any lawful manner. The Company shall pay the defaulted interest to the Holders of the Notes on a special record date. The Company shall fix or cause to be fixed any such special record date and payment date, which specified record date shall not be less than 10 days prior to the payment date for such defaulted interest, and shall promptly mail or cause to be mailed to each Holder a notice that states

the special record date, the payment date and the amount of defaulted interest to be paid.

(d) No remedy herein conferred upon the Holder of this Note is intended to be exclusive of any other remedy and each and every such remedy shall be cumulative and shall be in addition to every other remedy given hereunder or now or hereafter existing at law or in equity or by statute or otherwise.

(e) In any suit for the enforcement of any right or remedy under this Note or the Purchase Agreement, a court in its discretion may require the filing by any party litigant in the suit of an undertaking to pay the costs of the suit, and the court in its discretion may assess reasonable costs, including reasonable attorneys' fees, against any party litigant in the suit,

having due regard to the merits and good faith of the claims or defenses made by the party litigant. This Subsection 6(e) does not apply to a suit by Holders of more than 10% in aggregate principal amount of the then outstanding Notes or any suit for the enforcement of the mandatory conversion right set forth in Section 3.

SECTION 7. NOTE REGISTER.

(a) The Company shall keep at its principal executive office a register (herein sometimes referred to as the "Note Register"), in which, subject to such reasonable regulations as it may prescribe, but at its expense (other than transfer taxes, if any), the Company shall provide for the registration and transfer of this Note.

(b) Whenever this Note shall be surrendered at the principal executive office of the Company for transfer or exchange, accompanied by a written instrument of transfer in form reasonably satisfactory to the Company duly executed by the Holder hereof or his attorney duly authorized in writing, and, subject to compliance with applicable securities laws, the Company shall execute and deliver in exchange therefor a new Note or Notes, as may be requested by such Holder, in the same aggregate unpaid principal amount and payable on the same date as the principal amount of the Note or Notes so surrendered; each such new Note shall be dated as of the date to which interest has been paid on the unpaid principal amount of the Note or Notes so surrendered and shall be in such principal amount and registered in such name or names as such Holder may designate in writing.

(c) Upon receipt by the Company of evidence reasonably satisfactory to it of the loss, theft, destruction or mutilation of this Note and of indemnity reasonably satisfactory to it, and upon reimbursement to the Company of all reasonable expenses incidental thereto, and upon surrender and cancellation of this Note (in case of mutilation) the Company will make and deliver in lieu of this Note a new Note of like tenor and unpaid principal amount and dated as of the date to which interest has been paid on the unpaid principal amount of this Note in lieu of which such new Note is made and delivered.

SECTION 8. MISCELLANEOUS.

(a) AMENDMENTS AND WAIVERS. The holders of at least fifty percent (50%) or more in principal amount of outstanding Notes or the Secured Party on behalf of the holders of the Notes may waive or otherwise consent to the amendment of any of the provisions hereof, provided that no such waiver or amendment may reduce the principal amount of or interest on any of the Notes or change the stated maturity of the principal or reduce the percentage of holders of Notes necessary to waive or amend the provisions of this Note, without the consent of each holder of any Note affected thereby.

(b) RESTRICTIONS ON TRANSFERABILITY. In addition to the restrictions set forth in the Purchase Agreement, the securities represented by

this Note have been acquired for investment and have not been registered under the Securities Act of 1933, as amended, or the securities laws of any state or other jurisdiction. Without such registration, such securities may not be sold, pledged, hypothecated or otherwise transferred, except pursuant to exemptions from the Securities Act of 1933, as amended, and the securities laws of any state or other jurisdiction.

(c) FORBEARANCE FROM SUIT. No holder of Notes shall institute any suit or proceeding for the enforcement of the payment of principal or interest unless the holders of at least 25 % in principal amount of all of the outstanding Notes join in such suit or proceeding.

(d) NO RECOURSE AGAINST OTHERS. No directors, officer, employee, incorporator or stockholder of the Company, as such, shall have any liability for any obligations of the Company under this Note, the Purchase Agreement or for any claim based on, in respect of, or by reason of, such obligations or their creation. The Holder of this Note by accepting this Note waives and releases all such liability. The waiver and release are part of the consideration for the issuance of this Note.

(e) SUBORDINATION. The Holder by accepting this Note agrees that the payment (by set-off or otherwise) of principal of and interest on the Notes is subordinated in right of payment, to the extent and in the manner provided in Section 9 of the Purchase Agreement, to the prior payment in full of all obligations in respect of Senior Indebtedness of the Company, whether outstanding on the date of the Purchase Agreement or thereafter incurred.

(f) DENOMINATIONS. This Note is issuable in minimum denominations of $1,000 and integral multiples of $1,000 in excess thereof, except as otherwise provided in Section 1 hereof.

(g) GOVERNING LAW. This Note shall be governed by, and construed in accordance with, the laws of the State of New York, excluding the body of law relating to conflict of laws. Notwithstanding anything to the contrary contained herein, in no event may the effective rate of interest collected or received by the Holder exceed that which may be charged, collected or received by the Holder under applicable law.

(h) INTERPRETATION. If any term or provision of this Note shall be held invalid, illegal or unenforceable, the validity of all other terms and provisions hereof shall in no way be affected thereby.

(i) SUCCESSORS AND ASSIGNS. This Note shall be binding upon the Company and its successors and assigns and shall inure to the benefit of the Holder and its successors and registered assigns.

(j) NOTICES. All notices, requests, consents and demands shall be made in writing and shall be mailed postage prepaid, or delivered by hand, to the Company or to the Holder thereof at their respective addresses set forth below or to such other address as may be furnished in writing to the other party hereto:

If to the Holder: At the address shown on Schedule A attached hereto

If to the Company: Hybridon, Inc.
620 Memorial Drive
Cambridge, Massachusetts 02139
Attention: E. Andrews Grinstead, III

(k) SATURDAYS, SUNDAYS, HOLIDAYS. If any date that may at any time be specified in this Note as a date for the making of any payment of

principal or interest under this Note shall fall on Saturday, Sunday or on a day which in New York or Massachusetts or California shall be a legal holiday, then the date for the making of that payment shall be the next subsequent day which is not a Saturday, Sunday or legal holiday.

(l) PURCHASE AGREEMENT. This Note is subject to the terms contained in the Purchase Agreement and the registered Holder of this Note is entitled to the benefits of such Purchase Agreement to the extent provided therein and may, in addition to any rights hereunder, enforce the agreements of the Company contained therein and exercise the remedies provided for thereby or otherwise available in respect thereof.

(m) NO ADVERSE INTERPRETATION OF OTHER AGREEMENTS. This Note and the Purchase Agreement may not be used to interpret another note, indenture, loan or debt agreement of the Company or a Subsidiary. Any such note, indenture, loan or debt agreement may not be used to interpret this Note or the Purchase Agreement.

IN WITNESS WHEREOF, this Note has been executed and delivered on the date fast above written by the duly authorized representative of the Company.

HYBRIDON, INC.

By: /s/ E. Andrews Grinstead, III

Name:
Title:

Exhibit 10.40

HYBRIDON

345 Vassar Street
Cambridge, MA 02139
Facsimile: (617) 679-5592

To: Holders of Certain Hybridon Warrants and Shares of Series B Convertible Preferred Stock ("Series B Shares")

Ladies and Gentlemen:

In recent discussions, we explored with you your interest in participating in Hybridon, Inc.'s "early exercise" program intended to encourage holders of certain warrants and holders of Series B Shares, in the near term, to exercise their warrants to purchase, or convert their Series B Shares into, shares of Hybridon common stock.

EARLY EXERCISE PROGRAM

To assist us in this effort, we have engaged the investment banking firm of Adams, Harkness & Hill. Based on their recommendations and our discussions with you, we have decided to offer the holders of various warrants and Series B Shares:

- a lower exercise price on their warrants in consideration for their exercising such warrants in the near term, either by paying the lower exercise price in cash or by engaging in a "cashless" exercise involving the cancellation of warrant shares; and

- a lower conversion price on their Series B Shares in consideration for their converting such shares of Series B Convertible Preferred Stock in the near term into our Common Stock.

THE SECURITIES OFFERED HEREBY PURSUANT TO REGULATION S UNDER THE SECURITIES ACT OF 1933, AS AMENDED, HAVE NOT BEEN REGISTERED UNDER SUCH ACT AND MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED IN THE UNITED STATES OR TO A U.S. PERSON UNLESS AND UNTIL SUCH SECURITIES ARE REGISTERED UNDER SUCH ACT OR AN EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF SUCH ACT IS AVAILABLE. HEDGING TRANSACTIONS INVOLVING THE SECURITIES OFFERED HEREBY MAY NOT BE CONDUCTED UNLESS IN COMPLIANCE WITH THE SECURITIES ACT OF 1933, AS AMENDED.

The purpose of the program would be to simplify our capital structure and to reduce the number of outstanding securities which are exercisable for or convertible into shares of our common stock. We believe that by simplifying our capital structure and reducing the number of outstanding securities, we can reduce the downward pressure on our stock price resulting from our having a large number of "common share equivalents and related securities" (i.e. securities which represent rights to acquire shares of common stock) outstanding. In addition, conversion of our Series B Shares will reduce our interest expense.

IMPLEMENTING THE PROGRAM

Beginning on July 5, 2001, the Company will from time to time offer warrant holders:

- the opportunity to immediately exercise their warrants for the

purchase of the shares covered by such warrants at a reduced exercise price agreed to by us and the warrantholder by paying the exercise price for such shares in cash;

- or the opportunity to immediately convert (without the payment of any cash exercise price) their warrants into a specified number of shares of common stock based on an exchange ratio agreed to by us and the warrantholder in a "cashless" transaction, which number of shares would reflect (a) reduced exercise price, and (b) the effective payment of the exercise price of the warrants through the acceptance of a reduced number of shares of common stock.

Similarly, beginning on July 5, 2001, the Company will offer holders of its Series B Shares the right to convert such shares into common stock at a lower conversion price than that set forth in the Certificate of Designation governing the terms of Series B Shares.

The Company will decide whether or not to make offers on any given date at its own discretion. It may suspend the program with respect to the warrants or the Series B Shares, or both, when it determines in its own discretion that a sufficient number of warrants have been exercised or Series B Shares converted to accomplish the purposes of the program.

METHOD OF DETERMINING EARLY EXERCISE ADJUSTMENTS

The valuation methodology used to arrive at the early exercise conversion/strike price or exchange ratio is summarized in the presentation materials of Adams, Harkness & Hill attached hereto. The basic premise is that the conversion/strike price or exchange ratio as set forth in the original instrument is adjusted to give effect to the economic value of the instrument if exercised in the near term rather than held until the expiration date set forth in the instrument. Hence, there is no gain or loss in value to Hybridon or the holder of the warrant or Series B Shares upon participation in the early exercise program. But, see "Accounting Considerations" for a discussion of a likely non-cash charge to income resulting from the program.

Warrants:

The market value of warrants is calculated by formulae which take into account several variables including prevailing discount rates, the volatility of Hybridon's common stock, the exercise period remaining, the strike price as written and the market value of the Company's common stock at the time of exercise. To the extent that these variables may fluctuate on a daily basis, it follows that the market value of the warrants may also fluctuate from day to day.

If we were to make offers under the "early exercise" program as of the Letter's date, we would expect to offer the following:

Warrant Type	Reduced Exercise Price for Early Cash Exercise	Exchange Ratio for Early Conversion of Warrants in Cashless Transaction
$0.60 Warrants	$0.44 per share	0.6563 shares for each warrant share
$0.66 Warrants	$0.44 per share	0.6563 shares for each warrant share
$1.08 Warrants	$0.38 per share	0.7031 shares for each warrant share
$2.40 Warrants	$0.56 per share	0.5625 shares for each warrant share

HOWEVER, WE ARE NOT MAKING ANY OFFER TO YOU UNDER THE "EARLY EXERCISE" PROGRAM ON THESE TERMS. THE REDUCED EXERCISE PRICE AND THE EXCHANGE RATIO THAT WE PLAN TO OFFER UNDER OUR "EARLY EXERCISE" PROGRAM WILL BE SUBJECT TO CHANGE AND WILL NOT BE FINAL WITH RESPECT TO A WARRANTHOLDER UNTIL AGREED UPON BY US AND THE WARRANTHOLDER IN THE MANNER DESCRIBED UNDER "PARTICIPATION PROCEDURES" BELOW.

Series B Preferred:

The method for determining an appropriate adjustment in the conversion price for Series B Shares is determined by a formula which is not sensitive to the market value of the Company's common stock because it is more based upon the stated dividend which accrues on the Series B Shares and the time value of money if those shares are converted sooner than later. The Series B Shares have a preference as to the payment of dividends and distributions in liquidation once shares of the Company's Series A Convertible Preferred Stock and its Common Stock. Accordingly, the Company will offer rights to holders of Series B shares to convert their Series B Shares into shares of Common Stock at a conversion price of forty cents ($.40) in lieu of the conversion price of fifty cents ($.50) stated in the Certificate of Designation establishing the class of Series B Convertible Preferred Stock.

LOCK-UP AGREEMENTS

As a condition of participating in the early exercise program, the warrant holder or holder of Series B shares, as the case may be, will be required to execute a "lock-up Agreement in the form attached hereto by which he or it will agree to refrain from making public re-sales of the shares of common stock received upon exercise or exchange of his or its warrant or conversion of his or its Series B Shares except that one-third of such shares may be sold upon expiration of five months from his or its acceptance date, two-thirds may be sold upon the expiration of six months and all of such shares may be sold upon the expiration of 7 months.

ADAMS HARKNESS & HILL AND OTHER COMPENSATION

Adams Harkness & Hill was retained by the Company in May 2001 to provide financial advisory services. For these services, it is to receive a retainer of $200,000 of which $100,000 may be credited against amounts owing in connection with particular projects during the retainer period. Specific to the early exercise program, Adams Harkness & Hill will be paid a fee for advising us as to the terms and the timing of our offers under the "early exercise" program and rendering to our Board of Directors its opinion that the "early exercise" program is fair, from a

financial point of view, to the holders of the company's Common Stock. In addition, in its capacity as an advisor, Adams Harkness & Hill has contacted and will contact holders of warrants and Series B Shares regarding the "early exercise" program.

In addition, we will reimburse Adams Harkness & Hill for its reasonable out-of-pocket expenses, including attorneys' fees, and have agreed to indemnify Adams Harkness & Hill against certain liabilities and expenses in connection with the "early exercise" program.

We have also retained Pillar Investments Limited, an entity with which two of our directors, Youssef El-Zein and Nasser Menhall, are affiliated, to provide

advisory services in connection with the "early exercise" program. We have agreed to pay Pillar a fee to reimburse Pillar for its reasonable out-of-pocket expenses, including attorneys' fees and to indemnify Pillar against certain liabilities and expenses in connection with the "early exercise" program.

PLEASE NOTE THAT ADAMS HARKNESS & HILL'S OPINION WILL BE PROVIDED TO OUR BOARD OF DIRECTORS ONLY. THE OPINION IS DIRECTED ONLY TO THE FAIRNESS OF THE "EARLY EXERCISE" PROGRAM FROM A FINANCIAL POINT OF VIEW TO THE COMPANY (AND NOT TO THE ADDRESSEES OF THIS OFFER) AND DOES NOT CONSTITUTE A RECOMMENDATION AS TO WHETHER OR NOT YOU SHOULD PARTICIPATE IN THE "EARLY EXERCISE" PROGRAM.

All expenses incident to the "early exercise" program will be borne by us, including:

- any registration and filing fees (including, without limitation, fees and expenses of compliance with state securities or Blue Sky laws);

- printing expenses (including, without limitation, expenses of printing certificates for the shares of common stock in a form eligible for deposit with The Depository Trust Company;

- fees and disbursements of our counsel, fees and disbursements of independent certified public accountants;

- our internal expenses (including all salaries and expenses of our officers and employees, performing legal or accounting duties; and

- fees and expenses incurred in connection with the listing of the shares of common stock on a securities exchange.

We will pay all transfer taxes, if any, applicable to the exercise of warrants or conversion of shares of Series B Convertible Preferred Stock under the "early exercise" program. If, however, a transfer tax is imposed for any reason other than the exercise of warrants or conversion of shares of Series B Convertible Preferred Stock under the "early exercise" program, such a transfer by a warrantholder of the shares of common stock issuable upon conversion of warrants, then the amount of such transfer taxes (whether imposed on the registered holder or any other persons) will be payable by the holder. If satisfactory evidence of payment of such taxes or exemption is not submitted at the time of exercise or conversion, the amount of such transfer taxes will be billed directly to such holder.

INFORMATION ABOUT HYBRIDON

We are enclosing a copy of our annual report on Form 10-K for the year ended December 31, 2000, our quarterly report on Form 10-Q for the period ended March 31, 2001, and our periodic reports on Form 8-K dated May 10, 2001, May 29, 2001, June 8, 2001 and June 11, 2001 and the proxy statement relating to our June 28, 2001 annual stockholder's meeting. Any information in any documents we file later with the SEC will automatically update and supersede information included in or incorporated by reference in this document. We incorporate by reference in this document any future filings we will make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended.

We will provide a copy of any document filed with the SEC, at no cost, to any person who receives this document. To request a copy, you should write or telephone us as instructed at the end of the Acceptance and Lock-Up Agreement. In addition, our SEC filings are available from the SEC's internet site at http://www.sec.gov.

PRO FORMA EFFECT OF EARLY EXERCISE PROGRAM

The following table shows the pro forma effect on the company's

capitalization of the early exercise program assuming that the holders of all of the warrants and Series B Shares accept the offer. Also reflected in the table is the effect of an offer, not reflected in this Offer Letter, which the company contemplates making to the holders of its 8% Notes, again, assuming that all of such holders accept the offer.

	ORIGINAL		
CATEGORY OF SHARES (COMMON STOCK EQUIV)	STRIKE PRICE	BEFORE TRANSACTIONS	AFTER TRANSACTIONS
8% Notes	$0.60	1,200,117	0
$3M Loan	$2.40	1,250,000	1,250,000
Series A Preferred conv ratio=>	23.53	14,891,106	14,891,106
Series B Preferred	$0.50	15,294,400	0
Common	--	18,698,259	45,661,998
$0.60 Warrants	$0.60	2,750,000	0
$0.66 Warrants	$0.66	679,047	0
$1.08 Warrants	$1.08	1,500,000	0
$2.40 Warrants	$2.40	4,987,811	0
$3.00 Warrants	$3.00	173,333	173,333
$4.25 Warrants	$4.25	3,591,193	3,591,193
Total		65,015,266	65,567,630

INTEREST OF DIRECTORS AND OTHERS

The Directors of the Company and persons or entities whose ownership of is attributed to the Directors own warrants and Series B Shares which are the subject of this offer. The table set forth below shows as to the Company's directors (after giving effect to warrants and Series B Shares whose ownership is attributed to them) the number of shares of common stock which they would be entitled to if they were to convert their Series B Shares or exercise their warrants. Ownership of all warrants having an exercise price of $2.40 or less are combined.

	Series B PREFERRED	total warrants <= $2.40
Exercise Price	$0.50	
DIRECTORS - DIRECT & BENEFICIAL OWNERSHIP		
Keith Hartley - direct ownership	0	138,570
Beneficial ownership:		0
Founders Financial Group L.P. (a)	0	2,010,012

Keith Hartley - beneficial ownership (d)	0	2,148,582
		0
Art Berry - direct ownership	443,000	0
Beneficial ownership:		0
Delaware (a)	0	661,046
ICI (a)	0	253,620
Zeneca (a)	0	169,794
Art Berry - beneficial ownership	443,000	1,084,460
		0
Youssef El Zein - direct ownership	753,400	438,499
Kincroft Ltd. (controlled by YEZ)		309,749
subtotal direct YEZ	753,400	748,248
Beneficial ownership: (none)(e)		
Youssef El Zein - beneficial ownership(e)	753,400	748,248
		0
Nasser Menhall - direct ownership	32,000	136,029
Beneficial ownership: (none)(e)		0
Nasser Menhall - beneficial ownership(e)	32,000	136,029
		0
Paul Zamecnik - direct ownership	208,200	230,793
recently issued shares		0
subtotal direct PCZ	208,200	230,793
shares held by children		0
Paul Zamecnik - beneficial ownership	208,200	230,793
		0
James Wyngaarden - direct ownership	0	27,737
shares held by children		0
James Wyngaarden - beneficial ownership	0	27,737

	Series B Preferred	total warrants <= $2.40
Exercise Price	$0.50	
Sudhir Agrawal - direct ownership		0
Beneficial ownership: (none)		0
Sudhir Agrawal - beneficial ownership	0	0
		0
Camille Chebeir (in street name) - direct ownership		0
Affiliate ownership:		0
Global Investments.		55,872
Bin Mahfouz Cos.: Intercity Holdings and HTI		0
Investments	0	375,000
		0
Camille Chebeir & affiliate ownership	0	430,872

(a) Assumes that the remaining $3,000,000 Founders/Pecks loan is repaid in cash.

(b) Excludes shares held in street name unless the director has informed Hybridon.

(c) Includes all stock options.

(d) Excludes shares held by Forest Funds, Hal Purkey, Steven DeVoe and Eric Grant.

(e) Excludes shares held by other Pillar contacts.

TAX CONSEQUENCES

The Company will implement the early exercise program as a recapitalization meeting the requirements of section 368(a)(1)(E) of the Internal Revenue Code for a tax-free reorganization. Transactions under the early exercise program will not result in any tax consequences to the Company.

In the case of U.S. taxpayers, (a) acceptance of the early exercise offer, framed as a reduction in the strike price of a warrant or conversion price of preferred stock and the involves the payment of such price to the Company, should not result in recognition of gain, whereas (b) acceptance of an offer involving purely the exchange of common stock for the warrant (a "cashless" transaction where in effect the warrant holder "pays" the strike price with common shares issued upon exercise rather than cash) may require a recognition of gain equal to the excess of the fair market value of the common shares used to pay the adjusted strike price over the tax basis of such common shares. We advise you to seek the opinion of a tax advisor regarding the tax effect to you.

SECURITIES LAWS

This offer would be deemed under the Securities Act of 1933, as amended, to encompass an offer to exchange a new security for the presently held. The offer and sale of securities involved in early exercise transactions will not be registered under Section 5 of the Securities Act of 1933 in reliance upon, among other things, the provisions of Regulation S having to do with securities transactions deemed to be "off-shore" and the provisions of Regulation D in the case of transactions not off-shore. Offers and sales will be made only to persons or entities which are deemed to be "off-shore" as that term is defined in Regulation S or are "accredited investors" as the term is defined in Regulation D.

The new securities consisting of this offer and the shares of common stock which the Company will issue to those accepting this offer may not be sold, pledged, transferred, hypothecated or otherwise transferred unless the same have been registered under the Securities Act of 1933 or an exemption from such registration requirements is available.

REGISTRATION RIGHTS

Under US securities laws persons holding restricted shares (i.e. shares which were not obtained in a public offering) for a period of at least one year may sell them into the public market by meeting certain volume and other requirements set forth in Rule 144 promulgated by the SEC. Such persons who have held their shares for 2 years or more and who have not been affiliates of the Company with the preceding 3 months may sell their shares into the public market without any restrictions.

In determining their holding period for purposes of Rule 144, persons converting their preferred shares into common stock will be able to add to (tack) such common shares the period during which they have held their preferred shares. Persons accepting common shares in exchange for their warrants in a so-called cashless transaction (i.e. without the payment of any exercise or purchase price) may also tack to such common shares the period of time during which they held the warrants.

Persons exercising their warrants and purchasing common shares would begin a new holding period for purposes of Rule 144 transactions.

Affiliates of the Company (meaning any person "controlling, controlled by or under common control with Hybridon) are not, regardless of holding period, eligible to sell restricted securities in Rule 144(k) transactions.

Given the foregoing, the Company will enter into agreements to register the re-sale of shares of its common stock which are obtained by persons accepting this offer and making an early exercise to the extent such persons either (a) are affiliates, or (b) elect to make an early exercise by purchasing common shares upon exercise of their warrants. The form of such registration agreement is attached.

ACCOUNTING AND OTHER CONSIDERATIONS

With respect to the conversion of the Series B Convertible Preferred Stock, we will recognize on our income statement a non-cash charge equal to the product of (a) the number of additional shares of common stock issued upon conversion of the Series B Convertible Preferred Stock due to the reduced conversion price, and (b) the market price of our Common Stock on the date of conversion. For example, if all of the Series B Convertible Preferred Stock was converted at a conversion price of $0.40 per share on a date when the market price of our Common Stock was $1.22, we would recognize a one-time charge of approximately $4.66M.

Given that the value assigned to the various warrants will be established using a weighted average closing price, any difference between the value assigned to these securities and the market price of the securities at the time the offer is accepted, will have either a positive or negative accounting impact, depending on the market price of the stock.

Implementation of the early exercise program might result in the Company's foregoing the amount of cash proceeds which it would have received if the conversion price of Series B Shares was not lowered, the warrant strike prices were not changed and if cashless exercises were not permitted. The amount of cash proceeds so foregone is material although estimating the amount would involved predications of future market prices for the Company's common stock as well as the behavior of the warrant holders and holders of Series B Shares. The Company's Board of Directors has judged the benefits of the early exercise program to outweigh this potential loss.

PARTICIPATION PROCEDURES

If you are interested in participating in the "early exercise" program, please contact us at 1-800-223-3771, ext. 5575, to determine whether we are making offers under the "early exercise" program on that day and the terms we are offering on that day.

If we are not making offers on the day you contact us or have terminated the "early exercise program, we will advise you.

If we are making offers with respect to warrants on the day you contact us, we will advise you as to the reduced exercise price and the exchange ratio we are offering that day with respect to the warrants. If we reach agreement with you as to the terms of your participation in the "early exercise" program, then the exercise of warrants or conversion of Series B Convertible Preferred Stock on the agreed-upon terms can be consummated.

Warrants

In order to consummate your "early exercise" of warrants, you must complete the enclosed Acceptance and Lock-Up Agreement, specifying the number of shares you are purchasing and the manner of exercise, and sign and date it and fax it to us before 5:00 p.m. (Boston time) on the day on which we and you have agreed upon the terms of your "early exercise". Your execution and delivery of the Acceptance and Lock-Up Agreement will give rise to a binding obligation on your part to consummate the warrant exercise. You must, as soon as practical thereafter, send us your original warrant certificate for cancellation, as well a payment of the exercise price of the warrant unless you have chosen to exercise the warrant in a "cashless" transaction. Upon receipt from you of all of the necessary documentation and funds from you, if applicable, we will advise our transfer agent to issue to you a certificate for the appropriate number of shares of Common Stock in accordance with your instructions in the Acceptance and Lock-Up Agreement.

Series B Convertible Preferred Stock

In order to consummate your "early exercise" of Series B Convertible Preferred Stock, you must complete the enclosed Acceptance Agreement, specifying the number of shares of Series B Shares to be converted, and sign and date it and fax it to us. Our receipt of your Acceptance and Lock-Up Agreement will give rise to a binding obligation on your part to consummate the share conversion, and from and after the date of receipt (the "Conversion Date"), your shares of Series B Convertible Preferred Stock will be deemed to have been converted and you will have no further rights with respect to your shares of Series B Convertible Preferred Stock other than the right to receive the shares of common stock to which you are entitled. You must, as soon as practical thereafter, send us your original Series B stock certificate for cancellation. Upon receipt from you of all of the necessary documentation, we will advise our transfer agent to issue to you a certificate for the appropriate number of shares of common stock in accordance with your instructions in the Acceptance and Lock-Up Agreement, along with a new

certificate for any shares of Series B Convertible Preferred Stock you have not converted. Accrued, but unpaid dividends through the Conversion Date will be paid in additional Series B Shares.

ENCLOSURES

This booklet consists of:

(a) This overview document;

(b) A copy of the Adams, Harkness and Hill summary presentation;

(c) An Acceptance and Lock-Up Agreement to be signed by those who wish to participate in the "early exercise" program;

(d) A copy of our most recent SEC filings; and

(e) Form of Registration Rights Agreement.

Very truly yours,

Hybridon, Inc.

By Robert Andersen
Chief Financial Officer

ACCEPTANCE AND LOCK-UP AGREEMENT
RELATING TO THE EARLY EXERCISE PROGRAM
OF HYBRIDON, INC. ("HYBRIDON")

Hybridon, Inc., a Delaware corporation ("Hybridon"), has offered (the "Offer"), certain rights enabling (a) holders of shares its Series B Preferred Stock (the Series B "Shares") to convert such shares into shares of the Hybridon's common stock in the near term at a reduced conversion price and (b) holders of warrants in the near term to purchase common shares at a reduced strike price or exchange their warrants for commons shares at a similarly adjusted exchange ratio. To accept the Offer, you must complete sign and submit to Hybridon this Acceptance and Lock-Up Agreement (the "Acceptance"). The terms and conditions of the Offer are fully set forth in the Offer Letter accompanying this Acceptance.

PLEASE READ THE ENTIRE OFFER LETTER CAREFULLY. QUESTIONS AND REQUESTS FOR ASSISTANCE SHOULD BE DIRECTED TO HYBRIDON AT THE ADDRESS AND TELEPHONE NUMBER SET FORTH AT THE END OF THIS ACCEPTANCE. REQUESTS FOR ADDITIONAL COPIES OF THE OFFERING DOCUMENTS SHOULD BE DIRECTED TO HYBRIDON IN THE SAME FASHION.

YOU SHOULD NOT CONSTRUE THE CONTENTS OF THE OFFER LETTER AS LEGAL, TAX OR INVESTMENT ADVICE. YOU SHOULD SEEK YOUR OWN LEGAL, TAX AND INVESTMENT ADVICE FROM QUALIFIED PROFESSIONALS PRIOR TO MAKING A DECISION TO INVEST

LOCK-UP AGREEMENT

In consideration for the right to participate in the "early exercise" program and for other good and valuable consideration, receipt of which is hereby acknolwedged, the undersigned agrees that without the prior written consent of the Company, the undersigned will not directly or indirectly offer, sell, offer to sell, sell short, contract to sell or otherwise dispose of (a "disposition") any of the shares (the "Shares) of Common Stock the undersigned receives upon exercise or exchange of warrants or conversion of Preferred Stock, except that the undersigned may sell (i) one-third of the Shares upon the expiration of five months from the undersigned's acceptance date (the "Acceptance Date"), (ii) two-thirds of the Shares upon the expiration of six months from the Acceptance Date and (iii) all of the Shares upon the expiration of seven months from the Acceptance Date.

The undersigned agrees that the Company may, and that the undersigned will, with respect to any Shares for which the undersigned is the record holder, cause the transfer agent for the Company to note stop transfer instructions with respect to such Shares on the transfer book and records of the Company.

The undersigned understands that the Company will proceed with the "early exercise" program in reliance on this Lock-up Agreement.

OFFEREE'S REPRESENTATIONS

By accepting Hybridon's offer, you represent as follows:

INVESTMENT INTENT

You are acquiring the securities under the Offer Letter for its account and not with a view to the making of a public distribution unless such securities have been registered under the Securities Act of 19233, as amended, or pursuant to an exemption from the registration requirements of the Act.

LEGEND

You consent to the placement of the legend set forth below on any certificate or other document evidencing the shares of the Common Stock issued upon conversion of the Series B Shares or exercise of the warrants.

> THE SECURITIES OFFERED HEREBY HAVE NOT BEEN REGISTERED UNDER THE UNITED STATES SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR THE
>
> SECURITIES LAWS OF ANY STATE OF THE UNITED STATES, AND WERE OFFERED AND SOLD IN RELIANCE ON EXEMPTIONS FROM THE REGISTRATION REQUIREMENTS OF THE ACT AND SUCH LAWS. THE SECURITIES OFFERED HEREBY HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE U.S. SECURITIES AND EXCHANGE COMMISSION, ANY STATE SECURITIES COMMISSION OR OTHER REGULATORY AUTHORITY, NOR HAVE ANY OF THE FOREGOING AUTHORITIES PASSED UPON OR ENDORSED THE MERITS OF THIS OFFERING. ANY REPRESENTATION TO THE CONTRARY IS UNLAWFUL. NO OFFER OR SALE OF THE SECURITIES OFFERED HEREBY MAY BE MADE IN THE UNITED STATES OR TO FOR THE ACCOUNT OR BENEFIT OF A "U.S. PERSON" (AS THAT TERM IS DEFINED IN REGULATION S OF THE SECURITIES ACT) DURING ANY APPLICABLE "DISTRIBUTION COMPLIANCE PERIOD" (AS THAT TERM IS DEFINED IN REGULATION S OF THE SECURITIES ACT) IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OR PURSUANT TO AN AVAILABLE EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT. FURTHER, NO HEDGING TRANSACTION INVOLVING THESE SECURITIES MAY BE CONDUCTED DURING SUCH DISTRIBUTION COMPLIANCE PERIOD UNLESS IN COMPLIANCE WITH THE REGISTRATION OR EXEMPTION PROVISIONS OF THE SECURITIES ACT.

POWER AND AUTHORITY

You represent that you have full power and authority (corporate, statutory and otherwise) to execute and deliver this Acceptance and comply with the obligations attendant upon such acceptance. Such Acceptance constitutes your legal, valid and binding obligation enforceable against you in accordance with its terms.

ACCREDITED INVESTOR

You represent that you are an "accredited investor" as such term is defined in Rule 501 of Regulation D.

Generally, to be an "accredited investor," an investor who is a natural person must, at the time of his purchase, (i) have a net worth, individually or jointly with one's spouse, in excess of $1,000,000 or (ii) have had an individual income in excess of $200,000 in each of the two most recent years, or joint income with one's spouse in

excess of $300,000 in each of those years and have a reasonable expectation of reaching the same income level in the current year. An organization or entity subscribing for Units may qualify as an "accredited investor" if it is (a) a bank as defined in Section 3(a)(2) of the Securities Act or a savings and loan association or other institution defined in Section 3(a)(5)(A) of the Securities Act whether acting in its individual or fiduciary capacity; a broker-dealer registered pursuant to Section 15 of the Securities Exchange Act of 1934, as amended; an insurance company as defined in Section 2(13) of the Securities Act; an investment company registered under the Investment Company Act of 1940, as amended, or a business development company as defined in Section 2(a)(48) of the Securities Act; any small business investment company licensed by the U.S. Small Business Administration under Section 301(c) or (d) of the Small Business Investment Act of 1958, as amended; a plan established and maintained by a state, its political subdivisions, or any agency or instrumentality thereof, for the benefit of its employees, if such plan has total assets in excess of $5,000,000; an employee benefit plan within the meaning of the Employee Retirement Income Security Act of 1974, as amended ("ERISA"), if the investment decision is made by a plan fiduciary, as defined in Section 3(21) of ERISA, which is either a bank, savings and loan association, insurance company or registered investment adviser, or if the employee benefit plan has total assets in excess of $5,000,000, or, if a self-directed plan, with investment decisions made solely by persons that are accredited investors, (b) a private business development company as defined in Section 292(a)(22) of the Investment Advisers Act of 1940, as amended, (c) an organization described in Section 503(c) of the Internal Revenue Code of 1986, as amended, a corporation, Massachusetts or similar business trust or partnership, not formed for the specific purpose of acquiring Units, with total assets in excess of $5,000,000, (d) a director or officer of the Company, (e) a trust with total assets in excess of $5,000,000, not formed for the specific purpose of acquiring Units, whose purchase is directed by a sophisticated person and described in Rule 506(b)(2)(ii) of the Securities Act or (f) an entity all of the equity owners of which are accredited investors, all as defined in Regulation D.

SIGNATURE(S) MUST BE PROVIDED IN BOX TWO BELOW

BOX ONE

LIST BELOW THE WARRANTS OR SERIES B SHARES TO WHICH THIS ACCEPTANCE RELATES. IF THE SPACE PROVIDED BELOW IS INADEQUATE, THE CERTIFICATE NUMBERS AND SHARE AMOUNTS SHOULD BE LISTED ON A SEPARATE SIGNED SCHEDULE AFFIXED HERETO.

1	2	3	4
NAME(S) AND ADDRESS(ES) OF REGISTERED HOLDER(S)	CERTIFICATE NUMBER(S)	EXERCISE/ CONVERSION OF TOTAL POSITION (YES/NO)1	CASHLESS CONVERSION OF WARRANTS (YES/NO)2
$0.60 Warrants	_____	_____	_____
$0.66 Warrants	_____	_____	_____
$1.08 Warrants	_____	_____	_____
$2.40 Warrants	_____	_____	_____
Series B Shares	_____	_____	

NOTES:

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1 IF A PARTIAL EXERCISE OF WARRANT IS INTENDED, PLEASE STATE THE NUMBER OF WARRANTS YOU INTEND TO EXERCISE IN THE NOTES SECTION. IF A PARTIAL EXERCISE OF SERIES B SHARERS IS INTENDED, PLEASE STATE THE NUMBER OF SERIES B SHARES TO BE CONVERTED IN THE NOTES SECTION.

2 UNLESS OTHERWISE INDICATED, THE WARRANTHOLDER WILL BE DEEMED TO HAVE ACCEPTED ANY PARTIAL EXERCISE AS A CASHLESS EXERCISE.

BOX TWO

ACCEPTANCE OF OFFER

PLEASE SIGN HERE

I have read the Offering documents, and hereby accept the Offer described therein, and further agree to be bound by the foregoing.

_____
Signature(s) of Registered Stockholder(s) or Authorized Signatory

_____
Type or Print Name

Dated: _____ _____, 2001

Area Code and Telephone No(s): _____

Must be signed by the registered Warrant or Series B Holder(s) exactly as the name(s) appear(s) on the certificate representing the Shares as the case may be.

HYBRIDON'S ADDRESS

Please fax this signed Acceptance to Hybridon at the following address:

Hybridon, Inc.
Attn: Robert G. Andersen
345 Vassar Street
Cambridge, MA 02139
Facsmile: (617) 679-5592

TERMS OF REGISTRATION RIGHTS

The following are the terms (the "TERMS") of the registration rights granted to those equity securityholders (the "HOLDERS") of Hybridon, Inc., a Delaware corporation (the "COMPANY") who are party to an Acceptance and Lock-Up

Agreement (the "AGREEMENT") pursuant to that certain Offer Letter from the Company dated July 29, 2001 (the "OFFER LETTER") that describes the early exercise of Preferred Stock and/or Common Stock Purchase Warrants (both as defined below). These terms are specifically referenced and incorporated into the Agreement and are a part thereof.

1. DEFINITIONS. As used herein, the terms below shall have the following meanings. Any such term, unless the context otherwise requires, may be used in the singular or plural, depending upon the reference.

"AFFILIATE" shall have the meaning provided in the Exchange Act and the rules and regulations of the Securities and Exchange Commission promulgated thereunder.

"COMMON STOCK" shall mean the common stock, par value $0.001 per share, of the Company.

"COMMON STOCK PURCHASE WARRANT" shall mean the Common Stock Purchase Warrants of the Company identified in the Offer Letter.

"CONVERSION STOCK" shall mean the shares of Common Stock issued upon the conversion of any shares of Preferred Stock or the exercise of any Common Stock Purchase Warrant pursuant to the terms of the Offer Letter and Agreement.

"PERSON" shall mean an individual, partnership, limited liability company, joint venture, corporation, trust or unincorporated organization or any other similar entity.

"PREFERRED STOCK" shall mean the Series B Convertible Redeemable Preferred Stock, par value $0.01 per share, of the Company identified in the Offer Letter.

"REGISTER," "REGISTERED," and "REGISTRATION" shall refer to a registration effected by preparing and filing a registration statement or similar document in compliance with the Securities Act, and the declaration or ordering of effectiveness of such registration statement or document by the SEC.

"REGISTRABLE SECURITIES" shall mean (a) the Conversion Stock beneficially owned by any Holder, or (b) any Common Stock of the Company issued to a Holder as (or issuable upon the conversion or exercise of any warrant, option, right or other security which is issued as) a dividend or other distribution with respect to, or in exchange for or in replacement of, any of the Conversion Stock beneficially owned by any Holder; provided, however, that shares of Common Stock or other securities shall only be treated as Registrable Securities if and so long as (i) they have not been sold to or through a broker or dealer or underwriter in a public distribution or otherwise pursuant to an effective Registration Statement under the Securities Act, (ii) they have not been sold in a transaction exempt from the registration and prospectus delivery requirements of the Securities Act under Section 4(l) thereof (including any sale pursuant to Rule

144 of the Securities Act or any similar provision) so that all transfer restrictions and restrictive legends with respect thereto are removed upon the consummation of such sale, or (iii) they may not immediately be resold by the Holder pursuant to Rule 144 (without regard to subsection (k) thereof). In no event shall any securities of the Company other than Common Stock (or any successor security) constitute Registrable Securities. Common Stock issuable upon conversion or exercise of any shares of convertible securities (including the Preferred Stock), warrants, options or rights will be registered for resale only.

The number of shares of "REGISTRABLE SECURITIES THEN OUTSTANDING" shall be determined by the number of shares of Common Stock outstanding which are, and the number of shares of Common Stock issuable pursuant to then exercisable or convertible securities which are, Registrable Securities. The number of shares of Registrable Securities owned by any Holder shall be deemed to include the number of shares of Common Stock issuable pursuant to equity securities convertible into, or exercisable for, convertible securities (regardless of whether such securities are then convertible or exercisable, except for compensatory stock options, which shall not be deemed outstanding unless they have vested).

"SECURITIES ACT" shall mean the Securities Act of 1933, as amended.

"SEC" shall mean the Securities and Exchange Commission.

2. COMPANY OBLIGATIONS. The Company shall:

(a) REGISTRATION REQUIREMENT. Prepare and file with the SEC on or before October 1, 2001 a registration statement to register for resale the Registrable Securities and use its best efforts to cause such registration statement to be declared effective by the SEC as promptly as practicable; and

(b) EFFECTIVE PERIOD OF REGISTRATION STATEMENT. Prepare and file with the SEC such amendments and supplements to such registration statement and the prospectus used in connection therewith as may be necessary to keep such registration statement effective until the first anniversary of the date such registration statement is declared effective, or, if earlier, until such time as the Holder shall have completed the distribution of all Registrable Securities covered by the registration statement, and comply with the provisions of the Securities Act with respect to the disposition of all securities covered by such registration statement during such effective period in accordance with the intended methods of disposition by the Holders, and cause the prospectus to be supplemented by any required prospectus supplement, and as so supplemented to be filed pursuant to Rule 424 under the Securities Act. The Company is entitled to withdraw such registration statement at such time as it no longer is required to keep such registration statement effective under this clause (b) and following such withdrawal, the Holders shall have no further right to offer or sell any Registrable Securities pursuant to such registration statement; and

(c) PROSPECTUS. Furnish to the Holders such numbers of copies of a prospectus, including a preliminary prospectus, in conformity with the requirements of the Securities Act, and such other documents as they may reasonably request in order to facilitate the

disposition of Registrable Securities owned by them, and cause all related filings to be made with the SEC as required by Rule 424.

(d) PROSPECTUS DELIVERY. Promptly notify each Holder of Registrable Securities covered by the registration statement at any time when the Company becomes aware of the happening of any event as a result of which the registration statement or the prospectus included in such registration statement or any supplement to the prospectus (as then in effect) contains any untrue statement of a material fact or omits to state a material fact necessary to make the statements therein (in the case of the prospectus, in light of the circumstances under which they were made) not misleading or, if for any other reason it shall be necessary during such time period to amend or supplement the registration statement or the prospectus in order to comply with the Securities Act, whereupon, in either case, each Holder shall immediately cease to use such registration statement or prospectus for any purpose and, as promptly as practicable thereafter, the Company shall prepare and file with the SEC, and furnish without charge to the appropriate Holders a supplement or amendment to

such registration statement or prospectus which will correct such statement or omission or effect such compliance and such copies thereof as the Holders may reasonably request.

3. FURNISH INFORMATION. It shall be a condition precedent to the obligations of the Company to take any action pursuant to these Terms with respect to the Registrable Securities of any selling Holder that such Holder shall furnish to the Company such information regarding itself, the Registrable Securities held by it, and the intended method of disposition of such securities as shall be required to effect the registration of such Holder's Registrable Securities. Such information shall be used specifically for inclusion in the registration statement and the prospectus and any supplement thereto with respect to the Registrable Securities. The selling Holders shall promptly notify the Company at any time when any such Holder becomes aware that any information furnished pursuant to this SECTION 3 becomes materially incorrect.

4. EXPENSES OF COMPANY REGISTRATION. The Company shall bear and pay all expenses incurred in connection with any registration, filing or qualification of Registrable Securities pursuant to SECTION 2, including (without limitation) all registration, filing, and qualification fees, printers and accounting fees relating or apportionable thereto, but EXCLUDING (i) underwriting discounts and commissions, if any, (ii) stock transfer taxes and (iii) fees and expenses of separate counsel, if any, to the Holders relating to Registrable Securities.

5. DELAY OF REGISTRATION. No Holder shall have any right to obtain or seek an injunction restraining or otherwise delaying any such registration as the result of any controversy that might arise with respect to the interpretation or implementation of these Terms.

6. INDEMNIFICATION. In the event any Registrable Securities are included in a registration statement under these Terms:

(a) INDEMNIFICATION BY THE COMPANY. To the fullest extent permitted by law, the Company will indemnify and hold harmless each Holder and, if applicable, its officers, directors, stockholders, partners, owners and agents, for such Holder, and each person, if any, who controls such Holder within the meaning of the Securities Act or the Exchange Act, against any losses, claims, damages, or liabilities (joint or several) to which they may become subject

under the Securities Act, the Exchange Act, or other federal or state law, insofar as such losses, claims, damages, or liabilities (or actions in respect thereof) arise out of or are based upon any of the following statements, omissions or violations (collectively a "Violation"): (I) any untrue statement or alleged untrue statement of a material fact contained in such registration statement, including any preliminary prospectus or final prospectus contained therein or any amendments or supplements thereto, (ii) the omission or alleged omission to state therein a material fact required to be stated therein, or necessary to make the statements therein not misleading, or (iii) any violation or alleged violation by the Company of the Securities Act, the Exchange Act, or any state securities law or any rule or regulation promulgated under the Securities Act, the Exchange Act, or any state securities law; and the Company will pay to each such Holder, or controlling person, as incurred, any legal or other expenses reasonably incurred by one law firm retained by them, plus appropriate local counsel in connection with investigating or defending any such loss, claim, damage, liability, or action; provided, however, that the indemnity agreement contained in this SECTION 6(A) shall not apply to amounts paid in settlement of any such loss, claim, damage, liability, or action if such settlement is effected without the consent of the Company (which consent shall not be unreasonably withheld), nor shall the Company be liable in any such case for any such loss, claim, damage, liability, or action to which any Holder, or

controlling person may become subject to the extent that it arises out of or is based upon a Violation which occurs in reliance upon and in conformity with written information furnished expressly for use in connection with such registration by such Holder, or controlling person.

(b) INDEMNIFICATION BY SELLING HOLDER. To the fullest extent permitted by law, each selling Holder severally, but not jointly, will indemnify and hold harmless the Company, each of its directors, each of its officers who has signed the registration statement, each person, if any, who controls the Company within the meaning of the Securities Act or the Exchange Act, any other Holder selling securities in such registration statement and any controlling person of any other Holder against any losses, claims, damages, or liabilities (joint or several) to which any of the foregoing persons may become subject, under the Securities Act, the Exchange Act or other federal or state law, insofar as such losses, claims, damages, or liabilities (or actions in respect thereto) arise out of or are based upon any Violation, in each case to the extent (and only to the extent) that such Violation occurs in reliance upon and in conformity with written information furnished by such Holder expressly for use in connection with such registration; and each such Holder will pay, as incurred, any legal or other expenses reasonably incurred by any person intended to be indemnified pursuant to this SECTION 6(B), in connection with investigating or defending any such loss, claim, damage, liability, or action; provided, however, that the indemnity agreement contained in this SECTION 6(B) shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Holder, which consent shall not be unreasonably withheld; provided, further, that, in no event shall any indemnity under this SECTION 6(B) exceed the net after-tax proceeds from the offering actually received by such Holder.

(c) PROCEDURES. Promptly after receipt by an indemnified party under this SECTION 6 of notice of the commencement of any action (including any governmental action), such indemnified party will, if a claim in respect thereof is to be made against any indemnifying party under this SECTION 6, deliver to the indemnifying party a written notice of the commencement thereof and the indemnifying party shall have the right to participate in, and, to the extent the indemnifying party so desires, jointly with any other indemnifying party similarly

noticed, to assume the defense thereof with counsel mutually satisfactory to the parties; provided, however, that an indemnified party (together with all other indemnified parties which may be represented without conflict by one counsel) shall have the right to retain one separate counsel (plus appropriate local counsel), with the fees and expenses to be paid by the indemnifying party, if representation of such indemnified party by the counsel retained by the indemnifying party would be inappropriate due to actual or potential differing interests between such indemnified party and any other party represented by such counsel in such proceeding. The failure to deliver written notice to the indemnifying party within a reasonable time of the commencement of any such action shall relieve such indemnifying party of any liability to the indemnified party under this SECTION 6 to the extent (and only the extent) that it is actually prejudiced thereby, but the omission so to deliver written notice to the indemnifying party will not relieve it of any liability that it may have to any indemnified party otherwise than under this SECTION 6.

(d) CONTRIBUTION. If the indemnification provided for in this SECTION 6 from the indemnifying party is unavailable to an indemnified party hereunder in respect of any losses, claims, damages, liabilities or expenses referred to therein, then the indemnifying party, in lieu of indemnifying such indemnified party, shall contribute to the amount paid or payable by such indemnified party as a result of such losses, claims, damages, liabilities or expenses in such proportion as is appropriate to reflect the relative fault of the indemnifying party on the one hand and the indemnified parties on the other

in connection with the actions which resulted in such losses, claims, damages, liabilities or expenses, as well as any other relevant equitable considerations. The relative fault of such indemnifying party and indemnified parties shall be determined by reference to, among other things, whether any action in question, including any untrue or alleged untrue statement of a material fact or omission or alleged omission to state a material fact, has been made by, or related to information supplied by, such indemnifying party or indemnified parties, and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such action; provided, however, that in no event shall the liability of any selling Holder hereunder be greater in amount than the difference between the dollar amount of the net after-tax proceeds received by such Holder upon the sale of the Registrable Securities giving rise to such contribution obligation and all amounts previously contributed by such Holder with respect to such losses, claims, damages, liabilities and expenses. The amount paid or payable to a party as a result of the losses, claims damages, liabilities and expenses referred to above shall be deemed to include any legal or other fees or expenses reasonably incurred by such party in connection with any investigation or proceeding.

The parties hereto agree that it would not be just and equitable if contribution pursuant to this SECTION 6(D) were determined by pro rata allocation or by any other method of allocation which does not take into account the equitable considerations referred to in the immediately preceding paragraph. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any Person who was not guilty of such fraudulent misrepresentation.

(e) SURVIVAL. The obligations of the Company and Holders under this SECTION 6 shall survive the completion of any offering of Registrable Securities in a registration statement under these Terms, and otherwise.

7. ASSIGNMENT OF REGISTRATION RIGHTS. Except as otherwise provided herein, the rights to cause the Company to register Registrable Securities pursuant to these Terms may not be assigned to a purchaser, assignee or transferee of the underlying Registrable Securities without the Company's written consent.

8. AMENDMENT OF REGISTRATION RIGHTS. Any provision of these Terms may be amended and the observance thereof may be waived (either generally or in a particular instance and either retroactively or prospectively), only with the written consent of the Company and the holders of a majority of the outstanding shares of Registrable Securities. Any amendment or waiver effected in accordance with this SECTION 8 shall be binding upon each Holder of any Registrable Securities then outstanding, each future holder of all such Registrable Securities and the Company.

9. TERMINATION. The rights provided in these Terms shall terminate on the first year anniversary of the date the registration statement filed pursuant to SECTION 2(a) is declared effective by the SEC.

10. RECAPITALIZATIONS, ETC. The provisions of these Terms (including any calculation of share ownership) shall apply, to the full extent set forth herein with respect to the Registrable Securities, to any and all shares of capital stock of the Company or any capital stock, partnership units or any other security evidencing ownership interests in any successor or assign of the Company (whether by merger, consolidation, sale of assets or otherwise) that may be issued in respect of, in exchange for, or in substitution of the Common Stock by reason of any stock dividend, split, combination, recapitalization, liquidation, reclassification, merger, consolidation or otherwise.

11. TITLES AND SUBTITLES. The titles and subtitles used in these Terms are used for convenience only and are not to be considered in construing or interpreting these Terms.

12. GOVERNING LAW; DISPUTE RESOLUTION. These Terms shall be construed in accordance with and governed by the laws of the State of Delaware (without giving effect to its conflicts of law principles), except with respect to matters of law concerning the internal corporate affairs of any corporate entity which is a party to or the subject of these Terms, and as to those matters the law of the jurisdiction under which the respective entity derives its powers shall govern.

The parties hereby agree that, in order to obtain prompt and expeditious resolution of any disputes under these Terms, each claim, dispute or controversy of whatever nature, arising out of, in connection with, or in relation to the interpretation, performance or breach of these Terms, including without limitation any claim based on contract, tort or statute, or the arbitrability of any claim hereunder (an "ARBITRABLE CLAIM"), shall be settled, at the request of any party of these Terms, exclusively by final and binding arbitration conducted in Boston, Massachusetts. All such Arbitrable Claims shall be settled by three arbitrators in accordance with the Commercial Arbitration Rules then in effect of the American Arbitration Association. EACH PARTY HERETO EXPRESSLY CONSENTS TO, AND WAIVES ANY FUTURE OBJECTION TO, SUCH FORUM AND ARBITRATION RULES. Judgment upon any award may be entered by any state or federal court having jurisdiction thereof. Except as required by law (including, without limitation, the rules

and regulations of the Securities and Exchange Commission and stock exchange on which the Company's securities are listed, if applicable), no party nor the arbitrator shall disclose the existence, content, or results of any arbitration hereunder without the prior written consent of all parties. Except as provided herein, the Massachusetts Arbitration Act shall govern the interpretation, enforcement and all proceedings pursuant to this SECTION 12. Adherence to this dispute resolution process shall not limit the right of the parties hereto to obtain any provisional remedy, including without limitation, injunctive or similar relief, from any court of competent jurisdiction as may be necessary to protect their respective rights and interests pending arbitration. Notwithstanding the foregoing sentence, this dispute resolution procedure is intended to be the exclusive method of resolving any Arbitrable Claims arising out of or relating to these Terms.

The arbitration procedures shall follow the substantive law of the State of Massachusetts, including the provision of statutory law dealing with arbitration, as it may exist at the time of the demand for arbitration, insofar as said provisions are not in conflict with these Terms and specifically excepting therefrom sections of any such statute dealing with discovery and sections requiring notice of the hearing date by registered or certified mail. The arbitrators shall determine the prevailing party and shall include in their award that party's reasonable attorneys' fees and costs.

13. NEGOTIATION OF THE TERMS. Each party hereto represents and agrees with each other that it has been represented by or had the opportunity to be represented by, independent counsel of its own choosing, and that it has had the full right and opportunity to consult with its respective attorney(s), that to the extent, if any, that it desired, it availed itself of this right and opportunity, that it or its authorized officers (as the case may be) have carefully read and fully understand these Terms in its entirety and have had it fully explained to them by such party's respective counsel, that each is fully aware of the contents thereof and its meaning, intent and legal effect, and that it or its authorized officer (as the case may be) is competent to execute the Agreement of which these Terms is a part and has executed the Agreement free from coercion, duress or undue influence. These Terms is the product of negotiations between the parties hereto represented by counsel and any rules of construction relating to interpretation against the drafter of an agreement, shall not apply to these Terms and are expressly waived.

14. NOTICES. Any notice, request, instruction or other document to be given hereunder by any party hereto to another party hereto shall be in writing, shall be deemed to have been duly given or delivered when delivered personally or sent via facsimile (receipt confirmed, with a copy sent by reputable overnight courier), or one business day after delivery to a reputable overnight courier, postage prepaid, to the address of the party set forth in the Agreement or to such address as the party to whom notice is to be given may provide in a written notice to each of the other parties to the Agreement Terms, a copy of which written notice shall be on file with the Secretary of the Company.

15. SEVERABILITY. If one or more provisions of these Terms are held to be unenforceable under applicable law, such provision shall be excluded from these Terms and the balance of the Agreement shall be interpreted as if such provision were so excluded and shall be enforceable in accordance with its terms to the fullest extent permitted by law.

16. FURTHER ASSURANCES. Each of the parties shall, without further consideration, use reasonable efforts to execute and deliver such additional documents and take such other action as the other parties, or any of them may reasonably request to carry out the intent of these Terms and the transactions contemplated hereby.

17. SUCCESSORS AND ASSIGNS. These Terms shall be binding upon and all rights hereto shall inure to the benefit of the Company, its successors and permitted assigns, and shall be binding upon and all rights hereto shall inure to the benefit of the other parties hereto and their respective heirs, successors and permitted assigns.

18. ENTIRE AGREEMENT. These Terms embodies the entire agreement and understanding of the parties hereto in respect of the actions and transactions contemplated by these Terms. There are no restrictions, promises, inducements, representations, warranties, covenants or undertakings with regard to the registration of the Company's capital stock pursuant to the Securities Act, other than those expressly set forth or referred to in these Terms.

EXHIBIT 21.1

SCHEDULE OF REGISTRANT'S SUBSIDIARIES

Name	Jurisdiction of Incorporation
OriGenix Technologies Inc. (Minority owned)	Province of Quebec, Canada

Exhibit 23.1

CONSENT OF INDEPENDENT PUBLIC ACCOUNTANTS

As independent public accountants, we hereby consent to the use of our report dated February 21, 2002 included in this Form 10-K into the Hybridon, Inc.'s previously filed Registration Statement File No.'s 33-3896, 33-3898, 33-3900, 33-3902, 333-34008 and 333-71938.

/s/ Arthur Andersen LLP

Boston, Massachusetts
March 28, 2002

Exhibit 99.1

LETTER TO COMMISSION PURSUANT TO TEMPORARY NOTE 3T

HYBRIDON, INC.
345 Vassar Street
Cambridge, MA 02139
April 01, 2002

Securities and Exchange Commission
450 Fifth Street, N.W.
Washington, D.C. 20549-0408

Ladies and Gentlemen:

Pursuant to Temporary Note 3T to Article 3 of Regulation S-X, Hybridon, Inc. has obtained a letter of representation from Arthur Andersen LLP ("Andersen") stating that the December 31, 2001 audit was subject to their quality control system for the U.S. accounting and auditing practice to provide reasonable assurance that the engagement was conducted in compliance with professional standards, that there was appropriate continuity of Andersen personnel working on the audit and availability of national office consultation. Availability of personnel at foreign affiliates of Andersen is not relevant to this audit.

Very truly yours,

Hybridon, Inc.

/s/ Robert G. Andersen

Robert G. Andersen
Chief Financial Officer