

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-K/A
AMENDMENT NO. 1

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

FOR THE FISCAL YEAR ENDED DECEMBER 31, 1998

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

COMMISSION FILE NO. 0-19731

GILEAD SCIENCES, INC.

(Exact name of registrant as specified in its charter)

DELAWARE (State or other jurisdiction of incorporation or organization)	94-3047598 (I.R.S. Employer Identification No.)
333 LAKESIDE DRIVE, FOSTER CITY, CALIFORNIA (Address of principal executive offices)	94404 (Zip Code)

Registrant's telephone number, including area code: 650-574-3000

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
(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 such filing requirements for the past 90 days.
Yes _X_ No ____

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (Section 229.405 of this chapter) is not contained herein, and will not be contained, to the best of 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. /X/

The aggregate market value of the voting stock held by non-affiliates of the Registrant based upon the closing price of the Common Stock on the Nasdaq Stock Market on February 26, 1999 was $762,213,210*.

The number of shares outstanding of the Registrant's Common Stock was 30,884,298 as of February 26, 1999.

DOCUMENTS INCORPORATED BY REFERENCE

Certain Exhibits filed with the Registrant's Registration Statements on Form S-1 (Registration Nos. 33-44534 and 33-55680), as amended, the Registrant's Registration Statement on Form S-3 (No. 333-868), as amended, the Registrant's Registration Statement on Form S-8 (Registration No. 33-46058), the Registrant's Annual Reports on Form 10-K for the fiscal periods ended March 31, 1994, December 31, 1995 and December 31, 1997, the Registrant's Quarterly Reports on Form 10-Q for the fiscal quarters ended September 30, 1993, September 30, 1994, December 31, 1994, June 30, 1996, September 30, 1996 and September 30, 1997 and the Registrant's Current Report on Form 8-K filed March 9, 1999 are incorporated herein by reference into Part IV of this Report.

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* Based on a closing price of $41.25 per share. Excludes 12,406,402 shares of the Registrant's Common Stock held by executive officers, directors and stockholders whose ownership exceeds 5% of the Common Stock outstanding at February 26, 1999. Exclusion of such shares should not be construed to indicate that any such person possesses the power, direct or indirect, to direct or cause the direction of the management or policies of the Registrant or that such person is controlled by or under common control with the Registrant.

PART I

ITEM 1. BUSINESS

FORWARD-LOOKING STATEMENTS AND RISK FACTORS

THIS REPORT ON FORM 10-K CONTAINS FORWARD-LOOKING STATEMENTS RELATING TO CLINICAL AND REGULATORY DEVELOPMENTS (INCLUDING ANTICIPATED CLINICAL TRIAL COMMENCEMENT AND FDA FILING AND APPROVAL DATES), MARKETING AND SALES MATTERS, FUTURE EXPENSE LEVELS, FINANCIAL RESULTS AND YEAR 2000 MATTERS. THESE STATEMENTS INVOLVE INHERENT RISKS AND UNCERTAINTIES. THE COMPANY'S ACTUAL FINANCIAL AND OPERATING RESULTS MAY DIFFER SIGNIFICANTLY FROM THE RESULTS DISCUSSED IN THE FORWARD-LOOKING STATEMENTS. FACTORS THAT MIGHT CAUSE SUCH A DIFFERENCE INCLUDE, BUT ARE NOT LIMITED TO, THOSE DISCUSSED IN "RISK FACTORS," PARTICULARLY THOSE RELATING TO THE ONGOING DEVELOPMENT AND COMMERCIALIZATION OF THE COMPANY'S POTENTIAL PHARMACEUTICAL PRODUCTS AND, IN THE CASE OF YEAR 2000 MATTERS, THE ABILITY TO IDENTIFY AND CORRECT ALL RELEVANT COMPUTER CODE AND THE SUCCESS OF REMEDIAL EFFORTS IMPLEMENTED BY THIRD-PARTY SUPPLIERS AND BUSINESS PARTNERS.

GENERAL

Gilead Sciences, Inc. ("Gilead" or the "Company") is an independent biopharmaceutical company that seeks to provide accelerated solutions for patients and the people who care for them. The Company discovers, develops and commercializes proprietary therapeutics for important viral diseases, including the currently marketed product VISTIDE-Registered Trademark- (cidofovir injection) for the treatment of cytomegalovirus ("CMV") retinitis, a sight-threatening viral infection in patients with acquired immune deficiency syndrome ("AIDS"). In addition, the Company is developing products to treat diseases caused by human immunodeficiency virus ("HIV"), hepatitis B virus ("HBV") and influenza virus.

The successful development and commercialization of the Company's products will require substantial and ongoing efforts at the forefront of the life sciences industry. The Company is pursuing preclinical or clinical development of a number of product candidates. Even if these product candidates appear promising during various stages of development, they may not reach the market for a number of reasons. Such reasons include the possibilities that the

potential products will be found ineffective or cause harmful side effects during preclinical or clinical trials, fail to receive necessary regulatory approvals, be difficult or uneconomical to manufacture on a commercial scale, be uneconomical to market or be precluded from commercialization by either proprietary rights or competing products of others.

The Company faces significant challenges and risks in an industry undergoing rapid change, including the risks inherent in its research and development programs, uncertainties in obtaining and enforcing patents, the lengthy, expensive and uncertain regulatory approval process, reliance on third party manufacturers, intense competition from pharmaceutical and biotechnology companies, dependence on collaborative relationships, increasing pressure on pharmaceutical pricing from payors, patients and government agencies, and uncertainties associated with the market acceptance of and size of the market for any of the Company's products or products in development.

The Company expects that its financial results will continue to fluctuate from quarter to quarter and that such fluctuations may be substantial. There can be no assurance that the Company will successfully develop, commercialize, manufacture and market additional products, nor can there be assurance that the Company will either achieve or sustain profitability.

On March 1, 1999, Gilead and NeXstar Pharmaceuticals, Inc. ("NeXstar") announced a definitive merger agreement (the "Merger") providing for the acquisition by Gilead of all the outstanding common stock of NeXstar. The Merger is structured as a tax-free, stock-for-stock transaction. The Company intends to account for the Merger under the pooling-of-interests method. NeXstar, headquartered in Boulder, Colorado, is engaged in the discovery, development, manufacture and commercialization of products to treat serious and life-threatening illnesses. In addition to its Boulder headquarters, NeXstar maintains research, development and manufacturing facilities in San Dimas, California, and marketing subsidiaries

outside of the United States. Under the terms of the Merger agreement, NeXstar stockholders will receive between 0.3786 and 0.5000 of a share of Gilead common stock for each share of NeXstar common stock. The exact exchange ratio will be determined based on the trading range of Gilead common stock prior to completion of the Merger. The Merger is subject to certain conditions, including approval by the stockholders of Gilead and NeXstar. The Merger is expected to be completed in mid-1999. See "Management's Discussion and Analysis of Financial Condition and Results of Operation--Proposed Merger Agreement."

The Company was incorporated in Delaware in 1987. The Company's principal executive offices are located at 333 Lakeside Drive, Foster City, California 94404 and its telephone number is (650) 574-3000, or (800) GILEAD5 (800-445-3235).

FOR A MORE DETAILED DISCUSSION OF THE RISK FACTORS RELATING TO THE COMPANY SUMMARIZED ABOVE, SEE "RISK FACTORS" AT THE END OF THIS ITEM 1 (PAGES 20 THROUGH 25 OF THIS REPORT). STOCKHOLDERS AND PROSPECTIVE INVESTORS IN THE COMPANY SHOULD CAREFULLY CONSIDER THESE RISK FACTORS.

OVERVIEW OF NUCLEOTIDES

Nucleotides exist in every human cell and are the building blocks of the nucleic acids DNA and RNA. A single nucleotide is called a mononucleotide, and several nucleotides linked together are called an oligonucleotide. Nucleotides are involved in the metabolism and regulation of certain activities of cells and microorganisms. Oligonucleotides are the material containing genetic information.

Natural oligonucleotides are coupled to one another in a specific manner to form DNA or RNA strands. The specific sequences of nucleotides that compose each strand of DNA contain the genetic codes for the different proteins produced by the cell. Proteins perform most of the normal physiologic functions of humans, viruses and other organisms. However, when the production or activity of

proteins becomes aberrant, numerous diseases, such as vascular disease, inflammatory disease or cancer, can result. Diseases may also result from a foreign organism, such as a virus, which directs a cell to produce proteins necessary for viral replication.

Natural nucleotides are a versatile class of compounds that can be chemically modified to inhibit the production or activity of disease-causing proteins. Natural nucleotides have three molecular components: a sugar, a phosphate group and a base. Every nucleotide in DNA has the same sugar and phosphate group but a different base. Nucleotide analogues designed to be therapeutic compounds can work by a number of different mechanisms. Mononucleotides can be designed to interfere with the metabolism of cells or with the replication of viruses. Oligonucleotides can be designed to interfere with transcription or translation by binding to DNA or RNA.

The Company believes that the precise interaction of nucleotides in binding to DNA, RNA and proteins provides the chemical basis for the development of therapeutic products with high specificity and potency and long duration of action. Many of the Company's products or products in development are nucleotide analogues, including VISTIDE, PREVEON-Registered Trademark- (adefovir dipivoxil), adefovir dipivoxil for hepatitis B and PMPA.

PRODUCT PIPELINE

The following table summarizes Gilead's products and product candidates. This table is qualified in its entirety by reference to the more detailed descriptions elsewhere in this Report.

PRODUCT/CANDIDATE	TARGET INDICATIONS	DEVELOPMENT STATUS(1)	WORLDWIDE RIGHTS
VISTIDE-Registered Trademark-	CMV Retinitis	Launched in U.S. Launched in E.U.	Gilead (U.S.) Pharmacia & Upjohn (Ex-U.S.)
PREVEON-Registered Trademark-	HIV-AIDS	Phase III	Gilead
GS 4104 Oral	Influenza Virus (Treatment)	NDA filed in U.S.; MAA filed in E.U.	Roche
	Influenza Virus (Prophylaxis)	Phase III	Roche
Adefovir Dipivoxil	Hepatitis B Virus	Phase III	Gilead
PMPA Oral Prodrug	HIV-AIDS	Phase II	Gilead
Cidofovir Topical Ophthalmic	Viral Keratoconjunctivitis	Phase II	Bausch & Lomb
Adenosine Receptor Regulators	Stroke	Preclinical/Research	Gilead/NIH CRADA
HIV Protease Inhibitors	HIV-AIDS	Research	Gilead
Hepatitis C Virus Inhibitors	HCV	Research	Gilead

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(1) See "Government Regulation" for a description of the phases of clinical testing and the regulatory approval process.

VISTIDE

In June 1996, Gilead received United States Food and Drug Administration ("FDA") clearance to market its first product, VISTIDE for the treatment of CMV retinitis in patients with AIDS. The active ingredient in VISTIDE is cidofovir, a mononucleotide analogue that has demonstrated activity in preclinical studies and clinical trials against several viruses in the herpesvirus family. In addition to VISTIDE, cidofovir is under evaluation for other indications. See "Clinical Development Programs--Cidofovir."

Cytomegalovirus is an opportunistic infection in patients with AIDS. CMV is a systemic viral infection that may infect several sites in the body, including the retina, gastrointestinal tract, lungs, liver and central nervous system. Retinitis is the most frequent manifestation of CMV infection in patients with AIDS. The incidence of CMV retinitis in AIDS patients declined by more than 75% since 1996 as a result of more effective therapeutics for AIDS, as well as the use of oral ganciclovir for CMV prophylaxis. The Company anticipates that this decline may continue as these therapies effectively control HIV infection.

VISTIDE was cleared for marketing based on clinical trials demonstrating that the drug has a statistically significant effect in delaying the progression of CMV retinitis lesions in newly diagnosed patients, and in previously treated patients who had failed other therapies. In addition, VISTIDE has a more convenient dosing regimen than the other intravenous CMV treatments. VISTIDE is administered by intravenous infusion once per week for the first two weeks as induction therapy, and then once every other week as maintenance therapy until progression of the disease or intolerance to the therapy. Other intravenous treatments must be administered once or multiple times per day and often require the surgical implantation of a chronic catheter in the patient's chest for the daily infusions.

Renal toxicity is the primary dose-limiting side effect of VISTIDE administration. Prior to each administration, patients must be monitored for urinary protein and serum creatinine (laboratory markers of renal toxicity). In addition, patients receive intravenous saline hydration and oral probenecid on each treatment day to mitigate the potential for toxicity. VISTIDE is contraindicated in patients receiving other agents with nephrotoxic potential, and patients are required to undergo a "wash out" period of seven days after completing therapy with such agents and before receiving VISTIDE. In certain animal studies, cidofovir, the active ingredient in VISTIDE, was carcinogenic.

VISTIDE is marketed and sold in the United States by Gilead's sales force of antiviral specialists. This group currently consists of 26 sales representatives and three regional directors who detail physicians, hospitals, clinics, pharmacies and other healthcare providers involved in the treatment of patients with CMV retinitis. Gilead sells VISTIDE to wholesalers and specialty distributors who, in turn, sell the product to hospitals, home healthcare companies, pharmacies and other healthcare providers. See "Marketing and Sales."

In August 1996, Gilead licensed commercial rights to Pharmacia & Upjohn S.A. ("Pharmacia & Upjohn") to market and sell VISTIDE in all territories outside of the United States. In April 1997, the European Commission granted marketing approval for VISTIDE for all the member countries in the European Union under the centralized procedure of the European Medicines Evaluation Agency ("EMEA"). Subsequently, VISTIDE was approved for marketing in Switzerland, Australia and Hong Kong, and applications for approval are pending in several other countries. By the end of 1998, Pharmacia & Upjohn had launched the product in twelve European countries and two other countries. VISTIDE product launches by Pharmacia & Upjohn in additional countries are expected as approvals are obtained. Pharmacia & Upjohn pays Gilead a royalty on its net sales of VISTIDE on a trailing, quarterly basis. See "Collaborative Relationships--Pharmacia & Upjohn."

There are several approved therapies that compete with VISTIDE in the CMV retinitis market. Ganciclovir, marketed by Roche Laboratories, is the most widely used treatment for CMV retinitis. Ganciclovir is available in intravenous and oral formulations, and the oral formulation is approved for both prophylaxis and maintenance treatment of CMV retinitis. A ganciclovir ocular implant, marketed by Bausch & Lomb Incorporated ("Bausch & Lomb"), provides local therapy to an affected eye and is implanted through a surgical procedure. In addition, Astra U.S.A. markets foscarnet, another approved intravenous therapy for CMV retinitis, and CibaVision markets formivirsen, an antisense drug injected directly into the eye. There are also potentially competing products in clinical development for the treatment of CMV retinitis. Although the Company believes that VISTIDE has competitive advantages over these products, particularly with regard to dosing convenience and efficacy, there can be no assurance that the

Company will be successful in maintaining or increasing VISTIDE's share of the declining CMV retinitis treatment market. See "Competition."

CLINICAL DEVELOPMENT PROGRAMS

Gilead is developing small molecule nucleotide analogues that are intended to treat viral infections by selectively interfering with proteins essential for viral replication. Numerous disease processes, particularly viral infections, require precise interactions between cellular or viral proteins and nucleotides or oligonucleotides. For example, many viruses depend upon certain proteins known as enzymes to synthesize their own DNA. This dependence of the virus upon specific interactions between proteins and nucleic acids provides opportunities for the development of therapeutic products that disrupt these crucial interactions. Preclinical and clinical studies have demonstrated that small molecule nucleotide analogues can selectively interrupt these interactions.

The Company believes that small molecule nucleotide analogues offer several potential advantages as therapeutics. First, these molecules may have a long duration of action, permitting less frequent and therefore more convenient dosing. Second, because certain nucleotides can be active in both infected and

uninfected cells, these molecules may provide prophylactic protection of uninfected cells. Third, when compared to existing antiviral drugs, viruses may be less likely to develop resistance to these analogues. In addition, these analogues may be active against viral strains that have developed resistance to existing antiviral drugs. Finally, the low molecular weight of these analogues, or prodrug derivatives of them, may permit their development into drugs suitable for oral administration.

A major portion of the Company's operating expenses to date has been related to the research and development of products. During the years ended December 31, 1998, 1997 and 1996, the Company's research and development expenses were $75.3 million, $59.2 million, $41.9 million, respectively.

PREVEON

PREVEON is a mononucleotide analogue developed as an oral prodrug of adefovir, the Company's first HIV clinical candidate. A prodrug is a modified version of a parent compound designed to enhance delivery characteristics. PREVEON has demonstrated preclinical and clinical activity against HIV, hepatitis B virus and herpesviruses. See "Adefovir Dipivoxil for HBV." PREVEON has been generally well tolerated in clinical trials. The most common adverse events have been dose-related gastrointestinal effects, including nausea and loss of appetite. Nephrotoxicity, including changes in serum creatinine and phosphate, is the most significant toxicity observed. Nephrotoxicity has been observed in approximately one-third of patients dosed for six months to one year at the 120 mg daily dose level. In clinical trials, observed nephrotoxicity has generally been gradual in onset, asymptomatic, detectable by routine monitoring and resolvable upon dose reduction or withdrawal. Some patients have also experienced elevations in liver transaminases. In clinical trials, PREVEON is administered as a single oral tablet once per day, along with a single oral capsule of L-carnitine, a nutritional supplement. L-carnitine is administered to counteract the decrease of natural serum carnitine that can be caused by PREVEON administration.

A number of products with different mechanisms of action have been approved for the treatment of HIV. The first generation of approved HIV drugs are reverse transcriptase inhibitors, including nucleoside and non-nucleoside compounds. Several protease inhibitors were approved for marketing beginning in 1996, and others are in clinical development. Combination therapy with reverse transcriptase inhibitors and protease inhibitors is proving to be effective for many people with AIDS, in some cases lowering the patient's viral load (level of virus in the blood) to undetectable levels for prolonged periods of time. The Company believes, however, that there is still substantial room for improvement in AIDS drug therapy. Many patients are developing resistance or becoming intolerant to combination therapy, and require new combinations for therapy to

be effective. Patients would benefit from AIDS drugs that are better-tolerated, more convenient to dose, less prone to develop significant resistance and active against resistant strains of HIV.

PREVEON is a reverse transcriptase inhibitor that is being evaluated in a series of clinical studies sponsored by Gilead, as well as by government organizations, in the United States and abroad. These studies were designed to test the safety and efficacy of PREVEON in a variety of drug combinations and patient populations, including studies of patients not previously treated with anti-HIV therapies, patients not previously treated with a protease inhibitor and patients who had failed treatment with triple combination or protease containing regimens. PREVEON is also available in the United States under an expanded access program for patients with limited treatment options, and more than 7,000 patients have enrolled in the program as of March 1999. In both the clinical studies and the expanded access program, PREVEON has been administered at one of two dose levels (120 mg or 60 mg, once per day).

Based on the data obtained from the clinical studies and expanded access program, as well as ongoing feedback from the FDA, Gilead plans to submit a new drug application ("NDA") for the 60 mg dose of PREVEON during mid-1999. In November 1998, the FDA granted "fast track" designation to PREVEON for the treatment of HIV-infected patients with clinical, immunologic and/or virologic progression despite prior reverse transcriptase inhibitor therapy. In January 1999, Gilead initiated a rolling submission by filing

the Chemistry, Manufacturing and Controls section of the NDA. In addition to ongoing Phase III clinical trials for PREVEON, additional Phase IV studies will be initiated during 1999 to confirm the safety and efficacy of PREVEON at the 60 mg dose level. There can be no assurance as to when or whether Gilead will file an NDA for approval of PREVEON. Moreover, even if the NDA is filed, there can be no assurance as to the nature, timing or ultimate approval of the NDA by the FDA.

HIV is the causative agent of AIDS. HIV infects an estimated 33 million people worldwide. There were an estimated 260,000 people with AIDS in the United States in 1998. A number of therapeutics are currently marketed or are in advanced stages of clinical development for the treatment of HIV infection and AIDS, including 13 products currently marketed in the United States. See "Competition."

The Company has an exclusive, worldwide license to patent rights and related technology for adefovir, which is the parent compound of adefovir dipivoxil, from the Institute of Organic Chemistry and Biochemistry of the Academy of Sciences of the Czech Republic and the REGA Stichting Research Institute in Belgium (collectively, "IOCB/REGA"), and would be obligated to pay a royalty to IOCB/ REGA on any net sales of adefovir dipivoxil. See "Collaborative Relationships--IOCB/REGA."

GS 4104

In September 1996, Gilead announced the discovery of GS 4104 (oseltamivir), an oral prodrug of the active neuraminidase inhibitor GS 4071, which inhibits the replication of influenza virus in a variety of animal models. GS 4104 is a potent and specific inhibitor of influenza A and B virus neuraminidase activity and has shown potent antiviral activity when tested against laboratory strains of influenza A and B viruses IN VITRO.

Based on these data, Gilead and F. Hoffmann-La Roche Ltd. and Hoffmann-La Roche, Inc. (collectively, "Roche") entered into an exclusive, worldwide development and commercialization collaboration covering all of Gilead's neuraminidase inhibitors. Gilead and Roche are jointly conducting research and development of neuraminidase inhibitors for the prevention and treatment of influenza, with Roche funding 100% of this program. GS 4104 is a systemic treatment for influenza, administered as an oral capsule and designed to reach all sites of infection. GS 4104 targets one of the two major surface structures of the influenza virus, the neuraminidase protein. The neuraminidase site is

highly conserved in all common strains of influenza. If neuraminidase is inhibited, the virus is not able to infect new cells.

During 1998, Roche and Gilead completed and announced the results of several Phase III clinical studies of GS 4104. In two treatment studies, one conducted in the United States and another in Europe, Canada and Hong Kong and each involving over 600 patients, GS 4104 significantly decreased the duration and severity of acute influenza in adults. In addition, GS 4104 reduced secondary flu complications, such as bronchitis and sinusitis, in previously healthy adults. In both of these treatment studies, the drug was generally well tolerated. Transient nausea was reported more often in the active drug arm of each study than in the placebo group. In a third study, which involved testing GS 4104 as a preventative therapy, the drug reduced the incidence of influenza infection relative to placebo and was well tolerated by the over 1,000 participants who were on a six-week regimen of the active drug.

Roche has exclusive commercial rights to GS 4104 and to any other products developed under the collaboration. Roche is obligated to pay Gilead cash payments upon achievement of development milestones and royalties on net sales of any products developed under the collaboration. See "Collaborative Relationships--Hoffmann-La Roche." In the second quarter of 1999, Roche submitted an NDA to the FDA, and a Marketing Authorisation Application ("MAA") to the European Commission under the centralized procedure of the EMEA, in each case seeking marketing approval for the treatment indication for GS 4104. There can be no assurance as to the timing or ultimate approval of these marketing applications for GS 4104.

Glaxo Wellcome, in collaboration with Biota Holdings Limited, is also pursuing development of zanamavir, a neuraminidase inhibitor to treat influenza. This compound, delivered with a dry powder inhaler, has been approved in some countries and is under review for approval in the United States by the FDA. Zanamavir represents significant potential competition for GS 4104. See "Competition."

ADEFOVIR DIPIVOXIL FOR HBV

Gilead is also developing adefovir dipivoxil for the potential treatment of HBV. More than 350 million people worldwide are chronically infected with HBV, primarily in Asian countries. Complications of chronic HBV include cirrhosis, cancer of the liver and liver failure. A vaccine is available that can prevent the transmission of HBV; however, it has no activity in those already infected with the virus. Alpha interferon is approved for the treatment of HBV, is administered by injection and is not always successful in controlling the disease.

In 1998, Gilead completed two Phase II randomized, double-blind, placebo-controlled clinical studies of adefovir dipivoxil for the treatment of hepatitis B infection. Data from both studies indicate that twelve weeks of dosing with adefovir dipivoxil at 5 mg, 30 mg or 60 mg once per day was well tolerated and resulted in a statistically significant decline in HBV DNA levels in treated patients compared to placebo. The decline in HBV DNA was greater than 4 logs (99.99%) at the higher doses tested. Treatment with adefovir dipivoxil was also associated with seroconversion in a portion of the patients in one of the studies. In March 1999, the Company initiated the first of a series of multinational Phase III trials in HBV infected patients.

Glaxo Wellcome, in collaboration with Biochem Pharma, is pursuing development of lamivudine, a nucleoside analogue to treat HBV infection. This compound was recently approved for marketing in the United States, China and several other countries and represents significant potential competition for adefovir dipivoxil for HBV. See "Competition."

The Company has an exclusive, worldwide license to patent rights and related technology for adefovir, which is the parent compound of adefovir dipivoxil, from IOCB/REGA, and would be obligated to pay a royalty to IOCB/REGA on any net sales of adefovir dipivoxil. See "Collaborative Relationships--IOCB/ REGA."

PMPA

The Company is evaluating PMPA (tenofovir), a nucleotide analogue with structural similarities to adefovir dipivoxil, as a potential therapeutic for HIV and AIDS. PMPA has shown significant activity against simian immunodeficiency virus ("SIV") in a variety of preclinical treatment and prevention models. SIV causes an AIDS-like syndrome in primates. In these experiments, primates treated with injections of PMPA either before or after exposure to SIV were completely protected from infection. In another primate study, a topical gel form of PMPA also provided protection against SIV transmission when applied intravaginally.

Gilead has conducted placebo-controlled Phase I/II studies of PMPA in both intravenous and oral formulations ("PMPA Prodrug"). In February 1998, the Company presented data from a Phase I/II study of PMPA Prodrug, indicating that the highest dose of the drug tested reduced viral load by a median of 1.22 logs after one month of dosing. In this study, PMPA Prodrug was administered as a single oral tablet at one of three doses (75 mg, 150 mg or 300 mg) once per day. Based on these results, the Company initiated a long-term Phase II safety study of PMPA Prodrug, in combination with other anti-retroviral therapies, which completed enrollment at 190 patients in March 1999. Depending on the results from this study, Gilead intends to initiate a program of Phase III studies of PMPA Prodrug before the end of 1999.

The National Institutes of Health ("NIH") is evaluating possible applications of intravenous PMPA in the prevention of maternal-fetal HIV transmission, as well as a topical version of PMPA for the prevention of sexual transmission of HIV.

The Company has an exclusive, worldwide license to patent rights and related technology for PMPA from IOCB/REGA, and would be obligated to pay a royalty to IOCB/REGA on any net sales of PMPA or PMPA Prodrug. See "Collaborative Relationships--IOCB/REGA."

CIDOFOVIR

Cidofovir is a mononucleotide analogue that has demonstrated activity in preclinical studies and clinical trials against several viruses in the herpesvirus family. Cidofovir is the active ingredient in the Company's commercial product VISTIDE (cidofovir injection). See "VISTIDE." Gilead is currently evaluating cidofovir in different formulations for the potential treatment of certain infectious diseases caused by herpesviruses and other viruses.

Preclinical studies have demonstrated that cidofovir is active against a variety of viruses that cause disease in people with AIDS, including molluscum contagiosum, which causes disfiguring skin lesions, Kaposi's sarcoma, an AIDS-related malignancy, and progressive multifocal leukoencephalopathy ("PML"), a rapidly progressive, often fatal brain disease.

In 1994, Gilead entered into a license and supply agreement with Bausch & Lomb (formerly Storz Instrument Company, a subsidiary of American Home Products Corporation) to develop an eye drop formulation of cidofovir for the potential treatment of certain viruses that cause external eye infections, including adenovirus, which is the leading cause of viral conjunctivitis, or "pink eye." The license to Bausch & Lomb is limited to topical ophthalmic use for external viral eye disease, and excludes any treatment requiring injection and any treatment for other eye diseases such as CMV retinitis. Bausch & Lomb is conducting clinical development of topical ophthalmic cidofovir and is currently analyzing the data from Phase II clinical studies. See "Collaborative Relationships--Bausch & Lomb."

The side effect profiles of the drugs under development based on cidofovir have not yet been fully characterized. Renal toxicity is the primary dose-limiting side effect of VISTIDE administration. In addition, in certain

animal studies, cidofovir was carcinogenic. There can be no assurance that the Company will be successful in developing or commercializing any therapeutic products, other than VISTIDE, based on cidofovir.

The Company has an exclusive, worldwide license to patent rights and related technology for cidofovir from IOCB/REGA, and is obligated to pay a royalty to IOCB/REGA on the net sales of VISTIDE, as well as on any other future products containing cidofovir. See "VISTIDE," "Collaborative Relationships-- IOCB/REGA."

RESEARCH

Gilead's research efforts are conducted by a scientific team with the multi-disciplinary skills that the Company believes are critical for the discovery and preclinical development of therapeutics based on nucleotides or other small molecules. The primary therapeutic targets of the Company's research program are infectious diseases, primarily viral diseases, as well as cancer.

NUCLEOTIDE ANALOGUES

The Company has an extensive library of proprietary nucleotide compounds that it is evaluating for antiviral and antiproliferative activity. Among the primary targets of this screening activity are HIV, herpesviruses, hepatitis B virus and poxviruses. In addition, Gilead is evaluating novel nucleotide prodrugs with the potential for enhanced pharmaceutical properties, including better bioavailability, longer half-life and enhanced therapeutic index. Several nucleotide analogues are also being evaluated for activity against cancer in animal models.

HIV PROTEASE INHIBITORS

Through its structure-based drug design program, the Company has synthesized a number of small molecule compounds with IN VITRO activity against HIV. Gilead has evaluated several HIV protease inhibitors in animal models. The current focus of this program is to enhance the pharmacological

properties and cross-resistance profile of these compounds before conducting further preclinical development.

HEPATITIS C VIRUS

Building on its expertise in the discovery and development of antiviral therapeutics, the Company is evaluating different approaches that could lead to inhibitors of hepatitis C virus ("HCV"). This research includes identification of HCV targets, establishment of assays and screening of compounds as potential inhibitors. See "Legal Proceedings."

ANTIBACTERIAL PROGRAM

Gilead has synthesized a series of small molecule compounds with IN VITRO activity against bacteria, including methicillin-resistant staphylococcus aureus ("MRSA"). The current focus of this program is the optimization of potency and selectivity and evaluation of these compounds in preclinical animal models.

ADENOSINE RECEPTOR REGULATORS

Gilead is working with the National Institute of Diabetes, Digestive and Kidney Diseases at the NIH to study adenosine receptor agonists and antagonists in the treatment and prevention of neurodegenerative disorders, particularly stroke. Independent research has also implicated adenosine receptors in inflammation and allergic disorders. NIH researchers have synthesized a series of novel small molecule adenosine agonist and antagonist compounds and have identified several compounds with A3 receptor agonist and antagonist activity which exhibit protective effects in an animal model of stroke. These compounds also have potential utility in the treatment of inflammatory and allergic conditions. In collaboration with the NIH, Gilead is currently evaluating several compounds with A3 receptor antagonist or agonist activity in animal

models of stroke, and also intends to evaluate the anti-inflammatory and anti-allergic properties of these compounds.

COLLABORATIVE RELATIONSHIPS

As part of its business strategy, Gilead establishes collaborations with pharmaceutical companies to assist in the clinical development and/or commercialization of certain of its products and product candidates, and to provide support for research programs. The Company also evaluates opportunities for in-licensing products and technologies complementary to its business. The Company's existing collaborative relationships are as follows:

PHARMACIA & UPJOHN

In August 1996, Gilead and Pharmacia & Upjohn entered into a license and supply agreement providing Pharmacia & Upjohn with exclusive rights to market and sell VISTIDE in all countries outside of the United States. Under the terms of the agreement, Pharmacia & Upjohn paid Gilead an initial license fee of $10.0 million. In June 1997, after VISTIDE was approved for marketing in the European Union, Gilead received an additional cash milestone payment of $10.0 million. Except for payments for bulk cidofovir and the royalties described below, no additional payments are due to Gilead under the agreement with Pharmacia & Upjohn. Pharmacia & Upjohn also purchased 1,133,786 newly issued shares of Series B Preferred Stock at $35.28 per share, a price equal to 145% of the average closing price of Gilead's common stock over the 30 trading days prior to public announcement of the European approval, for a total purchase price of $40.0 million. The Series B Preferred Stock is not publicly registered, votes together with Gilead's common stock and is convertible at any time into an equal number of shares of Gilead's common stock at Pharmacia & Upjohn's option. Pharmacia & Upjohn is restricted in its ability to sell the Series B Preferred Stock (or underlying common stock), or purchase any additional stock of the Company until June 2002.

Gilead is responsible for maintaining the cidofovir patent portfolio and for supplying bulk cidofovir to Pharmacia & Upjohn. Gilead is entitled to payments for bulk cidofovir and royalty payments on a quarterly basis on the net sales of VISTIDE by Pharmacia & Upjohn. Gilead is recognizing royalties on a delayed basis, one quarter after the Pharmacia & Upjohn sales that generated the royalties. The agreement with Pharmacia & Upjohn terminates on a country-by-country basis as patent coverage for VISTIDE expires. Pharmacia & Upjohn has the right to terminate the agreement prior to its expiration at any time with six months notice. See "VISTIDE."

HOFFMANN-LA ROCHE

In September 1996, Gilead and Roche entered into a collaboration agreement to develop and commercialize therapies to treat and prevent viral influenza. Under the agreement, Roche received exclusive worldwide rights to all of Gilead's proprietary influenza neuraminidase inhibitors, including GS 4104. Gilead and Roche are jointly conducting the clinical development of GS 4104. In October 1996, Roche made an initial license fee payment to Gilead of $10.3 million and Gilead is entitled to total additional cash milestone payments of up to $40.0 million upon achievement of milestones relating to regulatory filings and approvals in the United States, Europe and Japan. Through December 31, 1998, Gilead recognized $6.0 million in milestone payments from Roche. Gilead recognized $2.0 million in milestone payments in the first quarter of 1999 and will recognize an additional $6.0 million in milestone payments relating to the marketing applications filed by Roche in the United States and Europe in the second quarter of 1999. Roche is funding 100% of its own and Gilead's research and development costs for the program and will pay Gilead royalties on net sales on GS 4104 and any other products developed under the collaboration. Under the agreement, Roche is responsible for commercialization of GS 4104 on a worldwide basis. The agreement with Roche terminates on a country-by-country basis as patent coverage for any product developed under the agreement expires. Roche has the right to terminate the agreement prior to expiration at any time upon 12 months notice. See "Clinical Development Programs--GS 4104."

For the years ended December 31, 1998, 1997 and 1996, the Company recorded approximately $16.4 million, $8.2 million and $1.1 million, respectively, of research and development reimbursement revenue related to the Roche agreement. The $16.4 million recorded as revenue during 1998 includes $5.2 million attributable to research and development expenses incurred in the fourth quarter of 1997, which were subject to Roche's approval as of December 31, 1997. Such expenses were approved for reimbursement and recognized in contract revenue in 1998. Except for this $5.2 million, research and development costs related to the Roche agreement approximate the reimbursement revenue recognized in each year and are included in research and development expenses.

In September 1996, Gilead and Roche Laboratories Inc. ("Roche Labs") entered into an agreement to co-promote Roche's Roferon-Registered Trademark--A (Interferon alfa-2a, recombinant) for the treatment of chronic hepatitis C infection in the United States. This co-promotion agreement terminated at the end of 1998.

GLAXO WELLCOME

In July 1990, Gilead entered into a collaborative research and development agreement with Glaxo Wellcome Inc. ("Glaxo"). Concurrent with the signing of the agreement Glaxo made an $8.0 million equity investment in Gilead and currently holds 889,911 shares (approximately 2.8%) of the Company's outstanding common stock. Under the terms of the Glaxo agreement, as amended, the Company received $1.8 million in 1998, and $3.0 million in both 1997 and 1996, to fund research, which is reported as contract revenue in Gilead's consolidated statements of operations. The research and development costs reimbursed by Glaxo approximate the related revenue and are included in research and development expense. This agreement and the related funding was terminated in June 1998.

In December 1998, Gilead sold its antisense patent estate to Isis Pharmaceuticals, Inc. ("Isis") for $6.0 million, payable in installments over three years. Gilead has no ongoing research or funding

obligations under the Isis agreement and does not expect to perform additional research in the antisense field.

BAUSCH & LOMB

In August 1994, the Company entered into a license and supply agreement with Bausch & Lomb (formerly Storz Instrument Company, a subsidiary of American Home Products Corporation), pursuant to which Bausch & Lomb will develop and have the right to market an eye drop formulation of cidofovir for the potential treatment of topical ophthalmic viruses. The field of the exclusive, worldwide license to Bausch & Lomb is limited to topical ophthalmic use for external viral eye disease, and specifically excludes any treatment requiring injection, and any treatment for other eye diseases such as CMV retinitis. Bausch & Lomb is conducting clinical development of topical ophthalmic cidofovir and is currently analyzing the data from Phase II clinical trials. Gilead is entitled to receive a fee of $250,000 each year until Bausch & Lomb files an NDA under the agreement. In addition, Bausch & Lomb is obligated to make a series of payments, up to $3,000,000 in the aggregate, based on the achievement of milestones during the term of the agreement. These milestones would be triggered by the commencement of Phase III clinical trials and regulatory filings and approvals in the United States, Europe and Japan. None of these milestones has been achieved to date. Gilead is responsible for supplying bulk cidofovir to Bausch & Lomb, and Bausch & Lomb is obligated to make royalty payments to Gilead based on net sales of any products developed under the agreement. Under the agreement, Bausch & Lomb is responsible for commercialization of topical ophthalmic cidofovir on a worldwide basis. The agreement with Bausch & Lomb terminates on a country-by-country basis as patent coverage for any product developed under the agreement expires. Bausch & Lomb may terminate this agreement prior to its expiration at any time on three months notice. See "Clinical Development Programs--Cidofovir."

IOCB/REGA

In 1991 and 1992, the Company entered into agreements with IOCB/REGA regarding a class of nucleotide compounds discovered at these institutions. Under these agreements and later amendments, Gilead received from IOCB/REGA an exclusive license to manufacture, use and sell the compounds covered by issued United States patents and patent applications plus foreign counterparts throughout the world, subject to an obligation to pay royalties on product sales to IOCB/REGA. The compounds covered by the agreement with IOCB/REGA include cidofovir, adefovir (the parent compound of adefovir dipivoxil) and PMPA. The IOCB/REGA agreements do not cover GS 4104 or any of the Company's compounds in clinical or preclinical development. The Company is currently paying IOCB/REGA quarterly royalties on sales of VISTIDE and will be obligated to pay additional royalties upon any future sales of adefovir dipivoxil or PMPA. See "VISTIDE" and "Clinical Development Programs--PREVEON," "--Adefovir Dipivoxil for HBV" and "--PMPA." The licenses from IOCB/REGA terminate on a country-by-country basis as patent coverage for any product licensed under the agreements expires. IOCB/REGA may terminate the licenses under these agreements with respect to any particular product, in specified countries, if the Company does not make any sales of such product in such countries within 12 months after regulatory approval. Under one of these agreements, the Company has an option to receive an exclusive license to any new developments by IOCB/REGA during the term of this agreement. Either party may terminate this agreement on six months notice.

ACADEMIC AND CONSULTING RELATIONSHIPS

To supplement its research and development efforts, in the ordinary course of business, the Company collaborates with and has licensed certain patents, patent applications and technology from a number of universities and medical research institutions.

MANUFACTURING

The Company generally relies on third parties for the manufacture of bulk drug substance and drug product for clinical and commercial purposes, including cidofovir (VISTIDE), adefovir dipivoxil (PREVEON) and PMPA. In the case of GS 4104, Gilead's influenza neuraminidase inhibitor in clinical development, Roche is responsible for the manufacture of clinical and any commercial supplies of drug substance and drug product. Pursuant to these relationships, the Company depends on such third parties to perform their manufacturing obligations effectively and on a timely basis. There can be no assurance that such parties will perform and any failures by third parties may delay clinical trials or the submission of products for regulatory approval, impair the Company's ability to deliver commercial products on a timely basis, or otherwise impair the Company's competitive position, which could have a material adverse effect on the Company.

The Company has readily available alternative supply sources for all key raw materials used in all of its drug substances and drug products. Suppliers of the Company's manufactured drug substances and drug products must be qualified as such by the FDA. The process of obtaining the FDA's approval to use a particular supplier of either a drug substance or a drug product is a costly and lengthy process. Further, there is no assurance that approval of a supplier ultimately will be obtained.

The Company has qualified a sole source supplier with the FDA for the bulk drug substance used in VISTIDE and another sole source supplier for the final drug product. Gilead has established a second source of bulk drug substance supply for VISTIDE, and intends to file for approval of this supplier with the FDA in 1999. The Company anticipates including two suppliers of bulk drug substance and one supplier of drug product for PREVEON in the NDA it intends to file in 1999. PMPA drug substance is manufactured at Gilead and at a contract manufacturer, and PMPA drug product for clinical trials is manufactured at two contract manufacturing sites. In the event that supplies from any of Gilead's suppliers were interrupted for any reason, the Company's ability to complete its clinical trials or ship its products could be impaired, which would have a material adverse effect on the Company. The Company believes that alternative

suppliers for any of the Company's products or products in development are available, but establishing a new supplier would require agreement with such supplier and FDA approval.

Gilead has developed in-house capabilities to synthesize and purify nucleotides and oligonucleotides, and believes that it has a base of proprietary technologies, including patent applications and trade secrets, for the manufacture of these compounds. Gilead has established a pilot-scale, bulk chemical facility, which operates in compliance with the FDA's current Good Manufacturing Practices ("cGMP"), to meet its current preclinical and limited early-stage clinical requirements. The Company believes that it has or will be able to develop, acquire or contract for sufficient supply capacity to meet its additional clinical and commercial manufacturing requirements, although there can be no assurance that it will be able to do so. Gilead currently has no commercial-scale cGMP manufacturing facilities for either the production of bulk drug substance or final drug product, and no current plans to establish such capacity.

The manufacture of sufficient quantities of new drugs can be an expensive, time-consuming and complex process and may require the use of materials with limited availability or require dependence on sole source suppliers. If the Company is unable to develop manufacturing capabilities internally or contract for large scale manufacturing with third parties on acceptable terms, the Company's ability to conduct preclinical studies and clinical trials, and/or meet demand for commercial products, will be adversely affected. This could prevent or delay commercial shipment, submission of products for regulatory approval and initiation of new development programs, which would have a material adverse effect on the Company.

The production of the Company's compounds is based in part on technology that the Company believes to be proprietary. Gilead has licensed this technology to contract manufacturers to enable them to manufacture compounds for the Company. There can be no assurance that such manufacturers will abide by any use limitations or confidentiality restrictions in licenses with the Company. In addition, any such manufacturer may develop process technology related to its work for Gilead, which could increase the

Company's reliance on such manufacturer or require the Company to obtain a license from such manufacturer in order to have its products manufactured elsewhere. There can be no assurance that such license, if required, would be available on terms acceptable to the Company, if at all.

For certain of its potential products, the Company will need to develop further its production technologies for use on a larger scale in order to conduct clinical trials and produce such products for commercial sale at an acceptable cost. There can be no assurance that the Company or its partners will be able to implement any of these developments successfully.

MARKETING AND SALES

In connection with the launch of VISTIDE in 1996, Gilead established a sales force of antiviral specialists in the United States. This group currently consists of 26 sales representatives and three regional directors who detail physicians, hospitals, clinics, pharmacies and other healthcare providers involved in the treatment of AIDS patients with CMV retinitis. Gilead sells VISTIDE to wholesalers and specialty distributors who, in turn, sell the product to hospitals, home healthcare companies, pharmacies and other healthcare providers. Gilead's sales force is supplemented by a marketing and sales staff of approximately 20 people based at the Company's headquarters in Foster City, California.

The Company's products are returnable in their original, unopened containers up to one year beyond expiration date or if damaged when received by the customer. Additionally, certain governmental agency customers are entitled to discounts, and the Company is required to provide rebates under state Medicaid programs. To date, returns, rebates and discounts have not been material.

The Company anticipates that it will expand its existing sales force in order to promote PREVEON in the United States, if that product receives marketing clearance from the FDA. A larger sales force and additional marketing resources will be required to reach the broader market of healthcare professionals treating patients infected with HIV. If any of the Company's other products in development for specialty markets receive marketing clearance in the United States, or if the Company obtains marketing rights to such a product from a third party, Gilead's current intention would be to market and sell such a product directly, supplementing its existing marketing and sales staff as appropriate. Gilead has not established a marketing and sales capacity in Europe or any other country outside of the United States. Pharmacia & Upjohn has exclusive commercial rights to VISTIDE outside the United States, and Roche has exclusive commercial rights to GS 4104 on a worldwide basis. The Company does not currently intend to directly market and sell any product outside of the United States and Europe.

The revenues received by Gilead for its products subject to commercial collaborations, including VISTIDE outside of the United States and GS 4104 on a worldwide basis, are dependent to a large degree on the efforts of third parties. There can be no assurance that such efforts will be successful, that the interests of the Company and its partners will not be in conflict or that any of the Company's partners will not terminate their relationship with the Company. See "Collaborative Relationships."

PATENTS AND PROPRIETARY RIGHTS

Gilead has a proprietary portfolio of patent rights and exclusive licenses to patents and patent applications related to its products and technologies. The Company has filed patent applications directed to the compositions of matter, methods of preparation and uses of novel compounds on the commercial market, under research or in development. Patent applications have been filed by Gilead which encompass compounds that are relevant to many of the targets the Company is currently researching, as well as other targets that may be of interest to Gilead in the future. Gilead intends to file additional patent applications, when appropriate, relative to improvements in its technologies and to specific products that it develops.

Patents covering cidofovir (the active ingredient in VISTIDE) and adefovir dipivoxil, including composition of matter claims, have been issued in the United States, Western Europe and other

jurisdictions. The Company has exclusive licenses from third parties covering these patents and other patent applications. See "Collaborative Relationships--IOCB/REGA." The Company does not have patent filings covering adefovir dipivoxil in China or in other certain other Asian countries, although it does have an application pending in Japan and is seeking patent protection in other Asian countries on commercial forms of adefovir dipivoxil. Asia is a major market for hepatitis B therapies, one of the potential indications for adefovir dipivoxil. Patents on certain of the Company's compounds may issue many years before marketing approval is obtained, limiting the ultimate commercial value of the product. However, patent term extensions for cidofovir have been applied for or granted in the United States and a number of European countries, compensating in part for delays in obtaining marketing approval. Similar patent term extensions may be available for other products in development.

Set forth below are the actual or estimated patent expiration dates in the United States and Europe for the compounds included in the Company's marketed product and products in clinical development:

COMPOUND	U.S. PATENT EXPIRATION	EUROPEAN PATENT EXPIRATION

Cidofovir.....	2010	2012
Adefovir dipivoxil.....	2014	2011
PMPA Prodrug.....	2017	2017*
GS 4104.....	2016	2016*

Expiration dates do not reflect patent term extensions or supplementary protection certificates not yet applied for or granted. There can be no assurance that pending patent applications will issue as patents or that issued patents will provide significant proprietary protection.

The Company is the exclusive licensee or holder of patents and patent applications relating to methoxyphosphonate derivatives and neuraminidase inhibitors and their use in the treatment and prevention of viral infections. The Company cannot predict whether its patent or license rights or those of third parties will result in a significant position in these fields, whether its patent applications or those of third parties will be issued, whether its patents or those of third parties will provide significant proprietary protection, or whether they will be dominated, circumvented or invalidated.

The commercial success of the Company will also depend in part on not infringing patents or proprietary rights of others and not breaching the licenses granted to the Company. There can be no assurance that the Company will be able to obtain a license to any third-party technology that it may require to conduct its business or that, if obtainable, such technology can be licensed at a reasonable cost. Failure by the Company to obtain a license to any technology that it may require to commercialize its technologies or products may have a material adverse effect on the Company. In August 1998, the Company was served with a patent infringement lawsuit filed by Chiron Corporation ("Chiron") in the U.S. District Court for the Northern District of California. In the lawsuit, Chiron alleges that Gilead is conducting scientific research that infringes Chiron's patents covering the hepatitis C NS3 protease protein and gene sequences and their use in screening for potential hepatitis C therapeutics. See "Legal Proceedings."

The patent positions of pharmaceutical, biopharmaceutical and biotechnology firms, including Gilead, are generally uncertain and involve complex legal and factual questions. Consequently, even though Gilead is currently prosecuting its patent applications with the United States and foreign patent offices, the Company does not know whether any of its or its licensors' pending applications will result in the issuance of any patents or, if any patents are issued, whether they will provide significant proprietary protection. Since patent applications in the United States are maintained in secrecy until patents are issued, and since publication of discoveries in the scientific or patent literature tend to lag behind actual discoveries by several months, Gilead cannot be certain that it has rights as the first inventor of technologies covered by pending patent applications or that it was the first to file patent applications for such inventions.

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* Estimated date for pending application, not yet issued.

The Company also relies upon unpatented trade secrets and improvements, unpatented know-how and continuing technological innovation to develop and maintain its competitive position which it seeks to protect, in part, by confidentiality agreements with its corporate partners, collaborators, employees, consultants and vendors. There can be no assurance that these agreements will not be breached, that the Company would have adequate remedies for any breach, or that the Company's trade secrets will not otherwise become known or be independently discovered by competitors.

Gilead's practice is to require its corporate partners, collaborators, employees, consultants and vendors to execute a confidentiality agreement upon the commencement of a relationship with the Company. The agreements provide that all confidential information developed or made known to an individual during the course of the relationship shall be kept confidential and not disclosed to third

parties except in specified circumstances. In the case of employees, the agreements provide that all inventions conceived by the individual while employed by the Company shall be the exclusive property of the Company. There can be no assurance, however, that these agreements will provide meaningful protection for the Company's trade secrets in the event of unauthorized use or disclosure of such information.

COMPETITION

The Company's products and development programs target a number of diseases and conditions, including viral infections and cancer. Even if the Company is successful in developing products to treat any of these diseases or conditions, there can be no assurance that any product that receives marketing clearance will achieve significant commercial acceptance. There are many commercially available products for these diseases, and a large number of companies and institutions are conducting well-funded research and development activities directed at developing additional treatments for these diseases.

Ganciclovir, marketed in intravenous and oral formulations by Roche Laboratories and as an ocular implant by Bausch & Lomb Incorporated, foscarnet, marketed by Astra U.S.A., and formivirsen, a local injection marketed by CibaVision, are commercially available for the treatment of CMV retinitis. These products are directly competitive with VISTIDE. Several other potential CMV retinitis therapeutics are being developed by other companies. A number of therapeutics are currently marketed or are in advanced stages of clinical development for the treatment of HIV infection and AIDS, including 13 products currently marketed in the United States. These products represent significant potential competition for PREVEON and PMPA. Among the companies with significant commercial presence in the AIDS market are Glaxo Wellcome, Bristol-Myers Squibb, Hoffmann-La Roche, Agouron Pharmaceuticals, Merck & Co. and DuPont Pharma.

Glaxo Wellcome, in collaboration with Biota Holdings Limited, is pursuing development of zanamavir, a neuraminidase inhibitor to treat influenza. This compound has been approved in some countries and is under review for approval in the United States by the FDA. If approved, zanamavir would represent significant potential competition for GS 4104. In addition, Glaxo Wellcome, in collaboration with Biochem Pharma, is pursuing development of lamivudine, a nucleoside analogue to treat HBV infection. This compound was recently approved for marketing in the United States, China and several other countries and represents significant potential competition for adefovir dipivoxil for HBV.

The Company believes that its products and product candidates have potential competitive advantages over many of these products, particularly with regard to dosing convenience and the potential for resistance development. However, there can be no assurance that any of the Company's products or products in development will compete successfully with other available products.

A number of companies are pursuing the development of technologies competitive with the Company's research programs. These competing companies include specialized pharmaceutical firms and large pharmaceutical companies acting either independently or together with biopharmaceutical companies. Furthermore, academic institutions, government agencies and other public and private organizations conducting research may seek patent protection and may establish collaborative arrangements for competitive products and programs.

Gilead anticipates that it will face increased competition in the future as new products enter the market and advanced technologies become available. There can be no assurance that existing products or new products developed by the Company's competitors will not be more effective, or more effectively marketed and sold, than any that may be developed by the Company. Competitive products may render Gilead's technology and products obsolete or noncompetitive prior to the Company's recovering research, development or commercialization expenses incurred with respect to any such products.

Many of the Company's existing or potential competitors, particularly large pharmaceutical companies, have substantially greater financial, technical and

human resources than the Company. In addition, many of these competitors have significantly greater experience than the Company in undertaking research, preclinical studies and clinical trials of new pharmaceutical products, obtaining FDA and other regulatory approvals, and manufacturing, marketing and selling such products. Accordingly, the Company's competitors may succeed in commercializing products more rapidly or more effectively than the Company, which would have a material adverse effect on the Company.

The Company's competition will be determined in part by the potential indications for which the Company's compounds are developed and ultimately approved by regulatory authorities. For certain of the Company's potential products, an important competitive factor may be the timing of market introduction of its products or competitive products. Accordingly, the relative speed with which Gilead can develop products, complete the clinical trials and regulatory approval processes, and supply commercial quantities of the products to the market are expected to be important competitive factors. The Company expects that competition among products approved for sale will be based, among other things, on product efficacy, safety, dosing convenience, availability, price, third-party reimbursement and patent position.

The Company's competitive position also depends upon its ability to attract and retain qualified personnel, obtain patent protection or otherwise develop proprietary products or processes, and secure sufficient capital resources for the substantial period between technological conception and commercial sales.

GOVERNMENT REGULATION

The production and marketing of the Company's products and its research and development activities are subject to regulation for safety, efficacy and quality by numerous government authorities in the United States and other countries. In the United States, drugs are subject to rigorous FDA regulation. The Federal Food, Drug and Cosmetic Act, as amended ("FFDCA"), and the regulations promulgated thereunder, and other federal and state statutes and regulations, govern, among other things the testing, manufacture, safety, efficacy, labeling, storage, record keeping, approval, advertising and promotion of the Company's products. Product development and approval within this regulatory framework, and under equivalent regulations in other countries, takes a number of years and involves the expenditure of substantial resources.

The steps required before a pharmaceutical agent may be marketed in the United States include (i) preclinical laboratory tests, IN VIVO preclinical studies and formulation studies, (ii) the submission to the FDA of an investigational new drug application ("IND"), which must become effective before clinical trials commence, (iii) adequate and well-controlled clinical trials to establish the safety and efficacy of the drug, (iv) the submission of an NDA to the FDA, and (v) the FDA approval of the NDA, prior to any commercial sale or shipment of the drug. In addition to obtaining FDA approval for each product, each drug manufacturing establishment must be registered with, and approved by, the FDA. Domestic manufacturing establishments, including third party contract manufacturers producing a drug sponsor's products, are subject to periodic inspections by the FDA and must comply with cGMP. To supply products for use in the United States, foreign manufacturing establishments must comply with cGMP and are subject to periodic inspection by the FDA or by regulatory authorities in certain of such countries under reciprocal agreements with the FDA. Drug product and drug substance manufacturing establishments located in California also must be licensed by the State of California in compliance with local regulatory requirements.

Preclinical tests include laboratory evaluation of product chemistry and formulation, as well as animal studies to assess the potential safety and efficacy of the product. Compounds must be formulated according to cGMP and preclinical safety tests must be conducted by laboratories that comply with FDA regulations regarding current Good Laboratory Practices ("GLP"). The results of the preclinical tests are

submitted to the FDA as part of an IND and are reviewed by the FDA prior to the

commencement of clinical trials. Additional pharmacology and toxicology studies are generally conducted concurrently with clinical trials.

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

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

The results of the preclinical studies and clinical trials are submitted to the FDA in the form of an NDA for approval of the marketing and commercial shipment of the drug. The testing and approval process is likely to require substantial time and effort and there can be no assurance that any approval will be granted on a timely basis, if at all. The FDA may deny an NDA if applicable regulatory criteria are not satisfied, require additional testing or information, require significant improvements to manufacturing facilities or require extensive post-marketing testing and surveillance to monitor the safety or efficacy of the Company's products if they do not view the NDA as containing adequate evidence of the quality, safety and efficacy of the drug. Notwithstanding the submission of such data, the FDA may ultimately decide that the application does not satisfy its regulatory criteria for approval. Moreover, if regulatory approval of a drug is granted, such approval may entail limitations on the indicated uses for which it may be marketed. Finally, product approvals may be withdrawn if compliance with regulatory standards is not maintained or if problems occur following initial marketing.

Among the conditions for NDA approval is the requirement that the prospective manufacturer's quality control and manufacturing procedures conform to cGMP, which must be followed at all times. In complying with standards set forth in these regulations, manufacturers (including a drug sponsor's third-party contract manufacturers) must continue to expend time, money and effort in the area of production and quality control to ensure full technical compliance.

The FDA has implemented accelerated approval procedures for pharmaceutical products that treat serious or life-threatening diseases and conditions, if those products have the potential to address unmet medical needs. Under the Food and Drug Modernization Act of 1997, effective in February 1998, such products may be designated as "fast track" products, and may be approved on the basis of surrogate as well as clinical endpoints. The FDA will generally review NDAs for fast track products within six months. Drug sponsors are generally required to conduct post-marketing clinical trials of drugs that have been approved under the FDA's accelerated approval procedures, in order to characterize further the drug's safety and

efficacy profile. The FDA has granted fast track designation to PREVEON for the treatment of HIV-infected patients and the Company believes that certain of its other products in development may qualify as fast track products and be eligible for accelerated approval. The Company cannot predict the ultimate impact, however, of the FDA's accelerated approval procedures on the timing or likelihood of approval of any of its potential products or those of any competitor.

In addition to regulations enforced by the FDA, the Company also is subject to regulation under the Occupational Safety and Health Act, the Environmental Protection Act, the Toxic Substances Control Act, the Resource Conservation and Recovery Act and other federal, state or local regulations. The Company's research and development involves the controlled use of hazardous materials, chemicals, viruses and various radioactive compounds. Although the Company believes that its safety procedures for handling and disposing of such materials comply with the standards prescribed by 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, the Company could be held liable for significant damages or fines.

In the European Community, human pharmaceutical products are also subject to extensive regulation. The European Community Pharmaceutical Directives govern, among other things, the testing, manufacture, safety, efficacy, labeling, storage, record keeping, advertising and promotion of human pharmaceutical products. Effective in January 1995, the European Community enacted regulations providing for a centralized licensing procedure, which is mandatory for certain kinds of products, as well as a decentralized (country by country) procedure. A license granted under the centralized procedure authorizes marketing of the product in all of the member states of the European Community. Under the decentralized procedure, a license granted in one member state can be extended to additional member states pursuant to a simplified application process. In the centralized procedure, the EMEA coordinates a scientific review by one or more rapporteurs chosen from among the membership of the Committee for Proprietary Medical Products ("CPMP"), which represent the medicine authorities of the member states. The final approval is granted by a decision of the Commission or Council of the European Community, based on the opinion of the CPMP. After approval under the centralized procedure, pricing and reimbursement approvals are generally required in most countries. VISTIDE was approved by the European Community under the centralized procedure. GS 4104 is being reviewed under the centralized procedure and the Company anticipates that PREVEON will be reviewed under the centralized procedure when a marketing authorization application for this product is filed.

PRICING AND REIMBURSEMENT

The business and financial condition of pharmaceutical and biotechnology companies will continue to be affected by the efforts of government and third-party payors to contain or reduce the cost of health care through various means. For example, in certain foreign markets pricing or profitability of prescription pharmaceuticals is subject to government control. In particular, individual pricing negotiations are often required in many countries of the European Community, even if approval to market the drug under the EMEA's centralized procedure is obtained. In the United States, there have been, and the Company expects that there will continue to be, a number of federal and state proposals to implement similar government control. In addition, an increasing emphasis on managed care in the United States has and will continue to increase the pressure on pharmaceutical pricing. While the Company cannot predict whether any such legislative or regulatory proposals will be adopted or the effect such proposals or managed care efforts may have on its business, the announcement of such proposals or efforts could have a material adverse effect on the trading price of the Company's Common Stock, and the adoption of such proposals or efforts could have a material adverse effect on the Company. Further, to the extent that such proposals or efforts have a material adverse effect on other pharmaceutical companies that are prospective corporate partners for the Company, the Company's ability to establish a strategic alliance may be

adversely affected. In addition, in both the United States and elsewhere, sales of prescription pharmaceuticals are dependent in part on the availability of reimbursement to the consumer from third-party payors, such as government

and private insurance plans that mandate rebates or predetermined discounts from list prices. For example, a significant proportion of VISTIDE sales is subject to reimbursement by government agencies, resulting in significant discounts from list price and rebate obligations. The Company expects that PREVEON and several of its other products in development, particularly for AIDS indications, will have a similar reimbursement profile. In addition, third-party payors, as well as patient advocacy organizations, are increasingly challenging the prices charged for medical products and services. If the Company succeeds in bringing one or more additional products to the market, there can be no assurance that these products will be considered cost effective and that reimbursement will be available or will be sufficient to allow the Company to sell its products on a competitive basis.

HUMAN RESOURCES

As of December 31, 1998, Gilead employed 293 people full-time, of whom 75 hold Ph.D. and/or M.D. degrees and 46 hold other advanced degrees. Approximately 182 employees are engaged in research and development activities and 111 are employed in finance, sales and marketing, corporate development, legal and general administrative positions. Gilead believes that it maintains good relations with its employees.

SCIENTIFIC ADVISORY BOARD

The Company's Scientific Advisory Board is composed of individuals with expertise in fields related to the Company's programs. This Board holds formal meetings with scientists from the Company at least once a year. In some cases, individual members of this Board consult and meet informally with the Company on a more frequent basis. Each of the members of this Board has a consulting agreement with the Company.

The members of Gilead's Scientific Advisory Board are as follows:

DANIEL L. AZARNOFF, M.D., has been a member of Gilead's Scientific Advisory Board since January 1990. He headed G.D. Searle & Co.'s research and development from 1979 through 1985, and previously was Professor of Medicine and Pharmacology at the University of Kansas. Dr. Azarnoff is a member of the Institute of Medicine of the National Academy of Sciences.

JACQUELINE K. BARTON, PH.D., has been a member of Gilead's Scientific Advisory Board since January 1989. She is a Professor of Chemistry at the California Institute of Technology ("Cal Tech"), a member of the American Academy of Arts and Sciences and a recipient of a MacArthur Foundation Fellowship.

PAUL BERG, PH.D., has been a member of Gilead's Scientific Advisory Board since April 1998 and also serves on the Company's Board of Directors. Dr. Berg is currently Cahill Professor in Cancer Research in the Department of Biochemistry at Stanford University School of Medicine, where he has been on the faculty since 1959. He received the Nobel Prize for Chemistry in 1980.

PETER B. DERVAN, PH.D., has been a member of Gilead's Scientific Advisory Board since September 1987. He is Bren Professor of Chemistry at Cal Tech and a member of the National Academy of Sciences and the American Academy of Arts and Sciences.

MICHAEL J. GAIT, PH.D., has been a member of Gilead's Scientific Advisory Board since July 1989. He is a Senior Staff Scientist with the Medical Research Council in Cambridge, England.

RALPH F. HIRSCHMANN, PH.D., has been a member of Gilead's Scientific Advisory Board since October 1989. He is a Research Professor of Chemistry at

the University of Pennsylvania. Previously, Dr. Hirschmann was employed by Merck & Co., most recently as Senior Vice President of Basic Research and Chemistry. Dr. Hirschmann is a member of the American Academy of Arts and Sciences.

LAWRENCE L.-K. LEUNG, M.D., has been a member of Gilead's Scientific Advisory Board since September 1994. He is Chief of the Division of Hematology at the Stanford University Medical School. Dr. Leung was previously Director of Cardiovascular Biology and Medicine at Gilead.

RISK FACTORS

GILEAD IS DEVELOPING DRUGS TO TREAT AIDS AND AIDS-RELATED CONDITIONS, AND THEREFORE CAN BE ADVERSELY AFFECTED BY CHANGES IN THE REGULATORY AND COMMERCIAL ENVIRONMENT FOR AIDS THERAPIES.

Several of Gilead's products and products in development address AIDS or AIDS-related conditions. These products include VISTIDE (cidofovir injection) for CMV retinitis, PREVEON (adefovir dipivoxil) for HIV and AIDS and PMPA for HIV and AIDS. The medical, regulatory and commercial environment for AIDS therapies changes quickly and often in ways that Gilead is unable to accurately predict. Gilead develops its AIDS products based upon current policy and the current marketplace for AIDS therapies, as well as its prediction of future policy and the future marketplace for these therapies. Gilead's business is subject to substantial risk because these policies and markets change quickly and unpredictably and in ways that could have a material adverse impact on its ability to obtain regulatory approval and commercial acceptance of its AIDS-related products.

GILEAD'S OPERATIONS DEPEND ON COMPLIANCE WITH COMPLEX FDA AND COMPARABLE INTERNATIONAL REGULATIONS. FAILURE TO OBTAIN BROAD APPROVALS ON A TIMELY BASIS OR TO ACHIEVE CONTINUED COMPLIANCE COULD DELAY COMMERCIALIZATION OF GILEAD'S PRODUCTS.

The products that Gilead develops and sells must be approved and are subject to extensive regulation by the FDA and comparable agencies in other countries. Gilead has plans to file an application with the FDA for marketing approval of PREVEON in the second quarter of 1999. In addition, Hoffmann-La Roche, Gilead's corporate partner for the development and commercialization of GS 4104, expects to file an application with the FDA for marketing approval of GS 4104 to treat influenza in the second quarter of 1999. Gilead anticipates conducting a variety of clinical trials and filing for marketing approval of additional products over the next several years. These products may fail to receive marketing approval on a timely basis, or at all. In addition, these products may receive marketing approvals that place limitations on the uses of the product. These failures, delays or limitations, as well as other regulatory changes, actions and recalls, could delay commercialization of any products and adversely affect Gilead's results of operations.

In addition, even after Gilead's products are marketed, the products and their manufacturers are subject to continual review. Later discovery of previously unknown problems with Gilead's products or manufacturers may result in restrictions on such product or manufacturer, including withdrawal of the product from the market.

RESULTS OF CLINICAL TRIALS AND APPROVAL OF PRODUCTS ARE UNCERTAIN, AND GILEAD MAY BE DELAYED IN OR PROHIBITED FROM SELLING ITS PRODUCTS.

Gilead has a number of potential products that have reached the development stage. These potential products include PREVEON, GS 4104, adefovir dipivoxil for HBV and PMPA. Gilead will be required to demonstrate the safety and effectiveness of these and any other products it develops in each intended use through extensive preclinical studies and clinical trials in order to obtain regulatory approval of those products. The results from preclinical and early clinical studies do not always accurately predict results in later, large-scale clinical trials for several reasons including:

- preliminary results may not be indicative of effectiveness;

- further clinical trials may not achieve the desired result; and

- further clinical trials may reveal unduly harmful side effects or may show the drugs to be less effective than other drugs or delivery systems for the desired indications.

Even successfully completed large-scale clinical trials may not result in marketable products for several reasons, including:

- the potential products are not shown to be safe and effective;

- regulatory authorities disagree with the results of Gilead's studies and trials;

- required regulatory approvals are not obtained;

- the potential products are too difficult to develop into commercially viable products; or

- the potential products do not obtain market acceptance.

A number of companies in Gilead's industry have suffered significant setbacks in advanced clinical trials despite promising results in earlier trials. In the end, Gilead may be unable to develop marketable products.

DELAYS IN PATIENT ENROLLMENT FOR CLINICAL TRIALS COULD INCREASE COSTS AND DELAY REGULATORY APPROVALS.

The rate of completion of Gilead's clinical trials will depend on the rate of patient enrollment. There will be substantial competition to enroll patients in Gilead's clinical trials, particularly for AIDS and HBV therapies. This competition has delayed Gilead's clinical trials in the past. In addition, recent improvements in existing AIDS and HBV drug therapy may make it more difficult for Gilead to enroll patients in its clinical trials as the patient population may choose to enroll in clinical trials sponsored by other companies or choose alternative therapies. Delays in planned patient enrollment can result in increased development costs and delays in regulatory approvals.

PRODUCT DEVELOPMENT EFFORTS MAY NOT YIELD MARKETABLE PRODUCTS DUE TO RESULTS OF STUDIES OR TRIALS, FAILURE TO ACHIEVE REGULATORY APPROVALS OR MARKET ACCEPTANCE, PROPRIETARY RIGHTS OF OTHERS OR MANUFACTURING ISSUES.

Gilead's future business success will depend on its ability to successfully develop and obtain regulatory approval to market new pharmaceutical products. Development of a product requires substantial technical, financial and human resources even if the product is not successfully completed. Gilead's potential products may appear to be promising at various stages of development yet fail to reach the market for a number of reasons, including:

- lack of efficacy or unacceptable toxicity during preclinical studies or clinical trials;

- failure to receive necessary regulatory approvals;

- failure to achieve market acceptance;

- existence of proprietary rights of third parties; and

- inability to develop manufacturing methods that are efficient, cost-effective and capable of meeting stringent regulatory standards.

GILEAD MAY UNDERESTIMATE DEVELOPMENT COSTS, ADVERSELY AFFECTING ITS BUSINESS.

Due to uncertainties that are part of the development process, Gilead may underestimate the costs associated with the development of a potential product. Delays or unanticipated increases in costs of development or failure to obtain regulatory approval or market acceptance for Gilead's products could adversely affect Gilead's operating results.

GILEAD DEPENDS ON RELATIONSHIPS WITH OTHER COMPANIES FOR RESEARCH FUNDING, CLINICAL DEVELOPMENT, SALES AND MARKETING PERFORMANCE AND REVENUES. FAILURE TO MAINTAIN THESE RELATIONSHIPS WOULD NEGATIVELY IMPACT GILEAD'S BUSINESS.

Gilead has established a number of significant collaborative relationships with major pharmaceutical companies, including Pharmacia & Upjohn, Hoffmann-La Roche and Bausch & Lomb. Gilead depends to a large degree on these partners for its research funding, clinical development and/or sales and marketing performance. In addition, Gilead has historically relied on collaborative relationships for a significant

portion of its revenues and expects this to be the case in future periods. Reliance or collaborative relationships poses a number of risks, including:

- Gilead cannot control whether its corporate partners will devote sufficient resources to its programs or products;

- disputes may arise in the future with respect to the ownership of rights to technology developed with corporate partners;

- disagreements with corporate partners could lead to delays in or termination of the research, development or commercialization of product candidates, or result in litigation or arbitration;

- contracts with Gilead's corporate partners may fail to provide significant protection or may fail to be effectively enforced if one of these partners fails to perform;

- corporate partners have considerable discretion in electing whether to pursue the development of any additional products and may pursue alternative technologies or products either on their own or in collaboration with Gilead's competitors; and

- corporate partners with marketing rights may choose to devote fewer resources to the marketing of Gilead's products than they do to products of their own development.

Given these risks, there is a great deal of uncertainty regarding the success of Gilead's current and future collaborative efforts. If these efforts fail, Gilead's product development or commercialization of new products could be delayed or revenue from existing products could decline.

INABILITY TO ESTABLISH SUCCESSFUL COLLABORATIVE RELATIONSHIPS MAY IMPAIR GILEAD'S FINANCIAL RESULTS.

Gilead may seek future collaborative relationships with corporate partners to fund some of its research and development expenses and to develop and commercialize some of its potential products. For example, the Company is in discussions with several potential corporate partners about collaborative development and commercialization of adefovir dipivoxil for HBV, particularly in Asian territories. Further, we anticipate that the Company's receipt of revenues from collaborative agreements will continue to be affected by existing agreements, as well as by the timing of drug development programs of its corporate partners. Gilead may not be able to negotiate acceptable collaborative arrangements in the future, and any arrangements it does negotiate may not be successful. If the Company fails to establish additional collaborative relationships, it will be required to undertake research, development, marketing and manufacturing of its proposed products at its own expense.

GILEAD HAS A HISTORY OF LOSSES, EXPECTS TO OPERATE AT A LOSS FOR THE

FORESEEABLE FUTURE AND MAY NEVER BE PROFITABLE.

Gilead has never been profitable on a full-year basis and may never become profitable. At December 31, 1998, Gilead's accumulated deficit was approximately $218.5 million. Gilead's losses have resulted principally from expenses associated with its research and development programs and, to a lesser extent, from sales, general and administrative expenses. Gilead's revenues to date have been generated primarily from collaborative arrangements rather than product revenues. Gilead's current product revenues are derived solely from sales of VISTIDE in the United States and a royalty arrangement for VISTIDE sales with Pharmacia & Upjohn outside of the United States. VISTIDE has limited sales potential relative to many pharmaceutical products.

GILEAD'S EXISTING PRODUCT AND PRODUCTS UNDER DEVELOPMENT MAY NOT BE ACCEPTED BY PHYSICIANS, INSURERS AND PATIENTS.

Many of Gilead's products in development, if approved for marketing, have no established market. The ability of these products to achieve and sustain market acceptance will depend on the receipt and scope of regulatory approvals and whether or not government authorities and managed care organizations will adequately reimburse patients who use these products.

In addition, Gilead needs to convince the medical and patient advocacy community of:

- the effectiveness of these products in treating disease;

- the safety of these products when administered to patients; and

- the advantages of these products over competitive products.

Physicians, patients, patient advocates, payors and the medical community in general may not accept and use any products that Gilead may develop. If Gilead's products are not accepted, its results of operations will suffer.

MANY OTHER COMPANIES ARE TARGETING THE SAME DISEASES AND CONDITIONS AS GILEAD. COMPETITIVE PRODUCTS FROM OTHER COMPANIES COULD SIGNIFICANTLY REDUCE THE MARKET ACCEPTANCE OF GILEAD'S PRODUCTS.

Gilead's products and development programs target a number of diseases and conditions, including viral infections and cancer. There are many commercially available products for these diseases. Certain of these products are well established therapies and have generated substantial sales. In addition, a large number of companies and institutions are conducting well-funded research and development activities directed at developing treatments for these diseases. Products currently on the market and those under development by Gilead's competitors could make its technology and products obsolete or noncompetitive. Gilead expects that competition for the treatment of these diseases will increase in the future as new products enter the market and advanced technologies become available. Gilead will also be competing to license or acquire technology from other companies.

Most of Gilead's competitors and potential competitors have substantially greater resources than Gilead. Those resources include superior product development capabilities and financial, scientific, manufacturing, managerial and human resources. These competitors may achieve superior patent protection, obtain key technology, receive regulatory approval or achieve product commercialization earlier than Gilead.

THE SIGNIFICANTLY GREATER RESOURCES OF THE MARKETING ORGANIZATIONS OF LARGE PHARMACEUTICAL COMPANIES COULD HINDER GILEAD'S ABILITY TO COMPETE SUCCESSFULLY.

Gilead's products compete, and the products Gilead may develop are likely to compete, with products of other companies that currently have extensive and well-funded marketing and sales operations. Because these companies are capable of devoting significantly greater resources to their marketing efforts, Gilead's

marketing or sales efforts may not compete successfully against the efforts of these other companies.

GILEAD'S EXISTING PRODUCTS ARE SUBJECT TO REIMBURSEMENT FROM GOVERNMENT AGENCIES AND OTHER THIRD PARTIES. PHARMACEUTICAL PRICING AND REIMBURSEMENT PRESSURES MAY REDUCE PROFITABILITY.

Successful commercialization of Gilead's products depends, in part, on the availability of governmental and third-party payor reimbursement for the cost of such products and related treatments. Reimbursement is generally provided by government health administration authorities, private health insurers and other organizations. Government authorities and third-party payors increasingly are challenging the price of medical products and services, particularly for innovative new products and therapies. This has resulted in lower average sales prices. For example, a majority of VISTIDE sales is subject to reimbursement by government agencies, resulting in significant discounts from list price and rebate obligations. Gilead expects that several of its products in development, particularly for AIDS indications, if they receive regulatory approval, will have a similar reimbursement profile. Even if reimbursement is available, reimbursement policies may adversely affect Gilead's ability to sell its products on a profitable basis.

In addition, in many international markets, governments control the prices of prescription pharmaceuticals. In these markets, once marketing approval is received, pricing negotiation can take another six to 12 months or longer. Product sales, attempts to gain market share or introductory pricing

programs of Gilead's competitors could require Gilead to lower its prices in these countries, which could adversely affect its results of operations.

GILEAD MAY NOT BE ABLE TO OBTAIN EFFECTIVE PATENTS TO PROTECT ITS TECHNOLOGIES FROM USE BY COMPETITORS, AND PATENTS OF OTHER COMPANIES COULD REQUIRE GILEAD TO STOP USING OR PAY FOR THE USE OF REQUIRED TECHNOLOGY.

Gilead's success will depend to a significant degree on its ability to:

- obtain patents and licenses to patent rights;

- preserve trade secrets; and

- operate without infringing on the proprietary rights of others.

Gilead has rights to United States and foreign issued patents and has filed and will continue to file patent applications in the United States and abroad relating to its technologies. There is a risk, however, that patents may not issue from any of these applications or that the patents will not be sufficient to protect Gilead's technology. Patent applications in the United States are confidential until a patent is granted. As a result, Gilead would not know if its competitors filed patent applications for technology covered by its pending applications. Gilead also can not be certain that it was the first to invent the technology that is the subject of its patent applications. Competitors may have filed patent applications or received patents and may obtain additional patents and proprietary rights that block or compete with Gilead's patents.

Gilead does not have patent filings covering adefovir dipivoxil in China or in certain other Asian countries, although it does have an application pending in Japan. Asia is a major market for hepatitis B therapies, one of the potential indications for adefovir dipivoxil. Gilead may obtain patents for certain products many years before marketing approval is obtained for those products. Because patents have a limited life, which may begin to run prior to commercial sale, the commercial value of the product may be limited.

Gilead's competitors may file patent applications covering its technology. If so, Gilead may have to participate in interference proceedings or litigation to determine the right to a patent. Litigation and interference proceedings are expensive even if successful. In August 1998, the Company was served with a

patent infringement lawsuit filed by Chiron Corporation alleging that Gilead's research infringes Chiron's patents covering the hepatitis C protein and gene sequences and their use in screening for potential hepatitis C therapeutics.

Gilead's success depends in large part on its ability to operate without infringing upon the patents or other proprietary rights of third parties. If Gilead infringes patents of others, it may be prevented from commercializing products or may be required to obtain licenses from these third parties. Gilead cannot be certain that it would be able to obtain alternative technologies or any required license. Even if Gilead were to obtain such technologies or licenses, it cannot be certain that the terms would be reasonable. If Gilead fails to obtain such licenses or alternative technologies, it may be unable to develop some or all of its products.

In addition, Gilead uses significant unpatented proprietary technology and relies on unpatented trade secrets and proprietary know-how to protect certain aspects of its production and other technologies. Gilead's trade secrets may become known or independently discovered by its competitors.

MANUFACTURING PROBLEMS COULD DELAY PRODUCT SHIPMENTS AND REGULATORY APPROVALS.

Gilead generally relies on third parties for the manufacture of bulk drug substance and final drug product for clinical and commercial purposes, including for VISTIDE, adefovir dipivoxil, PMPA and GS 4104. Gilead depends on these third parties to perform their obligations effectively and on a timely basis. If these third parties fail to perform as required, Gilead's clinical trials or submission of products for regulatory approval may be delayed. These delays could impair Gilead's ability to deliver commercial products on a timely basis and could impair its competitive position.

GILEAD MAY NOT BE ABLE TO OBTAIN MATERIALS NECESSARY TO MANUFACTURE ITS PRODUCTS.

Many of the materials Gilead utilizes in its operations are made at only one facility. A shutdown in any of these facilities due to technical, regulatory or other problems, resulting in an interruption in supply of these materials, could have an adverse impact on Gilead's financial results. For example, Gilead has qualified only one supplier with the FDA for the bulk drug substance used in VISTIDE and one different supplier for the final drug product. Gilead has also established a second source of bulk drug substance supply for VISTIDE but has not yet qualified this source with the FDA and cannot be certain that the FDA will approve this second source. Because the suppliers of key components and materials must be named in the New Drug Application filed with the FDA for a product, significant delays can occur if the qualification of a new supplier is required. If supplies from Gilead's suppliers were interrupted for any reason, Gilead could be unable to ship VISTIDE or any of its products in development.

GILEAD HAS LIMITED EXPERIENCE MANUFACTURING PRODUCTS AND COULD BE ADVERSELY AFFECTED IF IT FAILS TO DEVELOP MANUFACTURING CAPACITY.

For some of Gilead's potential products, Gilead will need to develop further its production technologies for use on a larger scale in order to conduct clinical trials and produce such products for commercial sale at an acceptable cost. Gilead cannot be certain that it will be able to implement any of these developments successfully.

The manufacturing process for pharmaceutical products is highly regulated, and regulators may shut down manufacturing facilities that they believe do not comply with regulations. The FDA's current Good Manufacturing Practices are extensive regulations governing manufacturing processes, stability testing, record-keeping and quality standards. Similar, but not identical, regulations are in effect in other countries.

GILEAD'S BUSINESS MAY GIVE RISE TO PRODUCT LIABILITY CLAIMS NOT COVERED BY INSURANCE OR INDEMNITY AGREEMENTS.

Testing, manufacturing, marketing and use of VISTIDE and Gilead's products in development involve substantial risk of product liability claims. These claims may be made directly by consumers, healthcare providers, pharmaceutical companies or others. Although Gilead maintains product liability insurance, a single product liability claim could exceed its coverage limits, and multiple claims are possible. If that happens, the insurance coverage Gilead has may not be adequate. A successful product liability claim in excess of Gilead's coverage could require Gilead to pay substantial amounts. This could adversely affect Gilead's results of operations. Moreover, the amount and scope of any coverage may be inadequate to protect Gilead in the event of a successful product liability claim. In addition, in the future such insurance may not be renewed at an acceptable cost or at all.

GILEAD'S USE OF HAZARDOUS MATERIAL, CHEMICALS, VIRUSES AND RADIOACTIVE COMPOUNDS EXPOSES IT TO POTENTIAL LIABILITIES.

Gilead's research and development involves the controlled use of hazardous materials, chemicals, viruses and various radioactive compounds. Although Gilead believes that its safety procedures for handling and disposing of such materials comply with the standards prescribed by state and federal regulations, Gilead cannot completely eliminate the risk of accidental contamination or injury from these materials. In the event of such an accident, Gilead could be held liable for significant damages or fines.

IF GILEAD OR THIRD-PARTY SUPPLIERS AND BUSINESS PARTNERS FAIL TO ADEQUATELY ADDRESS YEAR 2000 ISSUES, ITS BUSINESS COULD BE ADVERSELY AFFECTED.

Gilead is implementing a Year 2000 project designed to address the issue of computer software and hardware correctly processing dates through and beyond the Year 2000. Due to the uncertainty inherent in the Year 2000 problem, however, there can be no assurance that Year 2000 failures will not have a material impact on Gilead's operations, financial results or financial condition. In addition, Gilead cannot predict whether its critical third-party suppliers and business partners will achieve Year 2000 compliance, or whether the failure of any third party to do so would have a material effect on Gilead's business.

ITEM 2. PROPERTIES

Gilead's administrative offices and research laboratories are located in Foster City, California. The Company leases approximately 163,200 square feet of space in seven adjacent buildings. The leases on this space expire March 31, 2006, and the Company has an option to renew the leases for two additional five-year periods. The Company believes that it will need to expand its facilities in the future to support any significant growth in its operations. Gilead anticipates it will be able to expand its facilities in nearby locations. There can be no assurance, however, that such space will be available on favorable terms, if at all.

ITEM 3. LEGAL PROCEEDINGS

In August 1998, the Company was served with a patent infringement lawsuit filed by Chiron Corporation in the U.S. District Court for the Northern District of California. In the lawsuit, Chiron alleges that Gilead is conducting scientific research that infringes Chiron's patents covering the hepatitis C protein and gene sequences and their use in screening for potential hepatitis C therapeutics. Gilead has taken the position that its research activities do not infringe the Chiron patents and believes that the lawsuit will not have a material impact on Gilead's business, operating results or financial condition.

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

Not Applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON STOCK AND RELATED STOCKHOLDER MATTERS

Gilead common stock is traded on The Nasdaq Stock Market under the symbol "GILD." The following table sets forth for the periods indicated the high and low prices per share of the Company's common stock on The Nasdaq Stock Market. These prices represent quotations among dealers without adjustments for retail mark-ups, mark-downs or commissions, and may not represent prices of actual transactions.

1997	CLOSING HIGH	CLOSING LOW
First Quarter	$ 34 1/4	$ 22 7/8
Second Quarter	$ 32 1/8	$ 21 5/8
Third Quarter	$ 46 1/8	$ 24 1/4
Fourth Quarter	$ 44 7/8	$ 32 1/4
1998		
First Quarter	$ 42	$ 35 5/8
Second Quarter	$ 43 1/4	$ 31 5/8
Third Quarter	$ 30 3/8	$ 18 1/4
Fourth Quarter	$ 41 1/16	$ 18 3/4

As of February 26, 1999, there were approximately 480 stockholders of record. No dividends have been paid on the common stock since the Company's inception, and the Company does not anticipate paying any dividends in the foreseeable future.

ITEM 6. SELECTED FINANCIAL DATA

We derived this information from Gilead's audited financial statements for the year ended March 31, 1995 through the year ended December 31, 1998. This information is only a summary, and you should read it in conjunction with Gilead's historical financial statements and related notes and Management's Discussion and Analysis of Financial Condition and Results of Operations contained elsewhere herein, and the annual and quarterly reports and other information on file with the Securities and Exchange Commission. See Items 7 and 8.

GILEAD SCIENCES, INC.
SELECTED CONSOLIDATED FINANCIAL DATA
(IN THOUSANDS, EXCEPT PER SHARE DATA)

CONSOLIDATED STATEMENT OF OPERATIONS DATA:	YEAR ENDED DECEMBER 31, 1998	1997	1996	NINE MONTHS ENDED DECEMBER 31, 1995 (1)	YEAR ENDED MARCH 31, 1995
Revenues:					
Product sales, net	$ 6,074	$ 11,735	$ 8,477	$ --	$ --
Contract revenue	24,198	27,413	24,910	2,685	4,922
Royalty revenue, net	2,298	889	33	14	--
Total revenues	32,570	40,037	33,420	2,699	4,922
Costs and expenses:					
Cost of sales	594	1,167	910	--	--
Research and development	75,298	59,162	41,881	25,670	30,360
Selling, general and administrative	31,003	25,472	26,692	9,036	9,669
Total costs and expenses	106,895	85,801	69,483	34,706	40,029
Loss from operations	(74,325)	(45,764)	(36,063)	(32,007)	(35,107)
Interest income, net	18,250	17,771	14,331	4,592	3,833
Net loss	$ (56,075)	$ (27,993)	$ (21,732)	$ (27,415)	$ (31,274)
Basic and diluted loss per common share	$ (1.85)	$ (0.95)	$ (0.78)	$ (1.29)	$ (1.65)
Common shares used to calculate basic and diluted loss per common share	30,363	29,326	27,786	21,274	18,971

CONSOLIDATED BALANCE SHEET DATA:	DECEMBER 31, 1998	1997	1996	1995 (1)	MARCH 31, 1995
Cash, cash equivalents and short-term investments	$ 279,939	$ 322,298	$ 295,963	$ 155,659	$ 89,146
Working capital	256,560	306,867	284,154	145,539	80,190
Total assets	302,860	352,069	310,673	166,659	102,395
Non-current portion of long-term debt	563	1,331	2,914	3,482	5,454
Accumulated deficit	(218,554)	(162,479)	(134,486)	(112,754)	(85,339)
Total stockholders' equity (2)	270,547	317,347	291,660	151,499	86,056

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(1) In October 1995, Gilead changed its fiscal year end from March 31 to December 31, effective with the nine months ended December 31, 1995.

(2) No dividends have been declared or paid on Gilead's common stock.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

OVERVIEW

Since its inception in June 1987, Gilead has devoted the substantial portion of its resources to its research and development programs. In June 1996, the FDA granted marketing clearance of VISTIDE for the treatment of CMV retinitis in patients with AIDS. Since that time, the Company has independently marketed VISTIDE in the United States with an antiviral specialty sales force and has entered into a collaboration agreement with Pharmacia & Upjohn to market VISTIDE in all countries outside the United States.

The Company began to incur significant expenses relating to commercialization of VISTIDE and other potential product candidates in 1996. With the exception of the second quarter of 1997 and the third quarter of 1996, when the Company earned significant one-time fees related to collaborations, the Company has incurred losses since its inception. Gilead expects to continue to incur losses for at least an additional year, due primarily to its research and development programs, including preclinical studies, clinical trials and manufacturing, as well as marketing and sales efforts in support of VISTIDE and other potential products.

FORWARD-LOOKING STATEMENTS AND RISK FACTORS

This Report contains forward-looking statements relating to clinical and regulatory developments, marketing and sales matters, future expense levels, financial results and Year 2000 matters. These statements involve inherent risks and uncertainties. The Company's actual financial and operating results may differ significantly from those discussed in the forward-looking statements. Factors that might cause such a difference include, but are not limited to, the risks summarized below and described in more detail under "Risk Factors" on pages 19 to 24 of this Report. In particular, factors that could result in a material difference include, but are not limited to, those relating to the ongoing development and commercialization of the Company's potential pharmaceutical products and, in the case of Year 2000 matters, the ability to identify and correct all relevant computer code and the success of remedial efforts implemented by third-party suppliers and business partners.

The successful development and commercialization of the Company's products will require substantial and ongoing efforts at the forefront of the life sciences industry. The Company is pursuing preclinical or clinical development of a number of product candidates. Even if these product candidates appear promising during various stages of development, they may not reach the market for a number of reasons. Such reasons include the possibilities that the potential products will be found ineffective or unduly toxic during preclinical

or clinical trials, fail to receive necessary regulatory approvals, be difficult to manufacture on a large scale, be uneconomical to market or be precluded from commercialization by either proprietary rights or competing products of others.

As a company in an industry undergoing rapid change, the Company faces significant challenges and risks, including the risks inherent in its research and development programs, uncertainties in obtaining and enforcing patents, the lengthy, expensive and uncertain regulatory approval process, intense competition from pharmaceutical and biotechnology companies, increasing pressure on pharmaceutical pricing from payors, patients and government agencies and uncertainties associated with the market acceptance of and size of the market for VISTIDE or any of the Company's products in development.

The Company expects that its financial results will continue to fluctuate from quarter to quarter and that such fluctuations may be substantial. There can be no assurance that the Company will successfully develop, commercialize, manufacture and market additional products, nor can there be assurance that the Company will either achieve or sustain profitability. As of December 31, 1998, the Company's accumulated deficit was approximately $218.6 million.

As a result of the proposed acquisition of NeXstar described below, Gilead's business will be subject to additional risks related to NeXstar's business. Stockholders and potential investors in the Company should carefully consider these risks in evaluating the Company and should be aware that the realization of any of these risks could have a dramatic and negative impact on the Company's operating results, financial condition and stock price. In addition, the forward-looking statements included in this Report relate to Gilead as a stand-alone business, and do not take into account the potential impact of the proposed acquisition of NeXstar.

RESULTS OF OPERATIONS

REVENUES

The Company had total revenues of $32.6 million, $40.0 million and $33.4 million for the years ended December 31, 1998, 1997 and 1996, respectively. Total revenues include revenues from net product sales, contracts, including research and development ("R&D") collaborations, and net royalties.

Net product sales revenue was $6.1 million, $11.7 million, and $8.5 million for 1998, 1997, and 1996, respectively. All of the Company's product sales revenue relates to VISTIDE, which the Company began to sell in mid-1996. As expected, VISTIDE sales declined in 1998, primarily due to a decline in the incidence of CMV retinitis as a result of more effective HIV therapies. The 38% increase in net product sales revenue in 1997 as compared to 1996 is due to the fact that 1997 results represent a full year of sales, while 1996 revenue reflects approximately six months of sales. The Company anticipates that VISTIDE product sales revenue will be comparable to 1998 levels or will decline further in 1999 and later years as HIV therapy continues to improve.

Net royalty revenue was $2.3 million in 1998 and $0.9 million in 1997, and was derived from two sources. During 1998 and 1997, respectively, the Company earned $1.7 million and $0.7 million of net royalties from Pharmacia & Upjohn on sales of VISTIDE outside of the United States. This amount increased primarily because the number of countries in which Pharmacia & Upjohn sells the product expanded in 1998 as compared to 1997. The Company expects that royalties from Pharmacia & Upjohn's sales of VISTIDE will continue to increase during 1999 as a result of recognizing a full year of sales in a greater number of countries. The Company also reported $0.6 million and $0.2 million in 1998 and 1997, respectively, of royalty revenue from Roche Labs for co-promoting Roferon in the United States for the treatment of chronic hepatitis C virus infection. This co-promotion agreement with Roche Labs concluded at the end of 1998. While the Company expects to receive transition payments under this agreement in 1999, such amounts are not expected to be significant. Royalty revenue is recognized as income when received, which is generally in the quarter following that in which the corresponding sales occur. The Company did not earn significant

royalty revenue before 1997.

Contract revenue was $24.2 million, $27.4 million and $24.9 million in 1998, 1997, and 1996, respectively. The most significant source of contract revenue in each of these three years relates to the development of GS 4104 under an R&D collaboration agreement between the Company and Roche. GS 4104 is an orally administered compound to treat and prevent viral influenza in humans. During 1998, 1997 and 1996, the Company recorded approximately $16.4 million, $14.2 million and $11.4 million, respectively, of contract revenue under this agreement with Roche. The $16.4 million recorded during 1998 represents reimbursed R&D expenses and includes $5.2 million attributable to R&D expenses incurred in the fourth quarter of 1997, which were subject to Roche's approval as of December 31, 1997. Such expenses were approved for reimbursement and recognized as revenue in 1998. During 1997 and 1996, the Company recognized as contract revenue R&D reimbursements of $8.2 million and $1.1 million, respectively. Also during 1997 and 1996, the Company recognized milestone payments of $6.0 million and a license fee of $10.3 million, respectively. Gilead is entitled to additional milestone payments of up to $34.0 million upon achieving certain developmental and regulatory milestones. R&D reimbursements under the Roche agreement are expected to be significantly lower in 1999 as compared both to 1998 and 1997. The reimbursements will approximate actual related R&D costs the Company incurs.

Contract revenue for each year in the three-year period ended December 31, 1998 also includes reimbursement of research expenses under the Company's collaborative R&D agreement with Glaxo related to the Company's antisense program ($1.8 million in 1998 and $3.0 million in both 1997 and 1996). In June 1998, the agreement and the funding for the program were terminated, resulting in reduced revenue in 1998 as compared to 1997 and 1996.

In 1998, Gilead and Isis entered into an agreement under which Gilead sold Isis the holdings of its antisense patent estate, including patents and patent applications covering antisense chemistry and antisense drug delivery systems. Under the terms of the agreement, Isis is required to pay Gilead a total of $6.0 million in four installments. The first $2.0 million was paid in December 1998, and the remaining $4.0 million is payable in three additional payments (one payment per year in 1999, 2000 and 2001). The total sale price of $6.0 million is included in contract revenue in 1998.

During 1997, Gilead recognized a $10.0 million milestone payment under its collaborative agreement with Pharmacia & Upjohn following the marketing authorization for VISTIDE in the European Union, which is the only milestone payment provided for under that agreement. The Company also recognized as revenue a $10.0 million license fee from Pharmacia & Upjohn in 1996, the year the agreement went into effect.

COSTS AND EXPENSES

Cost of product sales was $0.6 million, $1.2 million and $0.9 million for the years ended December 31, 1998, 1997 and 1996, respectively, and resulted from sales of VISTIDE. The Company's declining cost of sales corresponds to the decrease in net product sales.

The Company's R&D expenses were $75.3 million for the year ended December 31, 1998, compared to $59.2 million for the year ended December 31, 1997. This 27% increase is primarily attributable to costs associated with the ongoing series of PREVEON Phase III clinical trials, as well as the expanded access program for patients with HIV infection, which commenced in the fourth quarter of 1997. PREVEON is an investigational reverse transcriptase inhibitor currently being studied to treat HIV. Increased R&D expenses also reflect costs associated with an additional product candidate that is advancing into later stage clinical trials (adefovir dipivoxil for the treatment of chronic hepatitis B infection). R&D expenses of $41.9 million in 1996 increased by 41% in 1997. The increase in 1997 as compared to 1996 is primarily attributable to costs associated with GS 4104 clinical trials, as well as PREVEON clinical trials and the commencement of the expanded access program for patients with HIV. The Company expects its R&D

expenses to continue to increase significantly in 1999 over 1998 amounts, reflecting anticipated increased expenses related to clinical trials for several product candidates as well as related increases in staffing and manufacturing.

Selling, general and administrative ("SG&A") expenses were $31.0 million in 1998 compared to $25.5 million in 1997, an increase of 22%. This increase represents costs incurred to expand sales, marketing and operational capacity in anticipation of the potential commercial launch of PREVEON and to support a greater level of R&D activities. SG&A expenses were $26.7 million during 1996, which is 5% greater than SG&A expense levels in 1997. The Company launched its first product, VISTIDE, in June 1996, and the level of expenses in that year is largely attributable to costs incurred to establish the Company's United States marketing and sales capabilities. As expected, these expenses were somewhat lower in 1997. The Company's selling, general and administrative expenses are expected to increase substantially during 1999, as Gilead continues to expand its sales and marketing capacity and increase support activities for its R&D efforts.

NET INTEREST INCOME

The Company had net interest income of $18.3 million, $17.8 million and $14.3 million in 1998, 1997 and 1996, respectively. The increased level of net interest income in 1998 as compared to 1997 is primarily due to increased returns on the investment portfolio in 1998. Net interest income in 1997 exceeded the

1996 amount mainly due to the full-year benefit in 1997 of the investment of the proceeds from the Company's public offering of common stock in 1996 and a $40.0 million equity investment by Pharmacia & Upjohn in 1997. The Company expects net interest income to decline substantially in 1999 due to increased spending levels and the corresponding decreasing balances of invested cash.

LIQUIDITY AND CAPITAL RESOURCES

Cash and cash equivalents and short-term investments totaled $279.9 million at December 31, 1998, compared to $322.3 million at December 31, 1997. This $42.4 million decrease is primarily due to the net use of cash to fund operations of $46.7 million, partially offset by proceeds of $9.0 million from the issuance of common stock under the Company's stock purchase plan and from the exercise of stock options. Significant changes in working capital during 1998 include a decrease in other current assets of $9.6 million. The decrease results from the payment in full during 1998 of reimburseable R&D expenses and a milestone payment totaling approximately $12.4 million due from Roche, partially offset by an increase in inventory of $3.0 million as well as a $1.0 million receivable from Isis at December 31, 1998 in connection with the sale of the Company's antisense patent estate. The balance of the amount due from Isis, $3.0 million, is reported as a noncurrent receivable in other assets at December 31, 1998 and comprises substantially all of the $2.9 million increase in that balance as compared to the end of the prior year. The balance of other accrued liabilities is $12.4 million and $5.7 million at December 31, 1998 and 1997, respectively. Of this $6.7 million increase, $5.0 million represents an accrued liability to Roche, which represents Roche's 1998 R&D funding in excess of the Company's related R&D spending. The Company's deferred revenue is $3.3 million and $9.5 million at December 31, 1998 and 1997, respectively. At December 31, 1997, deferred revenue includes $7.2 million from Roche, representing its advance reimbursement of budgeted R&D costs for the first quarter of 1998. The December 31, 1998 balance did not include a comparable amount because the 1999 budget was not approved at that date.

At December 31, 1996, cash and cash equivalents and short-term investments were $296.0 million. The $26.3 million increase at December 31, 1997 as compared to the prior year is primarily attributable to a $40.0 million preferred stock investment from Pharmacia & Upjohn and proceeds of $13.2 million from the issuance of common stock under the Company's stock purchase plan and from the exercise of stock options, partially offset by $19.9 million of net cash used in operations. Significant changes in working capital during 1997 include a $13.7

million increase in other current assets, of which $12.4 million represents reimbursable R&D expenses and a milestone payment due from Roche. Accrued clinical and preclinical expenses increased by $8.0 million as a result of a having a larger number of products in later stage clinical trials. Also, the Company's deferred revenue increased by $9.0 million during 1997 as a result of increased deferred revenues from Pharmacia & Upjohn and Roche. In October 1996, the Company entered into a $3.0 million term loan to finance its facilities expansion, which began in the fourth quarter of 1996.

During 1999, the Company expects that its balances of cash and cash equivalents and short-term investments will continue to decline substantially as R&D, SG&A and capital equipment spending levels increase.

The Company believes that its existing capital resources, supplemented by net product sales, contract revenue and net royalty revenue, will be adequate to satisfy its capital needs for the foreseeable future. As of December 31, 1998, Gilead was entitled to cash payments of up to $34.0 million from Roche upon achieving specific developmental and regulatory milestones, although there can be no assurance that the milestones will be met. The Company's future capital requirements will depend on many factors, including the progress of the Company's R&D efforts, the scope and results of preclinical studies and clinical trials, the cost, timing and outcomes of regulatory reviews, the rate of technological advances, determinations as to the commercial potential of the Company's products under development, the commercial performance of VISTIDE and any of the Company's products in development that receive marketing approval, levels of administrative and legal expenses, the status of competitive products, the establishment of manufacturing

capacity or third-party manufacturing arrangements, the expansion of sales and marketing capabilities, possible geographic expansion and the establishment of additional collaborative relationships with other companies.

The Company had federal net operating loss and federal research and development tax credit carryforwards of approximately $223.0 million and $7.9 million, respectively, at December 31, 1998. Utilization of the net operating losses and credit carryforwards may be subject to a substantial annual limitation due to the ownership change limitations provided by the Internal Revenue Code of 1986. The acquisition of NeXstar is not expected to have a material impact on the ability to utilize these tax loss and credit carryforwards.

The Company may in the future require additional funding, which could be in the form of proceeds from equity or debt financings or additional collaborative agreements with corporate partners. If such funding is required, there can be no assurance that it will be available on favorable terms, if at all.

IMPACT OF YEAR 2000

The Company is implementing a Year 2000 project to address the issue of computer software and hardware correctly processing dates through and beyond the Year 2000. The goal of this project is to ensure that all computer software and hardware that the Company uses or relies upon is retired, replaced or made Year 2000 compliant before December 31, 1999.

There are three primary aspects to the Company's Year 2000 project: computers and other equipment, information systems software and third-party suppliers and business partners. Gilead is addressing each of these areas on a phased basis, as follows: 1) educating the internal user community at Gilead; 2) conducting an inventory of all software and hardware; 3) evaluating all software and hardware for Year 2000 compliance; 4) implementing modifications, retirement or replacement of software or hardware, prioritized based on an analysis of importance to Gilead's business; 5) testing and validating all modified or replaced software and hardware; and 6) designing and implementing contingency and business continuation plans for critical systems.

To date, Gilead has completed the education and inventory phases of the

project, and estimates that 80% of software and hardware has completed the evaluation phase. Implementation of modifications or replacements and testing and validation are on schedule, and the Company anticipates that, for business-critical systems, all of these activities will be complete by the end of 1999.

The Company has prioritized the implementation phase to first address software or hardware that affects product manufacturing, quality control and safety, employee safety, revenues or cash reserves. Two systems that have been identified as critical to Gilead's operations are software programs from JD Edwards, Inc. ("JDE") and Beckman-Coulter, Inc. ("Beckman"). The JDE system is an enterprise-wide program that tracks financial information, processes sales orders and monitors purchasing and manufacturing activities. During 1998, the Company upgraded the JDE system to a Year 2000 compliant version, which is presently operational. The Beckman system monitors and records laboratory data. The Beckman system upgrades are approximately 80% complete and are scheduled to be finished during the second quarter of 1999.

To date, the Company has initiated evaluations of more than 90% of its critical third-party suppliers and business partners. The Company anticipates completing these evaluations by the second quarter of 1999, on a prioritized basis. Responses to Gilead's inquiries regarding Year 2000 compliance in many cases have been general and nonbinding. To date, substantially all respondents indicate that their Year 2000 compliance efforts are progressing on schedule, and that their computer systems either are or will be Year 2000-compliant at the appropriate time. A significant majority of these respondents are presently in the final testing phase of their Year 2000 compliance projects, and many of them indicate that they are concurrently developing contingency plans.

Among the most critical third parties the Company relies on are the financial institutions that manage Gilead's cash and investments of approximately $280 million, the Company's stock transfer agent, contract manufacturers, contract research and laboratory organizations and the FDA. The Company intends to continue monitoring and evaluating these third parties to the extent practical through the end of 1999.

Gilead anticipates that the total cost of its Year 2000 compliance efforts will not be material to its financial condition or results of operations. The current estimate for external costs of total compliance efforts is approximately $2.1 million, of which $1.1 million has been incurred to date. Of the amount incurred to date, $0.8 million has been expensed and the remainder has been capitalized. The $1.0 million of remaining costs includes $0.8 million of capitalizable costs, primarily computer hardware and software, and $0.2 million of costs to be charged to expense, primarily consulting fees. These external costs are included in Gilead's operating budget for 1999. However, this estimate does not include any costs to Gilead that may be associated with the failure of any third-party supplier or business partner to achieve Year 2000 compliance.

The Company is also developing a series of contingency plans for certain of its critical applications. These plans involve, among other actions, manual solutions, increased inventories and modified staffing strategies. These contingency plans are expected to be finalized and ready for implementation, if necessary, before the end of 1999.

The Company's Year 2000 project is designed to significantly reduce uncertainty and risk arising from the Year 2000 problem. The Company believes that the implementation actions described above reduce the potential for disruption of operations or significant financial impact. Due to the uncertainty inherent in the Year 2000 problem, however, there can be no assurance that Year 2000 failures will not occur. Should such a Year 2000 failure occur with any of Gilead's business critical operating systems, appropriate contingency plans have been established which the Company believes would result in only a temporary disruption in its ability to sell and distribute products. The Company does not believe that any such disruption would have a material impact on its financial condition or results of operations.

The Company cannot predict with any certainty whether its critical

third-party suppliers and business partners will achieve Year 2000 compliance, or whether the failure of any such third party to do so would have a material effect on the Company's business. However, the Company has established contingency plans for maintaining operations with all its critical third-party suppliers and business partners to minimize any disruption in its day-to-day business operations.

MARKET RISK

The Company's non-trading portfolio of investments creates an exposure to interest rate risk. By policy, the Company limits amounts invested in securities by maturity, industry group, investment type and issuer, except for securities issued by the U.S. government. The goals of the Company's investment policy, in order of priority, are as follows:

1. Safety and preservation of principal and diversification of risk.

2. Liquidity of investments sufficient to meet cash flow requirements.

3. Competitive after-tax rate of return.

Changes in interest rate levels affect the fair value of these financial instruments. A sensitivity analysis to measure potential losses in the fair value of Gilead's short-term investment portfolio arising from a change in interest rates indicates that a one percentage point increase in interest rates would have decreased the fair value of the short-term investment portfolio by approximately $2.7 million at December 31, 1998. A one percentage point decrease in interest rates at December 31, 1998 would have increased the fair value of the short-term investment portfolio by $2.7 million. These amounts were determined by calculating the weighted average effects of duration and convexity on the estimated overall portfolio return given the specified changes in interest rates. The adjusted portfolio returns were then multiplied by the fair value of the portfolio to derive the change in portfolio value that would result in each 100 basis point interest rate change scenario. The model assumes there are no changes in credit risk spreads.

All of Gilead's revenue is invoiced in U.S. dollars. The Company has no active foreign subsidiaries. Gilead's exposure to foreign currency exchange rate fluctuations arises from certain purchases denominated in foreign currencies. The Company periodically enters into foreign exchange forward contracts with financial institutions in accordance with its foreign exchange risk management policy to hedge the currency exchange risk associated with certain firmly committed purchase transactions. In general, these contracts mature within three months or less and do not expose the Company to market risk because gains and losses on the contracts offset gains and losses on the transactions being hedged. At December 31, 1998, the Company's outstanding forward foreign exchange contracts, their fair values and the unhedged exposure were immaterial. Due to the Company's hedging activities, the Company's potential loss of earnings from a change in foreign exchange rates is minimal. The effect of foreign exchange rate fluctuations on Gilead in the year ended December 31, 1998 was not material.

PROPOSED MERGER AGREEMENT

On March 1, 1999, Gilead and NeXstar announced a definitive merger agreement providing for the acquisition by Gilead of all the outstanding common stock of NeXstar. The merger is structured as a tax-free, stock-for-stock transaction. The Company intends to account for this merger under the pooling-of-interests method. NeXstar, headquartered in Boulder, Colorado, is engaged in the discovery, development, manufacture and commercialization of products to treat serious and life-threatening illnesses. In addition to its Boulder headquarters, NeXstar maintains research, development and manufacturing facilities in San Dimas, California, and marketing subsidiaries worldwide. Under the terms of the merger agreement, NeXstar stockholders will receive between 0.3786 and 0.5000 of a share of Gilead common stock for each share of NeXstar common stock. The exact exchange ratio will be determined based on the trading range of Gilead common

stock over a specified period prior to completion of the merger. The merger is subject to certain conditions, including approval of the stockholders of Gilead and NeXstar. The transaction is expected to be completed in mid-1999.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The financial statements required by this item are set forth beginning at page 44 of this report.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING FINANCIAL DISCLOSURE

Not applicable.

PART III

ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT

IDENTIFICATION OF DIRECTORS AND EXECUTIVE OFFICERS

DIRECTORS

The names of the directors in alphabetical order, and certain information about them as of March 18, 1999, are set forth below:

NAME	AGE	POSITION WITH GILEAD/PRINCIPAL OCCUPATION
Paul Berg(1).....	72	Cahill Professor, Department of Biochemistry, Stanford University School of Medicine
Etienne F. Davignon.....	66	Chairman, Societe Generale de Belgique
James M. Denny, Sr.(1)(2).....	66	Managing Director, William Blair Capital Partners V
John C. Martin.....	47	President and Chief Executive Officer
Gordon E. Moore(1)(2).....	70	Chairman Emeritus, Intel Corporation
Donald H. Rumsfeld.....	66	Chairman of the Gilead Board of Directors
George P. Shultz(2).....	78	Distinguished Fellow, Hoover Institution, Stanford University

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(1) Member of the compensation committee

(2) Member of the audit committee

Dr. Berg joined the Gilead board of directors in April 1998. Dr. Berg is currently Cahill Professor in Cancer Research in the Department of Biochemistry at Stanford University School of Medicine, where he has been on the faculty since 1959. He has served as Director of the Stanford University Beckman Center for Molecular and Genetic Medicine since its founding in 1985. Dr. Berg is a director of Affymetrix, Inc. and Transgene, Inc. He is the founder and a scientific advisor to Schering-Plough's DNAX Research Institute. Dr. Berg also serves as a member of Gilead's Scientific Advisory Board. Dr. Berg received the Nobel Prize for Chemistry in 1980.

Mr. Davignon joined the Gilead board of directors in September 1990. He has served as the Chairman of Societe Generale de Belgique, a diversified financial and industrial company, since 1985. Mr. Davignon served as the European Community's Commissioner for Industry and International Markets from 1977 to 1981, and as the EC's Vice President for Research, Industry and Energy Policies from 1981 to 1984. Mr. Davignon is a director of Fiat S.A., Compagnie de Suez, Minorco S.A. and a number of other European companies.

Mr. Denny joined the Gilead board of directors in January 1996. Mr. Denny is a Managing Director of William Blair Capital Partners V and VI, private equity

funds. Mr. Denny is a retired Vice Chairman of Sears, Roebuck & Co. As Vice Chairman, he had responsibility for Allstate Insurance Corporation, Coldwell Banker Real Estate Group and the corporate financial organization. Previously, he served as Executive Vice President and Chief Financial and Planning Officer of G.D. Searle & Co., as well as Chairman of Pearle Health Services, Inc., a Searle-affiliated company. He is a director of Allstate Corporation, Astra A.B., GATX Corporation and ChoicePoint, Inc. and is a Chairman of Northwestern Memorial Hospital.

Dr. Martin is Gilead's President and Chief Executive Officer. Dr. Martin joined Gilead in October 1990 as Vice President for Research and Development, was appointed Chief Operating Officer in October 1995, and was appointed President and Chief Executive Officer and elected to the Gilead board of directors in April 1996. From 1984 to 1990 he was employed at Bristol-Myers Squibb, a pharmaceutical company, where he was Director of Antiviral Chemistry. Dr. Martin was employed at Syntex Corporation,

a pharmaceutical company, from 1978 to 1984. Dr. Martin is the co-inventor of ganciclovir, a pharmaceutical now used for treatment of cytomegalovirus infection. He is currently the President of the International Society for Antiviral Research. Dr. Martin received his Ph.D. in organic chemistry from the University of Chicago.

Dr. Moore joined the Gilead board of directors in January 1996, and served as a member of Gilead's Business Advisory Board from July 1991 until January 1996. Dr. Moore is a co-founder and Chairman Emeritus of Intel Corporation, where he previously served as Chairman, President and Chief Executive Officer. He also served as Director of Research and Development for the Fairchild Semiconductor Division of Fairchild Camera and Instrument Corporation. Dr. Moore is a director of Transamerica Corporation and is Chairman of the Board of Trustees at the California Institute of Technology. He received the National Medal of Technology in 1990.

Mr. Rumsfeld joined the Gilead board of directors in July 1988 and was elected Chairman of the Board in January 1997. Mr. Rumsfeld has been in private business since August 1993. He served as the Chairman and Chief Executive Officer of General Instrument Corporation, a diversified electronics company, from 1990 to 1993, and was Chief Executive Officer of G.D. Searle & Co., a pharmaceutical company, from 1977 to 1985. Mr. Rumsfeld formerly served as Presidential Envoy to the Middle East, U.S. Secretary of Defense, White House Chief of Staff, U.S. Ambassador to NATO and a U.S. Congressman. Mr. Rumsfeld is a director of ABB AB, Gulfstream Aerospace Corp., RAND Corporation and Tribune Company. In 1977, Mr. Rumsfeld was awarded the Medal of Freedom, the nation's highest civilian award.

Dr. Shultz joined the Gilead board of directors in January 1996. Dr. Shultz currently serves as Distinguished Fellow at the Hoover Institution and as a director of the Bechtel Group, Inc., AirTouch Communications and Gulfstream Aerospace Corporation. Dr. Shultz served as U.S. Secretary of State from 1982 to 1989 and earlier served as Secretary of Labor, Director of the Office of Management and Budget and Secretary of the Treasury. Previously, he served as Dean of the Graduate School of Business at the University of Chicago and as President of the Bechtel Group, Inc. In 1989, Dr. Shultz was awarded the Medal of Freedom, the nation's highest civilian honor.

EXECUTIVE OFFICERS

The names of Gilead's executive officers who are not also directors of Gilead and certain information about each of them are set forth below:

Jeffrey W. Bird, age 38, is Gilead's Senior Vice President, Business Operations. Dr. Bird joined Gilead in September 1988 and worked as Director of Scientific Programs and Research Scientist until March 1990. After completing his medical degree, he returned to Gilead in December 1991 as Director of Corporate Development, became Vice President of Corporate Development in March 1995 and was appointed Senior Vice President, Business Operations in January

1998, at which time he became an executive officer. Dr. Bird received his M.D. and Ph.D. degrees at Stanford University Medical School.

Norbert W. Bischofberger, age 43, is Gilead's Senior Vice President, Research. Dr. Bischofberger joined Gilead in 1990 as Director of Organic Chemistry, became Vice President of Organic Chemistry in March 1993 and was named Vice President of Research in August 1995. Dr. Bischofberger was appointed Senior Vice President, Research in January 1998, at which time he became an executive officer. Prior to joining Gilead, Dr. Bischofberger worked in research at Genentech, Inc. from 1986 to 1990, most recently as Manager of DNA Synthesis. He received his B.S. in chemistry at the University of Innsbruck in Austria, and his Ph.D. in Organic Chemistry at the Eidgennossische Technische Hochschule (ETH) in Zurich, Switzerland.

Howard S. Jaffe, age 41, is Gilead's Senior Vice President, Drug Development. Dr. Jaffe joined Gilead in December 1991 as Vice President, Clinical Affairs, became Vice President and Chief Medical Officer in March 1995 and became Senior Vice President, Drug Development in August 1996. Dr. Jaffe is

an assistant clinical professor and attending physician at the University of California, San Francisco. From 1986 until joining Gilead, he was employed by Genentech, Inc., most recently as Director of Clinical Research and Cytokine Project Team Leader. Dr. Jaffe received his M.D. from the Yale University School of Medicine and performed his residency and fellowship training at the University of California, San Francisco.

Mark L. Perry, age 43, is Gilead's Senior Vice President, Chief Financial Officer and General Counsel. Mr. Perry joined Gilead in July 1994 as its Vice President and General Counsel and became Chief Financial Officer in May 1996. Mr. Perry was appointed Senior Vice President, Chief Financial Officer and General Counsel in January 1998. He has also served as Corporate Secretary since May 1994. From 1981 to 1994, Mr. Perry was with Cooley Godward LLP in San Francisco and Palo Alto, California. Cooley Godward serves as Gilead's primary outside counsel. Mr. Perry was an associate with Cooley Godward from 1981 to 1987, and a partner from 1987 to 1994. Mr. Perry received his J.D. from the University of California, Davis and is a member of the California bar.

COMPLIANCE WITH SECTION 16(A) OF THE SECURITIES EXCHANGE ACT OF 1934

Section 16(a) of the Securities Exchange Act of 1934 requires Gilead's directors and executive officers, and persons who own more than ten percent of a registered class of Gilead's equity securities, to file with the SEC initial reports of ownership and reports of changes in ownership of common stock and other equity securities of Gilead. Executive officers, directors and greater than ten percent stockholders are required by SEC regulation to furnish Gilead with copies of all Section 16(a) forms they file.

To Gilead's knowledge, based solely on a review of the copies of such reports furnished to Gilead and written representations that no other reports were required, during 1998, all Section 16(a) filing requirements applicable to its executive officers, directors and greater than ten percent beneficial owners were met.

ITEM 11. EXECUTIVE COMPENSATION

COMPENSATION OF DIRECTORS

Each non-employee director of Gilead receives a fee of $1,000 for each meeting attended. In the year ended December 31, 1998, the total compensation paid to current non-employee directors was $19,000. The members of the Gilead board of directors are also eligible for reimbursement for their expenses incurred in connection with attendance at Gilead board of directors meetings in accordance with Gilead's policy.

Each non-employee director of Gilead also receives stock option grants under the Directors' Option Plan. The Directors' Option Plan provides for

non-discretionary grants of nonstatutory stock options to non-employee directors of Gilead, on an automatic basis pursuant to a pre-approved schedule. Options granted under the Directors' Option Plan are at prices not less than fair market value on the date of grant, become exercisable over a period of five years in equal quarterly installments at the rate of 5% per quarter and expire after ten years. Such vesting is conditioned upon continuous service as a non-employee director of or consultant to Gilead. The exercise price of options granted must be paid in cash or shares of common stock of Gilead at the time the option is exercised.

Each non-employee director was granted as of January 2, 1996, or will be granted on the date he or she is first elected to be a non-employee director, an option to purchase 25,000 shares of Gilead common stock, the initial grant. Thereafter, on each anniversary date of a non-employee director's initial grant, such non-employee director shall automatically be granted an option to purchase 5,000 shares of Gilead common stock, the annual grant. A non-employee director who is also the Chairperson of the Gilead board of directors shall be granted an option to purchase an additional 20,000 shares of Gilead common stock at the time of his or her initial grant or later election as Chairperson, and an additional 4,000 shares

of Gilead common stock at the time of his or her annual grant. Each non-employee director who also serves on a standing committee of the Gilead board of directors shall automatically be granted an option to purchase an additional 1,000 shares of Gilead common stock at the time of his or her initial grant, and an additional 1,000 shares of Gilead common stock at the time of his or her annual grant, for each such committee. Each non-employee director who serves on a standing committee and who is also the Chairperson of that committee shall automatically be granted an option to purchase an additional 2,000 shares of Gilead common stock at the time of his or her annual grant. No other options may be granted under the Directors' Option Plan.

During 1998, Gilead granted options covering 66,000 shares (net of cancellations) to its current non-employee directors, at exercise prices ranging from $25.00 to $38.25 per share. Each option granted had an exercise price equal to fair market value on the date of grant.

As of February 26, 1999, options to purchase a total of 305,000 shares of Gilead common stock were outstanding under the Directors' Option Plan.

COMPENSATION OF EXECUTIVE OFFICERS

SUMMARY OF COMPENSATION

The following table shows, for the years ended December 31, 1998, 1997, and 1996, certain compensation awarded or paid to, or earned by, Gilead's Chief Executive Officer and its four other most highly compensated executive officers at December 31, 1998 (the "named executive officers"):

SUMMARY COMPENSATION TABLE

NAME AND PRINCIPAL POSITION	FISCAL YEAR ENDED DECEMBER 31,	ANNUAL COMPENSATION		LONG TERM COMPENSATION
		SALARY ($)(1)	BONUS ($)	SECURITIES UNDERLYING OPTIONS (#)(2)
John C. Martin.....	1998	$ 354,375	$ 150,000	65,000
President and Chief Executive	1997	$ 326,667	$ 150,000	75,000
Officer	1996	$ 298,333	$ 110,000	75,000
Jeffrey W. Bird.....	1998	$ 222,750	$ 100,000	65,000
Senior Vice President,	1997	$ 187,917	$ 100,000	40,000
Business Operations	1996	$ 150,417	$ 30,000	20,000
Norbert W. Bischofberger.....	1998	$ 222,752	$ 115,000	55,000
Senior Vice President,	1997	$ 199,583	$ 75,000	40,000
Research	1996	$ 179,167	$ 50,000	30,000

Howard S. Jaffe.....	1998	$ 278,461	$ 100,000	35,000
Senior Vice President,	1997	$ 269,167	$ 100,000	40,000
Drug Development	1996	$ 250,417	$ 100,000	65,000
Mark L. Perry.....	1998	$ 253,125	$ 100,000	35,000
Senior Vice President,	1997	$ 244,458	$ 75,000	40,000
Chief Financial Officer and	1996	$ 238,000	$ 60,000	20,000
General Counsel				

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(1) Includes amounts earned but deferred at the election of the named executive officer pursuant to Gilead's 401(k) employee savings and retirement plan. To date, Gilead has not made any matching contributions under such plan.

(2) Gilead has not granted any stock appreciation rights, has not made any long-term incentive plan awards and did not make any restricted stock grants to the named executive officers during the periods covered.

STOCK OPTION GRANTS AND EXERCISES

As of February 26, 1999, options to purchase a total of 3,921,698 shares of common stock had been granted and remained outstanding under the 1991 Stock Option Plan, and options to purchase 842,530 shares of common stock remained available for grant thereunder. In addition, as of such date, options to purchase a total of 190,351 shares of common stock were outstanding under Gilead's 1987 Incentive Stock Option Plan and 1987 Supplemental Stock Option Plan and pursuant to certain option grants made outside of Gilead's option plans.

Gilead grants both incentive stock options and nonstatutory stock options to its executive officers under the 1991 Stock Option Plan. The following tables show, for the year ended December 31, 1998, the last fiscal year, certain information regarding options granted to, exercised by, and held at year end by the named executive officers:

OPTION GRANTS IN LAST FISCAL YEAR

	INDIVIDUAL GRANTS				POTENTIAL REALIZABLE VALUE AT ASSUMED ANNUAL RATES OF STOCK PRICE APPRECIATION FOR OPTION TERM(3)	
NAME	NUMBER OF SECURITIES UNDERLYING OPTIONS GRANTED (#)(1)	% OF TOTAL OPTIONS GRANTED TO EMPLOYEES IN FISCAL YEAR(2)	EXERCISE OR BASE PRICE ($/SH.)	EXPIRATION DATE	5% ($)	10% ($)
John C. Martin.....	65,000	6.12%	$ 22.875	07/22/08	$ 935,096	$ 2,369,633
Jeffrey W. Bird.....	30,000	2.82%	$ 38.000	01/21/08	$ 716,946	$ 1,816,818
	35,000	3.29%	$ 22.875	07/22/08	$ 503,513	$ 1,275,956
Norbert W. Bischofberger.....	20,000	1.88%	$ 38.000	01/21/08	$ 477,964	$ 1,211,212
	35,000	3.29%	$ 22.875	07/22/08	$ 503,513	$ 1,275,956
Howard S. Jaffe.....	35,000	3.29%	$ 22.875	07/22/08	$ 503,513	$ 1,275,956
Mark L. Perry.....	35,000	3.29%	$ 22.875	07/22/08	$ 503,513	$ 1,275,956

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(1) The terms of such options, which include both incentive and nonstatutory stock options, are consistent with those of options granted to other employees under Gilead's 1991 Stock Option Plan. The options vest at the rate of 20% after one year and 5% per quarter thereafter during the optionee's employment. Subject to certain exceptions, the maximum term of options granted under the 1991 Stock Option Plan is ten years.

(2) Based on options to purchase 1,062,400 shares of Gilead common stock granted to employees, including executive officers, for the year ended December 31, 1998.

(3) The potential realizable value is based on the term of the option at the date of the grant (10 years). It is calculated by assuming that the stock price on the date of grant appreciates at the indicated annual rate,

compounded annually for the entire term, and that the option is exercised and sold on the last day of the option term for the appreciated stock price. Actual gains, if any, are dependent on the actual future performance of Gilead common stock and the timing of exercise and sale transactions by the holder. There can be no assurance that the amounts reflected in this table, or that any gains, will be achieved.

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

NAME	SHARES ACQUIRED ON EXERCISE (#)	VALUE REALIZED ($)(1)	NUMBER OF SECURITIES UNDERLYING UNEXERCISED OPTIONS AT 12/31/98 (#) EXERCISABLE/UNEXERCISABLE(2)	VALUE OF UNEXERCISED IN-THE-MONEY OPTIONS AT 12/31/98 ($) EXERCISABLE/UNEXERCISABLE(3)
John C. Martin.....	25,165	$ 540,196	288,325/208,000	$ 7,509,989/$3,378,875
Jeffery W. Bird.....	15,832	$ 587,141	59,097/120,600	$ 1,631,730/$1,815,612
Norbert W. Bischofberger.....	2,000	$ 44,500	91,599/112,600	$ 2,374,795/$1,776,613
Howard S. Jaffe.....	42,735	$ 886,837	76,065/132,200	$ 1,745,509/$2,715,038
Mark L. Perry.....	15,000	$ 397,500	74,000/121,000	$ 2,115,875/$1,991,937

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(1) Represents the fair market value of Gilead common stock on the date of exercise (based on the closing sales price reported on the Nasdaq Stock Market or the actual sales price if the shares were sold by the optionee) less the exercise price, and does not necessarily indicate that the shares were sold by the optionee.

(2) Includes both in-the-money and out-of-the-money options.

(3) Fair market value of Gilead common stock at December 31, 1998 ($41.0625, based on the closing sales price reported on the Nasdaq Stock Market), less the exercise price.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information regarding the ownership of Gilead common stock as of February 26, 1999 by: (1) each current director and nominee for director; (2) each named executive officer (as defined above in Item 11); (3) all executive officers and directors of Gilead as a group; and (4) all those known by Gilead to be beneficial owners of more than five percent of Gilead common stock and series B preferred stock on a combined basis.

BENEFICIAL OWNER	BENEFICIAL OWNERSHIP(1) NUMBER OF SHARES	PERCENT OF TOTAL
Wellington Management Company, LLP(2) ..... 75 State Street Boston, MA 02109	4,287,860	13.4%
T. Rowe Price Associates(3) ..... 100 East Pratt Street Baltimore, MD 21202	3,164,300	9.9%
Capital Research and Management Company(4) ..... 333 South Hope Street Los Angeles, CA 90025	2,895,000	9.0%
Capital Guardian Trust Company and Capital International S.A.(5) ..... 11100 Santa Monica Boulevard, Suite 1500 Los Angeles, CA 90025	1,895,000	5.9%
John C. Martin(6).....	349,045	1.1%
Donald H. Rumsfeld(7).....	166,232	*
Norbert W. Bischofberger(8).....	112,153	*

Howard S. Jaffe(9)	96,213	*

BENEFICIAL OWNER	BENEFICIAL OWNERSHIP(1) NUMBER OF SHARES	PERCENT OF TOTAL
Mark L. Perry(10)	94,548	*
Jeffrey W. Bird(11)	79,043	*
James M. Denny, Sr.(12)	53,524	*
Etienne F. Davignon(13)	53,330	*
Gordon E. Moore(14)	47,531	*
George P. Shultz(15)	31,400	*
Paul Berg(16)	5,200	*
All executive officers and directors as a group (11 persons)(17)	1,088,219	3.4%

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* Less than one percent

(1) This table is based upon information supplied by Gilead's officers, directors and principal stockholders and Schedules 13D and 13G filed with the Securities and Exchange Commission. Unless otherwise indicated in the footnotes to this table, and subject to community property laws where applicable, each of the stockholders named in this table has sole voting and investment power with respect to the shares indicated as beneficially owned. Applicable percentages are based on 30,884,298 shares of Gilead common stock and 1,133,786 shares of Gilead series B preferred stock outstanding on February 26, 1999, for a total of 32,018,084 outstanding shares, adjusted as required by rules promulgated by the SEC.

(2) Based on a Schedule 13G filed with the Commission on January 24, 1999. The Wellington Management Company, LLP is a registered investment adviser. The Wellington Management Company in its capacity as investment adviser is considered a "beneficial owner" in the aggregate of 4,287,860 shares of Gilead common stock. Such shares are owned by numerous investment advisory clients of The Wellington Management Company, none of which is known to have beneficial ownership of more than 5% of that class of securities of Gilead. As of December 31, 1998 The Wellington Management Company had shared voting power with respect to 1,770,280 shares and shared dispositive power with respect to 4,228,860 shares.

(3) Based on a Schedule 13G filed with the Commission on February 12, 1999. T. Rowe Price Associates, Inc., in its capacity as a registered investment adviser is considered a "beneficial owner" in the aggregate of 3,164,300 shares of Gilead common stock. Such shares are owned by various individual and institutional investors for which T. Rowe Price Associates, Inc. serves as investment adviser with power to direct investments and/or sole power to vote the shares. For purposes of the reporting requirements of the Securities and Exchange Act of 1934, T. Rowe Price Associates is deemed to be a beneficial owner of such shares; however, T. Rowe Price Associates expressly disclaims such beneficial ownership.

(4) Based on a Schedule 13G filed with the Commission on February 8, 1999. The Capital Research and Management Company is a registered investment adviser that manages The American Funds Group of mutual funds. The Capital Research and Management Company in its capacity as investment adviser is considered a "beneficial owner" in the aggregate of 2,895,000 shares of Gilead common stock. Such shares are owned by accounts under the discretionary investment management of The Capital Research and Management Company. As of December 31, 1998, The Capital Research and Management Company had sole dispositive power with respect to 2,895,000 shares.

(5) Based on a Schedule 13G filed with the Commission on February 8, 1999. The Capital Guardian Trust Company is a California state-chartered trust company that acts as investment manager to large

institutional accounts (primarily pension funds). Capital International S.A. provides investment management services to institutional accounts. The Capital Guardian Trust Company and Capital International S.A., in their capacity as investment managers, are considered "beneficial owners" in the aggregate of 1,865,000 shares of Gilead common stock. Such shares are owned by accounts under the discretionary investment management of The Capital Guardian Trust Company and Capital International S.A. As of December 31, 1998, The Capital Guardian Trust Company had sole voting power with respect to 1,662,000 shares and sole dispositive power with respect to 1,865,000 shares and Capital International S.A. had sole voting and dispositive power with respect to 30,000 shares.

(6) Includes 318,325 shares subject to stock options exercisable within 60 days.

(7) Includes 39,889 shares held in a grantor annuity trust for which Mr. Rumsfeld is the donor and trustee and 37,000 shares subject to stock options exercisable within 60 days.

(8) Includes 12,534 shares held in trust for which Dr. Bischofberger and his wife are trustees and 96,599 shares subject to stock options exercisable within 60 days.

(9) Includes 13,548 shares held in trust for which Dr. Jaffe and his wife are trustees and 82,665 shares subject to stock options exercisable within 60 days.

(10) Includes 500 shares held in account for Mr. Perry's minor child for which Mr. Perry is the custodian and 86,000 shares subject to stock options exercisable within 60 days.

(11) Includes 72,597 shares subject to stock options exercisable within 60 days.

(12) Includes 19,998 shares held by a partnership in which Mr. Denny is a managing partner, as to which Mr. Denny disclaims beneficial ownership. Also includes 7,426 shares held in partnership with Mr. Denny's wife and 26,100 shares subject to stock options exercisable within 60 days.

(13) Includes 53,330 shares subject to stock options exercisable within 60 days.

(14) Includes 30,866 shares subject to stock options exercisable within 60 days.

(15) Includes 21,400 shares subject to stock options exercisable within 60 days.

(16) Includes 5,200 shares subject to stock options exercisable within 60 days.

(17) Includes 830,082 shares subject to stock options exercisable within 60 days. See notes (6) through (16) above.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

In November 1990, Gilead entered into a Relocation Loan Agreement with John C. Martin, currently Gilead's President and Chief Executive Officer. The principal amount of the loan is $100,000 with a term of ten years. The loan is non-interest bearing and 100% of the principal amount will be forgiven on a pro rata basis over years six through ten as long as Dr. Martin is still employed by Gilead. In the event Dr. Martin ceases to be employed by Gilead, the loan

becomes interest-bearing and due within ninety days. The loan is secured by a deed of trust on Dr. Martin's residence. As of December 31, 1998, $40,000 was outstanding.

In October 1994, Gilead entered into a Loan Agreement with Mark L. Perry, currently Gilead's Senior Vice President, Chief Financial Officer and General Counsel. The principal amount of the loan is $100,000 with a term of ten years. The loan is non-interest bearing and 50% of the principal amount will be forgiven on a pro rata basis over years six through ten as long as Mr. Perry is still employed by Gilead. In the event Mr. Perry ceases to be employed by Gilead, the loan becomes interest-bearing and due within sixty days. The loan is secured by a deed of trust on Mr. Perry's residence. As of December 31, 1998, the entire loan amount was outstanding.

During 1998, Gilead paid an aggregate of $2,551,134 to Pharma Research Corporation, a contract research organization. James M. Denny, a member of Gilead's board of directors, is a managing director of William Blair Capital, LLC, which manages William Blair Capital Fund V, which owns a controlling interest (45% of the voting stock) in Pharma Research Corporation. Mr. Denny is not involved in the supervision of the operations of Pharma Research Corporation. Pharma Research Corporation provided services to Gilead prior to William Blair Capital's investment.

Gilead has entered into indemnity agreements with all of its officers (including the named executive officers) and directors which provide, among other things, that Gilead will indemnify such officer or director, under the circumstances and to the extent provided for therein, for expenses, damages, judgments, fines and settlements he may be required to pay in actions or proceedings which he is or may be made a party by reason of his position as a director, officer or other agent of Gilead, and otherwise to the full extent permitted under Delaware law and Gilead's by-laws.

PART IV

ITEM 14. EXHIBITS, FINANCIAL STATEMENT SCHEDULES AND REPORTS ON FORM 8-K

(A) THE FOLLOWING DOCUMENTS ARE FILED AS PART OF THIS FORM 10-K:

(1) All schedules are omitted because they are not required or the required information is included in the financial statements or notes thereto.

(2) Exhibits

EXHIBIT FOOTNOTE	EXHIBIT NUMBER	DESCRIPTION OF DOCUMENT
(1)	3.1	Amended and Restated Certificate of Incorporation of the Registrant.
	3.2	By-laws of the Registrant, as amended and restated March 30, 1999.
(3)	3.3	Certificate of Amendment of Restated Certificate of Incorporation.
	4.1	Reference is made to Exhibits 3.1, 3.2, and 3.3.
(4)	4.2	Rights Agreement, dated as of November 21, 1994, between Registrant and First Interstate Bank, with exhibits.
(4)	4.3	Form of letter sent to Gilead Sciences, Inc. stockholders, dated December 14, 1994.
(3)	10.1	Form of Indemnity Agreement entered into between the Registrant and its directors and executive officers.
(5)	10.3	Form of Employee Proprietary Information and Invention Agreement entered into between Registrant and certain of its officers and key employees.
(2)	10.4	Registrant's 1987 Incentive Stock Option Plan and related agreements.
(2)	10.5	Registrant's 1987 Supplemental Stock Option Plan and related agreements.
	10.7	Registrant's Employee Stock Purchase Plan, as amended March 30, 1999.
	10.8	Registrant's 1991 Stock Option Plan, as amended March 30, 1999.
(2)	10.15	Form of Non-Qualified Stock Option issued to certain executive officers and directors in 1991.
(2)	10.16	Relocation Loan Agreement, dated as of November 1, 1990 among Registrant, John C. Martin and Rosemary Martin.
(2)	10.17	Vintage Park Research and Development Net Lease by and between Registrant and Vintage Park Associates dated March 27, 1992 for premises located at 344B, 346 and 353 Lakeside Drive, Foster City, California with related addendum, exhibits and amendments.
(2)	10.21	Letter Agreement, dated as of September 23, 1991 between Registrant and IOCB/ REGA, with exhibits with certain confidential information deleted.
(6)	10.23	Vintage Park Research and Development Net Lease by and between Registrant and Vintage Park Associates dated September 16, 1993 for premises located at 335 Lakeside Drive, Foster City, California with related exhibits.

(7)	10.26	Amendment Agreement, dated October 25, 1993 between Registrant and IOCB/ REGA, and related license agreements and exhibits with certain confidential information deleted.
(7)	10.28	Loan Agreement among Registrant and The Daiwa Bank, Limited dated May 17, 1994 with certain confidential information deleted.
(8)	10.29	License and Supply agreement between Registrant and American Cyanamid Company dated August 1, 1994 with certain confidential information deleted.
(4)	10.30	Loan Agreement, dated as of October 1, 1994 among Registrant and Mark L. Perry and Melanie P. Pena.
	10.33+	Registrant's 1995 Non-Employee Directors' Stock Option Plan, as amended January 26, 1999, and related form of stock option grant.

EXHIBIT FOOTNOTE	EXHIBIT NUMBER	DESCRIPTION OF DOCUMENT
(9)	10.34	Collaborative Research Agreement, dated as of March 25, 1996, by and between Registrant and Glaxo Wellcome Inc. with certain confidential information deleted.
(10)	10.36	Vintage Park Research and Development Lease by and between Registrant and WCB Sixteen Limited Partnership dated June 24, 1996 for premises located at 333 Lakeside Drive, Foster City, California.
(10)	10.37	Amendment No. 1 to Vintage Park Research and Development Lease by and between Registrant and WCB Seventeen Limited Partnership dated June 24, 1996 for premises located at 335 Lakeside Drive, Foster City, California.
(10)	10.38	Amendment No. 2 to Vintage Park Research and Development Lease by and between Registrant and WCB Seventeen Limited Partnership dated June 24, 1996 for premises located at 344B, 346 and 353 Lakeside Drive, Foster City, California.
(11)	10.40	License and Supply Agreement between Registrant and Pharmacia & Upjohn S.A. dated August 7, 1996 with certain confidential information deleted.
(11)	10.41	Series B Preferred Stock Purchase Agreement between Registrant and Pharmacia & Upjohn S.A. dated August 7, 1996.
(11)	10.42	Development and License Agreement between Registrant and F. Hoffmann-La Roche Ltd and Hoffmann-La Roche Inc dated September 27, 1996 with certain confidential information deleted.
(12)	10.45	Amended and Restated Copromotion Agreement between Registrant and Roche Laboratories, Inc. dated September 12, 1997 with certain confidential information deleted.
(13)	10.46	Amendment No. 1 to Collaborative Research Agreement, dated as of December 22, 1997, between Registrant and Glaxo Wellcome Inc.
	10.47*	Patent Rights Purchase Agreement between Registrant and Isis Pharmaceuticals, Inc. dated December 18, 1998.
	10.48+	Amendment No. 3 to Vintage Park Research and Development Lease by and between Registrant and Spieker Properties, L.P. dated August 14, 1998 for premises located at 355 Lakeside Drive, Foster City, California.
(14)	10.49	Agreement and Plan of Merger dated February 28, 1999 by and among Registrant, Gazelle Acquisition Sub, Inc. and NeXstar Pharmaceuticals, Inc.
(14)	10.50	Share Option Agreement dated February 28, 1999 by and between Registrant and NeXstar Pharmaceuticals, Inc.
(14)	10.51	Form of Voting Agreement in connection with merger with NeXstar Pharmaceuticals, Inc.
	23.1	Consent of Ernst & Young LLP, Independent Auditors. Reference is made to page 70.
	24.1	Power of Attorney. Reference is made to page 68.
	27.1+	Financial Data Schedule.

+ Previously filed.

* Confidential treatment has been requested.

(1) Filed as an exhibit to Registrant's Registration Statement on Form S-8 (No. 33-46058) and incorporated herein by reference.

(2) Filed as an exhibit to Registrant's Registration Statement on Form S-1 (No. 33-44534) or amendments thereto and incorporated herein by reference.

(3) Filed as an exhibit to Registrant's Registration Statement on Form S-3 (No. 333-868) or amendments thereto and incorporated herein by reference.

(4) Filed as an exhibit to Registrant's Quarterly Report on Form 10-Q for the quarter ended December 31, 1994 and incorporated herein by reference.

(5) Filed as an exhibit to Registrant's Registration Statement on Form S-1 (No. 33-55680) or amendments thereto and incorporated herein by reference.

(6) Filed as an exhibit to Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 1993 and incorporated herein by reference.

(7) Filed as an exhibit to Registrant's Annual Report on Form 10-K for the fiscal year ended March 31, 1994 and incorporated herein by reference.

(8) Filed as an exhibit to Registrant's Quarterly Report on Form 10-Q for the

quarter ended September 30, 1994 and incorporated herein by reference.

(9) Filed as an exhibit to Registrant's Annual Report on Form 10-K for the nine month period ended December 31, 1995.

(10) Filed as an exhibit to Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 1996 and incorporated herein by reference.

(11) Filed as an exhibit to Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 1996 and incorporated herein by reference.

(12) Filed as an exhibit to Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 1997 and incorporated herein by reference.

(13) Filed as an exhibit to Registrant's Annual Report on Form 10-K for the year ended December 31, 1997 and incorporated herein by reference.

(14) Filed as an exhibit to Registrant's Current Report on Form 8-K filed on March 9, 1999 and incorporated herein by reference.

(B) REPORTS ON FORM 8-K

There were no reports on Form 8-K filed by the Registrant during the fourth quarter of the fiscal year ended December 31, 1998. On March 9, 1999, the Registrant filed a Current Report on Form 8-K regarding the proposed merger with NeXstar Pharmaceuticals, Inc.

GILEAD SCIENCES, INC.

CONSOLIDATED FINANCIAL STATEMENTS

YEARS ENDED DECEMBER 31, 1998, 1997 AND 1996
CONTENTS

REPORT OF ERNST & YOUNG LLP, INDEPENDENT AUDITORS

The Board of Directors and Stockholders
Gilead Sciences, Inc.

We have audited the accompanying consolidated balance sheets of Gilead Sciences, Inc. as of December 31, 1998 and 1997 and the related consolidated statements of operations, stockholders' equity and cash flows for each of the three years in the period ended December 31, 1998. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain

reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Gilead Sciences, Inc. at December 31, 1998 and 1997, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 1998, in conformity with generally accepted accounting principles.

/s/ ERNST & YOUNG LLP

Palo Alto, California
January 21, 1999

GILEAD SCIENCES, INC.

CONSOLIDATED BALANCE SHEETS

(IN THOUSANDS, EXCEPT SHARE AND PER SHARE AMOUNTS)

	DECEMBER 31,	
	1998	1997
ASSETS		
Current assets:		
Cash and cash equivalents	$ 32,475	$ 31,990
Short-term investments	247,464	290,308
Other current assets	8,371	17,960
Total current assets	288,310	340,258
Property and equipment, net	10,182	10,313
Other assets	4,368	1,498
	$ 302,860	$ 352,069
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 3,422	$ 3,303
Accrued clinical and preclinical expenses	11,925	12,989
Other accrued liabilities	12,358	5,705
Deferred revenue	3,275	9,541
Current portion of long-term debt and equipment financing obligations	770	1,853
Total current liabilities	31,750	33,391
Non-current portion of long-term debt	563	1,331
Commitments		
Stockholders' equity:		
Preferred stock, par value $.001 per share, issuable in series; 5,000,000 shares authorized; 1,133,786 shares of Series B convertible preferred issued and outstanding at December 31, 1998 and 1997 (liquidation preference of $40,000)	1	1
Common stock, par value $.001 per share; 60,000,000 shares authorized; 30,710,435 shares and 30,041,584 shares issued and outstanding at December 31, 1998 and 1997, respectively	31	30
Additional paid-in capital	489,183	479,737
Accumulated other comprehensive income	43	344

Deferred compensation	(157)	(286)
Accumulated deficit	(218,554)	(162,479)
Total stockholders' equity	270,547	317,347
	$ 302,860	$ 352,069

See accompanying notes

GILEAD SCIENCES, INC.

CONSOLIDATED STATEMENTS OF OPERATIONS

(IN THOUSANDS, EXCEPT PER SHARE AMOUNTS)

	YEAR ENDED DECEMBER 31,		
	1998	1997	1996
Revenues:			
Product sales, net	$ 6,074	$ 11,735	$ 8,477
Contract revenue	24,198	27,413	24,910
Royalty revenue, net	2,298	889	33
Total revenues	32,570	40,037	33,420
Costs and expenses:			
Cost of product sales	594	1,167	910
Research and development	75,298	59,162	41,881
Selling, general and administrative	31,003	25,472	26,692
Total costs and expenses	106,895	85,801	69,483
Loss from operations	(74,325)	(45,764)	(36,063)
Interest income	18,442	18,260	15,042
Interest expense	(192)	(489)	(711)
Net loss	$ (56,075)	$ (27,993)	$ (21,732)
Basic and diluted loss per common share	$ (1.85)	$ (0.95)	$ (0.78)
Common shares used to calculate basic and diluted loss per common share	30,363	29,326	27,786

See accompanying notes

GILEAD SCIENCES, INC.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(IN THOUSANDS, EXCEPT SHARE AND PER SHARE AMOUNTS)

	PREFERRED STOCK	COMMON STOCK	ADDITIONAL PAID-IN CAPITAL	ACCUMULATED OTHER COMPREHENSIVE INCOME	DEFERRED COMPENSATION	ACCUMULATED DEFICIT
Balance at December 31, 1995	$ --	$ 24	$ 265,460	$ 167	$ (1,398)	$ (112,754)
Net Loss	--	--	--	--	--	(21,732)
Unrealized loss on available-for-sale short-term investments, net	--	--	--	(78)	--	--
Comprehensive loss	--	--	--	--	--	--
Issuance of 500,853 shares of common stock upon the exercise of stock options	--	1	3,077	--	--	--
Issuance of 181,590 shares of common stock pursuant to the employee stock purchase						

plan	--	--	1,856	--	--	--
Issuance of 4,305,844 shares of common stock at $37.75 per share (net of issuance costs of $7,063)	--	4	155,478	--	--	--
Compensation related to accelerated vesting on stock options	--	--	706	--	--	--
Amortization of deferred compensation	--	--	--	--	849	--
Balance at December 31, 1996	$ --	$ 29	$ 426,577	$ 89	$ (549)	$ (134,486)
Net Loss	--	--	--	--	--	(27,993)
Unrealized gain on available-for-sale short-term investments, net	--	--	--	255	--	--
Comprehensive loss	--	--	--	--	--	--
Issuance of 1,190,541 shares of common stock upon the exercise of stock options	--	1	11,243	--	--	--
Issuance of 92,878 shares of common stock pursuant to the employee stock purchase plan	--	--	1,918	--	--	--
Issuance of 1,133,786 shares of preferred stock	1	--	39,999	--	--	--
Amortization of deferred compensation	--	--	--	--	263	--
Balance at December 31, 1997	$ 1	$ 30	$ 479,737	$ 344	$ (286)	$ (162,479)
Net Loss	--	--	--	--	--	(56,075)
Unrealized loss on available-for-sale short-term investments, net	--	--	--	(301)	--	--
Comprehensive loss	--	--	--	--	--	--
Issuance of 568,969 shares of common stock upon the exercise of stock options	--	1	6,859	--	--	--
Issuance of 99,882 shares of common stock pursuant to the employee stock purchase plan	--	--	2,153	--	--	--
Amortization of deferred compensation	--	--	--	--	129	--
Amounts recognized under compensatory stock transactions	--	--	434	--	--	--
Balance at December 31, 1998	$ 1	$ 31	$ 489,183	$ 43	$ (157)	$ (218,554)

	TOTAL STOCKHOLDERS' EQUITY
Balance at December 31, 1995	$ 151,499
Net Loss	(21,732)
Unrealized loss on available-for-sale short-term investments, net	(78)
Comprehensive loss	(21,810)
Issuance of 500,853 shares of common stock upon the exercise of stock options	3,078
Issuance of 181,590 shares of common stock pursuant to the employee stock purchase plan	1,856
Issuance of 4,305,844 shares of common stock at $37.75 per share (net of issuance costs of $7,063)	155,482
Compensation related to accelerated vesting on stock options	706
Amortization of deferred compensation	849
Balance at December 31, 1996	$ 291,660
Net Loss	(27,993)
Unrealized gain on available-for-sale short-term investments, net	255
Comprehensive loss	(27,738)
Issuance of 1,190,541 shares of common stock upon the exercise of stock options	11,244
Issuance of 92,878 shares of common stock pursuant to the employee stock purchase plan	1,918
Issuance of 1,133,786 shares of preferred stock	40,000
Amortization of deferred compensation	263
Balance at December 31, 1997	$ 317,347
Net Loss	(56,075)
Unrealized loss on available-for-sale short-term investments, net	(301)
Comprehensive loss	(56,376)
Issuance of 568,969 shares of common stock upon the exercise of stock options	6,860
Issuance of 99,882 shares of common stock pursuant to the	

employee stock purchase plan	2,153
Amortization of deferred compensation	129
Amounts recognized under compensatory stock transactions	434
Balance at December 31, 1998	$ 270,547

See accompanying notes

GILEAD SCIENCES, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS

(IN THOUSANDS)

	YEAR ENDED DECEMBER 31,		
	1998	1997	1996
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net loss	$ (56,075)	$ (27,993)	$ (21,732)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	2,757	2,983	3,773
Stock plan compensation expense	434	--	706
Changes in assets and liabilities:			
Other current assets	9,589	(13,670)	(2,732)
Other assets	(2,870)	(250)	(175)
Accounts payable	119	802	89
Accrued clinical and preclinical expenses	(1,064)	7,982	1,084
Other accrued liabilities	6,653	1,272	2,204
Deferred revenue	(6,266)	9,014	319
Total adjustments	9,352	8,133	5,268
Net cash used in operating activities	(46,723)	(19,860)	(16,464)
CASH FLOWS FROM INVESTING ACTIVITIES:			
Purchases of short-term investments	(486,067)	(410,997)	(437,627)
Sales of short-term investments	390,251	196,515	248,552
Maturities of short-term investments	138,359	88,408	153,257
Capital expenditures	(2,497)	(3,861)	(3,727)
Net cash provided by (used in) investing activities	40,046	(129,935)	(39,545)
CASH FLOWS FROM FINANCING ACTIVITIES:			
Payments of financing obligations and long-term debt	(1,851)	(3,361)	(2,843)
Proceeds from issuance of long-term debt	--	--	3,000
Proceeds from issuance of preferred stock	--	40,000	--
Proceeds from issuances of common stock	9,013	13,162	160,416
Net cash provided by financing activities	7,162	49,801	160,573
Net increase (decrease) in cash and cash equivalents	485	(99,994)	104,564
Cash and cash equivalents at beginning of year	31,990	131,984	27,420
Cash and cash equivalents at end of year	$ 32,475	$ 31,990	$ 131,984
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:			
Interest paid	$ 202	$ 509	$ 731

See accompanying notes

GILEAD SCIENCES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 1998

1. ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

ORGANIZATION AND PRINCIPLES OF CONSOLIDATION

Gilead Sciences, Inc. (the "Company" or "Gilead") was incorporated in the State of Delaware on June 22, 1987. All of the Company's operations are located in the United States. The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiary Gilead Sciences Limited, which was formed under the laws of the United Kingdom in November 1995. To date, the subsidiary has been inactive and has no material assets or liabilities.

USE OF ESTIMATES

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

BUSINESS SEGMENTS

In 1998, the Company adopted Statement of Financial Accounting Standards ("SFAS") No. 131, DISCLOSURES ABOUT SEGMENTS OF AN ENTERPRISE AND RELATED INFORMATION, which addresses how public business enterprises must report information about operating segments. For a number of years, the Company has been primarily engaged in one reportable operating segment, the discovery, development and marketing of a new class of human therapeutics based on nucleotides. Gilead's President and Chief Executive Officer evaluates performance and allocates resources based on the operating results of the whole Company. The operating expenses of the Company are not allocated to individual business components so that no measure of profit or loss for any individual component of the Company is available. Gilead attributes revenues from customers to individual countries based on the location of the customer. At the present time, the Company is organized and managed along functional lines. VISTIDE-Registered Trademark- (cidofovir injection), a drug for the treatment of cytomegalovirus ("CMV") retinitis in patients with AIDS, received marketing clearance from the FDA in June 1996 and is the Company's first commercially available product. Gilead sells this product in the United States through major drug wholesalers and it is currently the Company's only source of product sales revenue. Gilead has recorded no product sales from customers outside of the U.S.

Gilead also derives revenue from contracts, including reimbursement of research and development ("R&D") costs and the sale of patent rights, and from royalties. During 1998, Gilead recognized royalty revenue from sales of VISTIDE outside the United States by Pharmacia & Upjohn S.A. ("P&U"), and from the co-promotion with Roche Laboratories Inc. ("Roche Labs") of Roferon-A-Registered Trademark- (Interferon alfa-2a, recombinant) for the treatment of chronic hepatitis C infection in the United States. Gilead has recorded contract revenue from P&U, F. Hoffmann-La Roche, Ltd. and Glaxo Wellcome Inc. ("Glaxo"), companies located in Sweden, Switzerland and the United Kingdom, respectively. The amounts, sources and nature of the Company's contract and royalty revenues are described in more detail in Note 3. Long-lived assets located outside of the U.S. are immaterial at December 31, 1998 and 1997.

REVENUE RECOGNITION

The Company recognizes product sales revenue at the time product is shipped. Provisions are made for estimated product returns, cash discounts and government discounts and rebates. Gilead retains no

1. ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

future performance obligations under the terms of its product sales. Contract revenue recognized under the Company's collaborative R&D agreements, license and supply agreements and patent rights purchase agreement is recorded as earned based upon the performance requirements of the contract. Payments received in advance under these agreements are recorded as deferred revenue until earned. Under the Company's collaborative R&D agreements, the Company has no explicit or implied obligation or intent to repay any amounts earned and recognized. Royalty revenue is recognized when received, which is generally in the quarter following that in which the corresponding sales occur.

RESEARCH AND DEVELOPMENT COSTS

All R&D costs, including those funded by third parties, are expensed as incurred.

STOCK-BASED COMPENSATION

In accordance with the provisions of SFAS No. 123, ACCOUNTING FOR STOCK-BASED COMPENSATION, the Company has elected to follow Accounting Principles Board Opinion ("APB") No. 25, ACCOUNTING FOR STOCK ISSUED TO EMPLOYEES, and related interpretations in accounting for its employee stock option plans. Under APB No. 25, if the exercise price of the Company's employee and director stock options equals or exceeds the fair value of the underlying stock on the date of grant, no compensation expense is recognized. Subsequent to the effective date of SFAS No. 123, the Company's policy is to record compensation expense over the vesting period for stock grants to consultants and scientific advisors based on the fair value of the options. See Note 7 for pro forma disclosures of stock-based compensation pursuant to SFAS No. 123.

BASIC AND DILUTED LOSS PER COMMON SHARE

For all periods presented, both basic and diluted loss per common share are computed based on the weighted average number of common shares outstanding during the period. Convertible preferred stock and stock options could potentially dilute basic earnings per share in the future, but were excluded from the computation of diluted loss per share as their effect is antidilutive for the periods presented.

CASH AND CASH EQUIVALENTS

The Company considers highly liquid investments with insignificant interest rate risk and a remaining maturity of three months or less at the purchase date to be cash equivalents. Gilead may enter into overnight repurchase agreements under which it purchases securities with an obligation to resell them the following day. Securities purchased under agreements to resell are recorded at face value and reported in cash and cash equivalents.

SECURITIES AVAILABLE-FOR-SALE

Management determines the appropriate classification of debt securities at the time of purchase and reevaluates such designation at each balance sheet date. The Company's debt securities are classified as available-for-sale and carried at estimated fair values in cash equivalents and short-term investments. At December 31, 1998, cash and cash equivalents includes $30.5 million of securities designated as available-for-sale ($28.5 million at December 31, 1997). Fair values of available-for-sale securities are based on prices obtained from commercial pricing services. Unrealized gains and losses on available-for-sale

1. ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)
securities are excluded from earnings and reported as a separate component of stockholders' equity. Interest income includes interest, dividends, amortization of purchase premiums and discounts, and realized gains and losses on sales of securities. The cost of securities sold is based on the specific identification method.

CONCENTRATIONS OF CREDIT RISK

Cash and cash equivalents and short-term investments are the financial instruments that primarily subject the Company to credit risk. By policy, the Company limits amounts invested in securities by maturity, industry group, investment type and issuer, except for securities issued by the U.S. government. Gilead is not exposed to any significant concentrations of credit risk. The goals of the Company's investment policy, in order of priority, are as follows:

1. Safety and preservation of principal and diversification of risk;

2. Liquidity of investments sufficient to meet cash flow requirements; and

3. Competitive after-tax rate of return.

ACCOUNTS RECEIVABLE AND OTHER CURRENT ASSETS

Trade receivables, net of allowances for returns, discounts, rebates and bad debts, are reported on the consolidated balance sheet in other current assets. At December 31, 1997, other current assets includes reimbursable R&D expenses and a milestone payment totaling approximately $12.4 million due from F. Hoffmann-La Roche, Ltd. and Hoffmann-La Roche Inc. (collectively, "Roche"). For additional information, refer to Note 3.

PROPERTY AND EQUIPMENT

All of the Company's capitalized software is purchased. Gilead has no internally developed computer software. Property and equipment are stated at cost and consist of the following (in thousands):

	DECEMBER 31,	
	1998	1997
Equipment subject to financing obligations	$ 34	$ 2,732
Laboratory equipment	7,037	5,571
Office furniture and equipment	2,863	2,019
Computer equipment	3,685	2,062
Capitalized software	1,422	956
Leasehold improvements	12,797	12,583
	27,838	25,923
Less accumulated depreciation and amortization	(17,656)	(15,610)
	$ 10,182	$ 10,313

1. ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Property and equipment are depreciated on a straight-line basis over their estimated useful lives, as follows:

DESCRIPTION	ESTIMATED USEFUL LIFE (IN YEARS)
Laboratory equipment	4-8
Office furniture and equipment	6
Computer equipment	2-3
Capitalized software	3

Leasehold improvements and equipment subject to financing obligations are amortized on a straight-line basis over the shorter of the estimated useful life of the item or the term of the related lease or borrowing.

LONG-LIVED ASSETS

The carrying value of long-lived assets is reviewed on a regular basis for the existence of facts or circumstances both internally and externally that may suggest impairment. Specific potential indicators of impairment include:

- a significant decrease in the fair value of an asset;
- a significant change in the extent or manner in which an asset is used or a significant physical change in an asset;
- a significant adverse change in legal factors or in the business climate that affects the value of an asset or an adverse action or assessment by a regulator;
- an accumulation of costs significantly in excess of the amount originally expected to acquire or construct an asset; and
- operating or cash flow losses combined with a history of operating or cash flow losses or a projection or forecast that demonstrates continuing losses associated with an income-producing asset.

Should there be indication of an impairment, the Company will confirm this by comparing the estimated future cash flows expected to result from the use of the asset and its eventual disposition to the carrying amount of the asset. Assets are grouped at the lowest level for which there are identifiable cash flows that are largely independent of the cash flows generated by other asset groups. If the fair value of the asset is less than the carrying amount of the asset, an impairment loss, measured as the excess of the carrying value of the asset over its fair value, will be recognized. The cash flow estimates used in such calculations are based on management's best estimates, using appropriate and customary assumptions and projections at the time. The Company has not recorded any losses related to the impairment of long-lived assets in the years ended December 31, 1998, 1997 and 1996.

1. ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

OTHER ACCRUED LIABILITIES

Other accrued liabilities are summarized as follows (in thousands):

	DECEMBER 31,	
	1998	1997
Accrued compensation	$ 2,251	$ 1,833
Accrued Medicaid rebates	1,705	1,881
Estimated liability to Roche (Note 3)	5,000	--
Other	3,402	1,991
	$ 12,358	$ 5,705

FOREIGN CURRENCY INSTRUMENTS

The Company periodically enters into foreign exchange forward contracts with financial institutions in accordance with its foreign exchange risk management policy to hedge the currency exchange risk associated with certain firmly committed purchase transactions. In general, these contracts do not expose the Company to market risk because gains and losses on the contracts offset gains and losses on the transactions being hedged. The Company's exposure to credit risk from these contracts is a function of changes in interest and currency exchange rates and, therefore, varies over time. Gilead limits its risk that counterparties to these contracts may be unable to perform by transacting only with major U.S. banks. The Company also limits its risk of loss by entering into contracts that provide for net settlement at maturity. Therefore, the Company's overall risk of loss in the event of a counterparty default is limited to the amount of any unrecognized and unrealized gains on outstanding contracts (i.e., those contracts that have a positive fair value) at the date of default.

Gains and losses on these contracts are deferred and reported as a component of the related transaction in the period in which it occurs. At both December 31, 1998 and 1997, the Company's outstanding forward foreign exchange contracts and their fair values were immaterial.

NEW ACCOUNTING PRONOUNCEMENT

In June 1998, the Financial Accounting Standards Board issued SFAS No. 133, ACCOUNTING FOR DERIVATIVE INSTRUMENTS AND HEDGING ACTIVITIES, which establishes accounting and reporting standards for derivative instruments, including forward foreign exchange contracts, and for hedging activities. SFAS No. 133 is effective for years beginning after June 15, 1999. Under Gilead's existing derivatives activity levels and hedging strategies, the adoption of SFAS No. 133 would not have a significant impact on the Company's present financial accounting and reporting practices.

RECLASSIFICATIONS

Certain prior period amounts have been reclassified to conform to the 1998 presentation.

2. INVESTMENTS

The following is a summary of available-for-sale securities (in thousands):

	AMORTIZED COST	GROSS UNREALIZED GAINS	GROSS UNREALIZED LOSSES	ESTIMATED FAIR VALUE
DECEMBER 31, 1998				
U.S. treasury securities and obligations of U.S. government agencies	$ 78,703	$ 62	$ (123)	$ 78,642
Certificates of deposit	38,058	65	(11)	38,112
Corporate debt securities	34,676	152	(18)	34,810
Asset-backed securities	89,565	101	(185)	89,481
Other debt securities	36,984	--	--	36,984
Total	$ 277,986	$ 380	$ (337)	$ 278,029
DECEMBER 31, 1997				
U.S. treasury securities and obligations of U.S. government agencies	$ 35,615	$ 55	$ (6)	$ 35,664
Certificates of deposit	65,485	20	(2)	65,503
Corporate debt securities	78,054	192	(1)	78,245
Asset-backed securities	118,362	121	(35)	118,448
Other debt securities	20,965	--	--	20,965
Total	$ 318,481	$ 388	$ (44)	$ 318,825

The following table presents certain information related to sales of available-for-sales securities (in thousands):

	YEAR ENDED DECEMBER 31,		
	1998	1997	1996
Proceeds from sales	$ 390,251	$ 196,515	$ 248,552
Gross realized gains on sales	$ 1,127	$ 225	$ 451
Gross realized losses on sales	$ 654	$ 142	$ 65

At December 31, 1998, $63.6 million of the Company's portfolio of short-term investments (excluding asset-backed securities) has a contractual maturity of less than one year and $94.4 million of the portfolio has a contractual maturity greater than one year but less than three years. None of the estimated maturities of the Company's asset-backed securities exceed three years. Under the Company's investment policy, it may enter into repurchase agreements ("repos") with major banks and authorized dealers provided that such repos are collateralized by U.S. government securities with a fair value of at least 102 percent of the fair value of securities sold to Gilead.

3. CONTRACT REVENUE AND ROYALTIES

PHARMACIA & UPJOHN

In August 1996, the Company and P&U entered into a License and Supply Agreement ("P&U Agreement") to market VISTIDE in all countries outside the United States. Under the terms of the P&U

3. CONTRACT REVENUE AND ROYALTIES (CONTINUED)
Agreement, P&U paid Gilead an initial license fee of $10.0 million. During the second quarter of 1997, VISTIDE was approved for marketing in the European Union by the European Commission, which triggered an additional cash milestone payment of $10.0 million by P&U to the Company. Also as a result of achieving this milestone, in the second quarter of 1997 the Company issued and P&U purchased 1,133,786 shares of Series B Convertible Preferred Stock for approximately $40.0 million, or $35.28 per share. For additional information about the preferred stock, refer to Note 7.

Under the terms of the P&U Agreement and related agreements covering expanded access programs for VISTIDE outside of the United States, the Company is responsible for maintaining the cidofovir patent portfolio and for supplying to P&U bulk cidofovir used to manufacture the finished VISTIDE product ("Product"). Gilead is entitled to receive a royalty based upon P&U's sale of Product. It receives a portion of the royalty upon shipping either bulk drug substance or Product to P&U, and the remainder upon P&U's sale of Product to third parties. Any royalties that Gilead receives before Product is sold to third parties are recorded as deferred revenue until such third-party sales occur. At December 31, 1998, the Company has recorded on its balance sheet approximately $3.3 million of P&U deferred revenue ($2.1 million at December 31, 1997).

HOFFMANN-LA ROCHE

In September 1996, Gilead and Roche entered into a collaboration agreement ("Roche Agreement") to develop and commercialize therapies to treat and prevent viral influenza. Under the Roche Agreement, Roche received exclusive worldwide rights to Gilead's proprietary influenza neuraminidase inhibitors. In October 1996, Roche made an initial license fee payment to Gilead of $10.3 million, which the Company reported as contract revenue. Upon achieving certain developmental milestones, in both the second and fourth quarters of 1997, Gilead earned cash payments of $3.0 million per quarter, for a total of $6.0 million. Gilead is entitled to additional cash payments of up to $34.0 million upon achieving additional developmental and regulatory milestones. If any commercial products are developed under the collaboration, Roche will pay Gilead royalties based on net product sales.

Under the Roche Agreement, Roche reimburses the Company for its related R&D costs under this program by funding such costs quarterly and generally in advance, based on an annual budget. Reimbursements are included in contract revenue as the Company incurs the related R&D costs. Amounts incurred by the Company in excess of amounts funded may also be reimbursed, subject to Roche's approval. In this event, revenue is not recognized until such approval has been obtained. Conversely, if amounts funded by Roche exceed the Company's related R&D costs, the Company may be required to repay such excess funding to Roche.

For the years ended December 31, 1998, 1997 and 1996, the Company recorded approximately $16.4 million, $8.2 million and $1.1 million, respectively, of R&D reimbursement revenue related to the Roche Agreement, which is reported as contract revenue in the accompanying consolidated statements of operations. The $16.4 million recorded as revenue during 1998 includes $5.2 million attributable to R&D expenses incurred in the fourth quarter of 1997, which were subject to Roche's approval as of December 31, 1997. Such expenses were approved for reimbursement and recognized in contract revenue in 1998. Except for this $5.2 million, R&D costs related to the Roche Agreement approximate the reimbursement revenue in each year presented and are included in R&D expenses.

3. CONTRACT REVENUE AND ROYALTIES (CONTINUED)

At December 31, 1998, the Company has recorded an accrued liability of $5.0 million, which represents 1998 R&D funding from Roche in excess of actual 1998 R&D costs. The Company and Roche are in the process of finalizing the 1999 budget and, as a result, the Company has not yet received funding for estimated 1999 R&D spending under the Roche Agreement. At December 31, 1997, deferred revenue includes $7.2 million, representing Roche's advance reimbursement of budgeted R&D costs for the first quarter of 1998.

In September 1996, Gilead and Roche Labs entered into an agreement to co-promote Roche's Roferon-A for the treatment of chronic hepatitis C infection in the United States. Roche paid Gilead a $0.2 million one-time fee in 1996 in connection with the signing of this agreement. Beginning in 1997, Roche was required to pay Gilead a royalty based on the net product sales. The Company recognizes these royalties when received. During 1998, Gilead received $0.6 million, which is reported as royalty revenue. This co-promotion agreement concluded at the end of 1998. While the Company expects to receive transition payments under the agreement in 1999, such amounts are not expected to be significant.

GLAXO WELLCOME

In July 1990, the Company entered into a collaborative research agreement with Glaxo. Concurrent with the signing of the agreement, Glaxo made an $8.0 million equity investment in the Company and holds 889,911 shares (approximately 2.8%) of the Company's outstanding common stock at December 31, 1998. Under the terms of the Glaxo agreement, as amended over time, the Company received $1.8 million in 1998, and $3.0 million in both 1997 and 1996, to fund research, which is reported as contract revenue in the accompanying consolidated statements of operations. The R&D costs reimbursed by Glaxo approximate the related revenue and are included in R&D expense. This agreement and the related funding were terminated in June 1998.

BAUSCH & LOMB

In August 1994, the Company entered into a license and supply agreement with Bausch & Lomb Incorporated (formerly Storz Instrument Company, a subsidiary of American Home Products Corporation), to develop and market an eyedrop formulation of cidofovir for the potential treatment of topical ophthalmic viruses. The Company received a $0.3 million annual fee under this agreement in each of the years ended December 31, 1997 and 1996, which is reported as contract revenue. If specified milestones are achieved, the Company may receive up to $3.0 million in milestone payments. The Company also may be entitled to receive future royalties on product sales under the agreement.

ISIS PHARMACEUTICALS

In December 1998, Gilead and Isis Pharmaceuticals, Inc. ("Isis") entered into an agreement under which Gilead sold Isis its antisense patent estate, including patents and patent applications covering antisense chemistry and antisense drug delivery systems. Under the terms of the agreement, Isis is required to pay Gilead a total of $6.0 million in four nonrefundable installments. The first $2.0 million was paid in December 1998, and the remaining $4.0 million is payable in three additional payments (one payment of $1.0 million in both 1999 and 2000, and one payment of $2.0 million in 2001). The total sale price of $6.0 million is included in contract revenue in the Company's consolidated statement of operations for the

3. CONTRACT REVENUE AND ROYALTIES (CONTINUED)
year ended December 31, 1998. Gilead has no ongoing research or funding obligations under the agreement.

4. LONG-TERM DEBT

In October 1996, the Company entered into an unsecured $3.0 million term loan to finance its office and R&D facilities expansion. The four-year loan requires quarterly principal payments of $0.2 million, plus applicable interest, commencing October 1, 1996. The interest rate was fixed at 6.9 percent for the first year of the loan, and resets periodically thereafter based on applicable LIBOR rates. At December 31, 1998, the total debt outstanding is approximately $1.3 million, the current portion outstanding is $0.8 million and the book value of the debt approximates its fair value.

The terms of the debt require the Company to comply with certain financial and operating covenants. At December 31, 1998, the Company was in compliance with all such covenants.

5. COMMITMENTS

The Company leases its facilities pursuant to operating leases that have expiration dates in March 2006, with two five-year renewal options. Rent expense net of sublease income under these leases totaled approximately $2.2 million, $2.3 million and $2.1 million for the years ended December 31, 1998, 1997 and 1996, respectively.

At December 31, 1998, the aggregate noncancelable future minimum payments under the operating leases, net of aggregate future minimum rentals to be received by the Company under noncancelable subleases, are as follows (in thousands):

Year ending December 31:	
1999	$ 2,825
2000	2,992
2001	3,106
2002	3,224
2003	3,347
Thereafter	8,005
	$ 23,499

The Company has in place a letter of credit agreement from a bank, which secures the aggregate future payments under one of its facilities leases. At December 31, 1998, a total of $0.5 million was secured under this letter of credit arrangement.

6. COMPREHENSIVE INCOME

On January 1, 1998, the Company adopted SFAS No. 130, REPORTING COMPREHENSIVE INCOME, which establishes new requirements for reporting and displaying comprehensive income (loss) and its components. The adoption of SFAS No. 130 has no impact on the Company's net loss or total stockholders' equity. This new accounting standard requires net unrealized gains or losses on the

Company's available-for-sale securities to be reported as accumulated other comprehensive income (loss). Prior year financial statements have been reclassified to conform to the requirements of SFAS No. 130.

The following reclassification adjustments are required to avoid double-counting net realized gains on sales of securities that were previously included in comprehensive income prior to the sales of the securities (in thousands):

	YEAR ENDED DECEMBER 31,		
	1998	1997	1996
Net gains on sales of securities included in interest income	$ 473	$ 83	$ 386
Other comprehensive income:			
Net unrealized gain arising during the year	$ 172	$ 338	$ 308
Reclassification adjustment	(473)	(83)	(386)
Net unrealized gain (loss) reported in other comprehensive income	$ (301)	$ 255	$ (78)

7. STOCKHOLDERS' EQUITY

PREFERRED STOCK

The Company has 5,000,000 shares of authorized preferred stock issuable in series. The Company's Board of Directors is authorized to determine the designation, powers, preferences and rights of any such series. The Company has reserved 400,000 shares of preferred stock for potential issuance under the Preferred Share Purchase Rights Plan.

In June 1997, the Company issued 1,133,786 shares of Series B Convertible Preferred Stock to P&U for approximately $40.0 million, or $35.28 per share. Each preferred share is convertible at the option of the holder into one share of common stock at any time, and each has a liquidation value equal to its purchase price. The Series B Preferred Stock has substantially the same voting rights as the Company's common stock. Dividends are noncumulative and payable at the rate of 5 percent of the original issue price per year only when, as and if declared by the Company's Board of Directors. No dividends have been declared or paid on the Series B Convertible Preferred Stock.

EMPLOYEE STOCK PURCHASE PLAN

Under the Company's Employee Stock Purchase Plan ("ESPP"), employees can purchase shares of the Company's common stock based on a percentage of their compensation. The purchase price per share must equal at least the lower of 85 percent of the market value on the date offered or the date purchased. A total of 1,250,000 shares of common stock are reserved for issuance under the ESPP. As of December 31, 1998, 794,049 shares had been issued under the ESPP (694,167 shares as of December 31, 1997).

7. STOCKHOLDERS' EQUITY (CONTINUED)

Emerging Issues Task Force ("EITF") Issue No. 97-12, ACCOUNTING FOR

INCREASED SHARE AUTHORIZATIONS IN AN IRS SECTION 423 EMPLOYEE STOCK PURCHASE PLAN UNDER APB OPINION NO. 25, provides that new shares authorized under existing Section 423 employee stock purchase plans may give rise to compensation expense under circumstances specified in that accounting standard. During 1998, the Company recognized compensation expense of $0.4 million related to an ESPP share authorization approved in 1998 in accordance with the provisions of EITF Issue No. 97-12. In future years, the Company will not be required to recognize additional compensation expense related to the 1998 share authorization.

STOCK OPTION PLANS

In December 1987, the Company adopted the 1987 Incentive Stock Option Plan and the Supplemental Stock Option Plan for issuance of common stock to employees, consultants and scientific advisors. In April 1991, the Company's Board of Directors approved the granting of certain additional nonqualified stock options with terms and conditions substantially similar to those granted under the 1987 Supplemental Stock Option Plan. At the grant date, none of the options described above had exercise prices that were less than the fair value of the underlying stock on that date. The options vest over five years pursuant to a formula determined by the Company's Board of Directors and expire after ten years. No shares are available for grant of future options under any of these plans.

In November 1991, the Company adopted the 1991 Stock Option Plan ("1991 Plan") for issuance of common stock to employees and consultants. Options issued under the 1991 Plan shall, at the discretion of the Company's Board of Directors, be either incentive stock options or nonqualified stock options. In May 1998, the 1991 Plan was amended such that the exercise price of all stock options must be at least equal to the fair value of the Company's common stock on the date of grant. The options vest over five years pursuant to a formula determined by the Company's Board of Directors and expire after ten years. At December 31, 1998, 958,380 shares were available for grant of future options.

In November 1995, the Company adopted the 1995 Non-Employee Directors' Stock Option Plan ("Directors' Plan") for issuance of common stock to non-employee Directors pursuant to a predetermined formula. The exercise price of options granted under the Directors' Plan must be at least equal to the fair value of the Company's common stock on the date of grant. The options vest over five years from the date of grant in quarterly 5 percent installments and expire after ten years. At December 31, 1998, 85,000 shares were available for grant of future options under the Directors' Plan.

7. STOCKHOLDERS' EQUITY (CONTINUED)

The following table summarizes activity under all stock option plans for each of the three years in the period ended December 31, 1998. All option grants presented in the table had exercise prices not less than the fair value of the underlying stock on the grant date (shares in thousands):

	YEAR ENDED DECEMBER 31,					
	1998		1997		1996	
	SHARES	WEIGHTED AVERAGE EXERCISE PRICE	SHARES	WEIGHTED AVERAGE EXERCISE PRICE	SHARES	WEIGHTED AVERAGE EXERCISE PRICE
Outstanding, beginning of year	4,117	$ 19.39	4,651	$ 14.96	4,144	$ 10.55
Granted	1,128	27.69	923	29.21	1,239	25.89
Forfeited	(241)	27.11	(266)	20.51	(231)	13.70
Exercised	(569)	12.06	(1,191)	9.42	(501)	6.15
Outstanding, end of year	4,435	$ 22.16	4,117	$ 19.39	4,651	$ 14.96

Exercisable, end of year	1,885	$ 16.66	1,673	$ 13.83	2,025	$ 10.23

In 1995, the Company granted 75,000 stock options with exercise prices less than the fair value of the underlying stock at the grant date. For these options only, the Company recorded deferred compensation expense of $0.5 million, based on the difference between the grant price and the fair value of the underlying stock at the date of grant. This deferred compensation is being amortized to expense over the five-year vesting period of the options. Amortization expense for the years ended December 31, 1998, 1997 and 1996 totaled $0.1 million, $0.3 million and $0.8 million, respectively.

The following table summarizes information about exercise price ranges of outstanding and exercisable options at December 31, 1998 (options in thousands):

	OPTIONS OUTSTANDING			OPTIONS EXERCISABLE	
RANGE OF EXERCISE PRICES	OPTIONS OUTSTANDING	WEIGHTED-AVERAGE REMAINING CONTRACTUAL LIFE IN YEARS	WEIGHTED-AVERAGE EXERCISE PRICE	OPTIONS EXERCISABLE	WEIGHTED-AVERAGE EXERCISE PRICE
$ 0.24 - $16.50	1,245	4.47	$ 10.55	1,072	$ 10.57
$17.50 - $22.88	1,417	7.96	20.50	421	18.86
$23.00 - $32.00	1,114	8.27	27.65	279	28.70
$32.13 - $42.88	659	8.48	37.45	113	36.54
Total	4,435	7.14	$ 22.16	1,885	$ 16.66

PRO FORMA DISCLOSURES

The table below reflects Gilead's net loss and basic and diluted loss per common share if compensation cost for the Company's stock plans had been determined based on their estimated fair values at the grant dates for awards under those plans. Since pro forma compensation cost is amortized over the vesting

7. STOCKHOLDERS' EQUITY (CONTINUED)
periods of the related awards, and because SFAS No. 123 is applicable only to options granted or shares issued subsequent to March 31, 1995, its pro forma effect will not be fully reflected until 1999.

	YEAR ENDED DECEMBER 31,		
	1998	1997	1996
Pro forma net loss (in thousands)	$ (68,656)	$ (38,503)	$ (29,586)
Pro forma basic and diluted loss per share	$ (2.26)	$ (1.31)	$ (1.06)

Fair values of the options were estimated at grant dates using a Black-Scholes option pricing model. The Company used the multiple option approach and the following assumptions:

	1998	1997	1996
Expected life in years (from vesting date)--options	1.78	1.75	1.54
Expected life in years--ESPP	1.51	0.75	1.54
Interest rate--options	5.5%	6.2%	6.0%
Interest rate--ESPP	5.2%	5.6%	6.0%
Volatility	66%	66%	69%
Dividend yield	0%	0%	0%

The weighted average estimated fair value of each stock option granted for the years ended December 31, 1998, 1997 and 1996 was $15.90, $17.14 and $15.17, respectively. The weighted average estimated fair value of each ESPP share granted for the years ended December 31, 1998, 1997 and 1996 was $11.97, $9.57 and $5.49, respectively.

PREFERRED SHARE PURCHASE RIGHTS PLAN

In November 1994, the Company adopted a Preferred Share Purchase Rights Plan (the "Plan"). The Plan provides for the distribution of a preferred stock purchase right (a "Right") as a dividend for each share of Gilead common stock held of record at the close of business on December 14, 1994. The Rights are not currently exercisable. Under certain conditions involving an acquisition or proposed acquisition by any person or group of 15 percent or more of the Company's common stock, the Rights permit the holders (other than the 15 percent holder) to purchase Gilead common stock at a 50 percent discount from the market price at that time, upon payment of an exercise price of $60 per Right. In addition, in the event of certain business combinations, the Rights permit the purchase of the common stock of an acquirer at a 50 percent discount from the market price at that time. Under certain conditions, the Rights may be redeemed by the Company's Board of Directors in whole, but not in part, at a price of $.01 per Right. The Rights have no voting privileges and are attached to and automatically trade with Gilead common stock. The Rights expire on November 21, 2004.

8. INCOME TAXES

As of December 31, 1998, the Company had federal net operating loss carryforwards of approximately $223.0 million. The Company also had federal R&D tax credit carryforwards of approximately $7.9 million. The net operating loss and credit carryforwards will expire at various dates beginning in 2001 through 2018, if not utilized.

8. INCOME TAXES (CONTINUED)

Significant components of the Company's deferred tax assets for federal and state income taxes are as follows (in thousands):

	DECEMBER 31,	
	1998	1997
Deferred tax assets:		
Net operating loss carryforwards	$ 77,200	$ 57,100
R&D credits	10,700	6,800
Capitalized R&D for California	11,200	4,400
Other	4,500	2,300

Total deferred tax assets	103,600	70,600
Valuation allowance for deferred tax assets	(103,600)	(70,600)
Net deferred tax assets	$ --	$ --

The valuation allowance increased by $33.0 million and $15.3 million during the years ended December 31, 1998 and 1997, respectively.

Utilization of the net operating losses and credit carryforwards may be subject to a substantial annual limitation due to the ownership change limitations provided by the Internal Revenue Code of 1986.

Approximately $14.9 million of the valuation allowance at December 31, 1998 relates to the tax benefits of stock option deductions, which will be credited to additional paid-in capital when realized.

9. RELATED PARTY TRANSACTIONS

During 1998, Gilead paid an aggregate of $2.6 million to Pharma Research Corporation, a contract research organization, for services rendered in connection with clinical studies. A member of Gilead's Board of Directors is the managing director of an investment fund that owns a controlling interest in Pharma Research Corporation.

10. SUBSEQUENT EVENTS (UNAUDITED)

On January 26, 1999, the Board of Directors authorized an additional 200,000 shares of common stock as available for grant under the Directors' Plan. This increase is subject to stockholder approval at the Company's annual stockholders' meeting to be held in 1999.

On March 1, 1999, Gilead and NeXstar Pharmaceuticals, Inc. ("NeXstar") announced a definitive merger agreement providing for the acquisition by Gilead of all the outstanding common stock of NeXstar. The merger is structured as a tax-free, stock-for-stock transaction. The Company intends to account for this merger under the pooling-of-interests method. NeXstar, headquartered in Boulder, Colorado, is engaged in the discovery, development, manufacture and commercialization of products to treat serious and life-threatening illnesses. In addition to its Boulder headquarters, NeXstar maintains research, development and manufacturing facilities in San Dimas, California, and marketing subsidiaries worldwide. Under the terms of the merger agreement, NeXstar stockholders will receive between 0.3786 and 0.5000 of a share of Gilead common stock for each share of NeXstar common stock. The exact exchange ratio will be

10. SUBSEQUENT EVENTS (UNAUDITED) (CONTINUED)
determined based on the trading range of Gilead common stock over a specified period prior to completion of the merger. The merger is subject to certain conditions, including approval of the stockholders of Gilead and NeXstar. The transaction is expected to be completed in mid-1999.

On March 30, 1999 the Gilead Board amended and restated the bylaws of the Company, approved an amendment to the 1991 Plan increasing the number of shares reserved for issuance by 3.5 million to a total of 10 million shares, and approved an amendment to the ESPP increasing the number of shares reserved for issuance by 330,000 to a total of 1.58 million shares. This share increase authorization will not give rise to compensation expense under EITF Issue No.

97-12.

11. QUARTERLY RESULTS (UNAUDITED)

The following table is in thousands, except per share amounts:

	1ST QUARTER	2ND QUARTER	3RD QUARTER	4TH QUARTER
1998				
Total revenues	$ 13,560	$ 7,036	$ 3,038	$ 8,936
Total costs and expenses	25,902	26,887	24,715	29,393
Net loss	(7,384)	(14,844)	(17,559)	(16,290)
Basic and diluted loss per share	(0.25)	(0.49)	(0.58)	(0.53)
1997				
Total revenues	$ 5,466	$ 19,726	$ 4,937	$ 9,909
Total costs and expenses	17,460	21,170	20,017	27,155
Net income (loss)	(7,948)	2,711	(10,331)	(12,424)
Basic and diluted income (loss) per share	(0.27)	0.09	(0.35)	(0.42)

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this Report to be signed on its behalf by the undersigned, thereunto duly authorized.

GILEAD SCIENCES, INC.

BY: /s/ MARK L. PERRY

Mark L. Perry
SENIOR VICE PRESIDENT, CHIEF FINANCIAL OFFICER AND GENERAL COUNSEL (PRINCIPAL FINANCIAL AND ACCOUNTING OFFICER)

Date: June 22, 1999

EXHIBIT 23.1

CONSENT OF ERNST & YOUNG LLP, INDEPENDENT AUDITORS

We consent to the incorporation by reference in the Registration Statement (Form S-8 No. 33-46058) pertaining to the Gilead Sciences, Inc. 1987 Incentive Stock Option Plan, 1987 Supplemental Stock Option Plan, 1991 Stock Option Plan, Employee Stock Purchase Plan, and 1995 Non-Employee Directors' Stock Option Plan, the Registration Statement (Form S-8 No. 33-62060) pertaining to the Gilead Sciences, Inc. 1991 Stock Option Plan, and the Registration Statement (Form S-8 No. 33-81670) pertaining to the Gilead Sciences, Inc. Employee Stock Purchase Plan, of our report dated January 21, 1999, with respect to the consolidated financial statements of Gilead Sciences, Inc. included in the Annual Report (Form 10-K/A) for the year ended December 31, 1998.

/s/ ERNST & YOUNG LLP

Palo Alto, California
June 22, 1999

EXHIBIT INDEX

EXHIBIT NUMBER	DESCRIPTION OF DOCUMENT
3.2	By-laws of the Registrant, as amended and restated March 30, 1999.
10.7	Registrant's Employee Stock Purchase Plan, as amended March 30, 1999.
10.8	Registrant's 1991 Stock Option Plan, as amended March 30, 1999.
10.33+	Registrant's 1995 Non-Employee Directors' Stock Option Plan, as amended January 26, 1999, and related form of stock option grant.
10.47	Patent Rights Purchase Agreement between Registrant and Isis Pharmaceuticals, Inc. dated December 18, 1998.*
10.48+	Amendment No. 3 to Vintage Park Research and Development Lease by and between Registrant and Spieker Properties, L.P. dated August 14, 1998 for premises located at 355 Lakeside Drive, Foster City, California.
23.1	Consent of Ernst & Young LLP, Independent Auditors. Reference is made to page 69.
24.1+	Power of Attorney.
27.1+	Financial Data Schedule.

+ Previously filed.

* Confidential treatment has been requested for certain portions of this Exhibit under 17 C.F.R. Sections 200.80(b)(4), 200.83 and 240.24b-2.

Exhibit 3.2

GILEAD SCIENCES, INC.

AMENDED AND RESTATED BYLAWS

TABLE OF CONTENTS

TABLE OF CONTENTS
(CONTINUED)

TABLE OF CONTENTS
(CONTINUED)

TABLE OF CONTENTS
(CONTINUED)

AMENDED AND RESTATED BYLAWS
OF
GILEAD SCIENCES, INC.
(A DELAWARE CORPORATION)

ARTICLE I

OFFICES

SECTION 1. REGISTERED OFFICE. The registered office of the corporation in the State of Delaware shall be in the City of Wilmington, County of New Castle.

SECTION 2. OTHER OFFICES. The corporation shall also have and maintain an office or principal place of business in California, at such

place as may be fixed by the Board of Directors, and may also have offices at such other places, both within and without the State of Delaware as the Board of Directors may from time to time determine or the business of the corporation may require.

ARTICLE II

CORPORATE SEAL

SECTION 3. CORPORATE SEAL. The corporate seal shall consist of a die bearing the name of the corporation and the inscription, "Corporate Seal-Delaware." Said seal may be used by causing it or a facsimile thereof to be impressed or affixed or reproduced or otherwise.

ARTICLE III

STOCKHOLDERS' MEETINGS

SECTION 4. PLACE OF MEETINGS. Meetings of the stockholders of the corporation shall be held at such place, either within or without the State of Delaware, as may be designated from time to time by the Board of Directors, or, if not so designated, then at the office of the corporation required to be maintained pursuant to Section 2 hereof.

SECTION 5. ANNUAL MEETING.

(a) The annual meeting of the stockholders of the corporation, for the purpose of election of directors and for such other business as may lawfully come before it, shall be held on such date and at such time as may be designated from time to time by the Board of Directors. Nominations of persons for election to the Board of Directors of the corporation and the proposal of business to be considered by the stockholders may be made at an annual meeting of stockholders: (i) pursuant to the corporation's notice of meeting of stockholders; (ii) by or at the direction of the Board of Directors; or (iii) by any stockholder of the corporation who was a stockholder of record at the time of giving of notice provided for in the following paragraph, who is entitled to vote at the meeting and who complied with the notice procedures set forth in Section 5.

(b) At an annual meeting of the stockholders, only such business shall be conducted as shall have been properly brought before the meeting. For nominations or other business to be properly brought before an annual meeting by a stockholder pursuant to clause (iii) of Section 5(a) of these Bylaws, (i) the stockholder must have given timely notice thereof in writing to the Secretary of the corporation, (ii) such other business must be a proper matter for stockholder action under the Delaware General Corporation Law, (iii) if the stockholder, or the beneficial owner on whose behalf any such proposal or nomination is made, has provided the corporation with a Solicitation Notice (as defined in this Section 5(b)), such stockholder or beneficial owner must, in the case of a proposal, have delivered a proxy statement and form of proxy to holders of at least the percentage of the corporation's voting shares required under applicable law to carry any such proposal, or, in the case of a nomination or nominations, have delivered a proxy statement and form of proxy to holders of a percentage of the corporation's voting shares reasonably believed by such stockholder or beneficial owner to be sufficient to elect the nominee or nominees proposed to be nominated by such stockholder, and must, in either case, have included in such materials the Solicitation Notice, and (iv) if no Solicitation Notice relating thereto has been timely provided pursuant to this section, the stockholder or beneficial owner proposing such business or nomination must not have solicited a number of proxies sufficient to have required the delivery of such a Solicitation Notice under this Section 5. To be timely, a stockholder's notice shall be delivered to the Secretary at the principal

executive offices of the corporation not later than the close of business on the ninetieth (90th) day nor earlier than the close of business on the one hundred twentieth (120th) day prior to the first anniversary of the preceding year's annual meeting; provided, however, that in the event that the date of the annual meeting is advanced more than thirty (30) days prior to or delayed by more than thirty (30) days after the anniversary of the preceding year's annual meeting, notice by the stockholder to be timely must be so delivered not earlier than the close of business on the one hundred twentieth (120th) day prior to such annual meeting and not later than the close of business on the later of the ninetieth (90th) day prior to such annual meeting or the tenth (10th) day following the day on which public announcement of the date of such meeting is first made. In no event shall the public announcement of an adjournment of an annual meeting commence a new time period for the giving of a stockholder's notice as described above. Such stockholder's notice shall set forth: (A) as to each person whom the stockholder proposed to nominate for election or reelection as a director all information relating to such person that is required to be disclosed in solicitations of proxies for election of directors in an election contest, or is otherwise required, in each case pursuant to Regulation 14A under the Securities Exchange Act of 1934, as amended (the "1934 Act") and Rule 14a-11 thereunder (including such person's written consent to being named in the proxy statement as a nominee and to serving as a director if elected); (B) as to any other business that the stockholder proposes to bring before the meeting, a brief description of the business desired to be brought before the meeting, the reasons for conducting such business at the meeting and any material interest in such business of such stockholder and the beneficial owner, if any, on whose behalf the proposal is made; and (C) as to the stockholder giving the notice and the beneficial owner, if any, on whose behalf the nomination or proposal is made (i) the name and address of such stockholder, as they appear on the corporation's books, and of such beneficial owner, (ii) the class and number of shares of the corporation which are owned beneficially and of record by such stockholder and such beneficial owner, and (iii) whether either such stockholder or beneficial owner intends to deliver a proxy statement and form of proxy to holders of, in the case of the proposal, at least the percentage of the

corporation's voting shares required under applicable law to carry the proposal or, in the case of a nomination or nominations, a sufficient number of holders of the corporation's voting shares to elect such nominee or nominees (an affirmative statement of such intent, a "Solicitation Notice").

(c) Notwithstanding anything in the second sentence of Section 5(b) of these Bylaws to the contrary, in the event that the number of directors to be elected to the Board of Directors of the corporation is increased and there is no public announcement naming all of the nominees for director or specifying the size of the increased Board of Directors made by the corporation at least one hundred (100) days prior to the first anniversary of the preceding year's annual meeting, a stockholder's notice required by this Section 5 shall also be considered timely, but only with respect to nominees for any new positions created by such increase, if it shall be delivered to the Secretary at the principal executive offices of the corporation not later than the close of business on the tenth (10th) day following the day on which such public announcement is first made by the corporation.

(d) Only such persons who are nominated in accordance with the procedures set forth in this Section 5 shall be eligible to serve as directors and only such business shall be conducted at a meeting of stockholders as shall have been brought before the meeting in accordance with the procedures set forth in this Section 5. Except as otherwise provided by law, the Chairman of the meeting shall have the power and duty to determine whether a nomination or any business proposed to be brought before the meeting was made, or proposed, as the case may be, in accordance with the

procedures set forth in these Bylaws and, if any proposed nomination or business is not in compliance with these Bylaws, to declare that such defective proposal or nomination shall not be presented for stockholder action at the meeting and shall be disregarded.

(e) Notwithstanding the foregoing provisions of this Section 5, in order to include information with respect to a stockholder proposal in the proxy statement and form of proxy for a stockholder's meeting, stockholders must provide notice as required by the regulations promulgated under the 1934 Act. Nothing in these Bylaws shall be deemed to affect any rights of stockholders to request inclusion of proposals in the corporation proxy statement pursuant to Rule 14a-8 under the 1934 Act.

(f) For purposes of this Section 5, "public announcement" shall mean disclosure in a press release reported by the Dow Jones News Service, Associated Press or comparable national news service or in a document publicly filed by the corporation with the Securities and Exchange Commission pursuant to Section 13, 14 or 15(d) of the 1934 Act.

SECTION 6. SPECIAL MEETINGS.

(a) Special meetings of the stockholders of the corporation may be called, for any purpose or purposes, by (i) the Chairman of the Board of Directors, (ii) the Chief Executive Officer, or (iii) the Board of Directors pursuant to a resolution adopted by a majority of the total number of authorized directors (whether or not there exist any vacancies in previously authorized directorships at the time any such resolution is presented to the Board of Directors for adoption) and shall be held at such place, on such date, and at such time as the Board of Directors shall fix.

(b) If a special meeting is properly called by any person or persons other than the Board of Directors, the request shall be in writing, specifying the general nature of the business proposed to be transacted, and shall be delivered personally or sent by registered mail or by telegraphic or other facsimile transmission to the Chairman of the Board of Directors, the Chief Executive Officer, or the Secretary of the corporation. No business may be transacted at such special meeting otherwise than specified in such notice. The Board of Directors shall determine the time and place of such special meeting, which shall be held not less than thirty-five (35) nor more than one hundred twenty (120) days after the date of the receipt of the request. Upon determination of the time and place of the meeting, the officer receiving the request shall cause notice to be given to the stockholders entitled to vote, in accordance with the provisions of Section 7 of these Bylaws. If the notice is not given within one hundred (100) days after the receipt of the request, the person or persons properly requesting the meeting may set the time and place of the meeting and give the notice. Nothing contained in this paragraph (b) shall be construed as limiting, fixing, or affecting the time when a meeting of stockholders called by action of the Board of Directors may be held.

(c) Nominations of persons for election to the Board of Directors may be made at a special meeting of stockholders at which directors are to be elected pursuant to the corporation's notice of meeting (i) by or at the direction of the Board of Directors or (ii) by any stockholder of the corporation who is a stockholder of record at the time of giving notice provided for in these Bylaws who shall be entitled to vote at the meeting and who complies with the notice procedures set forth in this Section 6(c). In the event the corporation calls a special meeting of stockholders for the purpose of electing one or more directors to the Board of Directors, any such stockholder may nominate a person or persons (as the case may be), for election to such position(s) as specified in the corporation's notice of meeting, if the stockholder's notice required by Section 5(b) of these Bylaws shall be delivered to the Secretary at the principal executive offices of the

corporation not earlier than the close of business on the one hundred twentieth (120th) day prior to such special meeting and not later than the close of business on the later of the ninetieth (90th) day prior to such meeting or the tenth (10th) day following the day on which public announcement is first made of the date of the special meeting and of the nominees proposed by the Board of Directors to be elected at such meeting. In no event shall the public announcement of an adjournment of a special meeting commence a new time period for the giving of a stockholder's notice as described above.

SECTION 7. NOTICE OF MEETINGS. Except as otherwise provided by law or the Certificate of Incorporation, written notice of each meeting of stockholders shall be given not less than ten (10) nor more than sixty (60) days before the date of the meeting to each stockholder entitled to vote at such meeting, such notice to specify the place, date and hour and purpose or purposes of the meeting. Notice of the time, place and purpose of any meeting of stockholders may be waived in writing, signed by the person entitled to notice thereof, either before or after such meeting, and will be waived by any stockholder by his attendance thereat in person or by proxy, except when the stockholder attends a meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Any stockholder so waiving notice of such meeting shall be bound by the proceedings of any such meeting in all respects as if due notice thereof had been given.

SECTION 8. QUORUM. At all meetings of stockholders, except where otherwise provided by statute or by the Certificate of Incorporation, or by these Bylaws, the presence, in person or by proxy duly authorized, of the holders of a majority of the outstanding shares of stock entitled to vote shall constitute a quorum for the transaction of business. In the absence of a quorum, any meeting of stockholders may be adjourned, from time to time, either by the chairman of the meeting or by vote of the holders of a majority of the shares represented thereat, but no other business shall be transacted at such meeting. The stockholders present at a duly called or convened meeting, at which a quorum is present, may continue to transact business until adjournment, notwithstanding the withdrawal of enough stockholders to leave less than a quorum. Except as otherwise provided by statute, the Certificate of Incorporation or these Bylaws, in all matters other than the election of directors, the affirmative vote of the majority of shares present in person or represented by proxy at the meeting and entitled to vote on the subject matter shall be the act of the stockholders. Except as otherwise provided by statute, the Certificate of Incorporation or these Bylaws, directors shall be elected by a plurality of the votes of the shares present in person or represented by proxy at the meeting and entitled to vote on the election of directors. Where a separate vote by a class or classes or series is required, except where otherwise provided by the statute or by the Certificate of Incorporation or these Bylaws, a majority of the outstanding shares of such class or classes or series, present in person or represented by proxy, shall constitute a quorum entitled to take action with respect to that vote on that matter and, except where otherwise provided by the statute or by the Certificate of Incorporation or these Bylaws, the affirmative vote of the majority (plurality, in the case of the election of directors) of the votes cast by the holders of shares ofsuch class or classes or series shall be the act of such class or classes or series.

SECTION 9. ADJOURNMENT AND NOTICE OF ADJOURNED MEETINGS. Any meeting of stockholders, whether annual or special, may be adjourned from time to time either by the chairman of the meeting or by the vote of a majority of the shares casting votes. When a meeting is adjourned to another time or place, notice need not be given of the adjourned meeting if the time and place thereof are announced at the meeting at which the adjournment is taken. At the adjourned meeting, the corporation may transact any business

which might have been transacted at the original meeting. If the adjournment is for more than thirty (30) days or if after the adjournment a new record date is fixed for the adjourned meeting, a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting.

SECTION 10. VOTING RIGHTS. For the purpose of determining those stockholders entitled to vote at any meeting of the stockholders, except as otherwise provided by law, only persons in whose names shares stand on the stock records of the corporation on the record date, as provided in Section 12 of these Bylaws, shall be entitled to vote at any meeting of stockholders. Cumulative voting shall not be available to stockholders. Every person entitled to vote shall have the right to do so either in person or by an agent or agents authorized by a proxy granted in accordance with Delaware law. An agent so appointed need not be a stockholder. No proxy shall be voted after three (3) years from its date of creation unless the proxy provides for a longer period.

SECTION 11. JOINT OWNERS OF STOCK. If shares or other securities having voting power stand of record in the names of two (2) or more persons, whether fiduciaries, members of a partnership, joint tenants, tenants in common, tenants by the entirety, or otherwise, or if two (2)

or more persons have the same fiduciary relationship respecting the same shares, unless the Secretary is given written notice to the contrary and is furnished with a copy of the instrument or order appointing them or creating the relationship wherein it is so provided, their acts with respect to voting shall have the following effect: (a) if only one (1) votes, his act binds all; (b) if more than one (1) votes, the act of the majority so voting binds all; (c) if more than one (1) votes, but the vote is evenly split on any particular matter, each faction may vote the securities in question proportionally, or may apply to the Delaware Court of Chancery for relief as provided in the Delaware General Corporation Law, Section 217(b). If the instrument filed with the Secretary shows that any such tenancy is held in unequal interests, a majority or even-split for the purpose of subsection (c) shall be a majority or even-split in interest.

SECTION 12. LIST OF STOCKHOLDERS. The Secretary shall prepare and make, at least ten (10) days before every meeting of stockholders, a complete list of the stockholders entitled to vote at said meeting, arranged in alphabetical order, showing the address of each stockholder and the number of shares registered in the name of each stockholder. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting, during ordinary business hours, for a period of at least ten (10) days prior to the meeting, either at a place within the city where the meeting is to be held, which place shall be specified in the notice of the meeting, or, if not specified, at the place where the meeting is to be held. The list shall be produced and kept at the time and place of meeting during the whole time thereof and may be inspected by any stockholder who is present.

SECTION 13. ACTION WITHOUT MEETING. No action shall be taken by the stockholders except at an annual or special meeting of stockholders called in accordance with these Bylaws, and no action shall be taken by the stockholders by written consent.

SECTION 14. ORGANIZATION.

(a) At every meeting of stockholders, the Chairman of the Board of Directors, or, if a Chairman has not been appointed or is absent, the President, or, if the President is absent, a chairman of the meeting chosen by a majority in interest of the stockholders entitled to vote, present in person or by proxy, shall act as chairman. The Secretary, or, in

his absence, an Assistant Secretary directed to do so by the President, shall act as secretary of the meeting.

(b) The Board of Directors of the corporation shall be entitled to make such rules or regulations for the conduct of meetings of stockholders as it shall deem necessary, appropriate or convenient. Subject to such rules and regulations of the Board of Directors, if any, the chairman of the meeting shall have the right and authority to prescribe such rules, regulations and procedures and to do all such acts as, in the judgment of such chairman, are necessary, appropriate or convenient for the proper conduct of the meeting, including, without limitation, establishing an agenda or order of business for the meeting, rules and procedures for maintaining order at the meeting and the safety of those present, limitations on participation in such meeting to stockholders of record of the corporation and their duly authorized and constituted proxies and such other persons as the chairman shall permit, restrictions on entry to the meeting after the time fixed for the commencement thereof, limitations on the time allotted to questions or comments by participants and regulation of the opening and closing of the polls for balloting on matters which are to be voted on by ballot. Unless and to the extent determined by

the Board of Directors or the chairman of the meeting, meetings of stockholders shall not be required to be held in accordance with rules of parliamentary procedure.

ARTICLE IV

DIRECTORS

SECTION 15. NUMBER AND TERM OF OFFICE. The authorized number of directors of the corporation shall be fixed in accordance with the Certificate of Incorporation. Directors need not be stockholders unless so required by the Certificate of Incorporation. If for any cause, the directors shall not have been elected at an annual meeting, they may be elected as soon thereafter as convenient at a special meeting of the stockholders called for that purpose in the manner provided in these Bylaws.

SECTION 16. POWERS. The powers of the corporation shall be exercised, its business conducted and its property controlled by the Board of Directors, except as may be otherwise provided by statute or by the Certificate of Incorporation.

SECTION 17. BOARD OF DIRECTORS. Subject to the rights of the holders of any series of Preferred Stock to elect additional directors under specified circumstances, directors shall be elected at each annual meeting of stockholders for a term of one year. Each director shall serve until his successor is duly elected and qualified or until his death, resignation or removal. No decrease in the number of directors constituting the Board of Directors shall shorten the term of any incumbent director.

SECTION 18. VACANCIES. Unless otherwise provided in the Certificate of Incorporation, any vacancies on the Board of Directors resulting from death, resignation, disqualification, removal or other causes shall be filled by either (i) the affirmative vote of the holders of a majority of the voting power of the then-outstanding shares of voting stock of the corporation entitled to vote generally in the election of Directors (the "Voting Stock") voting together as a single class; or (ii) by the affirmative vote of a majority of the remaining directors then in office, even though less than a quorum of the Board of Directors. Newly created directorships resulting from any increase in the number of directors shall, unless the Board of Directors determines by resolution that any such newly created directorship shall be filled by the stockholders, be filled only by the affirmative vote of the directors then in office, even though less than a

quorum of the Board of Directors. Any director elected in accordance with the preceding sentence shall hold office for the remainder of the full term of the class of directors in which the new directorship was created or the vacancy occurred and until such director's successor shall have been elected and qualified. A vacancy in the Board of Directors shall be deemed to exist under this Bylaw in the case of the death, removal or resignation of any Director, or if the stockholders fail at any meeting of stockholders at which Directors are to be elected (including any meeting referred to in Section 22 below) to elect the number of Directors then constituting the whole Board of Directors.

SECTION 19. RESIGNATION. Any director may resign at any time by delivering his written resignation to the Secretary, such resignation to specify whether it will be effective at a particular time, upon receipt by the Secretary or at the pleasure of the Board of Directors. If no

such specification is made, it shall be deemed effective at the pleasure of the Board of Directors. When one or more directors shall resign from the Board of Directors, effective at a future date, a majority of the directors then in office, including those who have so resigned, shall have power to fill such vacancy or vacancies, the vote thereon to take effect when such resignation or resignations shall become effective, and each director so chosen shall hold office for the unexpired portion of the term of the director whose place shall be vacated and until his successor shall have been duly elected and qualified.

SECTION 20. REMOVAL. Subject to any limitations imposed by law or the Certificate of Incorporation, the Board of Directors, or any individual director, may be removed from office at any time (i) with cause by the affirmative vote of the holders of at least a majority of the then outstanding shares of Voting Stock; or (ii) without cause by an affirmative vote of the holders of at least sixty-six and two-thirds percent (66-2/3%) of such outstanding shares.

SECTION 21. MEETINGS.

(a) ANNUAL MEETINGS. The annual meeting of the Board of Directors shall be held immediately before or after the annual meeting of stockholders and at the place where such meeting is held. No notice of an annual meeting of the Board of Directors shall be necessary and such meeting shall be held for the purpose of electing officers and transacting such other business as may lawfully come before it.

(b) REGULAR MEETINGS. Unless otherwise restricted by the Certificate of Incorporation, regular meetings of the Board of Directors may be held at any time or date and at any place within or without the State of Delaware which has been designated by the Board of Directors and publicized among all directors. No formal notice shall be required for regular meetings of the Board or Directors.

(c) SPECIAL MEETINGS. Unless otherwise restricted by the Certificate of Incorporation, special meetings of the Board of Directors may be held at any time and place within or without the State of Delaware whenever called by the Chairman of the Board, the President or any two of the directors.

(d) TELEPHONE MEETINGS. Any member of the Board of Directors, or of any committee thereof, may participate in a meeting by means of conference telephone or similar communications equipment by means of which all persons participating in the meeting can hear each other, and participation in a meeting by such means shall constitute presence in person at such meeting.

(e) NOTICE OF MEETINGS. Notice of the time and place of all special meetings of the Board of Directors shall be orally or in writing, by telephone, including a voice messaging system or other system or technology designed to record and communicate messages, facsimile, telegraph or telex, or by electronic mail or other electronic means, during normal business hours, at least twenty-four (24) hours before the date and time of the meeting, or sent in writing to each director by first class mail, charges prepaid, at least three (3) days before the date of the meeting. Notice of any meeting may be waived in writing at any time before or after the meeting and will be waived by any director by attendance thereat, except when the director attends the meeting for

the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened.

(f) WAIVER OF NOTICE. The transaction of all business at any meeting of the Board of Directors, or any committee thereof, however called or noticed, or wherever held, shall be as valid as though had at a meeting duly held after regular call and notice, if a quorum be present and if, either before or after the meeting, each of the directors not present shall sign a written waiver of notice. All such waivers shall be filed with the corporate records or made a part of the minutes of the meeting.

SECTION 22. QUORUM AND VOTING.

(a) Unless the Certificate of Incorporation requires a greater number and except with respect to indemnification questions arising under Section 43 hereof, for which a quorum shall be one-third of the exact number of directors fixed from time to time in accordance with the Certificate of Incorporation, a quorum of the Board of Directors shall consist of a majority of the exact number of directors fixed from time to time by the Board of Directors in accordance with the Certificate of Incorporation; provided, however, at any meeting whether a quorum be present or otherwise, a majority of the directors present may adjourn from time to time until the time fixed for the next regular meeting of the Board of Directors, without notice other than by announcement at the meeting.

(b) At each meeting of the Board of Directors at which a quorum is present, all questions and business shall be determined by the affirmative vote of a majority of the directors present, unless a different vote be required by law, the Certificate of Incorporation or these Bylaws.

SECTION 23. ACTION WITHOUT MEETING. Unless otherwise restricted by the Certificate of Incorporation or these Bylaws, any action required or permitted to be taken at any meeting of the Board of Directors or of any committee thereof may be taken without a meeting, if all members of the Board of Directors or committee, as the case may be, consent thereto in writing, and such writing or writings are filed with the minutes of proceedings of the Board of Directors or committee.

SECTION 24. FEES AND COMPENSATION. Directors shall be entitled to such compensation for their services as may be approved by the Board of Directors, including, if so approved, by resolution of the Board of Directors, a fixed sum and expenses of attendance, if any, for attendance at each regular or special meeting of the Board of Directors and at any meeting of a committee of the Board of Directors. Nothing herein contained shall be construed to preclude any director from serving the corporation in any other capacity as an officer, agent, employee, or otherwise and receiving compensation therefor.

SECTION 25. COMMITTEES.

(a) EXECUTIVE COMMITTEE. The Board of Directors may appoint an Executive Committee to consist of one (1) or more members of the Board of Directors. The Executive Committee, to the extent permitted by law and provided in the resolution of the Board of Directors shall have and may exercise all the powers and authority of the Board of Directors in

the management of the business and affairs of the corporation, and may authorize the seal of the corporation to be affixed to all papers which may require it; but no such committee shall have the power or authority in reference to (i) approving or adopting, or recommending to the stockholders, any action or matter expressly required by the Delaware General Corporation Law to be submitted to stockholders for approval, or (ii) adopting, amending or repealing any bylaw of the corporation.

(b) OTHER COMMITTEES. The Board of Directors may, from time to time, appoint such other committees as may be permitted by law. Such other committees appointed by the Board of Directors shall consist of one (1) or more members of the Board of Directors and shall have such powers and perform such duties as may be prescribed by the resolution or resolutions creating such committees, but in no event shall any such committee have the powers denied to the Executive Committee in these Bylaws.

(c) TERM. Each member of a committee of the Board of Directors shall serve a term on the committee coexistent with such member's term on the Board of Directors. The Board of Directors, subject to any requirements of any outstanding series of preferred Stock and the provisions of subsections (a) or (b) of this Bylaw, may at any time increase or decrease the number of members of a committee or terminate the existence of a committee. The membership of a committee member shall terminate on the date of his death or voluntary resignation from the committee or from the Board of Directors. The Board of Directors may at any time for any reason remove any individual committee member and the Board of Directors may fill any committee vacancy created by death, resignation, removal or increase in the number of members of the committee. The Board of Directors may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee, and, in addition, in the absence or disqualification of any member of a committee, the member or members thereof present at any meeting and not disqualified from voting, whether or not he or they constitute a quorum, may unanimously appoint another member of the Board of Directors to act at the meeting in the place of any such absent or disqualified member.

(d) MEETINGS. Unless the Board of Directors shall otherwise provide, regular meetings of the Executive Committee or any other committee appointed pursuant to this Section 24 shall be held at such times and places as are determined by the Board of Directors, or by any such committee, and when notice thereof has been given to each member of such committee, no further notice of such regular meetings need be given thereafter. Special meetings of any such committee may be held at any place which has been determined from time to time by such committee, and may be called by any director who is a member of such committee, upon written notice to the members of such committee of the time and place of such special meeting given in the manner provided for the giving of written notice to members of the Board of Directors of the time and place of special meetings of the Board of Directors. Notice of any special meeting of any committee may be waived in writing at any time before or after the meeting and will be waived by any director by attendance thereat, except when the director attends such special meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. A majority of the authorized number of members of any such committee shall constitute a quorum for the

transaction of business, and the act of a majority of those present at any meeting at which a quorum is present shall be the act of such committee.

SECTION 26. ORGANIZATION. At every meeting of the directors, the Chairman of the Board of Directors, or, if a Chairman has not been appointed or is absent, the President (if a director), or if the President is absent, the most senior Vice President (if a director), or, in the absence of any such person, a chairman of the meeting chosen by a majority of the directors present, shall preside over the meeting. The Secretary, or in his absence, any Assistant Secretary directed to do so by the President, shall act as secretary of the meeting.

ARTICLE V

OFFICERS

SECTION 27. OFFICERS DESIGNATED. The officers of the corporation shall include, if and when designated by the Board of Directors, the Chairman of the Board of Directors, the Chief Executive Officer, the President, one or more Vice Presidents, the Secretary, the Chief Financial Officer, the Treasurer and the Controller, all of whom shall be elected at the annual organizational meeting of the Board of Directors. The order of the seniority of the Vice Presidents shall be in the order of their nomination, unless otherwise determined by the Board of Directors. The Board of Directors may also appoint one or more Assistant Secretaries, Assistant Treasurers, Assistant Controllers and such other officers and agents with such powers and duties as it shall deem necessary. The Board of Directors may assign such additional titles to one or more of the officers as it shall deem appropriate. Any one person may hold any number of offices of the corporation at any one time unless specifically prohibited therefrom by law. The salaries and other compensation of the officers of the corporation shall be fixed by or in the manner designated by the Board of Directors.

SECTION 28. TENURE AND DUTIES OF OFFICERS.

(a) GENERAL. All officers shall hold office at the pleasure of the Board of Directors and until their successors shall have been duly elected and qualified, unless sooner removed. Any officer elected or appointed by the Board of Directors may be removed at any time by the Board of Directors. If the office of any officer becomes vacant for any reason, the vacancy may be filled by the Board of Directors.

(b) DUTIES OF CHAIRMAN OF THE BOARD OF DIRECTORS. The Chairman of the Board of Directors, when present, shall preside at all meetings of the stockholders and the Board of Directors. The Chairman of the Board of Directors shall perform other duties commonly incident to his office and shall also perform such other duties and have such other powers as the Board of Directors shall designate from time to time. If there is no President, then the Chairman of the Board of Directors shall also serve as the Chief Executive Officer of the corporation and shall have the powers and duties prescribed in paragraph (c) of this Section 28.

(c) DUTIES OF PRESIDENT. The President shall preside at all meetings of the stockholders and at all meetings of the Board of Directors, unless the Chairman of the Board of Directors has been appointed and is present. Unless some other officer has been elected Chief

Executive Officer of the corporation, the President shall be the chief executive officer of the corporation and shall, subject to the control of the

Board of Directors, have general supervision, direction and control of the business and officers of the corporation. The President shall perform other duties commonly incident to his office and shall also perform such other duties and have such other powers as the Board of Directors shall designate from time to time.

(d) DUTIES OF VICE PRESIDENTS. The Vice Presidents may assume and perform the duties of the President in the absence or disability of the President or whenever the office of President is vacant. The Vice Presidents shall perform other duties commonly incident to their office and shall also perform such other duties and have such other powers as the Board of Directors or the President shall designate from time to time.

(e) DUTIES OF SECRETARY. The Secretary shall attend all meetings of the stockholders and of the Board of Directors and shall record all acts and proceedings thereof in the minute book of the corporation. The Secretary shall give notice in conformity with these Bylaws of all meetings of the stockholders and of all meetings of the Board of Directors and any committee thereof requiring notice. The Secretary shall perform all other duties given him in these Bylaws and other duties commonly incident to his office and shall also perform such other duties and have such other powers as the Board of Directors shall designate from time to time. The President may direct any Assistant Secretary to assume and perform the duties of the Secretary in the absence or disability of the Secretary, and each Assistant Secretary shall perform other duties commonly incident to his office and shall also perform such other duties and have such other powers as the Board of Directors or the President shall designate from time to time.

(f) DUTIES OF CHIEF FINANCIAL OFFICER. The Chief Financial Officer shall keep or cause to be kept the books of account of the corporation in a thorough and proper manner and shall render statements of the financial affairs of the corporation in such form and as often as required by the Board of Directors or the President. The Chief Financial Officer, subject to the order of the Board of Directors, shall have the custody of all funds and securities of the corporation. The Chief Financial Officer shall perform other duties commonly incident to his office and shall also perform such other duties and have such other powers as the Board of Directors or the President shall designate from time to time. The President may direct the Treasurer or any Assistant Treasurer, or the Controller or any Assistant Controller to assume and perform the duties of the Chief Financial Officer in the absence or disability of the Chief Financial Officer, and each Treasurer and Assistant Treasurer and each Controller and Assistant Controller shall perform other duties commonly incident to his office and shall also perform such other duties and have such other powers as the Board of Directors or the President shall designate from time to time.

SECTION 29. DELEGATION OF AUTHORITY. The Board of Directors may from time to time delegate the powers or duties of any officer to any other officer or agent, notwithstanding any provision hereof.

SECTION 30. RESIGNATIONS. Any officer may resign at any time by giving written notice to the Board of Directors or to the President or to the Secretary. Any such resignation shall be effective when received by the person or persons to whom such notice is given, unless a later time is specified therein, in which event the resignation shall become effective at such later

time. Unless otherwise specified in such notice, the acceptance of any such resignation shall not be necessary to make it effective. Any resignation shall be without prejudice to the rights, if any, of the corporation under any contract with the resigning officer.

SECTION 31. REMOVAL. Any officer may be removed from office at any

time, either with or without cause, by the affirmative vote of a majority of the directors in office at the time, or by the unanimous written consent of the directors in office at the time, or by any committee or superior officers upon whom such power of removal may have been conferred by the Board of Directors.

ARTICLE VI

EXECUTION OF CORPORATE INSTRUMENTS AND VOTING OF SECURITIES OWNED BY THE CORPORATION

SECTION 32. EXECUTION OF CORPORATE INSTRUMENTS. The Board of Directors may, in its discretion, determine the method and designate the signatory officer or officers, or other person or persons, to execute on behalf of the corporation any corporate instrument or document, or to sign on behalf of the corporation the corporate name without limitation, or to enter into contracts on behalf of the corporation, except where otherwise provided by law or these Bylaws, and such execution or signature shall be binding upon the corporation.

All checks and drafts drawn on banks or other depositaries on funds to the credit of the corporation or in special accounts of the corporation shall be signed by such person or persons as the Board of Directors shall authorize so to do.

Unless authorized or ratified by the Board of Directors or within the agency power of an officer, no officer, agent or employee shall have any power or authority to bind the corporation by any contract or engagement or to pledge its credit or to render it liable for any purpose or for any amount.

SECTION 33. VOTING OF SECURITIES OWNED BY THE CORPORATION. All stock and other securities of other corporations owned or held by the corporation for itself, or for other parties in any capacity, shall be voted, and all proxies with respect thereto shall be executed, by the person authorized so to do by resolution of the Board of Directors, or, in the absence of such authorization, by the Chairman of the Board of Directors, the Chief Executive Officer, the President, or any Vice President.

ARTICLE VII

SHARES OF STOCK

SECTION 34. FORM AND EXECUTION OF CERTIFICATES. Certificates for the shares of stock of the corporation shall be in such form as is consistent with the Certificate of Incorporation and applicable law. Every holder of stock in the corporation shall be entitled to have a certificate signed by or in the name of the corporation by the Chairman of the Board of Directors, or the President or any Vice President and by the Treasurer or Assistant Treasurer or the Secretary or Assistant Secretary, certifying the number of shares owned by him in the corporation. Any and

all of the signatures on the certificate may be facsimiles. In case any officer, transfer agent, or registrar who has signed or whose facsimile signature has been placed upon a certificate shall have ceased to be such officer, transfer agent, or registrar before such certificate is issued, it may be issued with the same effect as if he were such officer, transfer agent, or registrar at the date of issue. Each certificate shall state upon the face or back thereof, in full or in summary, all the powers, designations, preferences, and rights, and the limitations or restrictions of the shares authorized to be issued or shall, except as otherwise required by law, set forth on the face or back a statement that 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. Within a reasonable time after the issuance or transfer of uncertificated stock, the corporation shall send to the registered owner thereof a written notice containing the information required to be set forth or stated on certificates pursuant to this section or otherwise required by law or with respect to this section a statement that the corporation will furnish without charge to each stockholder who so requests the powers, designations, preferences and relative participating, optional or othe special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights. Except as otherwise expressly provided by law, the rights and obligations of the holders of certificates representing stock of the same class and series shall be identical.

SECTION 35. LOST CERTIFICATES. A new certificate or certificates shall be issued in place of any certificate or certificates theretofore issued by the corporation alleged to have been lost, stolen, or destroyed, upon the making of an affidavit of that fact by the person claiming the certificate of stock to be lost, stolen, or destroyed. The corporation may require, as a condition precedent to the issuance of a new certificate or certificates, the owner of such lost, stolen, or destroyed certificate or certificates, or his legal representative, to agree to indemnify the corporation in such manner as it shall require or to give the corporation a surety bond in such form and amount as it may direct as indemnity against any claim that may be made against the corporation with respect to the certificate alleged to have been lost, stolen, or destroyed.

SECTION 36. TRANSFERS.

(a) Transfers of record of shares of stock of the corporation shall be made only upon its books by the holders thereof, in person or by attorney duly authorized, and upon the surrender of a properly endorsed certificate or certificates for a like number of shares.

(b) The corporation shall have power to enter into and perform any agreement with any number of stockholders of any one or more classes of stock of the corporation to restrict the transfer of shares of stock of the corporation of any one or more classes owned by such stockholders in any manner not prohibited by the Delaware General Corporation Law.

SECTION 37. FIXING RECORD DATES.

(a) In order that the corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof, the Board of Directors may fix, in advance, a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which

record date shall, subject to applicable law, not be more than sixty (60) nor less than ten (10) days before the date of such meeting. If no record date is fixed by the Board of Directors, the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day next preceding the day on which notice is given, or if notice is waived, at the close of business on the day next preceding the day on which the meeting is held. A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the Board of Directors may fix a new record date for the adjourned meeting.

(b) In order that the corporation may determine the stockholders entitled to receive payment of any dividend or other distribution or allotment of any rights or the stockholders entitled to exercise any rights in respect of any change, conversion or exchange of stock, or for the purpose of any other lawful action, the Board of Directors may fix, in advance, a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted, and which record date shall be not more than sixty (60) days prior to such action. If no record date is fixed, the record date for determining stockholders for any such purpose shall be at the close of business on the day on which the Board of Directors adopts the resolution relating thereto.

SECTION 38. REGISTERED STOCKHOLDERS. The corporation shall be entitled to recognize the exclusive right of a person registered on its books as the owner of shares to receive dividends, and to vote as such owner, and shall not be bound to recognize any equitable or other claim to or interest in such share or shares on the part of any other person whether or not it shall have express or other notice thereof, except as otherwise provided by the laws of Delaware.

ARTICLE VIII

OTHER SECURITIES OF THE CORPORATION

SECTION 39. EXECUTION OF OTHER SECURITIES. All bonds, debentures and other corporate securities of the corporation, other than stock certificates (covered in Section 34), may be signed by the Chairman of the Board of Directors, the President or any Vice President, or such other person as may be authorized by the Board of Directors, and the corporate seal impressed thereon or a facsimile of such seal imprinted thereon and attested by the signature of the Secretary or an Assistant Secretary, or the Chief Financial Officer or Treasurer or an Assistant Treasurer; provided, however, that where any such bond, debenture or other corporate security shall be authenticated by the manual signature, or where permissible facsimile signature, of a trustee under an indenture pursuant to which such bond, debenture or other corporate security shall be issued, the signatures of the persons signing and attesting the corporate seal on such bond, debenture or other corporate security may be the imprinted facsimile of the signatures of such persons. Interest coupons appertaining to any such bond, debenture or other corporate security, authenticated by a trustee as aforesaid, shall be signed by the Treasurer or an Assistant Treasurer of the corporation or such other person as may be authorized by the Board of Directors, or bear imprinted thereon the facsimile signature of such person. In case any officer who shall have signed or attested any bond, debenture or other corporate security, or whose facsimile signature shall appear thereon or on any such interest coupon, shall have ceased to be such officer before the bond, debenture or other corporate security so signed or attested shall

have been delivered, such bond, debenture or other corporate security nevertheless may be adopted by the corporation and issued and delivered as though the person who signed the same or whose facsimile signature shall have been used thereon had not ceased to be such officer of the corporation.

ARTICLE IX

DIVIDENDS

SECTION 40. DECLARATION OF DIVIDENDS. Dividends upon the capital stock of the corporation, subject to the provisions of the Certificate of Incorporation and applicable law, if any, may be declared by the Board of Directors pursuant to law at any regular or special meeting. Dividends may be paid in cash, in property, or in shares of the capital stock, subject to the provisions of the Certificate of Incorporation and applicable law.

SECTION 41. DIVIDEND RESERVE. Before payment of any dividend, there may be set aside out of any funds of the corporation available for dividends such sum or sums as the Board of Directors from time to time, in their absolute discretion, think proper as a reserve or reserves to meet contingencies, or for equalizing dividends, or for repairing or maintaining any property of the corporation, or for such other purpose as the Board of Directors shall think conducive to the interests of the corporation, and the Board of Directors may modify or abolish any such reserve in the manner in which it was created.

ARTICLE X

FISCAL YEAR

SECTION 42. FISCAL YEAR. The fiscal year of the corporation shall be fixed by resolution of the Board of Directors.

ARTICLE XI

INDEMNIFICATION

SECTION 43. INDEMNIFICATION OF DIRECTORS, OFFICERS, EMPLOYEES AND OTHER AGENTS.

(a) DIRECTORS AND EXECUTIVE OFFICERS. The corporation shall indemnify its directors and executive officers (for the purposes of this Article XI, "executive officers" shall have the meaning defined in Rule 3b-7 promulgated under the 1934 Act) to the fullest extent not prohibited by the Delaware General Corporation Law or any other applicable law; provided, however, that the corporation may modify the extent of such indemnification by individual contracts with its directors and executive officers; and, provided, further, that the corporation shall not be required to indemnify any director or executive officer in connection with any proceeding (or part thereof) initiated by such person unless (i) such indemnification is expressly required to be made by law, (ii) the proceeding was authorized by the Board of Directors of the corporation, (iii) such indemnification is provided by the corporation, in its sole discretion, pursuant to the powers vested in the corporation under the Delaware General Corporation Law or

any other applicable law or (iv) such indemnification id required to be made under subsection (d).

(b) OTHER OFFICERS, EMPLOYEES AND OTHER AGENTS. The corporation shall have power to indemnify its other officers, employees and other agents as set forth in the Delaware General Corporation Law or any other applicable law.

(c) EXPENSES. The corporation shall advance to any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that he is or was a director or executive officer, of the corporation, or is or was serving at the request of the corporation as a director or executive officer of another corporation, partnership, joint venture, trust or other enterprise, prior to the final disposition of the proceeding, promptly following request therefor, all expenses incurred by any director or executive officer in connection with such proceeding upon receipt of an undertaking by or on behalf of such person to repay said amounts if it should be determined ultimately that such person is not entitled to be indemnified under this Bylaw or otherwise.

Notwithstanding the foregoing, unless otherwise determined pursuant to paragraph (d) of this Bylaw, no advance shall be made by the corporation to

an executive officer of the corporation (except by reason of the fact that such executive officer is or was a director of the corporation in which event this paragraph shall not apply) in any action, suit or proceeding, whether civil, criminal, administrative or investigative, if a determination is reasonably and promptly made (i) by the Board of Directors by a majority vote of a quorum consisting of directors who were not parties to the proceeding, or (ii) if such quorum is not obtainable, or, even if obtainable, a quorum of disinterested directors so directs, by independent legal counsel in a written opinion, that the facts known to the decision-making party at the time such determination is made demonstrate clearly and convincingly that such person acted in bad faith or in a manner that such person did not believe to be in or not opposed to the best interests of the corporation.

(d) ENFORCEMENT. Without the necessity of entering into an express contract, all rights to indemnification and advances to directors and executive officers under this Bylaw shall be deemed to be contractual rights and be effective to the same extent and as if provided for in a contract between the corporation and the director or executive officer. Any right to indemnification or advances granted by this Bylaw to a director or executive officer shall be enforceable by or on behalf of the person holding such right in any court of competent jurisdiction if (i) the claim for indemnification or advances is denied, in whole or in part, or (ii) no disposition of such claim is made within ninety (90) days of request therefor. The claimant in such enforcement action, if successful in whole or in part, shall be entitled to be paid also the expense of prosecuting his claim. In connection with any claim for indemnification, the corporation shall be entitled to raise as a defense to any such action that the claimant has not met the standards of conduct that make it permissible under the Delaware General Corporation Law or any other applicable law for the corporation to indemnify the claimant for the amount claimed. In connection with any claim by an executive officer of the corporation (except in any action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that such executive officer is or was a director of the corporation) for advances, the corporation shall be entitled to raise a defense as to any such action clear and convincing evidence that such

person acted in bad faith or in a manner that such person did not believe to be in or not opposed to the best interests of the corporation, or with respect to any criminal action or proceeding that such person acted without reasonable cause to believe that his conduct was lawful. Neither the failure of the corporation (including its Board of Directors, independent legal counsel or its stockholders) to have made a determination prior to the commencement of such action that indemnification of the claimant is proper in the circumstances because he has met the applicable standard of conduct set forth in the Delaware General Corporation Law or any other applicable law, nor an actual determination by the corporation (including its Board of Directors, independent legal counsel or its stockholders) that the claimant has not met such applicable standard of conduct, shall be a defense to the action or create a presumption that claimant has not met the applicable standard of conduct. In any suit brought by a director or executive officer to enforce a right to indemnification or to an advancement of expenses hereunder, the burden of proving that the director or executive officer is not entitled to be indemnified, or to such advancement of expenses, under this Article XI or otherwise shall be on the corporation.

(e) NON-EXCLUSIVITY OF RIGHTS. The rights conferred on any person by this Bylaw shall not be exclusive of any other right which such person may have or hereafter acquire under any applicable statute, provision of the Certificate of Incorporation, Bylaws, agreement, vote of stockholders or disinterested directors or otherwise, both as to action in his official capacity and as to action in another capacity while holding office. The corporation is specifically authorized to enter into individual contracts with any or all of its directors, officers, employees or agents respecting

indemnification and advances, to the fullest extent not prohibited by the Delaware General Corporation Law or any other applicable law.

(f) SURVIVAL OF RIGHTS. The rights conferred on any person by this Bylaw shall continue as to a person who has ceased to be a director, officer, employee or other agent and shall inure to the benefit of the heirs, executors and administrators of such a person.

(g) INSURANCE. To the fullest extent permitted by the Delaware General Corporation Law or any other applicable law, the corporation, upon approval by the Board of Directors, may purchase insurance on behalf of any person required or permitted to be indemnified pursuant to this Bylaw.

(h) AMENDMENTS. Any repeal or modification of this Bylaw shall only be prospective and shall not affect the rights under this Bylaw in effect at the time of the alleged occurrence of any action or omission to act that is the cause of any proceeding against any agent of the corporation.

(i) SAVING CLAUSE. If this Bylaw or any portion hereof shall be invalidated on any ground by any court of competent jurisdiction, then the corporation shall nevertheless indemnify each director and executive officer to the full extent not prohibited by any applicable portion of this Bylaw that shall not have been invalidated, or by any other applicable law. If this Section 43 shall be invalid due to the application of the indemnification provisions of another jurisdiction, then the corporation shall indemnify each director and executive officer to the full extent under any other applicable law.

(j) CERTAIN DEFINITIONS. For the purposes of this Bylaw, the following definitions shall apply:

(i) The term "proceeding" shall be broadly construed and shall include, without limitation, the investigation, preparation, prosecution, defense, settlement, arbitration and appeal of, and the giving of testimony in, any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative.

(ii) The term "expenses" shall be broadly construed and shall include, without limitation, court costs, attorneys' fees, witness fees, fines, amounts paid in settlement or judgment and any other costs and expenses of any nature or kind incurred in connection with any proceeding.

(iii) The term the "corporation" shall include, in addition to the resulting corporation, any constituent corporation (including any constituent of a constituent) absorbed in a consolidation or merger which, if its separate existence had continued, would have had power and authority to indemnify its directors, officers, and employees or agents, so that any person who is or was a director, officer, employee or agent of such constituent corporation, or is or was serving at the request of such constituent corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, shall stand in the same position under the provisions of this Bylaw with respect to the resulting or surviving corporation as he would have with respect to such constituent corporation if its separate existence had continued.

(iv) References to a "director," "executive officer," "officer," "employee," or "agent" of the corporation shall include, without limitation, situations where such person is serving at the request of the corporation as, respectively, a director, executive officer, officer, employee, trustee or agent of another corporation, partnership, joint venture, trust or other enterprise.

(v) References to "other enterprises" shall include employee benefit plans; references to "fines" shall include any excise taxes assessed on a person with respect to an employee benefit plan; and references to "serving at the request of the corporation" shall include any service as a director, officer, employee or agent of the corporation which imposes duties on, or involves services by, such director, officer, employee, or agent with respect to an employee benefit plan, its participants, or beneficiaries; and a person who acted in good faith and in a manner he reasonably believed to be in the interest of the participants and beneficiaries of an employee benefit plan shall be deemed to have acted in a manner "not opposed to the best interests of the corporation" as referred to in this Bylaw.

ARTICLE XII

NOTICES

SECTION 44. NOTICES.

(a) NOTICE TO STOCKHOLDERS. Whenever, under any provisions of these Bylaws, notice is required to be given to any stockholder, it shall be given in writing, timely and

duly deposited in the United States mail, postage prepaid, and addressed to his last known post office address as shown by the stock record of the corporation or its transfer agent.

(b) NOTICE TO DIRECTORS. Any notice required to be given to any director may be given by the method stated in subsection (a), or by overnight delivery service, facsimile, telex or telegram, except that such notice other than one which is delivered personally shall be sent to such address as such director shall have filed in writing with the Secretary, or, in the absence of such filing, to the last known post office address of such director.

(c) AFFIDAVIT OF MAILING. An affidavit of mailing, executed by a duly authorized and competent employee of the corporation or its transfer agent appointed with respect to the class of stock affected, specifying the name and address or the names and addresses of the stockholder or stockholders, or director or directors, to whom any such notice or notices was or were given, and the time and method of giving the same, shall in the absence of fraud, be prima facie evidence of the facts therein contained.

(d) TIME NOTICES DEEMED GIVEN. All notices given by mail or by overnight delivery service, as above provided, shall be deemed to have been given as at the time of mailing, and all notices given by facsimile, telex or telegram shall be deemed to have been given as of the sending time recorded at time of transmission.

(e) METHODS OF NOTICE. It shall not be necessary that the same method of giving notice be employed in respect of all directors, but one permissible method may be employed in respect of any one or more, and any other permissible method or methods may be employed in respect of any other or others.

(f) FAILURE TO RECEIVE NOTICE. The period or limitation of time within which any stockholder may exercise any option or right, or enjoy any privilege or benefit, or be required to act, or within which any director may exercise any power or right, or enjoy any privilege, pursuant to any notice sent him in the manner above provided, shall not be affected or extended in any manner by the failure of such stockholder or such director to receive such notice.

(g) NOTICE TO PERSON WITH WHOM COMMUNICATION IS UNLAWFUL.

Whenever notice is required to be given, under any provision of law or of the Certificate of Incorporation or Bylaws of the corporation, to any person with whom communication is unlawful, the giving of such notice to such person shall not be required and there shall be no duty to apply to any governmental authority or agency for a license or permit to give such notice to such person. Any action or meeting which shall be taken or held without notice to any such person with whom communication is unlawful shall have the same force and effect as if such notice had been duly given. In the event that the action taken by the corporation is such as to require the filing of a certificate under any provision of the Delaware General Corporation Law, the certificate shall state, if such is the fact and if notice is required, that notice was given to all persons entitled to receive notice except such persons with whom communication is unlawful.

(h) NOTICE TO PERSON WITH UNDELIVERABLE ADDRESS. Whenever notice is required to be given, under any provision of law or the Certificate of Incorporation or Bylaws of the corporation, to any stockholder to whom (i) notice of two consecutive annual meetings, and

all notices of meetings or of the taking of action by written consent without a meeting to such person during the period between such two consecutive annual meetings, or (ii) all, and at least two, payments (if sent by first class mail) of dividends or interest on securities during a twelve-month period, have been mailed addressed to such person at his address as shown on the records of the corporation and have been returned undeliverable, the giving of such notice to such person shall not be required. Any action or meeting which shall be taken or held without notice to such person shall have the same force and effect as if such notice had been duly given. If any such person shall deliver to the corporation a written notice setting forth his then current address, the requirement that notice be given to such person shall be reinstated. In the event that the action taken by the corporation is such as to require the filing of a certificate under any provision of the Delaware General Corporation Law, the certificate need not state that notice was not given to persons to whom notice was not required to be given pursuant to this paragraph.

ARTICLE XIII

AMENDMENTS

SECTION 45. AMENDMENTS. Subject to paragraph (h) of Section 43 of the Bylaws, the Bylaws may be altered or amended or new Bylaws adopted by the affirmative vote of at least sixty-six and two-thirds percent (66-2/3%) of the voting power of all of the then-outstanding shares of the voting stock of the corporation entitled to vote. The Board of Directors shall also have the power to adopt, amend, or repeal the Bylaws.

ARTICLE XIV

LOANS TO OFFICERS

SECTION 46. LOANS TO OFFICERS. The corporation may lend money to, or guarantee any obligation of, or otherwise assist any officer or other employee of the corporation or of its subsidiaries, including any officer or employee who is a director of the corporation or its subsidiaries, whenever, in the judgment of the Board of Directors, such loan, guarantee or assistance may reasonably be expected to benefit the corporation. The loan, guarantee or other assistance may be with or without interest and may be unsecured, or secured in such manner as the Board of Directors shall approve, including, without limitation, a pledge of shares of stock of the corporation. Nothing in these Bylaws shall be deemed to deny, limit or restrict the powers of guaranty or warranty of the corporation at common law or under any statute.

Exhibit 10.7

GILEAD SCIENCES, INC.

EMPLOYEE STOCK PURCHASE PLAN

ADOPTED NOVEMBER 15, 1991
AMENDED MAY 25, 1994
AMENDED AND RESTATED JANUARY 22, 1998
APPROVED BY STOCKHOLDERS MAY 27, 1998
AMENDED MARCH 30, 1999

TERMINATION DATE: JANUARY 21, 2008

1. PURPOSE.

(a) The purpose of the Employee Stock Purchase Plan ("the Plan") is to provide a means by which employees of GILEAD SCIENCES, INC., a Delaware corporation (the "Company"), and its Affiliates, as defined in subparagraph 1(c), which are designated as provided in subparagraph 2(b), may be given an opportunity to purchase stock of the Company.

(b) Plan initially was adopted on November 15, 1991 and subsequently amended on May 25, 1994 (the "Initial Plan"). The Initial Plan hereby is amended and restated in its entirety effective as of January 22, 1998. The terms of the Initial Plan (other than the aggregate number of shares issuable thereunder) shall remain in effect and apply to all options granted pursuant to the Initial Plan.

(c) The word "Affiliate" as used in the Plan means any parent corporation or subsidiary corporation of the Company, as those terms are defined in Sections 424(e) and (f), respectively, of the Internal Revenue Code of 1986, as amended (the "Code").

(d) The Company, by means of the Plan, seeks to retain the services of its employees, to secure and retain the services of new employees, and to provide incentives for such persons to exert maximum efforts for the success of the Company.

(e) The Company intends that the rights to purchase stock of the Company granted under the Plan be considered options issued under an "employee stock purchase plan" as that term is defined in Section 423(b) of the Code.

2. ADMINISTRATION.

(a) The Plan shall be administered by the Board of Directors (the "Board") of the Company unless and until the Board delegates administration to a Committee, as provided in subparagraph 2(c). Whether or not the Board has delegated administration, the Board shall have

the final power to determine all questions of policy and expediency that may arise in the administration of the Plan.

(b) The Board shall have the power, subject to, and within the limitations of, the express provisions of the Plan:

(i) To determine when and how rights to purchase stock of the Company shall be granted and the provisions of each offering of such

rights (which need not be identical).

(ii) To designate from time to time which Affiliates of the Company shall be eligible to participate in the Plan.

(iii) To construe and interpret the Plan and rights granted under it, and to establish, amend and revoke rules and regulations for its administration. The Board, in the exercise of this power, may correct any defect, omission or inconsistency in the Plan, in a manner and to the extent it shall deem necessary or expedient to make the Plan fully effective.

(iv) To amend the Plan as provided in paragraph 13.

(v) Generally, to exercise such powers and to perform such acts as the Board deems necessary or expedient to promote the best interests of the Company.

(c) The Board may delegate administration of the Plan to a Committee composed of not fewer than two (2) members of the Board (the "Committee"). If administration is delegated to a Committee, the Committee shall have, in connection with the administration of the Plan, the powers theretofore possessed by the Board, subject, however, to such resolutions, not inconsistent with the provisions of the Plan, as may be adopted from time to time by the Board. The Board may abolish the Committee at any time and revest in the Board the administration of the Plan.

3. SHARES SUBJECT TO THE PLAN.

Subject to the provisions of paragraph 12 relating to adjustments upon changes in stock, the stock that may be sold pursuant to rights granted under the Plan shall not exceed in the aggregate one million five hundred eighty thousand (1,580,000) shares of the Company's $.001 par value common stock (the "Common Stock"). If any right granted under the Plan shall for any reason terminate without having been exercised, the Common Stock not purchased under such right shall again become available for the Plan. The stock subject to the Plan may be unissued shares or reacquired shares, bought on the market or otherwise.

4. GRANT OF RIGHTS; OFFERING.

The Board or the Committee may from time to time grant or provide for the grant of rights to purchase Common Stock of the Company under the Plan to eligible employees (an "Offering") on a date or dates (the "Offering Date(s)") selected by the Board or the Committee.

Each Offering shall be in such form and shall contain such terms and conditions as the Board or the Committee shall deem appropriate. If an employee has more than one right outstanding under the Plan, unless he or she otherwise indicates in agreements or notices delivered hereunder: (1) each agreement or notice delivered by that employee will be deemed to apply to all of his or her rights under the Plan, and (2) a right with a lower exercise price (or an earlier-granted right, if two rights have identical exercise prices), will be exercised to the fullest possible extent before a right with a higher exercise price (or a later-granted right, if two rights have identical exercise prices) will be exercised. The provisions of separate Offerings need not be identical, but each Offering shall include (through incorporation of the provisions of this Plan by reference in the Offering or otherwise) the substance of the provisions contained in paragraphs 5 through 8, inclusive.

5. ELIGIBILITY.

(a) Rights may be granted only to employees of the Company or, as

the Board or the Committee may designate as provided in subparagraph 2(b), to employees of any Affiliate of the Company. Except as provided in subparagraph 5(b), an employee of the Company or any Affiliate shall not be eligible to be granted rights under the Plan, unless, on the Offering Date, such employee has been in the employ of the Company or any Affiliate for such continuous period preceding such grant as the Board or the Committee may require, but in no event shall the required period of continuous employment be equal to or greater than two (2) years. In addition, unless otherwise determined by the Board or the Committee and set forth in the terms of the applicable Offering, no employee of the Company or any Affiliate shall be eligible to be granted rights under the Plan, unless, on the Offering Date, such employee's customary employment with the Company or such Affiliate is at least twenty (20) hours per week and at least five (5) months per calendar year.

(b) The Board or the Committee may provide that, each person who, during the course of an Offering, first becomes an eligible employee of the Company or designated Affiliate will, on a date or dates specified in the Offering which coincides with the day on which such person becomes an eligible employee or occurs thereafter, receive a right under that Offering, which right shall thereafter be deemed to be a part of that Offering. Such right shall have the same characteristics as any rights originally granted under that Offering, as described herein, except that:

(i) the date on which such right is granted shall be the "Offering Date" of such right for all purposes, including determination of the exercise price of such right;

(ii) the Purchase Period (as defined below) for such right shall begin on its Offering Date and end coincident with the end of such Offering; and

(iii) the Board or the Committee may provide that if such person first becomes an eligible employee within a specified period of time before the end of the Purchase Period (as defined below) for such Offering, he or she will not receive any right under that Offering.

(c) No employee shall be eligible for the grant of any rights under the Plan if, immediately after any such rights are granted, such employee owns stock possessing five percent (5%) or more of the total combined voting power or value of all classes of stock of the Company or of any Affiliate. For purposes of this subparagraph 5(c), the rules of Section 424(d) of the Code shall apply in determining the stock ownership of any employee, and stock which such employee may purchase under all outstanding rights and options shall be treated as stock owned by such employee.

(d) An eligible employee may be granted rights under the Plan only if such rights, together with any other rights granted under "employee stock purchase plans" of the Company and any Affiliates, as specified by Section 423(b)(8) of the Code, do not permit such employee's rights to purchase stock of the Company or any Affiliate to accrue at a rate which exceeds twenty-five thousand dollars ($25,000) of fair market value of such stock (determined at the time such rights are granted) for each calendar year in which such rights are outstanding at any time.

(e) Officers of the Company and any designated Affiliate shall be eligible to participate in Offerings under the Plan, provided, however, that the Board may provide in an Offering that certain employees who are highly compensated employees within the meaning of Section 423(b)(4)(D) of the Code shall not be eligible to participate.

6. RIGHTS; PURCHASE PRICE.

(a) On each Offering Date, each eligible employee, pursuant to an Offering made under the Plan, shall be granted the right to purchase the number of shares of Common Stock of the Company purchasable with up to fifteen percent (15%) (or such lower percentage as the Board determines for a particular Offering) of such employee's Earnings (as defined in Section 7(a)) during the period which begins on the Offering Date (or such later date as the Board determines for a particular Offering) and ends on the date stated in the Offering, which date shall be no more than twenty-seven (27) months after the Offering Date (the "Purchase Period"). In connection with each Offering made under this Plan, the Board or the Committee shall specify a maximum number of shares which may be purchased by any employee as well as a maximum aggregate number of shares which may be purchased by all eligible employees pursuant to such Offering. In addition, in connection with each Offering which contains more than one Exercise Date (as defined in the Offering), the Board or the Committee may specify a maximum aggregate number of shares which may be purchased by all eligible employees on any given Exercise Date under the Offering. If the aggregate purchase of shares upon exercise of rights granted under the Offering would exceed any such maximum aggregate number, the Board or the Committee shall make a pro rata allocation of the shares available in as nearly a uniform manner as shall be practicable and as it shall deem to be equitable.

(b) In connection with each Offering made under the Plan, the Board or the Committee may specify a maximum number of shares that may be purchased by any employee as well as a maximum aggregate number of shares that may be purchased by all eligible employees pursuant to such Offering. In addition, in connection with each Offering that contains more than one Purchase Date, the Board or the Committee may specify a maximum aggregate

number of shares which may be purchased by all eligible employees on any given Purchase Date under the Offering. If the aggregate purchase of shares upon exercise of rights granted under the Offering would exceed any such maximum aggregate number, the Board or the Committee shall make a pro rata allocation of the shares available in as nearly a uniform manner as shall be practicable and as it shall deem to be equitable.

(c) The purchase price of stock acquired pursuant to rights granted under the Plan shall be not less than the lesser of:

(i) an amount equal to eighty-five percent (85%) of the fair market value of the stock on the Offering Date; or

(ii) an amount equal to eighty-five percent (85%) of the fair market value of the stock on the Exercise Date.

7. PARTICIPATION; WITHDRAWAL; TERMINATION.

(a) An eligible employee may become a participant in an Offering by delivering a participation agreement to the Company within the time specified in the Offering, in such form as the Company provides. Each such agreement shall authorize payroll deductions of up to fifteen percent (15%) (or such lower percentage as the Board determines for a particular Offering) of such employee's Earnings during the Purchase Period. "Earnings" is defined as an employee's total compensation, including all salary, wages and other remuneration paid to an employee (including amounts elected to be deferred by the employee, that would otherwise have been paid, under any cash or deferred arrangement established by the Company), overtime pay, commissions, bonuses, profit sharing, any special payments for extraordinary services, provided, however, that the Board in its sole discretion may limit the above definition from time to time with respect to each Offering. The payroll deductions made for each participant shall be credited to an account for such participant under the Plan and shall be deposited with the general funds of the Company. A participant may reduce, increase or begin such

payroll deductions after the beginning of any Purchase Period only as provided for in the Offering. A participant may make additional payments into his or her account only if specifically provided for in the Offering and only if the participant has not had the maximum amount withheld during the Purchase Period.

(b) At any time during a Purchase Period a participant may terminate his or her payroll deductions under the Plan and withdraw from the Offering by delivering to the Company a notice of withdrawal in such form as the Company provides. Such withdrawal may be elected at any time prior to the end of the Purchase Period. Upon such withdrawal from the Offering by a participant, the Company shall distribute to such participant all of his or her accumulated payroll deductions (reduced to the extent, if any, such deductions have been used to acquire stock for the participant) under the Offering, without interest unless the terms of the Offering specifically so provide, and such participant's interest in that Offering shall be automatically terminated. A participant's withdrawal from an Offering will have no effect upon such participant's eligibility to participate in any other Offerings under the Plan but such participant will be required to deliver a new participation agreement in order to participate in subsequent Offerings under the Plan.

(c) Rights granted pursuant to any Offering under the Plan shall terminate immediately upon cessation of any participating employee's employment with the Company or an Affiliate, for any reason, and the Company shall distribute to such terminated employee all of his or her accumulated payroll deductions (reduced to the extent, if any, such deductions have been used to acquire stock for the terminated employee), under the Offering, without interest unless the terms of the Offering specifically so provide.

(d) Rights granted under the Plan shall not be transferable by a participant otherwise than by will or the laws of descent and distribution, or by a beneficiary designation as provided in paragraph 14 and, otherwise during his or her lifetime, shall be exercisable only by the person to whom such rights are granted.

8. EXERCISE.

(a) On each exercise date, as defined in the relevant Offering (an "Exercise Date"), each participant's accumulated payroll deductions (without any increase for interest unless the terms of the Offering specifically so provide) will be applied to the purchase of whole shares of stock of the Company, up to the maximum number of shares permitted pursuant to the terms of the Plan and the applicable Offering, at the purchase price specified in the Offering. No fractional shares shall be issued upon the exercise of rights granted under the Plan. The amount, if any, of accumulated payroll deductions remaining in each participant's account after the purchase of shares which is less than the amount required to purchase one share of stock on the final Exercise Date of an Offering shall be held in each such participant's account for the purchase of shares under the next Offering under the Plan, unless such participant withdraws from such next Offering, as provided in subparagraph 7(b), or is no longer eligible to be granted rights under the Plan, as provided in paragraph 5, in which case such amount shall be distributed to the participant after said final Exercise Date, without interest unless the terms of the Offering specifically so provide. The amount, if any, of accumulated payroll deductions remaining in any participant's account after the purchase of shares which is equal to the amount required to purchase whole shares of stock on the final Exercise Date of an Offering shall be distributed in full to the participant after such Exercise Date, without interest unless the terms of the Offering specifically so provide.

(b) No rights granted under the Plan may be exercised to any

extent unless the Plan (including rights granted thereunder) is covered by an effective registration statement pursuant to the Securities Act of 1933, as amended (the "Securities Act"). If on an Exercise Date of any Offering hereunder the Plan is not so registered, no rights granted under the Plan or any Offering shall be exercised on said Exercise Date and all payroll deductions accumulated during the purchase period (reduced to the extent, if any, such deductions have been used to acquire stock) shall be distributed to the participants, without interest unless the terms of the Offering specifically so provide.

(c) Shares of stock of the Company that are purchased may be registered in the name of the participant or jointly in the name of the participant and his or her spouse as joint tenants with right of survivorship or community property.

9. COVENANTS OF THE COMPANY.

(a) During the terms of the rights granted under the Plan, the Company shall keep available at all times the number of shares of stock required to satisfy such rights.

(b) The Company shall seek to obtain from each regulatory commission or agency having jurisdiction over the Plan such authority as may be required to issue and sell shares of stock upon exercise of the rights granted under the Plan. If, after reasonable efforts, the Company is unable to obtain from any such regulatory commission or agency the authority which counsel for the Company deems necessary for the lawful issuance and sale of stock under the Plan, the Company shall be relieved from any liability for failure to issue and sell stock upon exercise of such rights unless and until such authority is obtained.

10. USE OF PROCEEDS FROM STOCK.

Proceeds from the sale of stock pursuant to rights granted under the Plan shall constitute general funds of the Company.

11. RIGHTS AS A STOCKHOLDER.

A participant shall not be deemed to be the holder of, or to have any of the rights of a holder with respect to, any shares subject to rights granted under the Plan unless and until certificates representing such shares shall have been issued.

12. ADJUSTMENTS UPON CHANGES IN STOCK.

(a) If any change is made in the stock subject to the Plan, or subject to any rights granted under the Plan (through merger, consolidation, reorganization, recapitalization, stock dividend, dividend in property other than cash, stock split, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or otherwise), the Plan and outstanding rights will be appropriately adjusted in the class(es) and maximum number of shares subject to the Plan and the class(es) and number of shares and price per share of stock subject to outstanding rights.

(b) In the event of: (1) a dissolution or liquidation of the Company; (2) a merger or consolidation in which the Company is not the surviving corporation; (3) a reverse merger in which the Company is the surviving corporation but the shares of the Company's Common Stock outstanding immediately preceding the merger are converted by virtue of the merger into other property, whether in the form of securities, cash or otherwise; or (4) any other capital reorganization in which more than fifty percent (50%) of the shares of the Company entitled to vote are exchanged, then, as determined by the Board in its sole discretion (i) any surviving

corporation may assume outstanding rights or substitute similar rights for those under the Plan, (ii) such rights may continue in full force and effect, or (iii) participants' accumulated payroll deductions may be used to purchase Common Stock immediately prior to the transaction described above and the participants' rights under the ongoing Offering terminated.

13. AMENDMENT OF THE PLAN.

(a) The Board at any time, and from time to time, may amend the Plan. However, except as provided in paragraph 12 relating to adjustments upon changes in stock, no amendment shall be effective unless approved by the stockholders of the Company within twelve (12) months before or after the adoption of the amendment, where the amendment will:

(i) Increase the number of shares reserved for rights under the Plan;

(ii) Modify the provisions as to eligibility for participation in the Plan (to the extent such modification requires stockholder approval in order for the Plan to obtain employee stock purchase plan treatment under Section 423 of the Code or to comply with the requirements of Rule 16b-3 promulgated under the Exchange Act of 1934, as amended (the "Exchange Act")); or

(iii) Modify the Plan in any other way if such modification requires stockholder approval in order for the Plan to obtain employee stock purchase plan treatment under Section 423 of the Code or to comply with the requirements of Rule 16b-3 promulgated under the Exchange Act or any Nasdaq or securities exchange listing requirements.

The Board may, in its sole discretion, submit any other amendment to the Plan for stockholder approval. It is expressly contemplated that the Board may amend the Plan in any respect the Board deems necessary or advisable to provide eligible employees with the maximum benefits provided or to be provided under the provisions of the Code and the regulations promulgated thereunder relating to employee stock purchase plans and/or to bring the Plan and/or rights granted under it into compliance therewith.

(b) Rights and obligations under any rights granted before amendment of the Plan shall not be altered or impaired by any amendment of the Plan, except with the consent of the person to whom such rights were granted or except as necessary to comply with any laws or governmental regulations or to ensure that the Plan and/or rights granted under the Plan comply with the requirements of Section 423 of the Code.

14. DESIGNATION OF BENEFICIARY.

(a) A participant may file a written designation of a beneficiary who is to receive any shares and cash, if any, from the participant's account under the Plan in the event of such participant's death subsequent to the end of an Offering but prior to delivery to the participant of such shares and cash. In addition, a participant may file a written designation of a beneficiary who is to receive any cash from the participant's account under the Plan in the event of such participant's death during an Offering.

(b) The participant may change such designation of beneficiary at any time by written notice. In the event of the death of a participant and in the absence of a beneficiary validly designated under the Plan who is living at the time of such participant's death, the Company shall deliver such shares and/or cash to the executor or administrator of the estate of

the participant, or if no such executor or administrator has been appointed (to the knowledge of the Company), the Company, in its sole discretion, may deliver such shares and/or cash to the spouse or to any one or more dependents or relatives of the participant, or if no spouse, dependent or relative is known to the Company, then to such other person as the Company may designate.

15. TERMINATION OR SUSPENSION OF THE PLAN.

(a) The Board may suspend or terminate the Plan at any time. Unless sooner terminated, the Plan shall terminate ten (10) years from the date the Plan is adopted by the Board or approved by the stockholders of the Company, whichever is earlier. No rights may be granted under the Plan while the Plan is suspended or after it is terminated.

(b) Rights and obligations under any rights granted while the Plan is in effect shall not be impaired by suspension or termination of the Plan, except as expressly provided in the Plan or with the consent of the person to whom such rights were granted, or except as necessary to comply with any laws or governmental regulation or to ensure that the Plan and/or rights granted under the Plan comply with the requirements of Section 423 of the Code.

16. EFFECTIVE DATE OF PLAN.

The Plan shall become effective as determined by the Board, but no rights granted under the Plan shall be exercised unless and until the stockholders of the Company have approved the Plan.

Exhibit 10.8

GILEAD SCIENCES, INC.
1991 STOCK OPTION PLAN

ADOPTED NOVEMBER 15, 1991
AMENDED APRIL 8, 1992
AMENDED APRIL 21, 1993
AMENDED OCTOBER 17, 1995
AMENDED AND RESTATED JANUARY 22, 1998
AMENDED MARCH 30, 1999

TERMINATION DATE: OCTOBER 31, 2001

1. PURPOSES.

(a) The Plan initially was adopted on November 15, 1991 and amended through October 17, 1995 (the "Initial Plan"). The Initial Plan hereby is amended and restated in its entirety effective as of January 22, 1998. The terms of the Plan (excluding the amended provision relating to the exercise price of Nonstatutory Stock Options) shall apply to all options granted pursuant to the Initial Plan.

(b) The purpose of the Plan is to provide a means by which selected Employees and Directors of, and Consultants to, the Company and its Affiliates may be given an opportunity to purchase stock of the Company.

(c) The Company, by means of the Plan, seeks to retain the services of persons who are now Employees of or Consultants to the Company, to secure and retain the services of new Employees and Consultants, and to provide incentives for such persons to exert maximum efforts for the success of the Company.

(d) The Company intends that the Options issued under the Plan shall, in the discretion of the Board or any Committee to which responsibility for administration of the Plan has been delegated pursuant to subsection 3(c), be either Incentive Stock Options or Nonstatutory Stock Options. All Options shall be separately designated Incentive Stock Options or Nonstatutory Stock Options at the time of grant, and in such form as issued pursuant to Section 6, and a separate certificate or certificates will be issued for shares purchased on exercise of each type of Option.

2. DEFINITIONS.

(a) "AFFILIATE" means any parent corporation or subsidiary corporation of the Company, whether now or hereafter existing, as those terms are defined in Sections 424(e) and (f) respectively, of the Code.

(b) "BOARD" means the Board of Directors of the Company.

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

(d) "COMMITTEE" means a Committee appointed by the Board in accordance with subsection 3(c) of the Plan.

(e) "COMPANY" means Gilead Sciences, Inc., a Delaware corporation.

(f) "CONSULTANT" means any person, including an advisor, engaged by the Company or an Affiliate to render services and who is compensated for such

services, provided that the term "Consultant" shall not include Directors who are paid only a director's fee by the Company or who are not otherwise compensated by the Company for their services as Directors. The term "Consultant" shall include a member of the Board of Directors of an Affiliate.

(g) "CONTINUOUS SERVICE" (formerly designated as "CONTINUOUS STATUS AS AN EMPLOYEE OR CONSULTANT") means that the Optionee's service with the Company or its Affiliates is not interrupted or terminated. The Optionee's Continuous Service shall not be deemed to have terminated merely because of a change in the capacity in which the Optionee renders service to the Company or its Affiliates or a change in the entity for which the Optionee renders such service, provided that there is no interruption or termination of the Optionee's Continuous Service. For example, a change in status from an Employee of the Company to a Consultant or Director of the Company or a member of the Board of Directors of an Affiliate will not constitute an interruption of Continuous Service. The Board or the chief executive officer of the Company, in that party's sole discretion, may determine whether Continuous Service shall be considered interrupted in the case of any leave of absence approved by the Board or the chief executive officer of the Company, including sick leave, military leave, or any other personal leave.

(h) "COVERED EMPLOYEE" means the chief executive officer and the four (4) other highest compensated officers of the Company for whom total compensation is required to be reported to shareholders under the Exchange Act, as determined for purposes of Section 162(m) of the Code.

(i) "DIRECTOR" means a member of the Board.

(j) "DISABILITY" means total and permanent disability as defined in Section 22(e)(3) of the Code.

(k) "EMPLOYEE" means any person, including Officers and Directors, employed by the Company or any Affiliate of the Company. Neither service as a Director nor payment of a director's fee by the Company shall be sufficient to constitute "employment" by the Company.

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

(m) "FAIR MARKET VALUE" means, as of any date, the value of the common stock of the Company determined as follows:

(i) If the common stock is listed on any established stock exchange or a national market system, including without limitation the National Market System of the National Association of Securities Dealers, Inc. Automated Quotation ("NASDAQ") System, the Fair Market Value of a share of common stock shall be the closing sales price for such stock (or the closing bid, if no sales were reported) as quoted on such system or exchange (or the exchange with the greatest volume of trading in common stock) on the last market trading day prior to the day of determination, as reported in the Wall Street Journal or such other source as the Board deems reliable;

(ii) If the common stock is quoted on the NASDAQ System (but not on the National Market System thereof) or is regularly quoted by a recognized securities dealer but selling prices are not reported, the Fair Market Value of a share of common stock shall be the mean between the high bid and high asked prices for the common stock on the last market trading day prior to the day of determination, as reported in the Wall Street Journal or such other source as the Board deems reliable;

(iii) In the absence of an established market for the common stock, the Fair Market Value shall be determined in good faith by the Board.

(n) "INCENTIVE STOCK OPTION" means an Option intended to qualify as an incentive stock option within the meaning of Section 422 of the Code and the regulations promulgated thereunder.

(o) "NON-EMPLOYEE DIRECTOR" means a Director who either (i) is not a current Employee or Officer of the Company or its parent or subsidiary, does not receive compensation (directly or indirectly) from the Company or its parent or subsidiary for services rendered as a consultant or in any capacity other than as a Director (except for an amount as to which disclosure would not be required under Item 404(a) of Regulation S-K promulgated pursuant to the Securities Act), does not possess an interest in any other transaction as to which disclosure would be required under Item 404(a) of Regulation S-K, and is not engaged in a business relationship as to which disclosure would be required under Item 404(b) of Regulation S-K; or (ii) is otherwise considered a "non-employee director" for purposes of Rule 16b-3.

(p) "NONSTATUTORY STOCK OPTION" means an Option not intended to qualify as an Incentive Stock Option.

(q) "OFFICER" means a person who is an officer of the Company within the meaning of Section 16 of the Exchange Act and the rules and regulations promulgated thereunder.

(r) "OPTION" means a stock option granted pursuant to the Plan.

(s) "OPTION AGREEMENT" means a written agreement between the Company and an Optionee evidencing the terms and conditions of an individual Option grant. The Option Agreement is subject to the terms and conditions of the Plan.

(t) "OPTIONED STOCK" means the common stock of the Company subject to an Option.

(u) "OPTIONEE" means a person who holds an outstanding Option.

(v) "OUTSIDE DIRECTOR" means a Director who either (i) is not a current employee of the Company or an "affiliated corporation" (within the meaning of the Treasury regulations promulgated under Section 162(m) of the Code), is not a former employee of the Company or an "affiliated corporation" receiving compensation for prior services (other than benefits under a tax qualified pension plan), was not an officer of the Company or an "affiliated corporation" at any time, and is not currently receiving direct or indirect remuneration from the Company or an "affiliated corporation" for services in any capacity other than as a Director, or (ii) is otherwise considered an "outside director" for purposes of Section 162(m) of the Code.

(w) "PLAN" means this 1991 Stock Option Plan.

(x) "RULE 16b-3" means Rule 16b-3 of the Exchange Act or any successor to Rule 16b-3, as in effect when discretion is being exercised with respect to the Plan.

3. ADMINISTRATION.

(a) The Board shall administer the Plan unless and until the Board delegates administration to a Committee, as provided in subsection 3(c).

(b) The Board shall have the power, subject to, and within the limitations of, the express provisions of the Plan:

(i) To determine from time to time which of the persons eligible under the Plan shall be granted Options; when and how the Option shall be granted; whether the Option will be an Incentive Stock Option or a

Nonstatutory Stock Option; the provisions of each Option granted (which need not be identical), including the time or times such Option may be exercised in whole or in part; and the number of shares for which an Option shall be granted to each such person.

(ii) To construe and interpret the Plan and Options granted under it, and to establish, amend and revoke rules and regulations for its administration. The Board, in the exercise of this power, may correct any defect, omission or inconsistency in the Plan or in any Option Agreement, in a manner and to the extent it shall deem necessary or expedient to make the Plan fully effective.

(iii) To amend the Plan as provided in Section 11.

(iv) Generally, to exercise such powers and to perform such acts as the Board deems necessary or expedient to promote the best interests of the Company.

(c) The Board may delegate administration of the Plan to a Committee or Committees of one or more members of the Board. In the discretion of the Board, a Committee may consist solely of two or more Outside Directors, in accordance with Code Section 162(m), or solely of two or more Non-Employee Directors, in accordance with Rule 16b-3 of the Exchange Act. If administration is delegated to a Committee, the Committee shall have, in connection with the administration of the Plan, the powers theretofore possessed by the Board (and references in this Plan to the Board shall thereafter be to the Committee), subject, however, to such resolutions, not inconsistent with the provisions of the Plan, as may be adopted from time to time by the Board. The Board may abolish the Committee at any time and revest in the Board the administration of the Plan. Within the scope of this authority, the Board or the Committee may delegate to a committee of one or more members of the Board the authority to grant Options to eligible persons who (1) are not then subject to Section 16 of the Exchange Act and/or (2) are either (i) not then Covered Employees and are not expected to be Covered Employees at the time of recognition of income resulting from such Option, or (ii) not persons with respect to whom the Company wishes to comply with Section 162(m) of the Code.

4. SHARES SUBJECT TO THE PLAN.

(a) Subject to the provisions of Section 10 relating to adjustments upon changes in stock, the stock that may be sold pursuant to Options shall not exceed in the aggregate Ten Million (10,000,000) shares of the Company's common stock. If any Option shall for any reason expire or otherwise terminate, in whole or in part, without having been exercised in full, the stock not purchased under such Option shall revert to again become available for issuance under the Plan.

(b) The stock subject to the Plan may be unissued shares or reacquired shares, bought on the market or otherwise.

5. ELIGIBILITY.

(a) Incentive Stock Options may be granted only to Employees. Nonstatutory Stock Options may be granted to Employees, Directors and Consultants.

(b) No person shall be eligible for the grant of an Incentive Stock Option if, at the time of grant, such person owns (or is deemed to own pursuant to Section 424(d) of the Code) stock possessing more than ten percent (10%) of the total combined voting power of all classes of stock of the Company or of any of its Affiliates unless the exercise price of such Option is at least one hundred ten percent (110%) of the Fair Market Value of

such stock at the date of grant and the Option is not exercisable after the expiration of five (5) years from the date of grant.

(c) Subject to the provisions of Section 10 relating to adjustments upon changes in stock, no person shall be eligible to be granted Options covering more than Five Hundred Thousand (500,000) shares of the Company's common stock in any calendar year.

6. OPTION PROVISIONS.

Each Option shall be in such form and shall contain such terms and conditions as the Board shall deem appropriate. The provisions of separate Options need not be identical, but each Option shall include (through incorporation of provisions hereof by reference in the Option or otherwise) the substance of each of the following provisions:

(a) TERM. No Option shall be exercisable after the expiration of ten (10) years from the date it was granted.

(b) PRICE.

(i) EXERCISE PRICE. The exercise price of each Incentive Stock Option and each Nonstatutory Stock Option shall be not less than one hundred percent (100%) of the fair market value of the stock subject to the Option on the date the Option is granted.

(ii) NO AUTHORITY TO REPRICE. Without the consent of the stockholders of the Company, the Board shall have no authority to effect (a) the repricing of any outstanding Options under the Plan and/or (b) the cancellation of any outstanding Options under the Plan and the grant in substitution therefor of new Options under the Plan covering the same or different numbers of shares of Common Stock.

(c) CONSIDERATION. The purchase price of stock acquired pursuant to an Option shall be paid, to the extent permitted by applicable statutes and regulations, either (i) in cash at the time the Option is exercised, or (ii) at the discretion of the Board or the Committee, at the time of the grant of the Option, (A) by delivery to the Company of other common stock of the Company, (B) according to a deferred payment arrangement, except that payment of the common stock's "par value" (as defined in the Delaware General Corporation Law) shall not be made by deferred payment or other arrangement (which may include, without limiting the generality of the foregoing, the use of other common stock of the Company) with the person to whom the Option is granted or to whom the Option is transferred pursuant to subsection 6(d), or (C) in any other form of legal consideration that may be acceptable to the Board.

In the case of any deferred payment arrangement, interest shall be compounded at least annually and shall be charged at the minimum rate of interest necessary to avoid the treatment as interest, under any applicable provisions of the Code, of any amounts other than amounts stated to be interest under the deferred payment arrangement.

(d) TRANSFERABILITY. An Incentive Stock Option shall not be transferable except by will or by the laws of descent and distribution, and shall be exercisable during the lifetime of the person to whom the Option is granted only by such person. A Nonstatutory Stock Option but not an Incentive Stock Option, may be transferred to the extent provided in the Option Agreement; provided that if the Option Agreement does not expressly permit the transfer of a Nonstatutory Stock Option, the Nonstatutory Stock Option shall not be transferable except by will, by the laws of descent and distribution and shall be exercisable during the lifetime of the person to whom the Option is granted only by such person. The person to whom the Option

is granted may, by

delivering written notice to the Company, in a form satisfactory to the Company, designate a third party who, in the event of the death of the Optionee, shall thereafter be entitled to exercise the Option.

(e) VESTING. The total number of shares of stock subject to an Option may, but need not, be allotted in periodic installments (which may, but need not, be equal). The Option Agreement may provide that from time to time during each of such installment periods, the Option may become exercisable ("vest") with respect to some or all of the shares allotted to that period, and may be exercised with respect to some or all of the shares allotted to such period and/or any prior period as to which the Option became vested but was not fully exercised. During the remainder of the term of the Option (if its term extends beyond the end of the installment periods), the option may be exercised from time to time with respect to any shares then remaining subject to the Option. The Option may be subject to such other terms and conditions on the time or times when it may be exercised (which may be based on performance or other criteria) as the Board may deem appropriate. The provisions of this subsection 6(e) are subject to any Option provisions governing the minimum number of shares as to which an Option may be exercised.

(f) SECURITIES LAW COMPLIANCE. The Company may require any Optionee, or any person to whom an Option is transferred under subsection 6(d), as a condition of exercising any such Option, (1) to give written assurances satisfactory to the Company as to the Optionee's knowledge and experience in financial and business matters and/or to employ a purchaser representative reasonably satisfactory to the Company who is knowledgeable and experienced in financial and business matters, and that he or she is capable of evaluating, alone or together with the purchaser representative, the merits and risks of exercising the Option; and (2) to give written assurances satisfactory to the Company stating that such person is acquiring the stock subject to the Option for such person's own account and not with any present intention of selling or otherwise distributing the stock. These requirements, and any assurances given pursuant to such requirements, shall be inoperative if (i) the issuance of the shares upon the exercise of the Option has been registered under a then currently effective registration statement under the Securities Act of 1933, as amended (the "Securities Act"), or (ii) as to any particular requirement, a determination is made by counsel for the Company that such requirement need not be met in the circumstances under the then applicable securities laws. The Company may require the Optionee to provide such other representations, written assurances, or information which the Company shall determine is necessary, desirable or appropriate to comply with applicable securities and other laws as a condition of granting an Option to such Optionee or permitting the Optionee to exercise such Option. The Company may, upon advice of counsel to the Company, place legends on stock certificates issued under the Plan as such counsel deems necessary or appropriate in order to comply with applicable securities laws, including, but not limited to, legends restricting the transfer of the stock.

(g) TERMINATION OF EMPLOYMENT OR CONSULTING RELATIONSHIP. In the event an Optionee's Continuous Service terminates (other than upon the Optionee's death or Disability), the Optionee may exercise his or her Option, but only within such period of time as is determined by the Board, and only to the extent that the Optionee was entitled to exercise it at

the date of termination (but in no event later than the expiration of the term of such Option as set forth in the Option Agreement). In the case of an Incentive Stock Option, the Board shall determine such period of time (in no event to exceed ninety (90) days from the date of termination) when the Option is granted. If, at the date of termination, the Optionee is not entitled to exercise his or her entire Option, the shares covered by the unexercisable portion of the Option shall revert to the Plan. If, after termination, the Optionee does not exercise his or her Option within the time specified in the Option Agreement, the Option shall terminate, and the shares covered by such Option shall revert to the Plan.

(h) DISABILITY OF OPTIONEE. In the event an Optionee's Continuous Service terminates as a result of the Optionee's Disability, the Optionee may exercise his or her Option, but only within twelve (12) months from the date of such termination (or such shorter period specified in the Option Agreement), and only to the extent that the Optionee was entitled to exercise it at the date of such termination (but in no event later than the expiration of the term of such Option as set forth in the Option Agreement). If, at the date of termination, the Optionee is not entitled to exercise his or her entire Option, the shares covered by the unexercisable portion of the Option shall revert to the Plan. If, after termination, the Optionee does not exercise his or her Option within the time specified herein, the Option shall terminate, and the shares covered by such Option shall revert to the Plan.

(i) DEATH OF OPTIONEE. In the event of the death of an Optionee, the Option may be exercised, at any time within twelve (12) months following the date of death (or such shorter period specified in the Option Agreement) (but in no event later than the expiration of the term of such Option as set forth in the Option Agreement), by the Optionee's estate or by a person who acquired the right to exercise the Option by bequest or inheritance, but only to the extent the Optionee was entitled to exercise the Option at the date of death. If, at the time of death, the Optionee was not entitled to exercise his or her entire Option, the shares covered by the unexercisable portion of the Option shall revert to the Plan. If, after death, the Optionee's estate or a person who acquired the right to exercise the Option by bequest or inheritance does not exercise the Option within the time specified herein, the Option shall terminate, and the shares covered by such Option shall revert to the Plan.

(j) EARLY EXERCISE. The Option may, but need not, include a provision whereby the Optionee may elect at any time while an Employee or Consultant to exercise the Option as to any part or all of the shares subject to the Option prior to the full vesting of the Option. Any unvested shares so purchased may be subject to a repurchase right in favor of the Company or to any other restriction the Board determines to be appropriate.

(k) WITHHOLDING. To the extent provided by the terms of an Option Agreement, the Optionee may satisfy any federal, state or local tax withholding obligation relating to the exercise of such Option by any of the following means or by a combination of such means: (1) tendering a cash payment; (2) authorizing the Company to withhold shares from the shares of the common stock otherwise issuable to the Optionee as a result of the exercise of the Option; or (3) delivering to the Company owned and unencumbered shares of the common stock of the Company.

7. COVENANTS OF THE COMPANY.

(a) During the terms of the Options, the Company shall keep available at all times the number of shares of stock required to satisfy such Options.

(b) The Company shall seek to obtain from each regulatory commission or agency having jurisdiction over the Plan such authority as may be required to issue and sell shares of stock upon exercise of the Options; provided,

however, that this undertaking shall not require the Company to register under the Securities Act either the Plan, any Option or any stock issued or issuable pursuant to any such Option. If, after reasonable efforts, the Company is unable to obtain from any such regulatory commission or agency the authority which counsel for the Company deems necessary for the lawful issuance and sale of stock under the Plan, the Company shall be relieved from any liability for failure to issue and sell stock upon exercise of such Options unless and until such authority is obtained.

8. USE OF PROCEEDS FROM STOCK.

Proceeds from the sale of stock pursuant to Options shall constitute general funds of the Company.

9. MISCELLANEOUS.

(a) The Board shall have the power to accelerate the time at which an Option may first be exercised or the time during which an Option or any part thereof will vest pursuant to subsection 6(e), notwithstanding the provisions in the Option stating the time at which it may first be exercised or the time during which it will vest.

(b) Neither an Optionee nor any person to whom an Option is transferred under subsection 6(d) shall be deemed to be the holder of, or to have any of the rights of a holder with respect to, any shares subject to such Option unless and until such person has satisfied all requirements for exercise of the Option pursuant to its terms.

(c) Nothing in the Plan or any instrument executed or Option granted pursuant thereto shall confer upon any Employee, Consultant or Optionee any right to continue in the employ of the Company or any Affiliate (or to continue acting as a Consultant) or shall affect the right of the Company or any Affiliate to terminate the employment or relationship as a Consultant of any Employee, Consultant or Optionee with or without cause.

(d) To the extent that the aggregate Fair Market Value (determined at the time of grant) of stock with respect to which Incentive Stock Options are exercisable for the first time by any Optionee during any calendar year under all plans of the Company and its Affiliates exceeds one hundred thousand dollars ($100,000), the Options or portions thereof which exceed such limit (according to the order in which they were granted) shall be treated as Nonstatutory Stock Options.

10. ADJUSTMENTS UPON CHANGES IN STOCK.

(a) If any change is made in the stock subject to the Plan, or subject to any Option (through merger, consolidation, reorganization, recapitalization, stock dividend, dividend in property other than cash, stock split, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or otherwise), the Plan will be appropriately adjusted in the class(es) and maximum number of shares subject to the Plan pursuant to subsection 4(a) and the maximum number of shares subject to award to any person during any calendar year period pursuant to subsection 5(d), and the outstanding Options will be appropriately adjusted in the class(es) and number of shares and price per share of stock subject to such outstanding Options.

(b) In the event of: (1) a dissolution or liquidation of the Company; (2) a merger or consolidation in which the Company is not the surviving corporation; (3) a reverse merger in which the Company is the surviving corporation but the shares of the Company's common stock outstanding immediately preceding the merger are converted by virtue of the merger into other property, whether in the form of securities, cash or otherwise; or (4)

any other capital reorganization in which more than fifty percent (50%) of the shares of the Company entitled to vote are exchanged, then, at the sole discretion of the Board and to the extent permitted by applicable law: (i) any surviving corporation shall assume any Options outstanding under the Plan or shall substitute similar Options for those outstanding under the Plan, (ii) the time during which such Options may be exercised shall be accelerated and the Options terminated if not exercised prior to such event, or (iii) such Options shall continue in full force and effect.

(c) Notwithstanding any other provisions of this Plan to the contrary, if an event occurs as specified in subsection 10(b) (a "Change in Control") and if within one (1) month before or thirteen (13) months after the date of such Change in Control the Continuous Service of an Optionee terminates due to an involuntary termination (not including death or Disability) without Cause (as such term is defined below) or a voluntary termination by the Optionee due to a Constructive Termination (as such term is defined below), then the vesting and exercisability of all Options held by such Optionee shall be accelerated, or any reacquisition or repurchase rights held by the Company with respect to an option shall lapse, as follows. With respect to those Options held by an Optionee at the time of such termination, one hundred percent (100%) of the unvested shares covered by such Options shall vest and become exercisable (or reacquisition or repurchase rights held by the Company shall lapse with respect to one hundred percent (100%) of the shares still subject to such rights, as appropriate) as of the date of such termination. Notwithstanding the foregoing, however, if such potential acceleration of the vesting and exercisability of Options (or lapse of reacquisition or repurchase rights held by the Company with respect to Options) would cause a contemplated Change in Control transaction that would otherwise be eligible to be accounted for as a "pooling-of-interests" transaction to become ineligible for such accounting treatment under generally accepted accounting principles as determined by the Company's independent public accountants (the "Accountants") prior to the Change of Control, such acceleration shall not occur.

For the purposes of this subsection 10(c) only, "Cause" means (i) conviction of, a guilty plea with respect to, or a plea of NOLO CONTENDERE to a charge that an Optionee has committed a

felony under the laws of the United States or of any state or a crime involving moral turpitude, including, but not limited to, fraud, theft, embezzlement or any crime that results in or is intended to result in personal enrichment at the expense of the Company or an Affiliate; (ii) material breach of any agreement entered into between the Optionee and the Company or an Affiliate that impairs the Company's or the Affiliate's interest therein; (iii) willful misconduct, significant failure of the Optionee to perform the Optionee's duties, or gross neglect by the Optionee of the Optionee's duties; or (iv) engagement in any activity that constitutes a material conflict of interest with the Company or any Affiliate.

For purposes of this subsection 10(c) only, "Constructive Termination" means the occurrence of any of the following events or conditions: (i) (A) a change in the Optionee's status, title, position or responsibilities (including reporting responsibilities) which represents an adverse change from the Optionee's status, title, position or responsibilities as in effect at any time within ninety (90) days preceding the date of a Change in Control or at any time thereafter; (B) the assignment to the Optionee of any duties or responsibilities which are inconsistent with the Optionee's status, title, position or responsibilities as in effect at any time within ninety (90) days preceding the date of a Change in Control or at any time thereafter; or (C) any removal of the Optionee from or failure to reappoint or reelect the Optionee to any of such offices or positions, except in connection with the termination of the Optionee's Continuous Service for Cause, as a result of the Optionee's Disability or death or by the Optionee other than as a result

of Constructive Termination; (ii) a reduction in the Optionee's annual base compensation or any failure to pay the Optionee any compensation or benefits to which the Optionee is entitled within five (5) days of the date due; (iii) the Company's requiring the Optionee to relocate to any place outside a fifty (50) mile radius of the Optionee's current work site, except for reasonably required travel on the business of the Company or its Affiliates which is not materially greater than such travel requirements prior to the Change in Control; (iv) the failure by the Company to (A) continue in effect (without reduction in benefit level and/or reward opportunities) any material compensation or employee benefit plan in which the Optionee was participating at any time within ninety (90) days preceding the date of a Change in Control or at any time thereafter, unless such plan is replaced with a plan that provides substantially equivalent compensation or benefits to the Optionee, or (B) provide the Optionee with compensation and benefits, in the aggregate, at least equal (in terms of benefit levels and/or reward opportunities) to those provided for under each other employee benefit plan, program and practice in which the Optionee was participating at any time within ninety (90) days preceding the date of a Change in Control or at any time thereafter; (v) any material breach by the Company of any provision of an agreement between the Company and the Optionee, whether pursuant to this Plan or otherwise, other than a breach which is cured by the Company within fifteen (15) days following notice by the Optionee of such breach; or (vi) the failure of the Company to obtain an agreement, satisfactory to the Optionee, from any successors and assigns to assume and agree to perform the obligations created under this Plan.

(d) In the event that the acceleration of the vesting and exercisability of the Options or lapse of reacquisition or repurchase rights held by the Company with respect to Options provided for in subsection 10(c) and benefits otherwise payable to an Optionee (i) constitute "parachute payments" within the meaning of Section 280G (as it may be amended or replaced)

of the Code, and (ii) but for this subsection 10(d) would be subject to the excise tax imposed by Section 4999 (as it may be amended or replaced) of the Code (the "Excise Tax"), then such Optionee's benefits hereunder shall be delivered to such lesser extent which would result in no portion of such benefits being subject to the Excise Tax; PROVIDED, HOWEVER, that the benefits hereunder shall be reduced only to the extent necessary after all cash amounts otherwise payable to such Optionee and which constitute "parachute payments" have been returned. Unless the Company and such Optionee otherwise agree in writing, any determination required under this subsection 10(d) shall be made in writing in good faith by the Accountants. For purposes of making the calculations required by this subsection 10(d), the Accountants may make reasonable assumptions and approximations concerning applicable taxes and may rely on reasonable, good faith interpretations concerning the application of the Code. The Company and such Optionees shall furnish to the Accountants such information and documents as the Accountants may reasonably request in order to make a determination under this subsection 10(d). The Company shall bear all costs the Accountants may reasonably incur in connection with any calculations contemplated by this subsection 10(d).

11. AMENDMENT OF THE PLAN.

(a) The Board at any time, and from time to time, may amend the Plan. However, except as provided in Section 10 relating to adjustments upon changes in stock, no amendment shall be effective unless approved by the stockholders of the Company within twelve (12) months before or after the adoption of the amendment, where the amendment will:

(i) Increase the number of shares reserved for options under the Plan;

(ii) Effect (a) the repricing of any outstanding Options under the

Plan and/or (b) the cancellation of any outstanding Options under the Plan and the grant in substitution therefor of new Options under the Plan covering the same or different numbers of shares of Common Stock;

(iii) Modify the requirements as to eligibility for participation in the Plan (to the extent such modification requires stockholder approval in order for the Plan to satisfy the requirements of Section 422 of the Code); or

(iv) Modify the Plan in any other way if such modification requires stockholder approval in order for the Plan to satisfy the requirements of Section 422 of the Code or to comply with the requirements of Rule 16b-3 or any Nasdaq or securities exchange listing requirements.

(b) The Board may in its sole discretion submit any other amendment to the Plan for stockholder approval, including, but not limited to, amendments to the Plan intended to satisfy the requirements of Section 162(m) of the Code and the regulations promulgated thereunder regarding the exclusion of performance-based compensation from the limit on corporate deductibility of compensation paid to certain executive officers.

(c) It is expressly contemplated that the Board may amend the Plan in any respect the Board deems necessary or advisable to provide Optionees with the maximum benefits provided or to be provided under the provisions of the Code and the regulations promulgated thereunder relating to Incentive Stock Options and/or to bring the Plan and/or Incentive Stock Options granted under it into compliance therewith.

(d) Rights and obligations under any Option granted before amendment of the Plan shall not be altered or impaired by any amendment of the Plan unless (i) the Company requests the consent of the person to whom the Option was granted and (ii) such person consents in writing.

12. TERMINATION OR SUSPENSION OF THE PLAN.

(a) The Board may suspend or terminate the Plan at any time. Unless sooner terminated, the Plan shall terminate on October 31, 2001. No Options may be granted under the Plan while the Plan is suspended or after it is terminated.

(b) Rights and obligations under any Option granted while the Plan is in effect shall not be altered or impaired by suspension or termination of the Plan, except with the consent of the person to whom the Option was granted.

13. EFFECTIVE DATE OF PLAN.

The Plan shall become effective as determined by the Board, but no Options granted under the Plan shall be exercised unless and until the stockholders of the Company have approved the Plan.

Exhibit 10.47

*** TEXT OMITTED AND FILED SEPARATELY
CONFIDENTIAL TREATMENT REQUESTED
UNDER 17 C.F.R. SECTIONS 200.80(b)(4),
200.83 AND 240.24b-2

PATENT RIGHTS PURCHASE AGREEMENT

This Patent Rights Purchase Agreement (this "Agreement") is made and entered into as of December 18, 1998 (the "Effective Date") between Isis Pharmaceuticals, Inc. ("Isis"), and Gilead Sciences, Inc. ("Gilead").

1. DEFINITIONS.

1.1 "Cationic Lipid" means those compounds described in United States Patent Nos. 5,777,153 and 5,705,693; United States Patent Application Serial No. 08/672,206; and European Patent Application No. 97931462.2, to the extent such compounds are not Codeblocker Compounds.

1.2 "Codeblocker Compound" means an oligonucleotide that binds directly to DNA or RNA within a cell on a selective basis determined by the nucleotide sequence of the target DNA or RNA and exerts its biological activity predominantly through binding to DNA or RNA to inhibit the transcription or replication of the target DNA or RNA or binding to RNA to inhibit the translation, processing, packaging or regulatory activity of the target RNA. A Codeblocker Compound may also have a mechanism of action or biological activity other than one conferred through direct binding to RNA or DNA provided that (i) the compound originally was designed to bind a target DNA or RNA and (ii) the final compound or any compounds used to derive the final compound were not identified using selective purification and polymerase amplification in any fashion. An oligonucleotide, is any oligomer or polymer made up [***] An oligonucleotide includes RNA or DNA fragments, and may be composed of naturally occurring or non-naturally occurring bases, sugars or intersugar linkages. An oligonucleotide may have the bases, sugars or intersugar linkages partially or completely absent. Oligonucleotides may be made such that adjacent nucleoside or nucleoside fragments are linked together by phosphate groups or modified or non-naturally occurring internucleoside linkages to form the internucleoside backbone of the oligomer, whether or not such linkages retain a phosphorous atom in the linkage.

1.3 "Oligonucleotide Delivery System" means any carrier, targeting entity, excipient, formulation, device, prodrug, covalent or noncovalent conjugate, encapsulating vesicle, microcapsule, micro- or nanosphere, emulsion, or microemulsion, lipid, liposome, virosome, or artificial vial envelope which was developed by Gilead on or prior to the Effective Date, and which (i) enhances the cellular penetration or circulating half-life of a Codeblocker Compound, (ii) selectively delivers a Codeblocker compound to the intended target tissue, cell or subcellular compartment, (iii) provides sustained release of a Codeblocker Compound from a depot formulation, or (iv) otherwise favorably alters the absorption, distribution, metabolism or excretion of a Codeblocker Compound so as to enhance its pharmacological activity of clinical value. "Oligonucleotide Delivery System" includes cationic lipids.

[***]=CONFIDENTIAL TREATMENT REQUESTED

1.4 "Patent Rights" means the patents and patent applications listed in Exhibit A attached hereto.

2. ASSIGNMENTS AND LICENSES.

2.1 Gilead hereby sells and assigns to Isis all of Gilead's right, title and interest in Patent Rights, subject to the rights of Glaxo Wellcome Inc. ("Glaxo") under the Collaborative Research Agreement between Glaxo and Gilead dated March 25, 1996 (the "Glaxo Agreement"), provided however, that the assignment of U.S. Patent Number 5,256,775 shall be subject to the condition precedent that Gilead settle the interference involving this patent on conditions of Gilead's choosing (including conceding priority). Gilead hereby grants Isis an exclusive, royalty-free, worldwide, assignable license (with the right to grant sublicenses) to U.S. Patent Number 5,256,775 beginning on the Effective Date and continuing until such time that Gilead settles the interference and the assignment to Isis becomes effective.

2.2 Gilead hereby assigns and delegates to Isis (and Isis accepts and agrees to perform) all of Gilead's rights and obligations under the License Agreement between Glen Research Corporation ("Glen Research") and Gilead dated January 1, 1994 and amended on November 19, 1996. A copy of the written consent to such assignment and delegation signed by Glen Research is attached hereto as Exhibit B. In the event that Isis, by reason of this Agreement, is required to indemnify Glen Research under Section 8.1 (b) of the Glen Research License Agreement, Gilead will indemnify Isis up to a maximum amount equal to one hundred percent (100%) of total royalties received by Gilead from Glen Research; thereafter, Gilead will not have any indemnity obligations to Isis related to such Agreement. Gilead will continue to honor its obligations to Glen Research for activities preceding the Effective Date of this Agreement.

2.3 Subject to the rights of Glen Research above, Isis hereby grants to Gilead an exclusive, perpetual, irrevocable, royalty-free, worldwide, assignable license (with the right to grant sublicenses) to directly or indirectly make, have made, use, import, export or sell compounds and other subject matter falling within the scope of Patent Rights which are [***]

2.4 Gilead hereby grants to Isis a nonexclusive, perpetual, royalty-free, worldwide, assignable license (with the right to grant sublicenses) to compounds and other subject matter which are within the scope of Patent Rights, solely for use as intermediates in the manufacture of Codeblocker Compounds or oligomers [***]

2.5 Isis hereby grants to Gilead a non-exclusive, non-sublicensable, non-assignable, perpetual, irrevocable, royalty-free, worldwide license under Patent Rights to make and use Codeblocker Compounds and Oligonucleotide Delivery Systems for internal research purposes, but not for any commercial purpose.

2.6 Isis will not have any obligations to Gilead relating to Codeblocker Compounds or this Agreement to the extent arising prior to the Effective Date.

[***]=CONFIDENTIAL TREATMENT REQUESTED

2.7 Each party hereby agrees to execute such documents and to take such other actions as shall be necessary or appropriate to effectuate the assignments and licenses set forth in this Section 2.

3. REPRESENTATIONS AND WARRANTIES BY GILEAD.

Gilead makes the following representations and warranties to Isis, each of which will survive the Effective Date:

3.1 To the best of Gilead's knowledge, the Patent Rights include all of the patents and patent applications owned or controlled by Gilead on or prior to the Effective Date that cover Codeblocker Compounds and Oligonucleotide Delivery Systems, their manufacture or use. There are no other US or unpublished foreign filings owned or controlled by Gilead filed prior to the Effective Date which claim Codeblocker Compounds or Oligonucleotide Delivery Systems other than as set forth in Exhibit A, nor does Gilead have any present intention to make such filings. If Gilead becomes aware of any patents or patent applications that (i) are owned or controlled by Gilead, (ii) claim inventions made prior to the Effective Date, (iii) cover Codeblocker Compounds or Oligonucleotide Delivery Systems, and (iv) are not included in Exhibit A, Gilead will promptly notify Isis in writing and execute appropriate documents to transfer such patents and patent applications to Isis.

3.2 Gilead represents and Isis acknowledges that (i) the Glaxo Agreement remains in effect and Gilead and Glaxo have ongoing rights and obligations thereunder, modified to the extent specifically set forth in this Agreement and (ii) this Agreement is not an assignment of Gilead's rights or obligations under the Glaxo Agreement and that Isis assumes no rights or obligations to Glaxo under this Agreement. Gilead represents that the Research Term and all rights, obligations and funding relating thereto under the Glaxo Agreement have been terminated. Gilead will not enter into any future amendments to the Glaxo Agreement which in any way affect the rights of Isis hereunder.

3.3 The Glaxo Agreement and the license to Glen Research referenced in Section 2.2 above are the only licenses and Gilead is not aware of any other third party rights of any kind affecting the Patent Rights. Except with respect to U.S. Patent Number 5,256,775, which is subject to an interference proceeding, the Patent Rights are not the subject of any pending interference, cancellation or other protest proceeding not otherwise known to Isis, or otherwise subject to rights or obligations to any third party other than Glaxo and Glen Research. The complete terms and conditions of such rights and obligations relating to Glaxo and Glen Research have been disclosed to Isis.

3.4 There are no Collaboration Compounds (as defined in Section 1.7 of the Glaxo Agreement) and none were developed during the Research Term under the Glaxo Agreement. Gilead does not owe any royalties to Glaxo or any third party under the Glaxo Agreement nor does Gilead have any known or pending claims against Glaxo arising out of the Glaxo Agreement. To the best of Gilead's knowledge, (i) Glaxo does not owe any royalties to Gilead or any third party under the Glaxo Agreement, (ii) nor does Glaxo have any known or pending claims against Gilead arising out of the Glaxo Agreement.

4. TECHNOLOGY TRANSFER.

4.1 Gilead and Isis will cooperate in the filing and execution of any and all documents necessary to effectuate the assignment to Isis of the Patent Rights, including the filing of assignments or other transfer of title covenants with the U.S. Patent and Trademark Office and foreign patent offices as applicable to the Patent Rights. Within thirty (30) days from the Effective Date, Gilead will notify all attorneys handling the prosecution of the Patent Rights to contact the Isis Patent Department to provide an immediate status update on the Patent Rights and to prepare the documents necessary to transfer the Patent Rights to Isis. The cost of

recording assignments of the Patent Rights will be borne by Isis. Within forty-five (45) days from the Effective Date, Gilead and its counsel will use their reasonable best efforts to transfer all files and supporting documents relating to the Patent Rights to Isis, including but not limited to, all initial invention disclosure documents, all documents sent to the U.S. Patent and Trademark Office regarding inventions and claims, all draft patent applications, all filing or prosecution documents submitted to the patent offices, and all file wrappers. Conception notebooks and all other documents in the possession or under the control of Gilead or its counsel relating to conception and/or reduction to practice, such as scientist notebooks shall be obtained in accord with Gilead's ordinary document retention and made available to Isis upon Isis' reasonable request. All documents to be provided to Isis hereunder are to be sent by expedited delivery service.

4.2 Gilead will make appropriate scientific staff available to Isis for a scientific tutorial on the subject matter of this Agreement, such tutorial not to exceed more than [***] from Gilead's staff and not to obligate Gilead to disclose any third party confidential information.

5. PATENT MAINTENANCE AND PROSECUTION RESPONSIBILITIES.

5.1 On and after the Effective Date, Isis will take responsibility for any action or proceeding involving Patent Rights. The cost of recording the assignment of Patent Rights shall be borne solely by Isis. If Isis elects not to take such responsibility involving Patent Right(s) in a particular country then Isis will timely notify Gilead and Glaxo 30 days before the time future action is due, and thereafter Gilead or Glaxo shall undertake such responsibility. If Gilead or Glaxo elects to do so, Isis will grant any necessary authority to Gilead. Gilead will determine whether Gilead or Glaxo shall take such responsibility at their expense. Isis assumes no obligation to Glaxo as a result of its agreement with Gilead in this Section 5.1.

5.2 NOTICE OF INFRINGEMENT. Isis shall promptly notify Gilead in writing of any infringement of any assigned Patent Right(s) of which it becomes aware.

5.3 ENFORCEMENT OF PATENTS. Except as otherwise set forth in this Section, Isis may, but shall not be required to, prosecute any alleged infringement or threatened infringement of any assigned Patent Right(s) of which it is aware or which is brought to its attention. Isis shall act in its own name and at its own expense. If Isis has failed to prosecute under the first sentence of this paragraph with respect to alleged or threatened infringement

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[***]=CONFIDENTIAL TREATMENT REQUESTED

relating to any Patent Right(s) (i) two months after it has been notified in writing of such alleged infringement, or (ii) one month before the time limit, if any, set forth in the appropriate laws and regulations for the filing of such actions, whichever comes first, Gilead (or at its election Glaxo) may, but shall not be required to, prosecute any such alleged infringement or threatened infringement of a Patent within the Patent Rights. In any such event, Gilead or Glaxo shall be free to act in its own name and at its own expense. Notwithstanding the foregoing and as between the parties, Gilead shall have the sole and exclusive right of enforcement with respect to any alleged or threatened infringement of any right within the scope of the license granted in Section 2.3 of this Agreement. Isis shall cooperate fully with Gilead or Glaxo in any action by Gilead or Glaxo, respectively, under this paragraph, including if required in order to bring such an action, the furnishing of a power of attorney.

6. INDEMNITY AND WARRANTY.

6.1 INDEMNITY BY ISIS. Isis will indemnify, save, defend and hold Gilead and its agents, directors and employees harmless from and against any and all suits, claims, actions, demands, liabilities, expenses and/or loss, including reasonable legal expense and attorneys fees, resulting from activities under this agreement by Isis.

6.2 INDEMNITY BY GILEAD. Gilead will indemnify, save, defend and hold Isis and its agents, directors and employees harmless from and against any and all suits, claims, actions, demands, liabilities, expenses and/or loss, including reasonable legal expense and attorney fees, resulting from (i) Gilead's, Gilead's sublicensee's or Gilead's assignee's activities under the licenses provided for in Sections 2.3 and 2.5; (ii) Gilead's contractual obligations to third parties including Glaxo and Glen Research, except to the extent resulting from Isis' activities under this Agreement; or (iii) Gilead's exercise of the Patent Rights prior to the Effective Date.

6.3 WARRANTY. Gilead warrants that it has sufficient right and title to enter into and to perform its obligations under this Agreement. EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, THE PARTIES DISCLAIM ALL WARRANTIES OF ANY NATURE, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION WARRANTIES OF VALIDITY, MERCHANTABILITY, NONINFRINGEMENT, AND FITNESS FOR A PARTICULAR PURPOSE.

7. CONFIDENTIALITY. Confidential Information under the terms of this Agreement is all information relating to the Patent Rights sold, assigned or licensed to Isis under Section 2.1 and the Technology Transfer to Isis by Gilead under Section 4.1. Gilead agrees to treat the Confidential Information as confidential and to protect and maintain the confidentiality thereof. Gilead will use at least the same standard of care as it uses to protect its own Confidential Information to ensure that its employees, agents, and consultants do not disclose or make any unauthorized use of such Confidential Information. Gilead will promptly notify Isis upon discovery of any unauthorized use or disclosure of the Confidential Information. Confidential Information will not include any information which is generally available to the public, is otherwise part of the public domain other than through any act or omission of Gilead in breach of this Agreement, or which is required to be disclosed by law or contract entered into

prior to this Agreement (provided that Isis shall have notice thereof in advance so that it can act to protect its interests should it decide to do so).

8. CONSIDERATION. Isis shall pay Gilead the following noncontingent, non-refundable cash payments as consideration for the assignments provided for in this Agreement: $2,000,000 on the Effective Date, $1,000,000 on the first anniversary of the Effective Date, $1,000,000 on the second anniversary of the Effective Date, and $2,000,000 on the third anniversary of the Effective Date, for total payments of $6,000,000. In the event that Isis defaults on any of these payments, after thirty (30) days notice and an opportunity to cure, then ownership of all Patent Rights will automatically revert to Gilead and Isis will take all actions reasonably requested by Gilead for such purposes, including, without limitation, signing and delivering any applicable assignments and other documents. Isis shall be entitled to no damages exceeding the consideration set forth in this Section 8 for any uncured claim against Gilead respecting Gilead's performance or representations hereunder.

9. NOTICES. Notices under this Agreement shall be sufficient only if personally delivered, delivered by a major commercial

rapid delivery courier service, facsimile or mailed by certified or registered mail, return receipt requested, to a party at its addresses set forth as follows:

If to Isis: Isis Pharmaceuticals, Inc.
2292 Faraday Avenue
Carlsbad, CA 92008
Attn: Executive Vice President, CFO
Facsimile: (760) 431-9448

If to Gilead: Gilead Sciences, Inc.
333 Lakeside Drive
Foster City, CA 94404
Attn: Vice President, Intellectual Property
Facsimile: (650) 577-6622

If to Glaxo: Glaxo Wellcome, Inc.
Five Moore Drive
Research Triangle Park, NC 27709
Attn: Company Secretary
Facsimile: (919) 483-0265

10. MISCELLANEOUS. If any provision of this Agreement shall be adjudged by any court of competent jurisdiction to be unenforceable or invalid, that provision shall be limited or eliminated to the minimum extent necessary to continue to effect the intent of the parties, and this Agreement shall otherwise remain in full force and effect and enforceable. Any waivers or amendments shall be effective only if made in writing and signed by a representative of the respective parties authorized to bind the parties. This Agreement shall be governed by the laws of the State of Delaware, excluding conflicts-of-law principles. This Agreement is the complete and exclusive statement of the mutual understanding of the parties and supersedes and cancels all previous written and oral agreements and communications relating to the subject matter of this

Agreement, excluding the Confidential Disclosure Agreement between the parties dated July 29, 1998.

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

ISIS PHARMACEUTICALS, INC.

By: /s/ B. Lynne Parshall

Printed: B. Lynne Parshall

Title: Executive Vice President, CFO

Address: 2292 Faraday Avenue
Carlsbad, CA 92008

GILEAD SCIENCES, INC.

By: /s/ Mark L. Perry

Printed: Mark L. Perry

Title: Sr. Vice President, Chief Financial Officer and General Counsel

Address: 333 Lakeside Drive
Foster City, CA 94404

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[***]=CONFIDENTIAL TREATMENT REQUESTED

12/16/98 EXHIBIT A

GSI # M&F	INFORMAL TITLE	FILING DATE	FOR.FILNG DATE	ISSUE DATE	EXP. DATE	COUNTRY/SER #	PATENT #	FOREIGN ASSOC.	ANNTY DUE
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[***]=CONFIDENTIAL TREATMENT REQUESTED

EXHIBIT B

December 16, 1998

VIA FACSIMILE AND COURIER

Hugh Mackie, Ph.D.
Glen Research Corporation
22825 Davis Drive
Sterling, VA 20164

RE: ASSIGNMENT OF LICENSE AGREEMENT

Dear Hugh:

As we discussed today by phone, Gilead has negotiated a Patent Rights Purchase Agreement with Isis Pharmaceuticals, Inc. ("Isis"), a biopharmaceutical company based in Carlsbad, California, pursuant to which Gilead will assign all of its antisense patent rights to Isis. As part of this Agreement, Gilead will be assigning to Isis the License Agreement between Gilead and Glen Research Corporation dated January 1, 1994, as amended November 19, 1996 (the "License Agreement"). The purpose of this letter is to obtain the formal consent of Glen Research Corporation to the proposed assignment of the License Agreement to Isis, as required by Section 16 of the License Agreement. Please indicate your consent to the assignment by executing and dating this letter in the space indicated below and returning it to my attention via facsimile at (650) 577-5488. When you receive the original copy of the letter please execute and date it (using the same date) and return it to me by courier.

We would be happy to discuss the proposed assignment in more detail with you, or put you in touch with appropriate people at Isis. Please give me a call at (650) 573-4772, or John Milligan at (650) 573-4756, if you have any questions. Thank you for your prompt response to this matter.

Very truly yours,

/s/ Jeffrey W. Bird
Jeffrey W. Bird, M.D., Ph.D.
Senior Vice President, Business Operations

ACCEPTED AND AGREED TO:
Glen Research Corporation

By /s/ Hugh Mackie

Name: Hugh Mackie
Title: President
Date: December 17, 1998