ACHILLION PHARMACEUTICALS INC
Form 10-K
March 05, 2008
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UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

x ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2007

OR

¨ TRANSITION REPORT PURSUANT TO SECTIONS 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from to

Commission File Number 001-33095

ACHILLION PHARMACEUTICALS, INC.

(Exact name of registrant as specified in its charter)

Delaware	52-2113479
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

300 George Street, New Haven, CT 06511

(Address of principal executive offices) (Zip Code)

Registrant s telephone number, including area code: (203) 724-6000

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

Title of Class	Name of Exchange on Which Registered
Common Stock, $0.001 par value per share	**NASDAQ Global Market**

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

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ¨ No x

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ¨ No x

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 is not contained herein, and will not be contained, to the best of the registrant s knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ¨

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

Large accelerated filer ¨	Accelerated filer ¨
Non-accelerated filer ¨ (Do not check if smaller reporting company)	Smaller reporting company x

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

The aggregate market value of the voting stock held by non-affiliates of the Registrant on June 30, 2007 was approximately $63,960,591 based on the closing price of such stock as reported by the NASDAQ Global Market on June 29, 2007.

As of March 1, 2008, the registrant had 15,638,346 shares of Common Stock, $0.001 par value per share, outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Items 10, 11, 12, 13 and 14 of Part III (except for information required with respect to our executive officers, which is set forth under Part I, Item 1 Business Executive Officers of the Registrant) and the information required by Item 5 relating to our equity compensation plans have been omitted from this report, as we expect to file with the Securities and Exchange Commission, not later than 120 days after the close of our fiscal year ended December 31, 2007, a definitive proxy statement for our annual meeting of stockholders to be held on June 3, 2008. The information required by Items 10, 11, 12, 13 and 14 of Part III and the information required by Item 5 relating to our equity compensation plans, which will appear in our definitive proxy statement, are incorporated by reference into this report.

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This Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, that involve risks and uncertainties. All statements other than statements relating to historical matters (including statements to the effect that we believe, expect, anticipate, plan, target and similar expressions) should be considered forward-looking statements. Our actual results could differ materially from those discussed in the forward-looking statements as a result of a number of important factors, including the factors discussed in this section and elsewhere in this Annual Report on Form 10-K, including those discussed in Item 1A of this report under the heading Risk Factors, and the risks discussed in our other filings with the Securities and Exchange Commission. Readers are cautioned not to place undue reliance on these forward-looking statements, which reflect management s analysis, judgment, belief or expectation only as of the date hereof. We assume no obligation to update these forward-looking statements to reflect events or circumstances that arise after the date hereof.

PART I

ITEM 1. BUSINESS

Overview

We are a biopharmaceutical company focused on the discovery, development and commercialization of innovative treatments for infectious diseases. Within the anti-infective market, we are currently concentrating on the development of antivirals for the treatment of HIV infection and chronic hepatitis C and the development of antibacterials for the treatment of serious hospital-based bacterial infections. We have advanced our lead drug candidate, elvucitabine for the treatment of HIV infection, into phase II clinical trials. In addition, we are advancing two late-stage preclinical candidates: ACH-1095, an NS4A antagonist for the treatment of chronic hepatitis C, being developed in collaboration with Gilead Sciences, and ACH-702 for the treatment of serious hospital-based bacterial infections. We are also developing a series of inhibitors of HCV protease in early preclinical assessment.

We believe that there are several business advantages to developing anti-infective drugs as compared to developing drugs in other therapeutic areas. The emergence of drug resistance seen with current antiviral and antibacterial therapy creates a continuing need for new drugs, which we believe provides us with a large and growing business opportunity.

We have established our drug candidate pipeline through our internal discovery capabilities and through the in-licensing of attractive drug candidates. Through these efforts we have identified and are developing the following drug candidates and programs:

Elvucitabine for HIV Infection. Elvucitabine, an antiviral we are developing for the treatment of HIV infection, is our most advanced clinical-stage drug candidate. Elvucitabine is a member of the nucleoside reverse transcriptase inhibitor, or NRTI, class of compounds, the predominant class of drugs used in the current standard of care for HIV therapy. To date, results from both completed and on-going clinical trials evaluating elvucitabine in phase II studies to explore its safety and efficacy in HIV-infected patients demonstrate that patients who received a once-daily 10 mg dose of elvucitabine for seven days experienced a significant mean viral load reduction as compared to those patients who received a placebo. Further, patients who received a once-daily 10 mg dose of elvucitabine for 24 weeks as part of a standard background combination therapy regimen experienced similar mean viral load reduction as compared to patients who received lamivudine, an NRTI marketed by GlaxoSmithKline, with the same background combination therapy regimen. These results are based on a small number of patients in an early-stage clinical trial, and are not necessarily predictive of results in later-stage clinical trials with larger and more diverse patient populations. Currently marketed drugs have several therapeutic limitations, including the development of HIV strains that are resistant to currently approved drugs, short half-lives which exacerbate drug resistance, inadequate patient compliance due to adverse side effects and complex dosing schedules, and limited combination

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treatment options due to cross resistance and drug-to-drug interactions. Elvucitabine has demonstrated potent antiviral activity against HIV, including HIV strains that are resistant to frequently prescribed NRTIs, as well as a half-life significantly longer than that of currently approved NRTIs. We believe this profile will allow us to position elvucitabine, if approved, favorably in the NRTI market. We currently retain full development and marketing rights to elvucitabine. We are currently in discussions with potential collaboration partners for elvucitabine and we are planning to enter a collaboration arrangement in 2008.

ACH-1095, an NS4A Antagonist for Chronic Hepatitis C Infection. We are evaluating ACH-1095 for the treatment of chronic hepatitis C in collaboration with Gilead Sciences. In preclinical and clinical studies, NS4A antagonists studied demonstrate potent inhibition of the replication of HCV, the virus that causes hepatitis C, by targeting a non-structural, or NS, viral protein called 4A. We believe these NS4A antagonists offer several potential advantages compared to currently available treatments, including greater potency, a novel mechanism of action, lack of cross resistance and the potential for oral administration. We believe these compounds could be used in combination with the current standard of care, or with other therapies in development, to significantly improve treatment outcomes. In November 2004, we entered into a collaboration agreement and exclusive license with Gilead Sciences for the research, development and commercialization of compounds for the treatment of chronic hepatitis C, including these compounds. Our first drug candidate demonstrating this mechanism of action, ACH-806 (also known as GS-9132), was determined to have positive antiviral effect in a proof-of-concept clinical trial in HCV infected patients, but also to elevate serum creatinine levels, a marker of kidney function. As a result, we discontinued further clinical development of ACH-806 in favor of next-generation back-up compounds demonstrating the same mechanism of action. A proof-of-concept clinical trial is generally a late stage Phase I or early stage Phase II clinical trial, the objective of which is to demonstrate that the tested drug shows a beneficial effect. The second clinical candidate demonstrating this mechanism of action, ACH-1095, is currently in pre-clinical studies, and we anticipate filing an investigational new drug application, or IND, for this compound in 2008.

Protease Inhibitor for Chronic Hepatitis C Infection. In a proprietary research program targeting HCV protease, we are also developing certain compounds discovered by our internal research team. These compounds have demonstrated strong in vitro potency and a satisfactory early safety profile. If our continued preclinical studies are positive, we expect to begin human clinical trials with one candidate from this series in 2009.

ACH-702 for Serious Hospital-Based Bacterial Infections. Another preclinical candidate is ACH-702, which we are developing for the treatment of serious hospital-based bacterial infections. In several preclinical studies, ACH-702 has exhibited potent antibacterial activity against a large number of medically relevant bacteria, including methicillin resistant staphylococcus aureus strains, highly prevalent hospital-based infections. Preclinical studies to date have also suggested that the compound has a bacteria-killing mechanism of action and may be administered in both intravenous and oral formulations. After requesting a pre-IND development meeting with the FDA, we intend to hold discussions on the most appropriate clinical strategy for ACH-702 and follow with submission of an IND to the FDA in the first half of 2008, if appropriate, based upon the outcome of those discussions.

We intend to focus on the discovery of new drug candidates through our extensive expertise in virology, microbiology and synthetic chemistry. Utilizing these capabilities, we have thus far internally discovered:

our NS4A antagonists, including ACH-806, our discontinued drug candidate, and ACH-1095, its successor candidate;

our HCV protease inhibitor series, and

our lead antibacterial candidate, ACH-702.

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In the aggregate, members of our drug discovery, preclinical and clinical development team have contributed to the selection and development of more than 85 clinical candidates and 50 marketed products throughout their careers. Although significant additional research and development will be required after the discovery of any new drug candidate, we believe our drug discovery capabilities will allow us to further expand our product candidate portfolio, providing us with strong growth potential and reducing our reliance on the success of any single drug candidate.

Background

Infectious diseases are caused by pathogens present in the environment, such as viruses, bacteria and fungi, which enter the body through the skin or mucous membranes and overwhelm its natural defenses. Some infections affect the entire body, while others may be localized in one organ or system within the body. The severity of infectious diseases varies depending on the nature of the infectious agent, as well as the degree to which the body s immune system can fight the infection. According to World Health Organization reports, infectious diseases, including HIV infection, chronic hepatitis C and drug-resistant bacterial infections, represent a significant cause of morbidity and mortality worldwide.

The market for anti-infective drugs can be divided into three main categories: antivirals, antibacterials (often referred to as antibiotics) and antifungals. To date, we have focused on the research and development of products for the antiviral and antibacterial markets.

The widespread use of anti-infective drugs has led to a significant reduction in morbidity and mortality associated with infectious diseases. However, for many infectious diseases, current treatment options are associated with suboptimal treatment outcomes, significant drug-related adverse side effects, complex dosing schedules and inconvenient methods of administration, such as injection or infusion. These factors often lead to patients discontinuing treatment or failing to comply fully with treatment dosing schedules. As a result, physicians are often required to modify therapy regimens throughout the course of treatment.

Moreover, in recent years, the increasing prevalence of drug resistance has created ongoing treatment challenges for antiviral and antibacterial therapies. The ability of both viruses and bacteria to adapt rapidly to these treatments through genetic mutations allows new strains to develop that are resistant to currently available drugs. In addition, a patient s failure to comply fully with a treatment regimen both accelerates and exacerbates drug resistance. This is particularly well documented for HIV treatments and antibacterials.

As a result of these treatment challenges, the industry is focused on developing anti-infective drugs that delay the emergence of drug resistance, improve patient compliance and improve treatment responses in infections associated with drug-resistant pathogens.

We believe there are significant business advantages to focusing on the development of drugs to treat infectious diseases, including the following:

- the emergence of drug resistance creates a continuing need for new drugs to combat infectious diseases, thus creating a large and growing business opportunity;
- infectious disease research and development programs generally have shorter development cycle times when compared to various therapeutic areas such as oncology, cardiovascular and central nervous system disorders; and
- evidence suggests systemic anti-infectives have a higher clinical success rate compared to various therapeutic areas such as oncology, cardiovascular and central nervous system disorders.

Viruses

Viruses are submicroscopic infectious agents consisting of an outer layer of protein surrounding a core of genetic material comprised of DNA or RNA. Viruses require living host cells to grow and multiply. In many

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cases, the body s immune system can effectively combat the viral infection. However, in certain viral infections, the body s immune system is unable to destroy the virus, and the infection becomes chronic. In chronic infections, persistent viral replication and subsequent infection of healthy cells may, over time, lead to the deterioration or destruction of the infected cells, resulting in disease. Antiviral drugs are utilized to assist the body s immune system in combating or eliminating the infection.

The development of resistance to antiviral drugs is a major challenge for the treatment of life-threatening viral infections such as HIV and chronic hepatitis C. The ability of viruses to mutate spontaneously during replication allows drug-resistant viral strains to emerge when patients are on treatment regimens that do not completely inhibit viral replication. This phenomenon has been particularly well documented in HIV. Resistance occurs because viruses continually make billions of copies of themselves, some of which will contain mutations in their genetic material. Mutations that confer a replication advantage in the presence of a suppressive antiviral drug will give rise to viral strains that are resistant or partially resistant to that antiviral drug. These mutated viruses, while initially found in low numbers, will eventually become the predominant strain in an infected patient. Once this occurs, the treatment benefit of the antiviral drug diminishes or disappears, which may result in treatment failure and create a need for an alternate therapy with new drugs.

Antiviral drug resistance is clinically managed by the administration of one or more potent direct-acting antiviral drugs and/or by enhancing the body s immune system through treatment with an immune response modifier to apply the highest possible level of suppression against viral replication. These direct acting antiviral drugs prevent viral replication by disrupting processes that are essential for completion of a viral infection cycle. The most effective disruption generally results from the use of multiple drugs that have different mechanisms of action.

Bacteria

Bacteria are unicellular, self-propagating microorganisms that multiply through growth in bacterial cell size and the subsequent division of the cell. Bacteria can be broadly classified into two categories based upon the composition of their cell walls: gram-positive or gram-negative. Many antibacterial drugs that are effective against gram-positive bacteria are less effective or ineffective against gram-negative bacteria, and vice versa. Antibacterial drugs that are active against a large number of both classes of bacteria are often referred to as broad-spectrum antibacterials.

Bacteria adapt remarkably well to their surroundings due to the high level of variation found within bacterial DNA and the ability of bacteria to reproduce rapidly. Replication of bacterial DNA is often error prone and can result in a high frequency of mutations. Because the bacterial reproductive cycle is very short, ranging from minutes to several days, a mutation that helps a bacterium survive exposure to an antibiotic drug may quickly become dominant throughout the population. Additionally, bacteria can acquire segments of DNA from other bacteria and organisms, which can also convey drug resistance.

Currently marketed antibacterials have historically proved highly successful in controlling the morbidity and mortality that accompany bacterial infections. The first antibacterials, introduced over 60 years ago, were highly effective in limiting or completely inhibiting bacterial reproduction, and thus were considered miracle drugs. A majority of the antibiotics currently in use were developed and introduced into the market before 1980. However, due to the widespread use of antibacterials over time and the ability of bacteria to develop drug resistance, many of these antibiotics now have diminished or limited antibacterial activity. This problem is particularly acute in the hospital setting, where approximately 70% of certain types of serious infections are associated with multi-drug-resistant bacteria. The inability to effectively treat serious infections caused by drug-resistant bacteria has led to increased mortality rates, prolonged hospitalizations and increased health care costs. The rate at which bacteria are now developing resistance to multiple antibacterials, and the pace at which those multi-drug-resistant bacteria are spreading, represent significant medical challenges.

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Our Strategy

Our objective is to become a leading infectious disease-focused biopharmaceutical company. We believe the infectious disease market is highly attractive due to its size, continued demand for new products to address the consequences of drug resistance and generally shorter development cycle times. In order to achieve our objective, we intend to:

Advance the Development of Our Current Drug Candidates. We are developing our most advanced clinical compound, elvucitabine, for the treatment of HIV infection. We are also developing two preclinical compounds: ACH-1095, our NS4A antagonist for the treatment of chronic hepatitis C, developed under a collaboration and exclusive license arrangement with Gilead Sciences, and ACH-702 for the treatment of serious hospital-based bacterial infection. In addition, we are developing a series of protease inhibitors for the treatment of chronic hepatitis C in early preclinical assessment. In particular, we expect to:

- complete the extension phases of two of our phase II clinical trials for elvucitabine in 2008;
- complete IND-enabling preclinical testing of ACH-1095 in collaboration with Gilead Sciences, file an IND application and begin clinical testing in 2008; and
- nominate and complete IND-enabling preclinical testing for one of our HCV protease inhibitors, file an IND application and begin clinical testing by mid 2009; and
- hold discussions with the FDA regarding our clinical protocols for ACH-702, and pending outcome from those discussions, file an IND application and begin clinical testing in 2008.

Expand our Infectious Disease Portfolio. We intend to leverage our expertise in synthetic chemistry, virology and microbiology to quickly and efficiently discover and develop additional anti-infective compounds. As recent examples of our capabilities, our research team designated clinical lead candidates in our HCV NS4A program (both ACH-806, a recently discontinued drug candidate, and ACH-1095, a possible successor compound with a similar mechanism of action), our HCV protease program, and antibacterial program (ACH-702) in fewer than 24 months from program inception. We may augment our internal discovery capabilities and further expand our pipeline by in-licensing and/or acquiring differentiated drug candidates, as we did with elvucitabine, or in-licensing and/or acquiring additional discovery technologies.

Accelerate Growth Through Selective Collaborations. We intend to establish strategic collaborations where we believe we can accelerate the development or maximize the value of our drug candidates by utilizing the financial, clinical development, manufacturing and/or commercialization strengths of a leading biotechnology or pharmaceutical company. For example, we entered into a collaboration with Gilead Sciences in 2004 for the development and commercialization of certain of our HCV compounds demonstrating a mechanism of action we call NS4A antagonism, pursuant to which we received a significant up-front payment. We are currently utilizing Gilead Sciences broad capabilities to accelerate the progress our NS4A antagonist. In addition, we are seeking to enter a collaboration arrangement during 2008 for elvucitabine, our clinical candidate for HIV infection to gain access to broad development and commercial capabilities of a multinational pharmaceutical partner.

Pursue a Diversified Commercial Strategy. If we successfully develop any drug candidates through regulatory approval, we may participate in their commercialization. If we select to pursue commercial participation for our HCV protease inhibitors or ACH-702, we plan to build and deploy a focused, North American sales force to support the sales and marketing of those drug candidates for which we believe it is possible to effectively and efficiently access the market. We may agree to collaborate with other companies to co-promote our drug candidates in North America, and/or utilize strategic alliances with third parties outside North America. In

addition, while we have granted Gilead Sciences worldwide commercialization rights for our NS4A antagonists for treatment of HCV infection, we have the option to participate on a limited basis in marketing efforts in the United States.

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We have spent substantial research and development funds to develop our product pipeline and expect to continue to do so in the future. We incurred approximately $28.1 million, $22.7 million and $18.1 million in research and development costs for the years ended December 31, 2007, 2006 and 2005, respectively.

Our Drug Candidates

The following table summarizes key information regarding our drug candidates:

Drug Candidate/ Indication	Target	Stage of Development	Current Status	Current Marketing Rights
Elvucitabine *HIV Infection*	HIV reverse transcriptase	Phase II	Phase II placebo-controlled viral kinetics, safety and pharmacokinetics trial in HIV treatment-naive patients completed Phase II comparative safety, antiviral efficacy and pharmacokinetics trial in HIV treatment-naive patients open label extension on-going Phase II comparative viral kinetics, safety and pharmacokinetics trial in HIV treatment-experienced patients open label extension on-going We are currently in discussions with potential collaboration partners for elvucitabine and we are planning to enter a collaboration arrangement in 2008	Achillion
ACH-1095 *Chronic Hepatitis C Infection*	HCV protein NS4A	Preclinical	Preclinical studies in progress IND submission expected in 2008	Gilead Sciences*
Protease Inhibitor *Chronic HCV Infection*	HCV protein NS3 protease	Preclinical	Preclinical studies in progress IND submission expected in 2009	Achillion
ACH-702 *Serious Hospital-Based Bacterial Infections*	Triple target of gyrase, topoisomerase IV, and DNA primase	Preclinical	Preclinical studies complete IND submission expected in 2008 pending the outcome of FDA discussions to be held in the first half of 2008	Achillion

* Achillion has a one-time option to participate on a limited basis in marketing in the United States.

Elvucitabine for HIV

Elvucitabine is a NRTI, which we are currently testing in phase II trials. Elvucitabine has demonstrated potent antiviral activity against HIV, including activity against HIV that contains mutations associated with resistance to other reverse transcriptase inhibitors such as Viread (tenofovir), Zerit (d4T) and Retrovir (AZT). Furthermore, elvucitabine has been demonstrated to have a significantly longer half-life than the other marketed drugs in its class. We believe that these attributes should allow elvucitabine to deliver consistent, potent antiviral activity to patients infected with HIV, particularly those patients with less than perfect compliance with their existing treatment regimens. We believe a treatment regimen containing elvucitabine may also delay the emergence of resistance and prolong the effectiveness of therapy. We have completed multiple phase II clinical trials with elvucitabine examining pharmacokinetics, safety and efficacy. Two of these phase II trials included open-label extension periods which remain ongoing. To date, results from these phase II trials indicate that elvucitabine is safe, well-tolerated and similarly efficacious to lamivudine, a NRTI with annual sales of $790 million in 2006.

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Overview of HIV Market

HIV is a viral infection that, if left untreated, results in the development of the Acquired Immune Deficiency Syndrome, or AIDS. HIV is a retrovirus that uses RNA to encode its genetic material. When a person is infected with HIV, the virus infects cells that are associated with the body s immune system. The most common cells infected are the T-helper lymphocytes, which are also called CD4 cells. After attaching to CD4 cells, the virus is taken inside the cell, where, using host-cell machinery, it replicates its genetic material into DNA, a process known as reverse transcription. This step is facilitated by the viral enzyme reverse transcriptase. The subsequent completion of the viral life cycle ultimately leads to the destruction of CD4 cells. When the CD4 cell count, as measured in the blood, falls below a certain level, a person s immune system starts to fail, and a person becomes at risk for the development of AIDS and opportunistic infections.

HIV-infected patients are clinically managed by monitoring two key parameters in the blood the number of CD4 cells and viral load, or the measurement of HIV RNA. The goal of antiviral treatment is to provide long-term suppression of HIV replication. This suppression allows the CD4 cells to increase toward normal levels, which decreases the likelihood of AIDS and/or death. Without treatment, HIV infection progresses to AIDS in 20-25% of infected individuals within six years and in 50% within ten years.

According to the Joint United Nations Programme on HIV/AIDS and the World Health Organization, it is estimated that 33 million people worldwide are infected with HIV in 2007 and the estimated number of deaths due to HIV/AIDS in 2007 was 2.1 million.

In addition, it is estimated that in 2007 there were 1.3 million people living with HIV in North America, with 46,000 newly infected individuals during the year, and 2.3 million people living with HIV in Europe and Central Asia, with 180,000 newly infected individuals during the year.

Currently, there is no cure for HIV infection. In addition, there are no preventative or therapeutic vaccines, but there are more than two dozen antiretroviral drugs on the market that target various steps in the HIV replication cycle. These can be divided into six drug classes that have been approved for the treatment of HIV infection:

- NRTIs;
- non-nucleoside reverse transcriptase inhibitors, or NNRTIs;
- protease inhibitors;
- fusion inhibitors;
- entry inhibitors; and
- integrase inhibitors.

NRTIs and NNRTIs prevent HIV replication by interacting with reverse transcriptase. NRTIs, such as Epivir (lamivudine), Emtriva (FTC), Viread (tenofovir), Retrovir (AZT) and Zerit (d4T), have become the predominant class of drugs in HIV therapy. Without successful reverse transcription, the virus is unable to reproduce itself. When reverse transcription occurs in the presence of an NRTI, the NRTI is incorporated into the newly synthesized DNA strand and stops the reverse transcription process, thus preventing a complete copy of the viral RNA from being transcribed into DNA. NNRTIs, such as Sustiva (efavirenz), also prevent HIV replication through an interaction with reverse transcriptase, but with a mechanism of action distinct from NRTIs.

Protease inhibitors, such as Kaletra (lopinavir + ritonavir) and Viracept (nelfinavir), prevent viral assembly by blocking the action of HIV protease, an enzyme that is required to produce new, infectious viruses. Fusion inhibitors, such as Fuzeon (enfuvirtide), prevent HIV from fusing to CD4 cells, thereby preventing the initial

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infection of CD4 cells by HIV. Entry inhibitors, such as Pfizer s Salzentry (maraviroc), block a protein called CCR5 which HIV uses to enter CD4 cells. Integrase inhibitors, such as Merck s raltegravir, (formerly known as MK-0518) are strand-transfer inhibitors of HIV-1 integrase, which is essential for viral replication.

Because of its high spontaneous mutation rate, HIV is especially prone to the development of resistance to a single therapeutic drug. As a result, the treatment paradigm for HIV has evolved from monotherapy to triple combination treatment known as highly active antiretroviral therapy, or HAART, which includes drugs from multiple drug classes to maximally suppress HIV replication. In accordance with current Department of Health and Human Services HIV Treatment Guidelines, the initial or first-line HAART regimens typically include two NRTIs with non-overlapping resistance patterns and either an NNRTI or a protease inhibitor. As resistance to first-line therapies develops, an integrase inhibitor or entry inhibitor may replace one or more of these therapy components, and in later stage therapy, a fusion inhibitor may be used. Overall, the use of HAART to manage HIV infections has resulted in a dramatic reduction in disease progression to AIDS and/or death. It is now believed that HIV-infected individuals can often be clinically managed for decades through daily treatment with HAART.

Limitations of Current Therapies

In spite of the benefits of HAART, all currently approved drugs have significant limitations, including the following:

Development of Drug Resistance. Ongoing viral replication in patients on a HAART regimen results in the emergence of viral strains that are no longer susceptible to one or more components of the regimen. If left unchecked, this may lead to treatment failure. In addition, development of resistance to certain drugs can lead to cross resistance, or resistance to other drugs of the same class, thus rendering a whole class of drugs ineffective. In order to regain viral suppression, patients failing a HAART regimen are switched to a new regimen comprised of drugs that are not cross resistant with drugs from previous regimens.

Short Half-Lives of Currently Available Therapies. Many of the currently available drugs have relatively short plasma half-lives, meaning the length of time the drug remains in the patient s bloodstream, as well as relatively short intracellular half-lives, meaning the length of time the drug remains in the patient s cells. The plasma half-life of a majority of the NRTIs is in the range of one to several hours, and the intracellular half-life of a majority of the NRTIs is approximately 18-20 hours. Short half-lives require patients to take their medications more frequently, or in the case of once-daily dosing, to take doses within a certain timeframe. If patients miss this window, or forget entirely to take their medication, the amount of drug in the bloodstream diminishes, creating an opportunity for increased viral replication and the emergence of drug resistance.

Inadequate Patient Compliance. A patient s ability to adhere to a HAART regimen will impact the treatment outcome. Virologic failure rates have been found to directly correlate with the level of compliance. In studies, 61% of patients with 80 94.9% adherence and 80% of those with less than 80% adherence to their dosing regimen were found to experience virologic treatment failure. The chronic nature of HIV disease and the long-term adverse side effects associated with certain drugs, such as the loss of subcutaneous fat associated with certain NRTIs, affect the ability of HIV patients to adhere perfectly or nearly perfectly to dosing schedules.

Limited Treatment Options. Most current HAART regimens include two NRTIs. Although there are currently seven commonly used NRTIs, not all of them can be paired together due to cross resistance and drug-to-drug interactions. As resistance develops and the efficacy of treatment regimens diminishes over time, patients cycle through different HAART regimens, eventually exhausting all the available NRTI pairings. Therefore, we believe that there is a continuing need for new NRTIs.

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Achillion Approach: Elvucitabine

Elvucitabine is an L-cytosine NRTI, belonging to the same class as lamivudine and FTC. L-cytosine NRTIs represent the most frequently prescribed class of NRTIs based upon sales, accounting for approximately 51% of the worldwide NRTI market in 2006. We believe L-cytosine NRTIs are frequently prescribed given their established potency, favorable short and long-term safety profile and fewer and less adverse side effects. In addition, laboratory data demonstrate that HIV with the M184V genotype, the mutation conferring resistance to lamivudine and FTC, is unable to replicate as effectively as HIV with other resistance mutations.

We believe elvucitabine addresses the limitations of currently available NRTIs in the following ways:

Long Half-Life. Elvucitabine s plasma half-life has been demonstrated in clinical trials to be approximately 100 hours, or up to 20 times greater than that of Epivir (lamivudine) and up to ten times greater than that of Emtriva (FTC). In addition, elvucitabine s intracellular half-life has been demonstrated in a clinical trial to be over 100 hours, or more than five times greater than that of Epivir (lamivudine) and Emtriva (FTC). We believe this long half-life may mitigate the negative effects of less than perfect patient compliance, providing a more durable NRTI for use in HAART regimens.

Potency Against Common Resistance Mutations. The laboratory antiviral profile of elvucitabine demonstrates superior potency against many of the most common resistance mutations associated with NRTIs typically used in combination with Epivir (lamivudine) and Emtriva (FTC), including those associated with Viread (tenofovir), Retrovir (AZT) and Zerit (d4T). In addition, although elvucitabine s resistance profile is similar to Epivir (lamivudine) and Emtriva (FTC), elvucitabine retains greater antiviral activity in laboratory tests against HIV with resistance to Epivir (lamivudine) and Emtriva (FTC). In clinical testing, patients genotyped as having the M184V mutation of HIV, the mutation conferred by treatment with Epivir (lamivudine) and Emtriva (FTC), demonstrated significant reduction in viral load at time points exceeding 21 days of therapy, despite having developed resistance to those other therapies. We believe this enhanced antiviral activity could provide an increased barrier to the emergence of drug resistance in patients and improve antiviral suppression in patients with emerging resistance to commonly used NRTIs.

Patient Compliance. We believe that a well-tolerated L-cytosine NRTI with convenient, flexible oral dosing will enhance patient compliance and will make elvucitabine attractive as a component of HAART regimens. With a projected daily dose of elvucitabine of 10 mg in a tablet formulation, compared to 200 mg for Emtriva (FTC) and 300 mg for Epivir (lamivudine), we also believe elvucitabine could be an attractive candidate as part of a combination product for use in HAART regimens.

Low Once-Daily Dosing. In phase 2 clinical studies, elvucitabine was demonstrated to be safe, well-tolerated and efficacious at doses of 10 mg once daily. Other leading cytosine NRTIs, Epivir (lamivudine) and Emtriva (FTC), are dosed at 300 mg and 200 mg daily, respectively. We believe elvucitabine s low daily dose is an advantage in developing fixed-dose co-formulations in partnership with potential collaborators.

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Recently Completed and Ongoing Clinical Development

Our clinical development plan for elvucitabine includes the following phase II trials to explore the safety and efficacy profile of elvucitabine in HIV-infected patients:

Trial Design	Population	Sites and Location	Patient Number	Dosing Duration	Status
Phase II placebo-controlled viral kinetics, safety and pharmacokinetics trial	HIV treatment-naïve patients	Single site in Europe	24	7 days	Complete.
Phase II comparative viral kinetics, safety and pharmacokinetics trial	HIV treatment-experienced patients	7 sites in the United States, Europe and Latin America	18	14 days, with extension to 48 weeks	Open label extension on-going.
Phase II comparative safety, antiviral efficacy and pharmacokinetics trial	HIV treatment-naïve patients	19 sites in the United States and India	78	12 weeks, with extension to 96 weeks	Open label extension on-going.

In May 2006, we completed a randomized, double-blind phase II trial in which we evaluated the viral kinetics, safety and pharmacokinetics of elvucitabine in 24 treatment-naïve HIV patients, that is, patients who have not previously been treated for their HIV infection. Patients received once daily either 10 mg of elvucitabine or a placebo for seven days. An acceptable treatment response for this trial was defined as the elvucitabine cohort demonstrating greater reduction in HIV viral load on day seven, as compared to the viral load observed in patients taking a placebo. The results from this trial demonstrated that patients who received a 10 mg dose of elvucitabine once daily experienced a mean viral load reduction of 0.85 logs, or 83%, on day seven. Patients who received a placebo experienced a mean -0.06 log change, or less than 1%, at day seven. In addition, patients who received elvucitabine experienced a mean increase in CD4 cells of approximately 20%, compared to a mean increase of less than 1% in patients receiving a placebo. This trial further demonstrated that the plasma half-life of elvucitabine is approximately 100 hours and that its intracellular half-life is also greater than 100 hours. During this trial, elvucitabine had not achieved steady state , that is, the point at which minimum plasma levels no longer increase after repeat dosing. Based upon our previous clinical studies of elvucitabine, we believe elvucitabine s steady state occurs following 21 days of dosing. Therefore, we believe that if we had dosed patients for longer than seven days, there would have been a further increase in patients viral reduction and CD4 cell counts. Clinical data from subsequent phase 2 clinical studies indicate that CD4 cell counts increase after dosing periods longer than 21 days. We observed no serious or clinically significant adverse events during this trial. These results are based on a small number of patients in an early-stage clinical trial and are not necessarily predictive of results in later-stage clinical trials with larger and more diverse patient populations.

As of January 2008, we had completed two 12- and 24-week treatment segments, respectively, of a randomized, double-blind phase II trial of a 10 mg daily dose of elvucitabine in combination with two additional antiretrovirals (Sustiva (efavirenz) and Viread (tenofovir), as compared to 300 mg daily dose of Epivir (lamivudine) in combination with the same two additional antiretrovirals, in 78 treatment-naïve HIV patients. We evaluated the safety, antiviral efficacy and pharmacokinetics of 12 and 24 weeks of therapy with these two treatment regimens, and will evaluate the same parameters after 48 and 96 weeks of treatment. The results from the 12 and 24 week treatment segments of this trial demonstrated that elvucitabine was as efficacious as lamivudine, as measured by a statistically similar viral load reduction. Results at 24 weeks demonstrated that elvucitabine had a potent anti-viral effect similar to lamivudine, with a mean decrease in viral load in the elvucitabine treatment group of more than 99%, or 3.0 $\log_{10,}$ similar to a decrease of more than 99%, or 3.2 $\log_{10,}$ in the lamivudine treatment group. In the elvucitabine-treated group, 96% of patients reached undetectable viral

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load at 24 weeks, defined as achieving fewer than 50 copies/ml after 24 weeks of therapy, compared to 94% in lamivudine group. In this trial, elvucitabine was demonstrated to be safe and well-tolerated, as indicated by the absence of any serious drug-related clinical adverse events. These results are based on a small number of patients in an early-stage clinical trial and are not necessarily predictive of results in later-stage clinical trials with larger and more diverse patient populations.

Also in January 2008, we announced completion of the first treatment segment of a randomized, double-blind phase II trial in which we evaluated the viral kinetics, safety and pharmacokinetics of elvucitabine in 18 HIV-infected patients who had failed a HAART regimen which included Epivir (lamivudine). Treatment failure is defined as the presence of the M184V mutation, which signifies Epivir (lamivudine) drug resistance. Patients receive either 10 mg of elvucitabine once daily in place of Epivir (lamivudine) or continue receiving 300 mg of Epivir (lamivudine) once daily for 14 days. The patients other two HAART regimen drugs remain unchanged. During the first 14 days of treatment, patients receiving elvucitabine had similar viral load reduction as those patients receiving Epivir (lamivudine) In addition, the trial results demonstrate significant improvement in response when measured during the extension phase in which 8 of 14 patients who received elvucitabine, or 57%, had achieved 0.5 $\log_{10}$ reduction or more in viral load, likely related to the fact that elvucitabine is believed to reach steady-state levels in patients after approximately 21 days of treatment. We observed no serious or clinically significant adverse events during this trial. These results are based on a small number of patients in an early-stage clinical trial and are not necessarily predictive of results in later-stage clinical trials with larger and more diverse patient populations.

We are currently in discussions with potential collaboration partners for elvucitabine and we are planning to enter a collaboration arrangement in 2008.

Clinical Development History

Between 2001 and 2003, we conducted several clinical trials to determine the safety, tolerability and pharmacokinetic profile of elvucitabine for use against both hepatitis B virus, or HBV, and HIV. Specifically, we conducted three phase I clinical trials in healthy subjects, two phase II clinical trials in patients infected with HBV, and one phase II clinical trial in patients infected with HIV. In the phase II clinical trials for HBV, we evaluated doses of 5, 10, 20 and 50 mg once daily and noted that all doses greater than 5 mg were effective in reducing HBV viral load by 99%, or 3.5 $\log_{10}$ copies/ml. Despite this result, our current commercial plans do not include developing elvucitabine as a treatment for HBV. In the phase II clinical trial for HIV, we evaluated doses of 50 and 100 mg once daily and noted that both dose groups demonstrated reduction in viral load by 80%, or 0.7 $\log_{10}$ copies/ml. We further noted that doses of 50 mg or greater per day were associated with an unacceptable reduction in the number of patients white and red blood cells. In 2003, the clinical trial was discontinued, and the elvucitabine program was placed on clinical hold while determination of the appropriate dosing regimen for elvucitabine was made.

In 2004, while operating under a partial clinical hold placed by the FDA, we evaluated the therapeutic window and pharmacokinetic profile of elvucitabine in HIV-infected patients with a 21-day, open label phase II clinical trial of 24 HIV treatment-naïve patients. The patients received elvucitabine at either 5 mg or 10 mg once daily, or 20 mg every 48 hours, in each case in combination with the protease inhibitor Kaletra (lopinavir + ritonavir). We made frequent measurements of elvucitabine plasma levels throughout the trial. Results from the trial demonstrated that all three doses are similar in antiviral activity, reducing the viral load by approximately 98%, or 1.9 $\log_{10}$ copies/ml. All three doses also showed similar safety profiles without the occurrence of any serious adverse events, particularly white or red blood cell reduction. Importantly, the trial also demonstrated that the amount of elvucitabine present in patients plasma 24 hours following their previous dose was well in excess of those amounts necessary to deliver potent antiviral activity. From this trial, we concluded that the plasma half-life of elvucitabine is approximately 100 hours and chose a dose of 10 mg once daily for evaluation in our current phase II safety and efficacy trials in HIV-infected patients. Following the completion of this clinical trial, the FDA removed the partial clinical hold.

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Preclinical Development History

We sublicensed elvucitabine from Vion Pharmaceuticals (which licensed the relevant patents and intellectual property from Yale University) and initiated development activities in 2000. In preclinical studies, elvucitabine has been shown to be approximately four-fold more potent *in vitro* than Epivir (lamivudine) against wild-type HIV, meaning HIV without mutations associated with drug resistance. In addition, elvucitabine demonstrates greater potency *in vitro* against HIV with resistance to most of the commonly used NRTIs such as Epivir (lamivudine), Retrovir (AZT), Zerit (d4T) and Viread (tenofovir). These studies were conducted at several laboratories with more than 70 clinical strains of HIV obtained from patients with drug resistance and eight laboratory strains of HIV with known reverse transcriptase resistance mutation profiles.

ACH-1095, an NS4A Antagonist for HCV Infection

Through our internal drug discovery efforts, we identified a series of novel inhibitors which share a unique mechanism of action from other HCV inhibitors currently in development. The lead compound from this series is ACH-1095. All compounds in this series function by targeting the NS4A protein of the hepatitis C virus and preventing formation of replicase complex, a necessary step in viral replication. In November 2004, we entered into a strategic alliance with Gilead Sciences for the discovery, development and commercialization of these compounds to treat chronic hepatitis C.

In February 2007, we discontinued ACH-806, our first clinical stage compound from this series, in favor of next-generation back-up compounds demonstrating the same mechanism of action. In clinical trials, ACH-806 demonstrated positive antiviral activity in human patients infected with HCV, but also demonstrated early signs of elevated serum creatinine, a marker of kidney function. We have nominated ACH-1095 for further development in IND-enabling preclinical studies.

Overview of HCV Market

HCV is a virus which is a common cause of viral hepatitis, an inflammation of the liver. HCV infection is contracted by contact with the blood or other body fluids of an infected person. Hepatitis due to HCV can result in an acute process where a person is affected for only several months and then the virus is cleared from the body. However, the American Association of Liver Disease estimates that up to 85% of individuals become chronically infected following exposure. HCV disease progression then occurs over a period of 20 to 30 years during which patients are generally asymptomatic, meaning they exhibit no symptoms of the disease. Chronic hepatitis can lead to permanent liver damage, which can result in the development of liver cancer, liver failure or death.

The current standard of care for patients with chronic HCV infection is treatment with a combination of long-acting, pegylated forms of interferon alpha administered through weekly injections coupled with daily, oral doses of ribavirin. The duration of treatment for patients infected with non-genotype 1 virus is six months and results in undetectable viral load and normalization of liver function markers in up to 80% of patients receiving a full course of treatment. However, in individuals infected with the genotype 1 virus, the standard of care calls for 12 months of treatment and is successful in only approximately 50% of patients receiving a full course of treatment.

Treatment with pegylated interferon and ribavirin is further complicated by significant adverse side effects, including flu-like symptoms, anemia, depression, fatigue, suicidal tendencies and abnormal fetal development. Since chronic hepatitis C infection, with the exception of late-stage disease, is generally asymptomatic, the nature and extent of the treatment-related adverse side effects make patients feel sicker than they were prior to treatment. As a result of these treatment-related adverse side effects, nearly 40% of treated patients require dosage adjustments, and many of these patients may discontinue therapy altogether. In addition, current treatments are administered by injection, which is inconvenient and problematic for patients who are afraid of needles. Therefore, important goals for new HCV therapies are to:

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improve efficacy against the genotype 1 virus;

offer a treatment response in patients who have failed an interferon and ribavirin based treatment;

reduce the magnitude of treatment-related adverse side effects; and

offer a more convenient, orally available, treatment option.

We believe the lessons learned from the treatment of HIV infection, specifically the improved antiviral response achieved through the use of combination therapies, are relevant for the treatment of HCV due to its rapid replication and high frequency of mutations. One common approach to the discovery of new therapies to treat chronic hepatitis C focuses on the inhibition of viral proteins essential to the completion of the HCV replication cycle. The two most common of these HCV drug targets are NS5B polymerase and NS3 protease. NS5B polymerase is essential for viral replication, as it is directly involved in creating new copies of the viral RNA genome. NS3 protease is essential for viral protein processing and completion of the viral lifecycle. All of the NS3 inhibitors of which we are aware work by binding to the protein s active site, thus preventing protein processing. Both NS5B and NS3 inhibitors have demonstrated in clinical trials significant viral load reduction in infected patients. Many experts believe that these drugs, if approved, will need to be used in combination with other drugs in order to improve upon the efficacy obtained with the current standard of care.

Achillion Approach: NS4A Antagonist ACH-1095

Our next-generation NS4A antagonists, including ACH-1095, are novel small molecule potent inhibitors of HCV replication which we identified through our internal research program. We believe these compounds have the following benefits:

Novel Mechanism of Action. Based upon extensive virology and biochemistry studies, we believe that the mechanism of action of our compounds is novel and involves targeting the NS4A protein of HCV, preventing the formation of a functional replicase complex, a necessary step in viral replication that occurs before copying the viral RNA genome, the step that polymerase inhibitors affect, but after viral protein processing, the step that protease inhibitors affect. Accordingly, we believe this unique mechanism may contribute to the lack of cross resistance between our compounds and other HCV inhibitors.

Potency. Data obtained in the standard laboratory assays used to determine anti-HCV activity against the genotype 1 virus demonstrate that our compounds have potency *in vitro* in a range similar to the published data on Boehringer Ingelheim s protease inhibitor under clinical development, and 14 to 21 times more potency *in vitro* than either the Schering-Plough or Vertex HCV protease inhibitors under clinical development.

Lack of Cross Resistance. In laboratory studies, our compounds have not demonstrated cross resistance to any of the polymerase inhibitors or protease inhibitors of which we are aware and have tested.

Ease of Administration. Based on current animal studies, we believe the compounds in this series could be administered orally.

Potential for Combination Treatment. Because of the lack of cross resistance in *in vitro* tests with all other known classes of HCV inhibitors, we believe that NS4A antagonists are well positioned for evaluation as a treatment for chronic hepatitis C in combination with the current standard of care and/or in combination with other direct acting antivirals.

Clinical Development History

In 2005, we initiated a single dose-escalating phase I clinical trial of ACH-806 in 20 subjects using a liquid formulation. There were no clinically significant findings in this trial, and we determined that this formulation is not suitable for further clinical trials or commercialization.

We then evaluated the pharmacokinetics and safety of

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a tablet formulation of ACH-806 in a single dose-escalating phase I clinical trial in 20 subjects. We completed this trial in May 2006, and results revealed the drug was safe and well tolerated in healthy volunteers.

In 2006, we initiated a multiple dose proof-of-concept clinical trial of ACH-806 in HCV-infected patients. A proof-of-concept trial is generally a late-stage phase I or early-stage phase II clinical trial, the objective of which is to demonstrate that the tested drug shows a beneficial effect (e.g., a reduction in viral RNA levels) in human subjects. From this trial we observed that ACH-806 demonstrated positive antiviral effect, but we also observed elevations in serum creatinine, which is a marker of kidney function, which we concluded limited further dose escalation. As a result, in February 2007, we discontinued further development of ACH-806.

Based on our experience in the HCV area, and as part of our collaboration with Gilead Sciences, we maintained an active back-up program. As a result of this backup program, we developed a series of HCV inhibitors, including ACH-1095, with the following characteristics:

Chemical Structure. The chemical structure of these compounds is distinct from ACH-806.

Mechanism of Action. These compounds inhibit HCV replication through the same mechanism of action as ACH-806.

Potency. These compounds display *in vitro* potency equal to or better than ACH-806.

Ease of Administration. Based on preclinical studies, we believe these compounds could be administered orally.

Following completion of preclinical testing we expect to submit an IND application with the FDA in 2008. As appropriate, based upon the clinical experience gained with ACH-806, our collaborative partner, Gilead Sciences, may conduct phase II and/or phase III clinical trials and would assume financial and operational responsibility for this phase II and phase III development if it chooses to conduct such trials.

Preclinical Development History

In our preclinical studies, we demonstrated that our NS4A antagonists inhibit HCV replication in cell-based replicon assays that have developed resistance to other HCV protease and polymerase inhibitors.

In 2005 and 2006, we compared the potency of our NS4A antagonists, including ACH-806 and ACH-1095, as well as other compounds, with two other NS3 protease inhibitors currently in clinical development, VX-950, being developed by Vertex, and SCH-503034, being developed by Schering-Plough. Potencies of ACH-1095, VX-950 and SCH-503034 for inhibition of HCV replication are represented by the amount of inhibitor required (as measured in nanomoles, or nM) to inhibit 50% of HCV replication in *in vitro* laboratory tests. A lower nM number represents greater inhibition and potency. Our results demonstrated that, in laboratory testing, ACH-1095 is approximately 10-fold more potent than SCH-503034, and approximately 14-fold more potent than VX-950. The following table describes these results:

HCV Inhibitor	**Potency (nM)**
ACH-1095	21
VX-950	300
SCH-503034	200

In addition, this compound has demonstrated good oral bioavailability and a favorable safety profile in animals.

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Collaboration Operations

Under the terms of the collaboration with Gilead Sciences, research activities are overseen by a joint research committee comprised of equal numbers of our representatives and representatives from Gilead Sciences. Under the terms of a jointly-agreed upon research plan for ACH-1095, we will perform certain early-stage preclinical activities and Gilead is responsible for performing later preclinical and clinical studies. We will continue to be responsible for back-up activities until such time as proof-of-concept is achieved, and Gilead will continue to be responsible for manufacturing, formulation and commercialization activities. Through December 31, 2007, the parties have expended an aggregate of $27.8 million on research and development activities.

In connection with commercialization of any products under the collaboration, we have a one-time option to participate on a limited basis in the marketing effort in the United States.

Achillion Approach: HCV Protease Inhibitor

Similar to the treatment paradigm in HIV, we believe combination therapy for the treatment of chronic HCV infection will benefit from drugs that inhibit HCV replication through complementary mechanisms of action.

For this reason, we have leveraged our experience in HCV drug discovery to identify protease inhibitors that are distinct from our NS4A antagonists in their mechanism of action and thus are not subject to our collaboration and exclusive license agreement with Gilead Sciences. In preclinical studies, we have demonstrated that these potent inhibitors are efficacious *in vitro* against genotype 1 virus. A lower nM potency number represents greater inhibition and potency, indicating that a lower concentration of drug is needed for viral inhibition. The following table describes these results.

HCV Inhibitor	Potency (nM)
One in our series of proprietary HCV protease inhibitors	7
VX-950	300
SCH-503034	200

Early pre-clinical data indicate that these inhibitors have good oral bioavailability, a favorable safety profile in animals, and the potential for once-daily dosing. We plan to continue development of this series of inhibitors in order to nominate a clinical candidate during the first half of 2008.

ACH-702, Anti-MRSA Antibacterial

ACH-702 is an internally discovered compound that we are developing as a treatment for serious nosocomial, or hospital-based, bacterial infections. We have completed the IND-enabling preclinical studies to support clinical evaluation of this drug and are currently analyzing those results. After requesting a pre-IND development meeting with the FDA, we expect to hold discussions on the most appropriate clinical strategy for ACH-702 and follow with submission of an IND to the FDA in the first half of 2008, if appropriate, based upon the outcome of those discussions.

Overview of Hospital-Based Antibacterials Market

CDC data shows that antibacterial resistance has been increasing dramatically over the past few decades. Antibacterial resistance is most pronounced in the hospital setting, where the heavy use of antibiotics creates an ideal environment for the development of drug resistance. Approximately 70% of nosocomial infections are resistant to at least one antibiotic.

One of the most common pathogenic bacteria is a gram-positive bacterium referred to as *Staphylococcus aureus*, or *S. aureus*. It can cause serious infections of the skin, bloodstream, bones or joints. In 2004, 64% of

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S. aureus infections in the hospital were due to infections with strains of *S. aureus* that were resistant to methicillin, part of a commonly used class of antibiotics. Frequently, these methicillin resistant *S. aureus* strains, commonly referred to as MRSA, are also resistant to other classes of antibacterials such as cephalosporins and quinolones. Consequently, MRSA is commonly used to refer to multi-drug-resistant bacteria associated with serious infections. The increasing difficulty in treating MRSA and other multi-drug-resistant hospital-based infections has led to higher morbidity and mortality rates, as well as increasing health care expenditures.

Historically, the pharmaceutical industry was able to keep pace with the need for new antibacterial drugs. However, since 1968, only two new classes of antibacterials have been brought to market. While alternative treatments are available for MRSA, such as vancomycin, Cubicin (daptomycin), Zyvox (linezolid) and Synercid (dalfopristin + quinupristin), they face one or more of the following limitations: limited potency, lack of a bactericidal, or bacteria-killing, mechanism of action, narrow spectrum of activity, the need for intravenous or injectable administration and adverse side effects.

Achillion Approach: ACH-702

We believe ACH-702 has the following benefits:

Broad-Spectrum Potency. ACH-702 has a novel target profile against bacterial DNA replication enzymes and potent broad-spectrum activity. We have established potent activity of ACH-702 against multi-drug-resistant bacteria in a laboratory evaluation of recent clinical isolates obtained from infected patients, as well as in preclinical models of infection. The spectrum of activity includes inhibition of the DNA replication enzymes: gyrase, topoisomerase IV and primase.

Bactericidal Mechanism of Action. ACH-702 has demonstrated bactericidal activity against multi-drug-resistant MRSA. A number of the other drugs currently used to treat MRSA infections are bacteriostatic, meaning they are able to prevent the growth of new bacteria, but have a limited effect on the bacteria existing at the time of treatment.

Dosing. We believe the properties of ACH-702 support potential administration through both intravenous and oral formulations. An orally administered drug would be more convenient for patients and may decrease health care costs by enabling patients to transition their treatment from the hospital to a home setting.

Preclinical Development History

In preclinical studies, ACH-702 has demonstrated potent antibacterial activity against a number of medically relevant bacteria, including drug-resistant strains such as MRSA and vancomycin-resistant enterococcus. The following table illustrates ACH-702 activity versus MRSA clinical strains, compared to other marketed antibacterial products. The standard measurement of antibacterial activity is minimum inhibitory concentration, or MIC, meaning the minimum amount of drug required to inhibit complete growth of bacteria (as measured in micrograms per ml, or µg/ml). The lower the MIC, the greater the potency of the compound. In this study, for example, ACH-702 demonstrated potent activity *in vitro* against three MRSA strains that are resistant to vancomycin and Zyvox (linezolid), which are current standards of care.

	MIC (µg/ml)		
Compound	**MRSA (F-2121)**	**MRSA (F-2128)**	**MRSA (F-2137)**
ACH-702	0.12	0.25	0.25
Vancomycin	8.00	>32.00	2.00
Linezolid	2.00	2.00	>16.00

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In late-stage preclinical studies, ACH-702 demonstrated acceptable pharmacokinetic and safety profiles. Potent antibacterial activity has been demonstrated against both sensitive and drug-resistant strains in well-established preclinical infection models.

Given the complexity of the mechanism of action of this compound, which operates via a three-part target including gyrase, topoisomerase IV and primase, the complexity of the preclinical results noted with ACH-702, and the evolving regulatory climate for antibacterials, we believe our development strategy for this compound should be discussed with the FDA before initiating human clinical studies. After requesting a pre-IND development meeting with the FDA, we expect to hold discussions on the most appropriate clinical strategy for ACH-702 and follow with submission of an IND to the FDA in the first half of 2008, if appropriate, based upon the outcome of those discussions.

Drug Discovery Programs and Capabilities

We have successfully advanced two drug candidates into human clinical trials, with two additional drug candidates in late-stage preclinical studies. We discovered three of these drug candidates in house by applying our deep understanding of virology, microbiology and synthetic chemistry. We intend to continue to capitalize on our internal drug discovery and development capabilities to expand our product candidate portfolio.

From early lead identification through clinical candidate selection, we have coupled our knowledge base in genomic replication targets with an integrated drug discovery infrastructure to aid in the rapid advancement of our discovery programs.

Target Selection and Assay Development

We are focused on addressing unmet medical needs in infectious diseases, with an emphasis on inhibiting viral and bacterial proteins essential for genomic replication. We select targets for our drug discovery programs based upon the relevance of the target to key steps within the viral or bacterial replication cycle, our ability to develop appropriate assays for early assessment of potency, selectivity and safety and confidence in our ability to identify small molecules that can be optimized within a reasonable time period to become drug candidates. We have developed proprietary assays for identification and optimization of small molecule inhibitors of viral and bacterial genomic replication.

Compound Synthesis, Hit Identification and Lead Optimization

Our focused compound library contains a diverse set of molecules that have been synthesized for the principal purpose of inhibiting genomic replication in viruses and bacteria. We have developed the following discovery tools that enable us to manage our compounds efficiently and advance our discovery programs:

AACP (Achillion Automated Chemistry Platform) is a proprietary software program that facilitates medium and high throughput synthesis of compounds. AACP allows us to synthesize thousands of small molecules in support of our drug discovery programs.

CART (Compound Acquisition and Repository Tracking) is a software tool that streamlines our scientists ability to select and acquire compounds for lead identification. CART is integrated with computational chemistry tools and a virtual database of greater than two million small molecules.

CHEM-ACH is data mining software that allows compounds synthesized at Achillion to be cross-referenced against biological activities associated with them. Structure-activity relationships are elaborated with CHEM-ACH, greatly facilitating design and synthesis of compounds for lead optimization.

D2P2 (Drug Design Through Pharmacophore Perception) is a software application which allows our scientists to study interactions between a drug target and its inhibitors in three dimensions. D2P2 has facilitated lead optimization in our HCV program.

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Preclinical Candidate Selection

A cornerstone of our approach to drug discovery and development is the early assessment of the drug-like properties associated with optimized lead compounds. Potency and activity against a given target are necessary but not sufficient predictors of eventual successful clinical development of a new drug. In order to perform an early assessment of the potential for successful development, prior to progression of a compound into late-stage preclinical studies in support of clinical trials, we aggressively evaluate compounds in numerous tests relating to safety, metabolism, pharmacokinetic properties and physical properties associated with the feasibility for an oral formulation.

Our Scientists

Our employees and advisors have significant preclinical and clinical development expertise. We have approximately 40 scientists engaged in drug discovery, preclinical drug development and clinical research and regulatory affairs. In the aggregate, members of our drug discovery, preclinical and clinical development team have contributed to the selection and development of more than 85 clinical candidates and 50 marketed products throughout their careers.

For additional information regarding our segment reporting, please refer to Note 2 of Notes to Financial Statements included in Part II, Item 8 Financial Statements and Supplementary Data of this annual report on Form 10-K.

Competition

Our industry is highly competitive and subject to rapid and significant technological change. All of the drugs we are developing, if approved, would compete against existing therapies. In addition, we believe a significant number of drug candidates are currently under development and may become available for the treatment of HIV infection, chronic hepatitis C and bacterial infections. The key competitive factors affecting the commercial success of these drugs are likely to be efficacy, safety profile, reliability, convenience of dosing, price and reimbursement.

Many of our potential competitors, including many of the organizations named below, either alone or with their collaborative partners, have substantially greater financial, technical and human resources than we do and significantly greater experience in the discovery and development of drug candidates, obtaining FDA and other regulatory approvals of products and the commercialization of those products. Accordingly, our competitors may be more successful than we may be in obtaining FDA approval for drugs and achieving widespread market acceptance. Our competitors drugs may be more effective, have fewer negative side effects or be more effectively marketed and sold, than any drug we may commercialize and may render our drug candidates obsolete or non-competitive before we can recover the expenses of developing and commercializing any of our drug candidates. We anticipate that we will face intense and increasing competition as new drugs enter the market and advanced technologies become available. These organizations may also establish collaborative or licensing relationships with our competitors. Finally, the development of a cure or new treatment methods for the diseases we are targeting could render our drugs non-competitive or obsolete.

Elvucitabine, HIV

Elvucitabine, if approved, would compete with the NRTIs currently marketed for treatment of HIV infection, including: Epivir (lamivudine), Retrovir (AZT), Ziagen (abacavir), Combivir (lamivudine + AZT), Trizivir (lamivudine + AZT + abacavir) and Epzicom (lamivudine + abacavir) from GlaxoSmithKline, Hivid (ddC) from Hoffman-La Roche, Emtriva (FTC), Viread (tenofovir) and Truvada (FTC + tenofovir) from Gilead Sciences and Videx EC, Videx (ddI) and Zerit (d4T) from Bristol-Myers Squibb. In addition, elvucitabine may compete with other NRTIs currently under development for HIV by companies such as Avexa, Medivir, Pharmasset and Koronis. Other drugs in other classes recently approved for treatment of HIV infection include Selzentry (miraviroc, an entry inhibitor) from Pfizer and Isentress (raltegravir, an integrase inhibitor) from Merck. In addition, there are other classes of drugs under development for the treatment of HIV infection by companies such as Abbott, Boehringer Ingelheim, Johnson & Johnson, Panacos, Roche, Schering-Plough, and Trimeris.

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ACH-1095 and Protease Inhibitor Series, HCV

Our NS4A antagonists and protease inhibitors, if approved, would compete with drugs currently approved for the treatment of hepatitis C, the interferon-alpha based products from Roche (Pegasys and Roferon-A) or Schering-Plough (Intron-A or Peg-Intron) and the ribavirin based products from Schering-Plough (Rebetrol), Roche (Copegus) or generic versions sold by various companies. In addition, our HCV compounds may compete with the interferon and ribavirin based drugs currently in development such as Valeant s ribavirin analog (Viramidine) and Human Genome Sciences Albuferon. Other products are also under development for the treatment of hepatitis C by companies such as Abbott, Anadys, Boehringer Ingelheim, Bristol-Myers Squibb, Gilead Sciences, GlaxoSmithKline, Human Genome Sciences, Intermune, Johnson & Johnson, Medivir, Merck, Novartis, Panacos, Pfizer, Pharmasset, Roche, Schering-Plough, Trimeris, Valeant and Vertex.

ACH-702, Anti-MRSA Antibiotic

ACH-702, if approved, would compete with drugs currently marketed for the treatment of serious gram-positive nosocomial infections including: vancomycin (multiple generic forms), Cubicin (daptomycin) by Cubist Pharmaceuticals, Zyvox (linezolid) by Pfizer and Synercid (dalfopristin + quinupristin) by King Pharmaceuticals. In addition, ACH-702 may compete with other drugs currently under development for the treatment of nosocomial gram-positive infections including: dalbavancin in development by Pfizer, telavancin from Theravance, oritavancin by Intermune, doripenem by Johnson & Johnson, ceftobiprole by Basilea and Johnson & Johnson, iclaprim by Arpida and garenoxacin by Schering-Plough. We may also compete with the following companies that have a strategic interest in the discovery, development and marketing of drugs for the treatment of bacterial infections: Abbott, Aventis, Bristol-Myers Squibb, Cubist, GlaxoSmithKline, Merck, Novartis, Replidyne, Roche and Wyeth.

Intellectual Property

Our strategy is to pursue patents, developed internally and licensed from third parties, and other means to otherwise protect our technology, inventions and improvements that are commercially important to the development of our business. We also rely on trade secrets that may be important to the development of our business.

Our success will depend significantly on our ability to:

- obtain and maintain patent and other proprietary protection for the technology, inventions and improvements we consider important to our business;
- defend our patents;
- preserve the confidentiality of our trade secrets; and
- operate without infringing the patents and proprietary rights of third parties.

Our elvucitabine patent portfolio currently consists of seven issued U.S. patents, twenty five associated issued non-U.S. patents, twenty three associated pending non-U.S. patent applications, and one pending PCT application. We either own or hold exclusive worldwide sublicenses from Vion Pharmaceuticals of patents owned by Yale University or exclusive worldwide licenses from Emory University to these patents and patent applications. The issued patents and patent applications, if issued, will expire between 2013 and 2026. The issued U.S. patents contain claims directed to the compound, method of use and process for synthesis of elvucitabine, which claims expire in 2013, 2013 to 2014 and 2023, respectively. The issued foreign patents contain claims directed to the method of use of elvucitabine and expire in 2014.

Our hepatitis C patent portfolio currently consists of one issued U.S. patent, five U.S. provisional patent applications, eight pending U.S. non-provisional applications, two associated issued non-U.S. patents, ninety five associated pending non-U.S. patent applications and three pending PCT applications. These patent applications, if issued, will expire between 2023 and 2027. The patent applications contain claims directed to compounds, method of use, process for synthesis, mechanism of action and research assays.

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In connection with our November 2004 collaboration with Gilead Sciences, we granted a worldwide exclusive license to Gilead Sciences for past, present and future patents, patent applications and patent filings with claims directed to our first NS4A antagonists and chemically related compounds, any additional compounds which inhibit HCV via a mechanism similar to that of NS4A antagonism and intellectual property relating to the mechanism of action. Gilead Sciences has a right to present and discuss with us its capabilities to participate in the development and commercialization of new HCV compounds.

In addition, we have obtained non-exclusive licenses to HCV drug discovery patents and patent applications owned by Chiron, a Novartis business unit, Apath, L.L.C. and ReBlikon, GmbH.

Our antibacterial patent portfolio currently consists of eight pending U.S. patent applications, one pending U.S. provisional patent application, thirty eight associated pending non-U.S. applications and three pending international patent applications filed under the Patent Cooperation Treaty. These patent applications, if issued, will expire between 2024 and 2027. The patent applications contain claims directed to compounds, method of use, process for synthesis and mechanism of action.

Collaborations and Licenses

Gilead Sciences

In November 2004, we entered into a research collaboration and license agreement with Gilead Sciences, Inc. pursuant to which we agreed to collaborate exclusively with Gilead Sciences throughout the world to develop and commercialize compounds for the treatment of chronic hepatitis which inhibit HCV replication through a novel mechanism of action targeting the NS4A protein involving HCV, including ACH-806, our previous lead candidate (also known as GS-9132), and successor compounds. Research and development activities prior to proof-of-concept will be overseen by a research committee comprised of equal numbers of our representatives and representatives from Gilead Sciences. The joint research committee shall assign research and development tasks, agree upon a budget for the research program, and share equally in the related costs. In addition, the parties may agree at any time to increase or decrease the research budget. Prior to proof-of-concept, any disputes within the joint research committee that cannot be resolved between designated executives of each party will be resolved by Gilead Sciences.

According to a jointly-agreed upon research plan for ACH-1095, the joint research committee determined that we would perform certain early-stage preclinical activities while Gilead would perform later preclinical and clinical studies. We would continue to be responsible for back-up activities until such time as proof-of-concept is achieved, and Gilead would continue to be responsible for manufacturing, formulation and commercialization activities. Through December 31, 2007, the parties have expended an aggregate of $27.8 million on research and development activities.

Gilead Sciences is otherwise responsible for all development and commercialization of compounds, including all regulatory filings and clinical trials after proof-of-concept. Gilead Sciences is responsible for the manufacturing of compounds throughout all stages of development and commercialization. Gilead Sciences has agreed under the agreement to use reasonably diligent efforts to develop and commercialize at least one compound in each of the United States, Japan, Germany, France, Italy, Spain and the United Kingdom. In connection with Gilead Sciences exclusive right to market and commercialize products, we have a one-time option to participate on a limited basis in the marketing effort in the United States. Pursuant to the terms of the collaboration agreement, Gilead Sciences must provide us with notice following commencement of a phase III clinical trial and prior to filing of an NDA. We must then notify Gilead Sciences whether we intend to designate field-based personnel to support their commercial activities within the United States. Following Gilead Sciences receipt of our notice, the parties must negotiate in good faith to determine the number of Achillion field-based personnel and the manner of their participation. These field-based personnel will operate under the supervision of Gilead Sciences and receive training at a similar level to equivalent Gilead Sciences field-based personnel. We will bear the costs associated with the commercial participation of our field-based personnel; provided, however,

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that Gilead Sciences shall bear the expense of training. Our participation does not change the amount of any royalty payments Gilead Sciences is obligated to pay us on net sales of any drugs pursuant to our collaboration agreement. Under the agreement, Gilead Sciences is required to make royalty payments, if any, to us until the end of the royalty term, which is the earlier of (i) ten years following the date of the first commercial sale of a compound or (ii) the expiration of the last Achillion patent or patent owned jointly with Gilead Sciences.

We received $10.0 million from Gilead Sciences upon the execution of the agreement, consisting of license fees and an equity investment, and could receive up to $157.5 million in development, regulatory and sales milestone payments, assuming the successful simultaneous development of a lead and back-up compound, and annual sales in excess of $600 million. The Company could also receive royalties on net sales of products if commercialization is achieved.

Under the Gilead Arrangement through March 31, 2007, agreed upon research or development expenses, including internal full-time equivalent, or FTE, costs and external costs, incurred by both companies during the period up to proof-of-concept were borne equally by both parties. Prior to March 31, 2007, we incurred the majority of those expenses and, therefore, were the net receiver of funds under this cost-sharing portion of the arrangement. Effective April 1, 2007, internal full-time equivalent costs are no longer subject to this cost-sharing arrangement. Instead, each party bears its own internal costs, including FTE costs. External costs continue to be shared equally by both parties. We also revised our joint research program to focus on next-generation NS4A antagonists, after discontinuing clinical trials for ACH-806, an NS4A antagonist we previously evaluated. In the most recently updated project plan, approved by the joint research committee in December 2007, the Company s remaining obligations under the plan continue through mid 2009.

The agreement will expire on the last to expire royalty term. In addition, Gilead Sciences may terminate the agreement for any reason by providing us with 120 days notice. Either party has the right to terminate for material breach, though we may terminate for Gilead Sciences breach only on a market-by-market basis and, if applicable, a product-by-product basis.

Vion Pharmaceuticals/Yale University

In February 2000, we entered into a license agreement with Vion Pharmaceuticals, pursuant to which we obtained a worldwide exclusive sublicense from Vion on the composition of matter and use of elvucitabine. Vion s license rights were granted to it by Yale, and Yale is a party with respect to certain provisions of this agreement. This license covers the use of elvucitabine alone, as a pharmaceutical composition containing elvucitabine alone, or its use as monotherapy to treat HIV. Yale has retained rights to utilize the intellectual property licensed by this agreement for its own noncommercial purposes. Pursuant to the agreement, we issued 6,250 shares of our common stock to each of Vion and Yale. In addition, pursuant to an amendment to the agreement entered into in January 2002, we granted options to purchase 7,500 shares of our common stock to each of Vion and Yale. Through December 31, 2007, we have made aggregate payments of $35,000 to Yale under this agreement, including a $10,000 initial license fee and a $25,000 development milestone payment. Under the terms of the agreement, we may also be required to make additional milestone payments to Yale of up to an aggregate of $850,000 for each licensed product based on the achievement of specified development and regulatory approval milestones. We are also required to pay Yale specified royalties on net product sales and a specified share of sublicensing fees that we receive under any sublicenses that we grant.

This agreement will remain in effect until the later of 15 years after the date of the agreement or the expiration of the last-to-expire licensed patent, which is currently scheduled to expire June 14, 2016, unless earlier terminated. We may terminate this agreement for convenience upon 30 days notice. The agreement may also be terminated by Vion upon 30 days notice of our uncured material breach of the agreement, including, among other things, nonpayment of any amounts owed under the agreement, our failure to provide reasonable assistance in connection with the enforcement of patents by Vion and Yale, upon 60 days notice of our uncured failure to meet specified development and marketing diligence requirements and upon notice of specified

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bankruptcy and insolvency events involving us. The agreement also provides that if the underlying license agreement between Vion and Yale terminates, our agreement with Vion will also terminate, provided that, if Yale terminates the underlying license agreement between Yale and Vion for cause, Yale has agreed to enter into a direct license with us on terms substantially similar to our agreement with Vion.

Emory University

In July 2002, we entered into a license agreement with Emory University, pursuant to which we obtained a worldwide exclusive license under specified licensed patents to use elvucitabine in combination with other antivirals. Under the license, Emory retains a right to use the intellectual property for educational and research purposes only and also retains the right to approve sublicenses under specified circumstances. Through December 31, 2007, we have made aggregate payments of $150,000 to Emory under this agreement, including an initial license fee of $100,000 and a development milestone payment of $50,000. We may also be required to make additional payments of up to an aggregate of $400,000 based on the achievement of specified development and regulatory approval milestones. Under this agreement, we are also required to pay Emory specified royalties on net product sales and a specified share of sublicensing fees that we receive under any sublicenses that we grant.

This agreement will remain in effect until the expiration of the last-to-expire licensed patent, which is currently scheduled to expire on January 27, 2015, unless earlier terminated. Each party has the right to terminate this agreement upon 60 days notice for an uncured material breach. Emory may terminate this agreement upon 60 days notice of specified bankruptcy and insolvency events involving us. We may terminate this agreement for convenience upon 60 days notice. Even after termination, we may continue selling licensed products for three months so long as royalties and all other monies owed are paid to Emory.

Manufacturing and Supply

We currently rely on contract manufacturers to produce drug substances and drug products required for our clinical trials under current good manufacturing practices, with oversight by our internal managers. We plan to continue to rely upon contract manufacturers and collaboration partners to manufacture commercial quantities of our drug candidates if and when approved for marketing by the FDA. We currently rely on a single manufacturer for the preclinical or clinical supplies of each of our drug candidates and do not currently have relationships for redundant supply or a second source for any of our drug candidates. We believe that there are alternate sources of supply that can satisfy our clinical trial requirements without significant delay or material additional costs.

Sales and Marketing

We intend to establish our own sales and marketing capabilities if and when we obtain regulatory approval of our drug candidates. In North America and Western Europe, patients in the markets for our drug candidates are largely managed by medical specialists in the areas of infectious diseases, hepatology and gastroenterology. Historically, companies have experienced substantial commercial success through the deployment of these specialized sales forces which can address a majority of key prescribers, particularly within the infectious disease marketplace. Therefore, we expect to utilize a specialized sales force in North America for the sales and marketing of drug candidates that we may successfully develop. We currently have no marketing, sales or distribution capabilities. In order to participate in the commercialization of any of our drugs, we must develop these capabilities on our own or in collaboration with third parties. We may also choose to hire a third party to provide sales personnel instead of developing our own staff. Pursuant to our collaboration agreement with Gilead Sciences, we have granted Gilead Sciences worldwide commercialization rights for our HCV compounds that operate by the mechanism of NS4A antagonism. However, we have the option to participate on a limited basis in marketing efforts in the United States.

Outside of North America, and in situations or markets where a more favorable return may be realized through licensing commercial rights to a third party, we may license a portion or all of our commercial rights in a territory to a third party in exchange for one or more of the following: up-front payments, research funding, development funding, milestone payments and royalties on drug sales.

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Regulatory Matters

Government Regulation and Product Approval

Government authorities in the United States, at the federal, state and local level, and other countries extensively regulate, among other things, the research, development, testing, manufacture, labeling, record keeping, packaging, promotion, storage, advertising, distribution, marketing and export and import of products such as those we are developing. Our drugs must be approved by the FDA through the new drug application, or NDA, process before they may be legally marketed in the United States.

In the United States, drugs are subject to rigorous regulation by the FDA under the Federal Food, Drug and Cosmetic Act, or FDCA, and implementing regulations, as well as other federal and state statutes. The process of obtaining regulatory approvals and the subsequent compliance with appropriate federal, state, local, and foreign statutes and regulations require the expenditure of substantial time and financial resources. Failure to comply with the applicable United States requirements at any time during the product development process, approval process or after approval, may subject an applicant to administrative or judicial sanctions. These sanctions could include the FDA s refusal to approve pending applications, license suspension or revocation, withdrawal of an approval, a clinical hold, warning letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, civil penalties or criminal prosecution. Any agency or judicial enforcement action could have a material adverse effect on us. The process required by the FDA before a drug may be marketed in the United States generally involves the following:

- completion of preclinical laboratory tests, animal studies and formulation studies according to FDA s Good Laboratory Practice regulations;
- submission of an investigational new drug application, or IND, which must become effective before human clinical trials may begin and which must include approval by an institutional review board, or IRB, at each clinical site before the trials are initiated;
- performance of adequate and well-controlled human clinical trials according to FDA s Good Clinical Practice regulations to establish the safety and efficacy of the proposed drug for its intended use;
- submission to, and acceptance by, the FDA of an NDA;
- satisfactory completion of an FDA inspection of the manufacturing facility or facilities at which the drug is produced to assess compliance with current good manufacturing practice, or cGMP, regulations to assure that the facilities, methods and controls are adequate to preserve the drug s identity, strength, quality and purity; and
- FDA review and approval of the NDA.

United States Drug Development Process

Once a pharmaceutical candidate is identified for development it enters the preclinical testing stage. Preclinical tests include laboratory evaluations of product chemistry, toxicity and formulation, as well as animal studies. Prior to beginning human clinical trials, an IND sponsor must submit an IND to the FDA. The IND sponsor must submit the results of the preclinical tests, together with manufacturing information and analytical data, to the FDA as part of the IND. Some preclinical or nonclinical testing may continue even after the IND is submitted. In addition to including the results of the preclinical studies, the IND will also include a protocol detailing, among other things, the objectives of the first phase of the clinical trial, the parameters to be used in monitoring safety and the effectiveness criteria to be evaluated, if the first phase lends itself to an efficacy evaluation. The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA, within the 30-day time period, raises concerns or questions about the conduct of the trial. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. The FDA may, at any time, impose a clinical hold on ongoing clinical trials. If the FDA imposes a clinical hold, clinical trials cannot commence or recommence without FDA authorization and then only under terms authorized by the FDA.

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Clinical trials involve the administration of the investigation new drug to healthy volunteers or patients under the supervision of one or more qualified investigators in accordance with Good Clinical Practice regulations. Clinical trials must be conducted under protocols detailing the objectives of the trial and the safety and effectiveness criteria to be evaluated. Each protocol must be submitted to the FDA as part of the IND. Further, an institutional review board, or IRB, at each institution participating in the clinical trial must review and approve each protocol before any clinical trial commences at that institution. All research subjects must provide informed consent, and informed consent information must be submitted to the IRB for approval prior to initiation of the trial. Progress reports detailing the results of the clinical trials must be submitted at least annually to the FDA and more frequently if adverse events or other certain types of other changes occur.

Human clinical trials are typically conducted in three sequential phases that may overlap or be combined:

Phase I: The drug is initially introduced into healthy human subjects or patients with the disease and tested for safety, dosage tolerance, absorption, metabolism, distribution and excretion. In the case of some products for severe or life-threatening diseases, especially when the product may be too inherently toxic to ethically administer to healthy volunteers, the initial human testing is often conducted in patients.

Phase II: Involves studies in a limited patient population to identify possible adverse effects and safety risks, to preliminarily evaluate the efficacy of the product for specific targeted diseases and to determine dosage tolerance and optimal dosage.

Phase III: Clinical trials are undertaken to further evaluate dosage, clinical efficacy and safety in an expanded patient population, typically at geographically dispersed clinical study sites. These studies are intended to establish the overall risk-benefit ratio of the product and provide, if appropriate, an adequate basis for product labeling.

Phase I, phase II, and phase III testing may not be completed successfully within any specified period, if at all. The FDA or an IRB or the sponsor may suspend a clinical trial at any time on various grounds, including a finding that the research subjects or patients are being exposed to an unacceptable health risk.

Concurrent with clinical trials, companies usually complete additional animal studies and must also develop additional information about the chemistry and physical characteristics of the drug and finalize a process for manufacturing the product in accordance with cGMP requirements. The manufacturing process must be capable of consistently producing quality batches of the drug candidate and, among other things, the manufacturer must develop methods for testing the identity, strength, quality and purity of the final drug. Additionally, appropriate packaging must be selected and tested and stability studies must be conducted to demonstrate that the drug candidate does not undergo unacceptable deterioration over its shelf life.

United States Review and Approval Processes

FDA approval of an NDA is required before marketing of the product may begin in the United States. The NDA must include the results of product development, preclinical studies and clinical studies, together with other detailed information, including information on the chemistry, manufacture and composition of the product. The FDA has 60 days from its receipt of the NDA to review the application to ensure that it is sufficiently complete for substantive review before accepting it for filing. The FDA may request additional information rather than accept an NDA for filing. In this event, the NDA must be resubmitted with the additional information. The resubmitted application also is subject to review before the FDA accepts it for filing. Once the submission is accepted for filing, the FDA begins an in-depth substantive review. The submission of an NDA is also subject to the payment of user fees; a waiver of such fees may be obtained under certain limited circumstances. Further, the sponsor of an approved NDA is subject to annual product and establishment user fees. The approval process is lengthy and difficult and the FDA may refuse to approve an NDA if the applicable regulatory criteria are not satisfied or may require additional clinical or other data and information. Even if such data and information is submitted, the FDA may ultimately decide that the NDA does not satisfy the criteria for approval. The FDA may

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also refer applications for novel drug products or drug products which present difficult questions of safety or efficacy to an advisory committee, typically a panel that includes clinicians and other experts, for review, evaluation and a recommendation as to whether the application should be approved. The FDA is not bound by the recommendation of an advisory committee. The FDA reviews an NDA to determine, among other things, whether a product is safe and effective for its intended use. Before approving an NDA, the FDA will inspect the facility or facilities where the product is manufactured to determine whether its manufacturing is cGMP-compliant to assure and preserve the product s identity, strength, quality, purity and stability. Before approving an NDA, the FDA will inspect the facility or facilities where the product is manufactured.

NDAs receive either standard or priority review. A drug representing a potential significant improvement in treatment, prevention or diagnosis of disease may receive priority review. In addition, products studied for their safety and effectiveness in treating serious or life-threatening illnesses and that provide meaningful therapeutic benefit over existing treatments may receive accelerated approval and may be approved on the basis of adequate and well-controlled clinical trials establishing that the drug product has an effect on a surrogate endpoint that is reasonably likely to predict clinical benefit or on the basis of an effect on a clinical endpoint other than survival or irreversible morbidity. As a condition of approval, the FDA may require that a sponsor of a drug receiving accelerated approval perform adequate and well-controlled post-marketing clinical trials. Priority review and accelerated approval do not change the standards for approval, but may expedite the approval process.

If the FDA evaluation of the NDA and inspection of manufacturing facilities are favorable, the FDA may issue an approval letter or an approvable letter. An approvable letter generally contains a statement of specific conditions that must be met in order to secure final approval of the NDA. If and when those conditions have been met to the FDA s satisfaction, the FDA will typically issue an approval letter. An approval letter authorizes commercial marketing of the drug with specific prescribing information for a specific indication. As a condition of NDA approval, the FDA may require post approval testing, including phase IV trials, and surveillance to monitor the drug s safety or efficacy and may impose other conditions, including labeling or distribution restrictions which can materially impact the potential market and profitability of the drug. Once granted, product approvals may be withdrawn if compliance with regulatory standards is not maintained or problems are identified following initial marketing.

If the FDA s evaluation of the NDA submission or manufacturing facilities is not favorable, the FDA may refuse to approve the NDA or issue a not approvable letter. The not approvable letter outlines the deficiencies in the submission and often requires additional testing or information in order for the FDA to reconsider the application. Even after submitting this additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval. With limited exceptions, the FDA may withhold approval of a NDA regardless of prior advice it may have provided or commitments it may have made to the sponsor.

Post-Approval Requirements and Considerations

Once an approval is granted, the FDA may withdraw the approval if compliance with regulatory standards is not maintained or if problems occur after the product reaches the market. After approval, some types of changes to the approved product, such as adding new indications, manufacturing changes and additional labeling claims, are subject to further FDA review and approval. In addition, the FDA may require testing and surveillance programs to monitor the effect of approved products that have been commercialized, and in some circumstances the FDA has the power to prevent or limit further marketing of a product based on the results of these post-marketing programs.

Any drug products manufactured or distributed by us pursuant to FDA approvals are subject to continuing regulation by the FDA, including, among other things, record-keeping requirements, reporting of adverse experiences with the drug, providing the FDA with updated safety and efficacy information, drug sampling and distribution requirements, notifying the FDA and gaining its approval of certain manufacturing or labeling

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changes, and complying with certain electronic records and signature requirements. Certain changes to the product, its labeling or its manufacturing require prior FDA approval and may require the conduct of further clinical investigations to support the change. Such approvals may be expensive and time-consuming and, if not approved, the product will not be allowed to be marketed as modified. FDA also regulates the promotional claims that are made about prescription drug products. In particular, a drug or biologic may not be promoted for uses that are not approved by the FDA as reflected in the product s approved labeling. In addition, the FDA requires clinical substantiation of any claims of superiority of one product over another, including that such claims be proven by adequate and well-controlled head-to-head clinical trials. For anti-infective drugs, *in vitro* superiority taken alone is generally not sufficient to permit promotional claims of product superiority. To the extent that market acceptance of our products may depend on their superiority over existing therapies, any restriction on our ability to advertise or otherwise promote claims of superiority, or requirements to conduct additional expensive clinical trials to provide proof of such claims, could negatively affect the sales of our products or our costs. Drug manufacturers and their subcontractors are required to register their establishments with the FDA and certain state agencies, and are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with cGMP regulations and other laws.

We rely, and expect to continue to rely, on third parties for the production of clinical and commercial quantities of our products. Future FDA and state inspections may identify compliance issues at the facilities of our contract manufacturers that may disrupt production or distribution, or require substantial resources to correct.

Once a new drug application is approved, the product covered thereby becomes a listed drug that can, in turn, be cited by potential generic competitors in support of approval of an abbreviated new drug application, or ANDA. An approved ANDA provides for marketing of a drug product that has the same active ingredients in the same strength, dosage form, and route of administration as the listed drug and has been shown through bioequivalence testing to be therapeutically equivalent to the listed drug. There is generally no requirement, other than the requirement for bioequivalence testing, for an ANDA applicant to conduct or submit results of non-clinical or clinical tests to prove the safety or effectiveness of its drug product. Drugs approved in this way are commonly referred to as generic equivalents to the listed drug, are listed as such by the FDA, and can often be substituted by pharmacists under prescriptions written for the original listed drug.

From time to time, legislation is drafted, introduced and passed in Congress that could significantly change the statutory provisions governing the approval, manufacturing and marketing of products regulated by the FDA. In addition, FDA regulations and guidance are often revised or reinterpreted by the agency in ways that may significantly affect our business and our products. It is impossible to predict whether legislative changes will be enacted, or FDA regulations, guidance or interpretations changed or what the impact of such changes, if any, may be.

Foreign Regulation

In addition to regulations in the United States, we will be subject to a variety of foreign regulations governing clinical trials and commercial sales and distribution of our products. Whether or not we obtain FDA approval for a product, we must obtain approval of a product by the comparable regulatory authorities of foreign countries before we can commence clinical trials or marketing of the product in those countries. The approval process varies from country to country and the time may be longer or shorter than that required for FDA approval. The requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary greatly from country to country.

Under European Union regulatory systems, we may submit marketing authorization applications either under a centralized or decentralized procedure. The centralized procedure, which is compulsory for medicines produced by certain biotechnological processes and optional for those which are highly innovative, provides for the grant of a single marketing authorization that is valid for all European Union member states. For drugs without approval in any Member State, the decentralized procedure provides for a member state, known as the

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reference member state, to assess an application, with one or more other, or concerned, member states subsequently approving that assessment. Under this procedure, an applicant submits an application, or dossier, and related materials, including a draft summary of product characteristics, draft labeling and package leaflet, to the reference member state and concerned member states. The reference member state prepares a draft assessment and drafts of the related materials within 120 days after receipt of a valid application. Within 90 days of receiving the reference member state s assessment report, each concerned member state must decide whether to approve the assessment report and related materials. If a member state cannot approve the assessment report and related materials on the grounds of potential serious risk to public health, the disputed points may eventually be referred to the European Commission, whose decision is binding on all member states.

Reimbursement

Sales of pharmaceutical products depend in significant part on the availability of third-party reimbursement. It is time consuming and expensive to seek reimbursement from third-party payors. Reimbursement may not be available or sufficient to allow us to sell our products on a competitive and profitable basis.

The passage of the Medicare Prescription Drug and Modernization Act of 2003, or the MMA, imposes new requirements for the distribution and pricing of prescription drugs for Medicare beneficiaries, which may affect the marketing of our products. The MMA also introduced a new reimbursement methodology, part of which went into effect in 2004, and a new prescription drug plan, which went into effect on January 1, 2006. At this point, it is not clear what long-term effect the MMA will have on the prices paid for currently approved drugs and the pricing options for new drugs. While the MMA applies only to drug benefits for Medicare beneficiaries, private payors often follow Medicare coverage policy and payment limitations in setting their own payment rates. Any reduction in payment that results from the MMA may result in a similar reduction in payments from non-governmental payors.

In addition, in some foreign countries, the proposed pricing for a drug must be approved before it may be lawfully marketed. The requirements governing drug pricing vary widely from country to country. For example, the European Union provides options for its member states to restrict the range of medicinal products for which their national health insurance systems provide reimbursement and to control the prices of medicinal products for human use. A member state may approve a specific price for the medicinal product or it may instead adopt a system of direct or indirect controls on the profitability of the company placing the medicinal product on the market.

There have been and we expect that there will continue to be frequent federal and state proposals to impose governmental pricing controls or cost containment measures for prescription drugs. While we cannot predict whether such legislative or regulatory proposals will be adopted, the adoption of such proposals could have a material adverse effect on our business, financial condition and profitability.

Employees

As of March 1, 2008, we had 60 employees, 24 of whom hold doctoral degrees. Approximately 40 of our employees are engaged in research and development, with the remainder engaged in administration, finance and business development functions. We believe our relations with our employees are good.

Our internet address is www.achillion.com. We are not including the information contained in our website as part of, or incorporating it by reference into, this annual report on Form 10-K. We make available free of charge through our web site our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to these reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, or the Exchange Act, as soon as reasonably practicable after we electronically file such materials with the Securities and Exchange Commission.

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Executive Officers of the Registrant

Name	Age	Position
Michael D. Kishbauch	58	President and Chief Executive Officer
Milind S. Deshpande, Ph.D.	51	Executive Vice President and Chief Scientific Officer
Gautam Shah, Ph.D.	51	Senior Vice President and Chief Compliance Officer
Mary Kay Fenton	44	Vice President and Chief Financial Officer
Elizabeth A. Olek, D.O.	43	Vice President and Chief Medical Officer

Michael D. Kishbauch, President and Chief Executive Officer. Prior to joining Achillion in July 2004 as our President and Chief Executive Officer, Mr. Kishbauch founded and served as President and Chief Executive Officer from September 2000 to July 2004 of OraPharma, Inc., a publicly traded, commercial-stage pharmaceutical company focused on oral health care, which was acquired by Johnson & Johnson in 2003. Prior to OraPharma, Inc., Mr. Kishbauch held senior management positions with MedImmune, Inc. Mr. Kishbauch is a director of ARIAD Pharmaceuticals, Inc. Mr. Kishbauch holds an M.B.A. from the Wharton School of the University of Pennsylvania and a B.A. in biology from Wesleyan University.

Milind S. Deshpande, Ph.D, Executive Vice President and Chief Scientific Officer. Dr. Deshpande joined Achillion in September 2001 as Vice President of Chemistry, was named head of drug discovery in April 2002, Senior Vice President of Drug Discovery in December 2002, Senior Vice President and Chief Scientific Officer in December 2004 and Executive Vice President and Chief Scientific Officer in June 2007. Prior to joining Achillion, Dr. Deshpande was Associate Director of Lead Discovery and Early Discovery Chemistry at the Pharmaceutical Research Institute at Bristol-Myers Squibb from 1991 to 2001, where he managed the identification of new clinical candidates to treat infectious and neurological diseases. From 1988 to 1991, he held a faculty position at Boston University Medical School. Dr. Deshpande received his Ph.D. in Organic Chemistry from Ohio University, following his undergraduate education in India.

Gautam Shah, Ph.D., Senior Vice President and Chief Compliance Officer. Dr. Shah joined Achillion in May 2004 as Vice President of Regulatory Affairs and was named Senior Vice President and Chief Compliance Officer in September 2006. Prior to joining Achillion, he was Senior Director of Regulatory Affairs with Sepracor from February 2003 to May 2004. Prior to Sepracor, Dr. Shah was in the Regulatory Affairs Group of Bayer Health Care. Before Bayer, he held positions of increasing responsibilities at Pfizer Inc. in the area of Product and Process Development. Dr. Shah holds a doctoral degree in Pharmaceutics from the University of Illinois, as well as a Master s degree in Medicinal Chemistry and a Bachelor s degree in Pharmacy.

Mary Kay Fenton, Vice President and Chief Financial Officer. Ms. Fenton, a certified public accountant, has led Achillion s financial function since October 2000. From 1991 to 2000, Ms. Fenton held various positions within the Technology Industry Group at PricewaterhouseCoopers LLP, most recently as Senior Manager responsible for the life sciences practice in Connecticut. Prior to 1991, Ms. Fenton was an economic development associate in the nonprofit sector. Ms. Fenton holds an M.B.A. in Finance from the Graduate School of Business at the University of Connecticut and an A.B. in Economics from the College of the Holy Cross.

Elizabeth A. Olek, D.O., Vice President and Chief Medical Officer. Prior to joining Achillion in December 2007, Dr. Olek served as Global Brand Medical Director and Clinical Research Physician in the Infectious Disease, Transplant and Immunology Group at Novartis Pharmaceuticals Corporation from January 2005 through November 2007. Between August and December 2004, Dr. Olek was employed as a clinical research consultant at the Avidia Research Institute. Between January 2003 and July 2004, Dr. Olek served as a Director of Clinical Research at InterMune Inc. From September 1998 through December 2002, Dr. Olek was a Director of Clinical Research at Genetics Institute/Wyeth Research. Dr. Olek holds an M.P.H. in epidemiology and biostatistics from the Boston University School of Public Health. She also holds a D.O. from Philadelphia College of Osteopathic Medicine and a B.S. in Pharmacy from the Philadelphia College of Pharmacy and Science University of Sciences Philadelphia.

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ITEM 1A. RISK FACTORS

Risks Related to Our Business

We have a limited operating history and have incurred a cumulative loss since inception. If we do not generate significant revenues, we will not be profitable.

We have incurred significant losses since our inception in August 1998. At December 31, 2007, our accumulated deficit was approximately $152 million. We have not generated any revenue from the sale of drug candidates to date. We expect that our annual operating losses will increase substantially over the next several years as we expand our research, development and commercialization efforts, including:

- completing the open label extension periods for phase II clinical trials for elvucitabine and, if we are successful in forming a licensing arrangement with a potential collaboration partner, moving into pivotal phase III clinical trials; and
- advancing ACH-1095 through preclinical testing and completion of proof-of-concept; and
- advancing our HCV protease inhibitor series into preclinical testing and completion of proof-of-concept; and
- advancing ACH-702 through preclinical testing and completion of proof-of-concept; and
- continuing to advance our other research and discovery programs in HIV and HCV, and identifying other infectious disease drug candidates.

To become profitable, we must successfully develop and obtain regulatory approval for our drug candidates and effectively manufacture, market and sell any drug candidates we develop. Accordingly, we may never generate significant revenues and, even if we do generate significant revenues, we may never achieve profitability.

We will need substantial additional capital to fund our operations, including drug candidate development, manufacturing and commercialization. If we do not have or cannot raise additional capital when needed, we will be unable to develop and commercialize our drug candidates successfully, and our ability to operate as a going concern may be adversely affected.

We believe that our existing cash and cash equivalents will be sufficient to support our current operating plan through at least the next twelve months. However, our operating plan may change as a result of many factors, including:

- the costs involved in the preclinical and clinical development, manufacturing and formulation of elvucitabine, our HCV protease inhibitors and ACH-702;
- the costs involved in the preclinical and clinical development of ACH-1095 and other NS4A antagonists, certain portions of which we share with Gilead Sciences;
- our ability to enter into corporate collaborations and the terms and success of these collaborations;
- the costs involved in obtaining regulatory approvals for our drug candidates;

the scope, prioritization and number of programs we pursue;

the costs involved in preparing, filing, prosecuting, maintaining, enforcing and defending patent and other intellectual property claims;

our ability to enter into corporate collaborations and the terms and success of these collaborations;

our ability to raise incremental debt or equity capital new technologies and drug candidates; and

our acquisition and development of new technologies and drug candidates; and

competing technological and market developments currently unknown to us.

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If our operating plan changes, we may need additional funds sooner than planned. Such additional financing may not be available when we need it or may not be available on terms that are favorable to us. In addition, we may seek additional capital due to favorable market conditions or strategic considerations, even if we believe we have sufficient funds for our current or future operating plans. If adequate funds are not available to us on a timely basis, or at all, we may be required to:

- terminate or delay preclinical studies, clinical trials or other development activities for one or more of our drug candidates; or
- delay our establishment of sales and marketing capabilities or other activities that may be necessary to commercialize our drug candidates, if approved for sale.

We may seek additional financing through a combination of private and public equity offerings, debt financings and collaboration, strategic alliance and licensing arrangements. To the extent that we raise additional capital through the sale of equity or convertible debt securities, your ownership interest will be diluted, and the terms may include adverse liquidation or other preferences that adversely affect your rights as a stockholder. Debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions such as incurring additional debt, making capital expenditures or declaring dividends. If we raise additional funds through collaboration, strategic alliance and licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies or drug candidates, or grant licenses on terms that are not favorable to us.

We depend heavily on the success of our most advanced drug candidate, elvucitabine, for the treatment of HIV infection, which is still under development.

We have invested a significant portion of our efforts and financial resources in the development of our most advanced drug candidate, elvucitabine, for the treatment of HIV infection. Our ability to generate revenues will depend heavily on the successful development and commercialization of this drug candidate. The development and commercial success of elvucitabine will depend on several factors, including the following:

- our ability to enter into a corporate collaboration for the further development of elvucitabine and the terms and success of this collaboration;
- our ability to provide acceptable evidence of its safety and efficacy in current and future clinical trials;
- receipt of marketing approvals from the FDA and similar foreign regulatory authorities;
- establishing commercial manufacturing arrangements with third-party manufacturers;
- launching commercial sales of the drug, whether alone or in collaboration with others; and
- acceptance of the drug in the medical community and with third-party payors.

We are currently studying elvucitabine in two open label extensions of recently completed phase II clinical trials. The longer-term results of these phase II clinical trials may not be consistent with results observed in earlier phases of the trials, and even if positive, may not be necessarily indicative of the results we will obtain in our planned phase III or other subsequent clinical trials that may be required for regulatory approval of this drug candidate. If we are not successful in commercializing elvucitabine, or are significantly delayed in doing so, our business will be materially harmed.

We plan to enter into an alliance for the phase III development and commercialization of elvucitabine, our drug candidate for treatment of HIV. Given the limited number of global pharmaceutical companies which currently develop and market drugs for the treatment of HIV, and the strategic need for elvucitabine to be suitable for co-formulation with drugs already marketed or under development by a potential partner, we may not be successful in forming such an alliance.

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Our market is subject to intense competition. If we are unable to compete effectively, our drug candidates may be rendered noncompetitive or obsolete.

We are engaged in segments of the pharmaceutical industry that are highly competitive and rapidly changing. Many large pharmaceutical and biotechnology companies, academic institutions, governmental agencies and other public and private research organizations are pursuing the development of novel drugs that target infectious diseases. We face, and expect to continue to face, intense and increasing competition as new products enter the market and advanced technologies become available. In addition to currently approved drugs, there are a significant number of drugs that are currently under development and may become available in the future for the treatment of HIV infection, chronic hepatitis C and serious hospital-based bacterial infections. We would expect elvucitabine, ACH-702 and our next generation NS4A candidate to compete with the following approved drugs and drug candidates currently under development:

Elvucitabine. If approved, elvucitabine would compete with the NRTIs currently marketed for treatment of HIV infection, including: Epivir (lamivudine), Retrovir (AZT), Ziagen (abacavir), Combivir (lamivudine + AZT), Trizivir (lamivudine + AZT + abacavir) and Epzicom (lamivudine + abacavir) from GlaxoSmithKline, Hivid (ddC) from Hoffman-La Roche, Emtriva (FTC), Viread (tenofovir) and Truvada (FTC + tenofovir) from Gilead Sciences and Videx EC, Videx (ddI) and Zerit (d4T) from Bristol-Myers Squibb. In addition, elvucitabine may compete with other NRTIs currently under development for HIV by companies such as Avexa, Medivir, Pharmasset and Koronis. Other drugs in other classes recently approved for treatment of HIV infection include Selzentry (miraviroc, an entry inhibitor) from Pfizer and Isentress (raltegravir, an integrase inhibitor) from Merck. In addition, there are other classes of drugs under development for the treatment of HIV infection by companies such as Abbott, Boehringer Ingelheim, Johnson & Johnson, Panacos, Roche, Schering-Plough, and Trimeris.

NS4A Antagonist and Protease Inhibitor. If approved, our NS4A antagonists would compete with drugs currently approved for the treatment of hepatitis C, the interferon-alpha based products from Roche (Pegasys and Roferon-A) or Schering-Plough (Intron-A or Peg-Intron) and the ribavirin based products from Schering-Plough (Rebetrol), Roche (Copegus) or generic versions sold by various companies. In addition, our HCV compounds may compete with the interferon and ribavirin based drugs currently in development such as Valeant s ribavirin analog (Viramidine) and Human Genome Sciences Albuferon. Other products are also under development for the treatment of hepatitis C by companies such as Abbott, Anadys, Boehringer Ingelheim, Bristol-Myers Squibb, Gilead Sciences, GlaxoSmithKline, Human Genome Sciences, Intermune, Johnson & Johnson, Medivir, Merck, Novartis, Panacos, Pfizer, Pharmasset, Roche, Schering-Plough, Trimeris, Valeant and Vertex.

ACH-702. ACH-702, if approved, would compete with drugs currently marketed for the treatment of serious gram-positive nosocomial infections including: vancomycin (multiple generic forms), Cubicin (daptomycin) by Cubist Pharmaceuticals, Zyvox (linezolid) by Pfizer and Synercid (dalfopristin + quinupristin) by King Pharmaceuticals. In addition, ACH-702 may compete with other drugs currently under development for the treatment of nosocomial gram-positive infections including: dalbavancin in development by Pfizer, telavancin from Theravance, oritavancin by Intermune, doripenem by Johnson & Johnson, ceftobiprole by Basilea and Johnson & Johnson, iclaprim by Arpida and garenoxacin by Schering-Plough. We may also compete with the following companies that have a strategic interest in the discovery, development and marketing of drugs for the treatment of bacterial infections: Abbott, Aventis, Bristol-Myers Squibb, Cubist, GlaxoSmithKline, Merck, Novartis, Replidyne, Roche and Wyeth

Many of our competitors have:

- significantly greater financial, technical and human resources than we have and may be better equipped to discover, develop, manufacture and commercialize drug candidates;
- more extensive experience in preclinical testing and clinical trials, obtaining regulatory approvals and manufacturing and marketing pharmaceutical products;

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drug candidates that have been approved or are in late-stage clinical development; and/or

collaborative arrangements in our target markets with leading companies and research institutions.

Competitive products may render our products obsolete or noncompetitive before we can recover the expenses of developing and commercializing our drug candidates. Furthermore, the development of new treatment methods and/or the widespread adoption or increased utilization of any vaccine for the diseases we are targeting could render our drug candidates noncompetitive, obsolete or uneconomical. If we successfully develop and obtain approval for our drug candidates, we will face competition based on the safety and effectiveness of our drug candidates, the timing of their entry into the market in relation to competitive products in development, the availability and cost of supply, marketing and sales capabilities, reimbursement coverage, price, patent position and other factors. If we successfully develop drug candidates but those drug candidates do not achieve and maintain market acceptance, our business will not be successful.

If we are not able to attract and retain key management and scientific personnel and advisors, we may not successfully develop our drug candidates or achieve our other business objectives.

We depend upon our senior management and scientific staff for our business success. Key members of our senior team include Michael Kishbauch, our president and chief executive officer and Dr. Milind Deshpande, our executive vice president and chief scientific officer. All of our employment agreements with our senior management employees are terminable without notice by the employee. The loss of the service of any of the key members of our senior management may significantly delay or prevent the achievement of drug development and other business objectives. Our ability to attract and retain qualified personnel, consultants and advisors is critical to our success. We face intense competition for qualified individuals from numerous pharmaceutical and biotechnology companies, universities, governmental entities and other research institutions. We may be unable to attract and retain these individuals, and our failure to do so would adversely affect our business.

Our business has a substantial risk of product liability claims. If we are unable to obtain appropriate levels of insurance, a product liability claim could adversely affect our business.

Our business exposes us to significant potential product liability risks that are inherent in the development, manufacturing and sales and marketing of human therapeutic products. Although we do not currently commercialize any products, claims could be made against us based on the use of our drug candidates in clinical trials. Product liability claims could delay or prevent completion of our clinical development programs. We currently have clinical trial insurance in an amount equal to up to $9.0 million in the aggregate and will seek to obtain product liability insurance prior to the sales and marketing of any of our drug candidates. However, our insurance may not provide adequate coverage against potential liabilities. Furthermore, clinical trial and product liability insurance is becoming increasingly expensive. As a result, we may be unable to maintain current amounts of insurance coverage or obtain additional or sufficient insurance at a reasonable cost to protect against losses that could have a material adverse effect on us. If a claim is brought against us, we might be required to pay legal and other expenses to defend the claim, as well as uncovered damages awards resulting from a claim brought successfully against us. Furthermore, whether or not we are ultimately successful in defending any such claims, we might be required to direct significant financial and managerial resources to such defense, and adverse publicity is likely to result.

Risks Related to the Development of Our Drug Candidates

All of our drug candidates are still in the early stages of development and remain subject to clinical testing and regulatory approval. If we are unable to successfully develop and test our drug candidates, we will not be successful.

To date, we have not commercially marketed, distributed or sold any drug candidates. The success of our business depends primarily upon our ability to develop and commercialize our drug candidates successfully. Our most advanced drug candidate is elvucitabine, which is currently in phase II clinical trials. Our other drug

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candidates are in various stages of preclinical development. Our drug candidates must satisfy rigorous standards of safety and efficacy before they can be approved for sale. To satisfy these standards, we must engage in expensive and lengthy testing and obtain regulatory approval of our drug candidates. Despite our efforts, our drug candidates may not:

- offer therapeutic or other improvement over existing, comparable drugs;
- be proven safe and effective in clinical trials;
- have the desired effects or may include undesirable effects or the drug candidates may have other unexpected characteristics;
- meet applicable regulatory standards;
- be capable of being produced in commercial quantities at acceptable costs; or
- be successfully commercialized.

In addition, we may experience numerous unforeseen events during, or as a result of, preclinical testing and the clinical trial process that could delay or prevent our ability to receive regulatory approval or commercialize our drug candidates, including:

- regulators or Institutional Review Boards, or IRBs, may not authorize us to commence a clinical trial or conduct a clinical trial at a prospective trial site;
- our pre-clinical tests or clinical trials may produce negative or inconclusive results, and we may decide, or regulators may require us, to conduct additional pre-clinical testing or clinical trials, or we may abandon projects that we expect to be promising;
- enrollment in our clinical trials may be slower than we currently anticipate or participants may drop out of our clinical trials at a higher rate than we currently anticipate, resulting in significant delays;
- our third party contractors may fail to comply with regulatory requirements or meet their contractual obligations to us in a timely manner;
- we might have to suspend or terminate our clinical trials if the participants are being exposed to unacceptable health risks;
- IRBs or regulators, including the FDA, may require that we hold, suspend or terminate clinical research for various reasons, including noncompliance with regulatory requirements; and
- the supply or quality of our drug candidates or other materials necessary to conduct our clinical trials may be insufficient or inadequate.

We, and a number of other companies in the pharmaceutical and biotechnology industries, have suffered significant setbacks in later stage clinical trials even after achieving promising results in early-stage development. For example, in February 2007, we announced that we were discontinued further clinical development of ACH-806 (also known as GS-9132) which was determined to have positive antiviral effect in a proof-of-concept clinical trial in HCV infected patients, but also to elevate serum creatinine levels, a marker of kidney function. Accordingly, the results from the completed preclinical studies and clinical trials and ongoing clinical trials for elvucitabine, ACH-702 and our other drug candidates may not be predictive of the results we may obtain in later stage trials. We do not expect any of our drug candidates to be commercially available for at least several years.

If we are unable to obtain U.S. and/or foreign regulatory approval, we will be unable to commercialize our drug candidates.

Our drug candidates are subject to extensive governmental regulations relating to among other things, research, testing, development, manufacturing, safety, efficacy, record keeping, labeling, marketing and distribution of drugs. Rigorous preclinical testing and clinical trials and an extensive regulatory approval process

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are required in the United States and in many foreign jurisdictions prior to the commercial sale of our drug candidates. Satisfaction of these and other regulatory requirements is costly, time consuming, uncertain and subject to unanticipated delays. It is possible that none of the drug candidates we are developing will obtain marketing approval. In connection with the clinical trials for elvucitabine, ACH-702 and any other drug candidate we may seek to develop in the future, we face risks that:

- the drug candidate may not prove to be efficacious;
- the drug may not prove to be safe;
- the results may not confirm the positive results from earlier preclinical studies or clinical trials; and
- the results may not meet the level of statistical significance required by the FDA or other regulatory agencies.

We have limited experience in conducting and managing the clinical trials necessary to obtain regulatory approvals, including approval by the FDA. The time required to complete clinical trials and for FDA and other countries regulatory review processes is uncertain and typically takes many years. Our analysis of data obtained from preclinical and clinical activities is subject to confirmation and interpretation by regulatory authorities, which could delay, limit or prevent regulatory approval. We may also encounter unanticipated delays or increased costs due to government regulation from future legislation or administrative action or changes in FDA policy during the period of product development, clinical trials and FDA regulatory review.

Any delay in obtaining or failure to obtain required approvals could materially adversely affect our ability to progress the development of a drug candidate and to generate revenues from that drug candidate. In particular, we plan to request a pre-IND development meeting with the FDA regarding ACH-702, our antibacterial drug candidate. We expect to hold discussions on the most appropriate clinical strategy for ACH-702 and follow with submission of an IND to the FDA in the first half of 2008, if appropriate, based upon the outcome of those discussions. Given the complexity of the mechanism of action of this compound, which operates via a three-part target including gyrase, topoisomerase IV and primase, the complexity of the preclinical results noted with ACH-702, and the evolving regulatory climate for antibacterials, we believe our development strategy for this compound should be discussed with the FDA before initiating human clinical studies. There can be no assurance that the FDA will approve our IND application once filed. Furthermore, any regulatory approval to market a product may be subject to limitations on the indicated uses for which we may market the product and affect reimbursement by third-party payors. These limitations may limit the size of the market for the product. We are also subject to numerous foreign regulatory requirements governing the conduct of clinical trials, manufacturing and marketing authorization, pricing and third-party reimbursement. The foreign regulatory approval process includes all of the risks associated with FDA approval described above as well as risks attributable to the satisfaction of foreign regulations. Approval by the FDA does not ensure approval by regulatory authorities outside the United States. Foreign jurisdictions may have different approval procedures than those required by the FDA and may impose additional testing requirements for our drug candidates.

If clinical trials for our drug candidates are prolonged or delayed, we may be unable to commercialize our drug candidates on a timely basis, which would require us to incur additional costs and delay our receipt of any product revenue.

We cannot predict whether we will encounter problems with any of our completed, ongoing or planned clinical trials that will cause us or regulatory authorities to delay, suspend or terminate clinical trials, or delay the analysis of data from our completed or ongoing clinical trials. Any of the following could delay the clinical development of our drug candidates:

- ongoing discussions with the FDA or comparable foreign authorities regarding the scope or design of our clinical trials;
- delays in receiving, or the inability to obtain, required approvals from institutional review boards or other reviewing entities at clinical sites selected for participation in our clinical trials;

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delays in enrolling volunteers and patients into clinical trials;

a lower than anticipated retention rate of volunteers and patients in clinical trials;

the need to repeat clinical trials as a result of inconclusive or negative results or unforeseen complications in testing;

inadequate supply or deficient quality of drug candidate materials or other materials necessary to conduct our clinical trials;

unfavorable FDA inspection and review of a clinical trial site or records of any clinical or preclinical investigation;

serious and unexpected drug-related side effects experienced by participants in our clinical trials; or

the placement by the FDA of a clinical hold on a trial.

Our ability to enroll patients in our clinical trials in sufficient numbers and on a timely basis will be subject to a number of factors, including the size of the patient population, the nature of the protocol, the proximity of patients to clinical sites, the availability of effective treatments for the relevant disease and the eligibility criteria for the clinical trial. Delays in patient enrollment may result in increased costs and longer development times. For example, we experienced delays in patient enrollment in connection with our phase II trial of elvucitabine in HIV infected patients who have failed a HAART regimen which included Epivir (lamivudine) due to the strict entry criteria for this trial. As a result, we expanded the number of sites at which the trial will be conducted and changed the protocol of the trial to include additional treatment with elvucitabine after the initial 14 days of treatment. In addition, subjects may drop out of our clinical trials, and thereby impair the validity or statistical significance of the trials.

We, the FDA or other applicable regulatory authorities or IRBs may suspend clinical trials of a drug candidate at any time if we or they believe the subjects or patients participating in such clinical trials are being exposed to unacceptable health risks or for other reasons.

We cannot predict whether any of our drug candidates will encounter problems during clinical trials which will cause us or regulatory authorities to delay or suspend these trials, or which will delay the analysis of data from these trials. In addition, it is impossible to predict whether legislative changes will be enacted, or whether FDA regulations, guidance or interpretations will be changed, or what the impact of such changes, if any, may be. If we experience any such problems, we may not have the financial resources to continue development of the drug candidate that is affected or the development of any of our other drug candidates.

In addition, we, along with our collaborators or subcontractors, may not employ, in any capacity, persons who have been debarred under the FDA s Application Integrity Policy. Employment of such a debarred person (even if inadvertently) may result in delays in FDA s review or approval of our products, or the rejection of data developed with the involvement of such persons.

Even if we obtain regulatory approvals, our drug candidates will be subject to ongoing regulatory review. If we fail to comply with continuing U.S. and applicable foreign regulations, we could lose those approvals, and our business would be seriously harmed.

Even if we receive regulatory approval of any drugs we are developing or may develop, we will be subject to continuing regulatory review, including the review of clinical results which are reported after our drug candidates become commercially available approved drugs. As greater numbers of patients use a drug following its approval, side effects and other problems may be observed after approval that were not seen or anticipated during pre-approval clinical trials. In addition, the manufacturer, and the manufacturing facilities we use to make any approved drugs, will also be subject to periodic review and inspection by the FDA. The subsequent discovery of previously unknown problems with the drug, manufacturer or facility may result in restrictions on the drug,

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manufacturer or facility, including withdrawal of the drug from the market. If we fail to comply with applicable continuing regulatory requirements, we may be subject to fines, suspension or withdrawal of regulatory approval, product recalls and seizures, operating restrictions and criminal prosecutions.

Our product promotion and advertising is also subject to regulatory requirements and continuing regulatory review. In particular, the marketing claims we will be permitted to make in labeling or advertising regarding our marketed products will be limited by the terms and conditions of the FDA-approved labeling. We must submit copies of our advertisements and promotional labeling to the FDA at the time of initial publication or dissemination. If the FDA believes these materials or statements promote our products for unapproved indications, or with unsubstantiated claims, or if we fail to provide appropriate safety-related information, the FDA could allege that our promotional activities misbrand our products. Specifically, the FDA could issue an untitled letter or warning letter, which may demand, among other things, that we cease such promotional activities and issue corrective advertisements and labeling. The FDA also could take enforcement action including seizure of allegedly misbranded product, injunction or criminal prosecution against us and our officers or employees. If we repeatedly or deliberately fail to submit such advertisements and labeling to the agency, the FDA could withdraw our approvals. Moreover, the Department of Justice can bring civil or criminal actions against companies that promote drugs or biologics for unapproved uses, based on the False Claims Act and other federal laws governing reimbursement for such products under the Medicare, Medicaid and other federally supported healthcare programs. Monetary penalties in such cases have often been substantial, and civil penalties can include costly mandatory compliance programs and exclusion from federal healthcare programs.

If we do not comply with laws regulating the protection of the environment and health and human safety, our business could be adversely affected.

Our research and development efforts involve the controlled use of hazardous materials, chemicals and various radioactive compounds. Although we believe that our safety procedures for the use, manufacture, storage, handling and disposing of these materials comply with the standards prescribed by federal, state and local laws and regulations, the risk of accidental contamination or injury from these materials cannot be eliminated. If an accident occurs, we could be held liable for resulting damages, which could be substantial. We are also subject to numerous environmental, health and workplace safety laws and regulations, including those governing laboratory procedures, exposure to blood-borne pathogens and the handling of biohazardous materials. Additional federal, state and local laws and regulations affecting our operations may be adopted in the future. Although we maintain workers compensation insurance to cover us for costs we may incur due to injuries to our employees resulting from the use of these materials, this insurance may not provide adequate coverage against potential liabilities. Due to the small amount of hazardous materials that we generate, we have determined that the cost to secure insurance coverage for environmental liability and toxic tort claims far exceeds the benefits. Accordingly, we do not maintain any insurance to cover pollution conditions or other extraordinary or unanticipated events relating to our use and disposal of hazardous materials. We may incur substantial costs to comply with, and substantial fines or penalties if we violate, any of these laws or regulations.

Risks Related to Commercialization of Our Drug Candidates

If we are unable to establish sales and marketing capabilities or enter into agreements with third parties to market and sell our drug candidates, we may not generate product revenue.

We have no commercial products, and we do not currently have an organization for the sales and marketing of pharmaceutical products. In order to successfully commercialize any drugs that may be approved in the future by the FDA or comparable foreign regulatory authorities, we must build our sales and marketing capabilities or make arrangements with third parties to perform these services. For certain drug candidates in selected indications where we believe that an approved product could be commercialized by a specialty sales force in North America that calls on a limited but focused group of physicians, we intend to commercialize these products ourselves. However, in therapeutic indications that require a large sales force selling to a large and diverse prescribing population and for markets outside of North America, we plan to enter into arrangements with other

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companies for commercialization. For example, we have entered into an agreement with Gilead Sciences for the development and commercialization of certain of our HCV candidates involving NS4A antagonism. If we are unable to establish adequate sales, marketing and distribution capabilities, whether independently or with third parties, we may not be able to generate product revenue and may not become profitable.

If physicians and patients do not accept our future drugs, we may be unable to generate significant revenue, if any.

Even if elvucitabine, ACH-1095, ACH-702, our protease inhibitor series or any other drug candidates we may develop or acquire in the future, obtain regulatory approval, they may not gain market acceptance among physicians, health care payors, patients and the medical community. Factors that we believe could materially affect market acceptance of our product candidates include:

- the timing of market introduction of competitive drugs;
- the demonstrated clinical safety and efficacy of our product candidates compared to other drugs;
- the cost-effectiveness of our product candidates;
- the availability of reimbursement from managed care plans and other third-party payors;
- the convenience and ease of administration of our product candidates;
- the existence, prevalence and severity of adverse side effects;
- other potential advantages of alternative treatment methods; and
- the effectiveness marketing and distribution support.

If our approved drugs fail to achieve market acceptance, we would not be able to generate significant revenue.

If third-party payors do not adequately reimburse patients for any of our drug candidates that are approved for marketing, they might not be purchased or used, and our revenues and profits will not develop or increase.

Our revenues and profits will depend significantly upon the availability of adequate reimbursement for the use of any approved drug candidates from governmental and other third-party payors, both in the United States and in foreign markets. Reimbursement by a third party may depend upon a number of factors, including the third-party payor s determination that use of a product is:

- a covered benefit under its health plan;
- safe, effective and medically necessary;

appropriate for the specific patient;

cost effective; and

neither experimental nor investigational.

Obtaining reimbursement approval for a product from each third-party and government payor is a time-consuming and costly process that could require us to provide supporting scientific, clinical and cost-effectiveness data for the use of any approved drugs to each payor. We may not be able to provide data sufficient to gain acceptance with respect to reimbursement. There also exists substantial uncertainty concerning third-party reimbursement for the use of any drug candidate incorporating new technology, and even if determined eligible, coverage may be more limited than the purposes for which the drug is approved by the FDA. Moreover, eligibility for coverage does not imply that any drug will be reimbursed in all cases or at a rate that allows us to make a profit or even cover our costs. Interim payments for new products, if applicable, may also not be

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sufficient to cover our costs and may not be made permanent. Reimbursement rates may vary according to the use of the drug and the clinical setting in which it is used, may be based on payments allowed for lower-cost products that are already reimbursed, may be incorporated into existing payments for other products or services, and may reflect budgetary constraints and/or imperfections in Medicare or Medicaid data used to calculate these rates. Net prices for products may be reduced by mandatory discounts or rebates required by government health care programs or by any future relaxation of laws that restrict imports of certain medical products from countries where they may be sold at lower prices than in the United States.

There have been, and we expect that there will continue to be, federal and state proposals to constrain expenditures for medical products and services, which may affect payments for any of our approved products. The Centers for Medicare and Medicaid Services frequently change product descriptors, coverage policies, product and service codes, payment methodologies and reimbursement values. Third-party payors often follow Medicare coverage policy and payment limitations in setting their own reimbursement rates and may have sufficient market power to demand significant price reductions. As a result of actions by these third-party payors, the health care industry is experiencing a trend toward containing or reducing costs through various means, including lowering reimbursement rates, limiting therapeutic class coverage and negotiating reduced payment schedules with service providers for drug products.

Our inability to promptly obtain coverage and profitable reimbursement rates from government-funded and private payors for any approved products could have a material adverse effect on our operating results and our overall financial condition.

Recent federal legislation will increase the pressure to reduce prices of pharmaceutical products paid for by Medicare, which could adversely affect our revenues, if any.

The Medicare Prescription Drug Improvement and Modernization Act of 2003, or MMA, changes the way Medicare will cover and pay for pharmaceutical products. The legislation expanded Medicare coverage for drug purchases by the elderly and eventually will introduce a new reimbursement methodology based on average sales prices for drugs. In addition, this legislation provides authority for limiting the number of drugs that will be covered in any therapeutic class. As a result of this legislation and the expansion of federal coverage of drug products, we expect that there will be additional pressure to contain and reduce costs. These cost reduction initiatives and other provisions of this legislation could decrease the coverage and price that we receive for any approved products and could seriously harm our business. While the MMA applies only to drug benefits for Medicare beneficiaries, private payors often follow Medicare coverage policy and payment limitations in setting their own reimbursement rates, and any reduction in reimbursement that results from the MMA may result in a similar reduction in payments from private payors.

Risks Related to Our Dependence on Third Parties

We may not be able to execute our business strategy if we are unable to enter into alliances with other companies that can provide capabilities and funds for the development and commercialization of our drug candidates. If we are unsuccessful in forming or maintaining these alliances on favorable terms, our business may not succeed.

We have entered into a collaboration arrangement with Gilead Sciences for the development and commercialization of certain of our HCV compounds involving NS4A antagonism, and we may enter into additional collaborative arrangements in the future. For example, we plan to enter into an alliance for the phase III development and commercialization of elvucitabine, our drug candidate for treatment of HIV. Given the limited number of global pharmaceutical companies which currently develop and market drugs for the treatment of HIV, and the strategic need for elvucitabine to be suitable for co-formulation with drugs already marketed or under development by a potential partner, we may not be successful in forming such an alliance. We also may enter into alliances with major biotechnology or pharmaceutical companies to jointly develop other specific drug candidates and to jointly commercialize them if they are approved. In such alliances, we would expect our

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biotechnology or pharmaceutical collaborators to provide substantial funding, as well as significant capabilities in clinical development, regulatory affairs, marketing and sales. We may not be successful in entering into any such alliances on favorable terms, if at all. Even if we do succeed in securing such alliances, we may not be able to maintain them if, for example, development or approval of a drug candidate is delayed or sales of an approved drug are disappointing. Furthermore, any delay in entering into collaboration agreements could delay the development and commercialization of our drug candidates and reduce their competitiveness even if they reach the market. Any such delay related to our collaborations could adversely affect our business.

If a collaborative partner terminates or fails to perform its obligations under agreements with us, the development and commercialization of our drug candidates could be delayed or terminated.

If Gilead Sciences or another, future collaborative partner does not devote sufficient time and resources to collaboration arrangements with us, we may not realize the potential commercial benefits of the arrangement, and our results of operations may be adversely affected. In addition, if any existing or future collaboration partner were to breach or terminate its arrangements with us, the development and commercialization of the affected drug candidate could be delayed, curtailed or terminated because we may not have sufficient financial resources or capabilities to continue development and commercialization of the drug candidate on our own. Under our collaboration agreement with Gilead Sciences, Gilead Sciences may terminate the collaboration for any reason at any time upon 120 days notice. If Gilead Sciences were to exercise this right, the development and commercialization of our HCV compounds would be adversely affected.

Much of the potential revenue from our existing and future collaborations will consist of contingent payments, such as payments for achieving development milestones and royalties payable on sales of drugs developed. The milestone and royalty revenues that we may receive under these collaborations will depend upon our collaborator s ability to successfully develop, introduce, market and sell new products. In addition, our collaborators may decide to enter into arrangements with third parties to commercialize products developed under our existing or future collaborations using our technologies, which could reduce the milestone and royalty revenue that we may receive, if any. In many cases we will not be involved in these processes and accordingly will depend entirely on our collaborators. Our collaboration partners may fail to develop or effectively commercialize products using our products or technologies because they:

- decide not to devote the necessary resources due to internal constraints, such as limited personnel with the requisite scientific expertise, limited cash resources or specialized equipment limitations, or the belief that other drug development programs may have a higher likelihood of obtaining regulatory approval or may potentially generate a greater return on investment;
- do not have sufficient resources necessary to carry the drug candidate through clinical development, regulatory approval and commercialization; or
- cannot obtain the necessary regulatory approvals.

In addition, a collaborator may decide to pursue a competitive drug candidate developed outside of the collaboration. In particular, Gilead Sciences, our collaborator for our chronic hepatitis C program, currently is developing other products for the treatment of chronic hepatitis C, and the results of its development efforts could affect its commitment to our drug candidate. If a collaboration partner fails to develop or effectively commercialize drug candidates or drugs for any of these reasons, we may not be able to replace the collaboration partner with another partner to develop and commercialize a drug candidate or drugs under the terms of the collaboration. We may also be unable to obtain, on terms acceptable to us, a license from such collaboration partner to any of its intellectual property that may be necessary or useful for us to continue to develop and commercialize a drug candidate.

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We rely on third parties to conduct our clinical trials, and those third parties may not perform satisfactorily, including failing to meet established deadlines for the completion of such trials.

We do not have the ability to independently conduct clinical trials for our drug candidates, and we rely on third parties such as contract research organizations, medical institutions and clinical investigators to enroll qualified patients and conduct our clinical trials. Our reliance on these third parties for clinical development activities reduces our control over these activities. Accordingly, these third-party contractors may not complete activities on schedule, or may not conduct our clinical trials in accordance with regulatory requirements or our trial design. To date, we believe our contract research organizations and other similar entities with which we are working have performed well. However, if these third parties do not successfully carry out their contractual duties or meet expected deadlines, we may be required to replace them. Although we believe that there are a number of other third-party contractors we could engage to continue these activities, it may result in a delay of the affected trial. Accordingly, our efforts to obtain regulatory approvals for and commercialize our drug candidates may be delayed.

We currently depend on third-party manufacturers to produce our preclinical and clinical drug supplies and intend to rely upon third-party manufacturers to produce commercial supplies of any approved drug candidates. If in the future we manufacture any of our drug candidates, we will be required to incur significant costs and devote significant efforts to establish and maintain these capabilities.

We have relied upon third parties to produce material for preclinical and clinical testing purposes and intend to continue to do so in the future. We also expect to rely upon third parties to produce materials required for the commercial production of our drug candidates if we succeed in obtaining necessary regulatory approvals. If we are unable to arrange for third-party manufacturing, or to do so on commercially reasonable terms, we may not be able to complete development of our drug candidates or market them. Reliance on third-party manufacturers entails risks to which we would not be subject if we manufactured drug candidates ourselves, including reliance on the third party for regulatory compliance and quality assurance, the possibility of breach of the manufacturing agreement by the third party because of factors beyond our control and the possibility of termination or nonrenewal of the agreement by the third party, based on its own business priorities, at a time that is costly or damaging to us. In addition, the FDA and other regulatory authorities require that our drug candidates be manufactured according to current good manufacturing practice regulations. Any failure by us or our third-party manufacturers to comply with current good manufacturing practices and/or our failure to scale up our manufacturing processes could lead to a delay in, or failure to obtain, regulatory approval of any of our drug candidates. In addition, such failure could be the basis for action by the FDA to withdraw approvals for drug candidates previously granted to us and for other regulatory action.

We currently rely on a single manufacturer for the preclinical and clinical supplies of each of our drug candidates and do not currently have relationships for redundant supply or a second source for any of our drug candidates. To date, our third-party manufacturers have met our manufacturing requirements, but we cannot be assured that they will continue to do so. Any performance failure on the part of our existing or future manufacturers could delay clinical development or regulatory approval of our drug candidates or commercialization of any approved products. If for some reason our current contract manufacturers cannot perform as agreed, we may be required to replace them. Although we believe there are a number of potential replacements as our manufacturing processes are not manufacturer specific, we may incur added costs and delays in identifying and qualifying any such replacements. Furthermore, although we generally do not begin a clinical trial unless we believe we have a sufficient supply of a drug candidate to complete the trial, any significant delay in the supply of a drug candidate for an ongoing trial due to the need to replace a third-party manufacturer could delay completion of the trial.

We may in the future elect to manufacture certain of our drug candidates in our own manufacturing facilities. If we do so, we will require substantial additional funds and need to recruit qualified personnel in order to build or lease and operate any manufacturing facilities.

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Risks Related to Patents and Licenses

If we are unable to adequately protect our drug candidates, or if we infringe the rights of others, our ability to successfully commercialize our drug candidates will be harmed.

As of December 31, 2007, our patent portfolio included a total of 224 patents and patent applications worldwide. We own or hold exclusive licenses to a total of eight U.S. issued patents and 18 U.S. pending patent applications, as well as 161 pending PCT applications and foreign counterparts to many of these patents and patent applications. Our success depends in part on our ability to obtain patent protection both in the United States and in other countries for our drug candidates. Our ability to protect our drug candidates from unauthorized or infringing use by third parties depends in substantial part on our ability to obtain and maintain valid and enforceable patents. Due to evolving legal standards relating to the patentability, validity and enforceability of patents covering pharmaceutical inventions and the scope of claims made under these patents, our ability to maintain, obtain and enforce patents is uncertain and involves complex legal and factual questions. Accordingly, rights under any issued patents may not provide us with sufficient protection for our drug candidates or provide sufficient protection to afford us a commercial advantage against competitive products or processes. In addition, we cannot guarantee that any patents will issue from any pending or future patent applications owned by or licensed to us. Even if patents have issued or will issue, we cannot guarantee that the claims of these patents are or will be valid or enforceable or will provide us with any significant protection against competitive products or otherwise be commercially valuable to us. Patent applications in the United States are maintained in confidence for up to 18 months after their filing. In some cases, however, patent applications remain confidential in the U.S. Patent and Trademark Office, which we refer to as the U.S. Patent Office, for the entire time prior to issuance as a U.S. patent. Similarly, publication of discoveries in the scientific or patent literature often lag behind actual discoveries. Consequently, we cannot be certain that we or our licensors or co-owners were the first to invent, or the first to file patent applications on, our drug candidates or their use as anti-infective drugs. In the event that a third party has also filed a U.S. patent application relating to our drug candidates or a similar invention, we may have to participate in interference proceedings declared by the U.S. Patent Office to determine priority of invention in the United States. The costs of these proceedings could be substantial and it is possible that our efforts would be unsuccessful, resulting in a loss of our U.S. patent position. Furthermore, we may not have identified all U.S. and foreign patents or published applications that affect our business either by blocking our ability to commercialize our drugs or by covering similar technologies that affect our drug market.

The laws of some foreign jurisdictions do not protect intellectual property rights to the same extent as in the United States and many companies have encountered significant difficulties in protecting and defending such rights in foreign jurisdictions. If we encounter such difficulties in protecting or are otherwise precluded from effectively protecting our intellectual property rights in foreign jurisdictions, our business prospects could be substantially harmed.

We license patent rights from third-party owners. If such owners do not properly maintain or enforce the patents underlying such licenses, our competitive position and business prospects will be harmed.

We are party to a number of licenses that give us rights to third-party intellectual property that is necessary or useful for our business. In particular, we have obtained a sublicense from Vion Pharmaceuticals and a license from Emory University with respect to elvucitabine. We may enter into additional licenses to third-party intellectual property in the future. Our success will depend in part on the ability of our licensors to obtain, maintain and enforce patent protection for their intellectual property, in particular, those patents to which we have secured exclusive rights. Our licensors may not successfully prosecute the patent applications to which we are licensed. Even if patents issue in respect of these patent applications, our licensors may fail to maintain these patents, may determine not to pursue litigation against other companies that are infringing these patents, or may pursue such litigation less aggressively than we would. In addition, our licensors may terminate their agreements with us in the event we breach the applicable license agreement and fail to cure the breach within a specified period of time. Without protection for the intellectual property we license, other companies might be able to offer substantially identical products for sale, which could adversely affect our competitive business position and harm our business prospects.

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Litigation regarding patents, patent applications and other proprietary rights may be expensive and time consuming. If we are involved in such litigation, it could cause delays in bringing drug candidates to market and harm our ability to operate.

Our success will depend in part on our ability to operate without infringing the proprietary rights of third parties. Although we are not currently aware of any litigation or other proceedings or third-party claims of intellectual property infringement related to our drug candidates, the pharmaceutical industry is characterized by extensive litigation regarding patents and other intellectual property rights. Other parties may obtain patents in the future and allege that the use of our technologies infringes these patent claims or that we are employing their proprietary technology without authorization. Likewise, third parties may challenge or infringe upon our existing or future patents. Under our license agreements with Vion Pharmaceuticals we have the right, but not an obligation, to bring actions against an infringing third party. If we do not bring an action within a specified number of days, the licensor may bring an action against the infringing party. Pursuant to our license agreement with Emory University and our research collaboration and license agreement with Gilead Sciences, Emory and Gilead Sciences have the primary right, but not an obligation, to bring actions against an infringing third party. However, if Gilead Sciences or Emory elects not to bring an action, we may bring an action against the infringing party.

Proceedings involving our patents or patent applications or those of others could result in adverse decisions regarding:

- the patentability of our inventions relating to our drug candidates; and/or
- the enforceability, validity or scope of protection offered by our patents relating to our drug candidates.

Even if we are successful in these proceedings, we may incur substantial costs and divert management time and attention in pursuing these proceedings, which could have a material adverse effect on us. If we are unable to avoid infringing the patent rights of others, we may be required to seek a license, defend an infringement action or challenge the validity of the patents in court. Patent litigation is costly and time consuming. We may not have sufficient resources to bring these actions to a successful conclusion. In addition, if we do not obtain a license, develop or obtain non-infringing technology, fail to defend an infringement action successfully or have infringed patents declared invalid, we may:

- incur substantial monetary damages;
- encounter significant delays in bringing our drug candidates to market; and/or
- be precluded from participating in the manufacture, use or sale of our drug candidates or methods of treatment requiring licenses.

Confidentiality agreements with employees and others may not adequately prevent disclosure of trade secrets and other proprietary information and may not adequately protect our intellectual property.

We rely on trade secrets to protect our technology, especially where we do not believe patent protection is appropriate or obtainable. However, trade secrets are difficult to protect. In order to protect our proprietary technology and processes, we also rely in part on confidentiality and intellectual property assignment agreements with our corporate partners, employees, consultants, outside scientific collaborators and sponsored researchers and other advisors. These agreements may not effectively prevent disclosure of confidential information nor result in the effective assignment to us of intellectual property, and may not provide an adequate remedy in the event of unauthorized disclosure of confidential information or other breaches of the agreements. In addition, others may independently discover our trade secrets and proprietary information, and in such case we could not assert any trade secret rights against such party. Enforcing a claim that a party illegally obtained and is using our trade secrets is difficult, expensive and time consuming, and the outcome is unpredictable. In addition, courts outside the United States may be less willing to protect trade secrets. Costly and time-consuming litigation could be necessary to seek to enforce and determine the scope of our proprietary rights, and failure to obtain or maintain trade secret protection could adversely affect our competitive business position.

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Risks Relating to Our Common Stock

Our stock price is likely to be volatile, and the market price of our common stock may decline in value in the future.

The market price of our common stock has fluctuated in the past and is likely to fluctuate in the future. Market prices for securities of early stage pharmaceutical, biotechnology and other life sciences companies have historically been particularly volatile. Some of the factors that may cause the market price of our common stock to fluctuate include:

- the results of our currently on-going phase II trial extensions and any future clinical trials for elvucitabine;
- the results of ongoing preclinical studies and planned clinical trials of our preclinical drug candidates, including ACH-702 and ACH-1095;
- the results of our research and candidate selection in our HCV protease program;
- the entry into, or termination of, key agreements, in particular our collaboration agreement with Gilead Sciences or our sublicense agreement with Vion Pharmaceuticals, or any new collaboration agreement we may enter for elvucitabine;
- the results of regulatory reviews relating to the approval of our drug candidates;
- the initiation of, material developments in, or conclusion of litigation to enforce or defend any of our intellectual property rights;
- failure of any of our drug candidates, if approved, to achieve commercial success;
- general and industry-specific economic conditions that may affect our research and development expenditures;
- the results of clinical trials conducted by others on drugs that would compete with our drug candidates;
- the failure or discontinuation of any of our research programs;
- issues in manufacturing our drug candidates or any approved products;
- the introduction of technological innovations or new commercial products by us or our competitors;
- changes in estimates or recommendations by securities analysts, if any, who cover our common stock;

future sales of our common stock;

changes in the structure of health care payment systems; and

period-to-period fluctuations in our financial results.

The stock markets in general have experienced substantial volatility that has often been unrelated to the operating performance of individual companies. These broad market fluctuations may adversely affect the trading price of our common stock.

In the past, following periods of volatility in the market price of a company s securities, stockholders have often instituted class action securities litigation against those companies. Such litigation, if instituted, could result in substantial costs and diversion of management attention and resources, which could significantly harm our profitability and reputation.

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Our executive officers, directors and principal stockholders own a large percentage of our voting common stock and could limit our stockholders influence on corporate decisions or could delay or prevent a change in corporate control.

Our directors, executive officers and current holders of more than 5% of our outstanding common stock, together with their affiliates and related persons, beneficially own, in the aggregate, approximately 67% of our outstanding common stock. As a result, these stockholders, if acting together, have the ability to determine the outcome of all matters submitted to our stockholders for approval, including the election and removal of directors and any merger, consolidation or sale of all or substantially all of our assets and other extraordinary transactions. The interests of this group of stockholders may not always coincide with our corporate interests or the interest of other stockholders, and they may act in a manner with which you may not agree or that may not be in the best interests of other stockholders. This concentration of ownership may have the effect of:

- delaying, deferring or preventing a change in control of our company;
- entrenching our management and/or board;
- impeding a merger, consolidation, takeover or other business combination involving our company; or
- discouraging a potential acquirer from making a tender offer or otherwise attempting to obtain control of our company.

Our management is required to devote substantial time and incur additional expense to comply with public company regulations. Our failure to comply with such regulations could subject us to public investigations, fines, enforcement actions and other sanctions by regulatory agencies and authorities and, as a result, our stock price could decline in value.

As a private company with limited resources, we maintained a small finance and accounting staff. As a public company, the Sarbanes-Oxley Act of 2002 and the related rules and regulations of the SEC, as well as the rules of the Nasdaq Global Market, have required us to implement additional corporate governance practices and adhere to a variety of reporting requirements and complex accounting rules. Compliance with these public company obligations places significant additional demands on our finance and accounting staff and on our financial, accounting and information systems.

In particular, as a public company, our management is required to conduct an annual evaluation of our internal controls over financial reporting and include a report of management on our internal controls in our annual reports on Form 10-K. In addition, we will be required to have our independent public accounting firm attest to and report on management s assessment of the effectiveness of our internal controls over financial reporting. If we are unable to continue to conclude that we have effective internal controls over financial reporting or, if our independent auditors are unable to provide us with an attestation and an unqualified report as to the effectiveness of our internal controls over financial reporting, investors could lose confidence in the reliability of our financial statements, which could result in a decrease in the value of our common stock.

We do not anticipate paying cash dividends, and accordingly stockholders must rely on stock appreciation for any return on their investment in us.

We anticipate that we will retain our earnings, if any, for future growth and therefore do not anticipate paying cash dividends in the future. As a result, only appreciation of the price of our common stock will provide a return to stockholders.

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ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

We currently lease approximately 37,000 square feet of laboratory and office space in New Haven, Connecticut, which we occupy under a ten-year lease expiring in 2011. We believe our existing facilities are adequate for our current needs and that additional space will be available in the future on commercially reasonable terms as needed.

ITEM 3. LEGAL PROCEEDINGS

We are currently not a party to any material legal proceedings.

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

No matters were submitted to a vote of our security holders during the fourth quarter of 2007.

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PART II

ITEM 5. MARKET FOR REGISTRANT S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Market Information

Our common stock began trading on the NASDAQ Global Market on October 26, 2006 under the symbol ACHN . Prior to that time, there was no established public trading market for our common stock. The following table sets forth the high and low sale prices per share for our common stock on the NASDAQ Global Market for the period indicated:

Year and Quarter:	2007	
	High	Low
2007		
First Quarter	$ 20.00	$ 5.71
Second Quarter	$ 7.41	$ 4.91
Third Quarter	$ 8.00	$ 5.61
Fourth Quarter	$ 6.50	$ 3.68
2006		
Fourth Quarter (beginning October 26, 2006)	$ 17.94	$ 11.57

Information regarding our equity compensation plans and the securities authorized for issuance thereunder is set forth in Item 12 below.

Holders of record

As of February 29, 2008, there were approximately 92 holders of record of our common stock.

Dividends

We have never paid or declared any cash dividends on our common stock. We currently intend to retain any earnings for future growth and, therefore, do not expect to pay cash dividends in the foreseeable future.

Issuer Purchases of Equity Securities

Neither we nor any affiliated purchaser or anyone acting on behalf of us or an affiliated purchaser made any purchases of shares of our common stock in the fourth quarter of 2007.

Comparative Stock Performance

The following graph and related information should not be deemed soliciting material or to be filed with the Securities and Exchange Commission, nor shall such information be incorporated by reference into any future filing under the Securities Act of 1933 or Securities Exchange Act of 1934, each as amended, except to the extent that we specifically incorporate it by reference into such filing.

The following graph compares the cumulative total stockholder return on our common stock from October 26, 2006 (the first trading date following our initial public offering) to December 31, 2007 with the cumulative total return of (i) the NASDAQ Market Index and (ii) the NASDAQ Biotechnology Index. This graph assumes the investment of $100.00 on October 26, 2006 in our common stock, the NASDAQ Market Index and the NASDAQ Biotechnology Index, and assumes any dividends are reinvested.

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	10/26/06	12/31/06	12/31/07
ACHILLION PHARMACEUTICALS, INC.	100.00	130.02	40.27
NASDAQ BIOTECHNOLOGY INDEX	100.00	96.80	98.64
NASDAQ MARKET INDEX	100.00	102.03	112.16

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ITEM 6. SELECTED FINANCIAL DATA

The following selected financial data should be read together with the information under Management s Discussion and Analysis of Financial Condition and Results of Operations and our financial statements and the notes to those financial statements included elsewhere in this Annual Report on Form 10-K. The selected statements of operations data for the years ended December 31, 2007, 2006 and 2005 and balance sheet data as of December 31, 2007 and 2006 set forth below have been derived from our audited financial statements included elsewhere in this Annual Report. The selected statement of operations data for the years ended December 31, 2004 and 2003 and balance sheet data as of December 31, 2005, 2004 and 2003 set forth below have been derived from the audited financial statements for such years not included in this Annual Report. The historical results presented here are not necessarily indicative of future results.

	Years Ended December 31,				
	2007	2006	2005	2004	2003
	(in thousands, except per share amounts)				
Statement of Operations Data:					
Total operating revenue	$ 4,038	$ 3,292	$ 8,526	$ 807	$
Research and development	28,120	22,741	18,112	14,841	13,194
General and administrative	6,476	4,865	3,101	3,181	3,261
Total operating expenses	34,596	27,606	21,213	18,022	16,455
Loss from operations	(30,558)	(24,314)	(12,687)	(17,215)	(16,455)
Interest income (expense)	1,496	179	(976)	(509)	(170)
Tax benefit	960	49	88	264	871
Net loss	(28,102)	(24,086)	(13,575)	(17,460)	(15,754)
Net loss applicable to common shareholders	$ (28,102)	$ (28,249)	$ (16,514)	$ (20,048)	$ (15,754)
Net loss per share basic and diluted	$ (1.80)	$ (9.35)	$ (32.96)	$ (43.77)	$ (44.16)
Weighted average number of shares outstanding basic and diluted	15,583	3,022	501	458	415

	2007	2006	2005	2004	2003
Balance Sheet Data:					
Cash and cash equivalents	$ 8,971	$ 22,662	$ 9,583	$ 9,481	$ 8,243
Marketable Securities	22,138	39,904		4,897	1,749
Working capital	20,224	53,190	654	6,264	8,393
Total assets	35,632	67,146	13,750	19,291	16,072
Long-term liabilities	1,402	8,102	5,021	14,811	3,046
Total liabilities	14,094	19,776	15,418	24,230	5,916
Convertible preferred stock			94,354	74,740	70,127
Total stockholders (deficit) equity	21,538	47,370	(96,022)	(79,679)	(59,971)

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

Overview

We are a biopharmaceutical company focused on the discovery, development and commercialization of innovative treatments for infectious diseases. Within the anti-infective market, we are currently concentrating on the development of antivirals and antibacterials. We are targeting our antiviral development efforts on treatments for HIV infection and chronic hepatitis C, and we are directing our antibacterial development efforts toward treatments for serious hospital-based bacterial infections.

We have devoted and are continuing to devote substantially all of our efforts toward product research and development. We have incurred losses of $138 million from inception through December 31, 2007 and had an accumulated deficit of $152 million through December 31, 2007. Our net losses were $28.1 million, $24.1 million and $13.6 million for the years ended December 31, 2007, 2006 and 2005, respectively. We have funded our operations primarily through:

- proceeds of $161.2 million from the sale of equity securities, including our initial public offering in October 2006;
- borrowings of $17.1 million from debt facilities; and
- receipts of $10.0 million from up-front and milestone payments, as well as $8.5 million in cost-sharing receipts, from our collaboration partner, Gilead Sciences.

We expect to incur substantial and increasing losses for at least the next several years as we seek to:

- complete the open-label extension phases of our phase II clinical trials for elvucitabine;
- complete assessment of ACH-702 preclinical data and prepare for early clinical testing;
- complete IND-enabling preclinical testing of ACH-1095;
- advance our HCV protease inhibitor, for chronic hepatitis C infection; and
- progress additional drug candidates.

We will need substantial additional financing to obtain regulatory approvals, fund operating losses, and, if deemed appropriate, establish manufacturing and sales and marketing capabilities, which we will seek to raise through public or private equity or debt financings, collaborative or other arrangements with third parties or through other sources of financing. There can be no assurance that such funds will be available on terms favorable to us, if at all. In addition to the normal risks associated with early-stage companies, there can be no assurance that we will successfully complete our research and development, obtain adequate patent protection for our technology, obtain necessary government regulatory approval for drug candidates we develop or that any approved drug candidates will be commercially viable. In addition, we may not be profitable even if we succeed in commercializing any of our drug candidates.

Financial Operations Overview

Revenue

To date, we have not generated revenue from the sale of any drugs. The majority of our revenue recognized to date has been derived from our collaboration with Gilead Sciences to develop compounds for use in treating chronic hepatitis C. During the years ended December 31, 2007, 2006 and 2005 we recognized $4.0 million, $3.0 million and $8.3 million, respectively, under this collaboration agreement.

Upon initiating our collaboration with Gilead Sciences, we received a payment of $10.0 million, which included an equity investment by Gilead Sciences determined to be worth approximately $2.0 million. The remaining $8.0 million is being accounted for as a nonrefundable up-front fee recognized under the proportionate

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performance model. Revenue under the proportionate performance model is recognized as our effort under the collaboration is incurred. When our performance obligation is complete, we will recognize milestone payments, if any, when the corresponding milestone is achieved. We will recognize royalty payments, if any, upon product sales.

Research and development expenses under our collaboration with Gilead Sciences, including internal full-time equivalent costs and external research costs, incurred by both companies prior to proof-of-concept, were borne equally by both parties through March 31, 2007. As we were providing the majority of those services and are incurring the majority of those expenses, we are the net recipient of funds under this cost-sharing portion of the arrangement and therefore recognize the reimbursed costs as revenue rather than research expense. Payments made by us to Gilead Sciences in connection with this collaboration are being recognized as a reduction of revenue. Effective April 1, 2007, internal full-time equivalent costs will no longer be subject to this cost-sharing arrangement. Instead, each party will provide for the costs of their own full-time equivalents. We expect that the relative full-time equivalent efforts of each of Achillion and Gilead Sciences will remain approximately one-half of total efforts. We will continue to equally share external research costs with Gilead Sciences.

We have also recognized revenue under a Small Business Innovation Research, or SBIR, grant by the National Institutes of Health, or NIH, related to our HIV capsid research program. During the years ended December 31, 2007, 2006 and 2005 we recognized $35,000, $313,000 and $249,000, respectively, in revenue under this grant. Efforts under our Small Business Innovation Research, or SBIR, grant were completed in the first quarter of 2007. No additional grant revenue related to this grant will be recognized.

Research and Development

Our research and development expenses reflect costs incurred for our proprietary research and development projects as well as costs for research and development projects conducted as part of collaborative arrangements we establish. These costs consist primarily of salaries and benefits for our research and development personnel, costs of services by clinical research organizations, other outsourced research, materials used during research and development activities, facility-related costs such as rent and utilities associated with our laboratory and clinical development space, operating supplies and other costs associated with our research and development activities. We expect that over the next twelve months research and development expenses will decrease somewhat due to several factors, most notably the near completion of the phase II clinical program for elvucitabine, the major expenses for which will not recur, and the lesser levels of expenses related to earlier stage IND-enabling testing for ACH-1095 and our HCV protease inhibitors.

All costs associated with internal research and development, and research and development services for which we have externally contracted, are expensed as incurred. Our research and development expenses are outlined in the table below.

	For the Years Ended		
	2007	2006	2005
	(in thousands)		
Direct external costs:			
Elvucitabine	$ 10,728	$ 5,204	$ 2,520
ACH-702	3,055	3,141	1,025
NS4A Antagonists (including ACH-806 and ACH-1095)	1,793	3,001	4,047
	15,576	11,346	7,592
Direct internal personnel costs	7,206	6,337	5,301
Sub-total direct costs	22,782	17,683	12,893
Indirect costs and overhead	5,338	5,058	5,219
Total research and development	$ 28,120	$ 22,741	$ 18,112

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Currently, we are completing the open-label extension phases of two phase II clinical trials for elvucitabine, conducting preclinical studies for ACH-1095, and performing late discovery-stage toxicology assessments of our HCV protease inhibitors. From the inception of each respective program through December 31, 2007, we incurred approximately $44.3 million in total costs for elvucitabine, approximately $26.0 million in total costs for our NS4A antagonist program (including both ACH-1095 and ACH-806) and approximately $16.3 million in total costs for ACH-702. These figures include our internal research and development personnel costs and related facilities overhead. We currently estimate that the clinical trial costs for two phase III clinical trials of elvucitabine in different HIV populations will be approximately $50.0 million, exclusive of the internal personnel costs associated with conducting these trials. We currently plan to enter a collaboration arrangement which would offset a significant portion of these costs. We estimate that the costs associated with completing phase I clinical trials with ACH-702 will be approximately $3.0 million, exclusive of the internal personnel costs associated with conducting these studies and trials. We anticipate that the costs associated with preclinical and early clinical development through proof-of-concept of ACH-1095, our next generation NS4A antagonist, will be approximately $3.4 million, exclusive of internal personnel costs. This amount for NS4A represents one-half of the external costs associated with those activities, as we share such external costs with Gilead Sciences. We estimate that the costs associated with preclinical and early clinical development of one of our HCV protease inhibitors to be approximately $3.1 million.

The successful development of our drug candidates is highly uncertain. At this time, we cannot reasonably estimate or know the nature, timing and estimated costs of the efforts that will be necessary to complete the remainder of the development of our drug candidates. We are also unable to predict when, if ever, material net cash inflows will commence from elvucitabine or any early stage programs. This is due to the numerous risks and uncertainties associated with developing drugs, including the uncertainty of:

- the scope, rate of progress and expense of our clinical trials and other research and development activities;
- the potential benefits of our drug candidates over other therapies;
- in the case of our HCV inhibitors involving NS4A antagonism, the rate at which our collaboration partner, Gilead Sciences, is able to complete pre-clinical and clinical trials, and the degree to which Gilead Sciences prioritizes those trials over its other development efforts;
- our ability to market, commercialize and achieve market acceptance for any of our drug candidates that we are developing or may develop in the future;
- future clinical trial results;
- the terms and timing of any collaborative, licensing and other arrangements that we may establish;
- the expense and timing of regulatory approvals; and
- the expense of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights.

A change in the outcome of any of these variables with respect to the development of any of our drug candidates would significantly change the costs and timing associated with the development of that drug candidate. For example, if the FDA or another regulatory authority were to require us to conduct clinical trials beyond those which we currently anticipate will be required to complete clinical development of a drug candidate, or if we experience significant delays in enrollment in any of our clinical trials, we would be required to expend significant additional financial resources and time on the completion of clinical development.

We expect expenses associated with the completion of these programs to be substantial and increase. We do not believe, however, that it is possible at this time to accurately project total program-specific expenses through commercialization. There exist numerous factors associated

with the successful commercialization of any of our drug candidates, including future trial design and various regulatory requirements, many of which cannot be

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determined with accuracy at this time based on our stage of development. Additionally, future commercial and regulatory factors beyond our control will evolve and therefore impact our clinical development programs and plans over time.

General and Administrative

Our general and administrative expenses consist primarily of salaries and benefits for management and administrative personnel, professional fees for legal, accounting and other services, travel costs and facility-related costs such as rent, utilities and other general office expenses. We expect that general and administrative expenses will remain substantially unchanged over the next twelve months, but may increase in the future due to increased payroll, expanded infrastructure, increased consulting, legal, accounting and investor relations expenses associated with being a public company.

Critical Accounting Policies and Estimates

The discussion and analysis of our financial condition and results of operations set forth below are based on our financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America, or GAAP. The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. On an ongoing basis, we evaluate our estimates and assumptions, including those described below. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. These estimates and assumptions form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Management makes estimates and exercises judgment in revenue recognition, research and development costs, stock-based compensation and accrued expenses. Actual results may differ from these estimates under different assumptions or conditions.

We believe the following critical accounting policies affect management s more significant judgments and estimates used in the preparation of our financial statements:

Revenue Recognition

We recognize revenue from contract research and development and research progress payments in accordance with Staff Accounting Bulletin, or SAB, No. 104, *Revenue Recognition*, or SAB 104, and Financial Accounting Standards Board, or FASB, Emerging Issue Task Force, or EITF, Issue No. 00-21, *Accounting for Revenue Arrangements with Multiple Deliverables*, or EITF 00-21. Revenue-generating research and development collaborations are often multiple element arrangements, providing for a license as well as research and development services. Such arrangements are analyzed to determine whether the deliverables, including research and development services, can be separated or whether they must be accounted for as a single unit of accounting in accordance with EITF 00-21. We recognize upfront license payments as revenue upon delivery of the license only if the license has standalone value and the fair value of the undelivered performance obligations can be determined. If the fair value of the undelivered performance obligations can be determined, such obligations would then be accounted for separately as performed. If the license is considered to either (i) not have standalone value or (ii) have standalone value but the fair value of any of the undelivered performance obligations cannot be determined, the arrangement would then be accounted for as a single unit of accounting and the upfront license payments are recognized as revenue over the estimated period of when our performance obligations are performed.

When we determine that an arrangement should be accounted for as a single unit of accounting, we must determine the period over which the performance obligations will be performed and revenue related to upfront license payments will be recognized. Revenue will be recognized using either a proportionate performance or

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straight-line method. We recognize revenue using the proportionate performance method provided that we can reasonably estimate the level of effort required to complete our performance obligations under an arrangement and such performance obligations are provided on a best-efforts basis. Under the proportionate performance method, periodic revenue related to up-front license payments is recognized as the percentage of actual effort expended in that period to total effort expected for all of our performance obligations under the arrangement. Actual effort is generally determined based upon actual direct labor hours or full-time equivalents incurred and include research and development activities performed by internal scientists. Total expected effort is generally based upon the total direct labor hours of full-time equivalents incorporated into the detailed budget and project plan that is agreed to by both parties to the collaboration. Significant management judgment is required in determining the level of effort required under an arrangement and the period over which we expect to complete the related performance obligations. The joint research committee periodically reviews and updates the project plan; the most recent review took place in December 2007. In the event that a change in estimate occurs, the change will be accounted for using the cumulative catch-up method which provides for an adjustment to revenue in the current period. Estimates of our level of effort may change in the future, resulting in a material change in the amount of revenue recognized in future periods. We revised our joint research program with Gilead Sciences in the first quarter of 2007 to focus on next-generation NS4A antagonists. At that time, we extended the period over which our remaining obligations under the arrangement would be completed. In addition, we and Gilead Sciences agreed to continue to equally share external costs, but effective April 1, 2007, internal full-time equivalents would no longer be subject to this cost sharing arrangement. Instead, each party would bear the costs of their respective full-time equivalents.

Generally under collaboration arrangements, payments received during the period of performance may include up-front payments, time- or performance-based milestones and reimbursement of internal and external costs. The proportion of actual performance to total expected performance is applied to these payments in determining periodic revenue, but will be limited by the aggregate cash received or receivable to date by the Company.

Substantive milestone payments are considered to be performance bonuses that are recognized upon achievement of the milestone only if all of the following conditions are met: (1) the milestone payments are non-refundable, (2) achievement of the milestone involves a degree of risk and was not reasonably assured at the inception of the arrangement, (3) substantive effort is involved in achieving the milestone, (4) the amount of the milestone payment is reasonable in relation to the effort expended or the risk associated with achievement of the milestone and (5) a reasonable amount of time passes between the upfront license payment and the first milestone payment as well as between each subsequent milestone payment (the Substantive Milestone Method).

Reimbursement of costs is recognized as revenue provided the provisions of EITF Issue No. 99-19 are met, the amounts are determinable and collection of the related receivable is reasonably assured.

Stock-Based Compensation Employee Stock-Based Awards

Through December 31, 2005, we accounted for grants of stock options and restricted stock utilizing the intrinsic value method in accordance with Accounting Principle Board (APB) Opinion No. 25, *Accounting for Stock Issued to Employees* (APB 25), and, accordingly, recognized no compensation expense for an option when the option had an exercise price equal to or greater than the fair market value at the date of grant. Under APB 25, compensation expense was computed to the extent that fair market value of the underlying stock on the date of grant exceeded the exercise price of the employee stock option or stock award. Compensation so computed was then recognized on a straight-line basis over the vesting period. Also through December 31, 2005, we had adopted the disclosure-only provisions of Statement of Financial Accounting Standards No. 123, (SFAS 123), *Accounting for Stock-Based Compensation,* as amended by Statement of Financial Accounting Standards No. 148, *Accounting for Stock Based Compensation Transition and Disclosure* (SFAS 148).

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Effective January 1, 2006, we adopted the Statement of Financial Accounting Standards No. 123 (revised 2004), Share-Based Payment , (SFAS 123R), which requires measurement and recognition of compensation expense for all stock-based awards made to employees and directors, including employee stock options and employee stock purchases under our 2006 ESPP Plan based on estimated fair values. SFAS 123R supersedes our previous method of accounting under APB 25. In March 2005, the Securities and Exchange Commission issued Staff Accounting Bulletin No. 107 (SAB 107) providing supplemental guidance for SFAS 123R implementation. We have applied the provisions of SAB 107 in our adoption of SFAS 123R.

We primarily grant qualified stock options for a fixed number of shares to employees with an exercise price equal to the market value of the shares at the date of grant. To the extent that the amount of the aggregate fair market value of qualified stock options that become exercisable for an individual exceeds $100,000 during any tax year, those stock options are treated as non qualified stock options. Under the fair value recognition provisions of SFAS No. 123R, stock-based compensation cost is based on the value of the portion of stock-based awards that is ultimately expected to vest during the period. Stock-based compensation expense recognized during the years ended December 31, 2007 and 2006 includes compensation expense for stock-based awards granted prior to, but not yet vested as of December 31, 2005, based on the fair value on the grant date estimated in accordance with the pro forma provisions of SFAS 123. Compensation expense also includes amounts related to the stock-based awards granted subsequent to December 31, 2005, based on the fair value on the grant date, estimated in accordance with the provisions of SFAS 123R.

Upon adoption of SFAS 123R, we selected the Black-Scholes option pricing model as the most appropriate method for determining the estimated fair value for stock-based awards. The Black-Scholes model requires the use of assumptions which determine the fair value of the stock-based awards. Determining the fair value of stock-based awards at the grant date requires judgment, including estimating the expected term of stock options, the expected volatility of our stock and expected dividends. In addition, we previously accounted for forfeitures as they occurred. In accordance with SFAS 123R, we are required to estimate forfeitures at the grant date and recognize compensation costs for only those awards that are expected to vest. Judgment is required in estimating the amount of stock-based awards that are expected to be forfeited.

If factors change and we employ different assumptions in the application of SFAS 123R in future periods, the compensation expense that we record under SFAS 123R may differ significantly from what we have recorded in the current period. Therefore, we believe it is important for investors to be aware of the degree of subjectivity involved when using option pricing models to estimate share-based compensation under SFAS 123R. There is risk that our estimates of the fair values of our share-based compensation awards on the grant dates may differ from the actual values realized upon the exercise, expiration, early termination or forfeiture of those share-based payments in the future. Certain share-based payments, such as employee stock options, may expire worthless or otherwise result in zero intrinsic value as compared to the fair values originally estimated on the grant date and reported in our financial statements. Alternatively, value may be realized from these instruments that is significantly in excess of the fair values originally estimated on the grant date and reported in our financial statements. Although the fair value of employee share-based awards is determined in accordance with SFAS 123R and SAB 107 using an option pricing model, that value may not be indicative of the fair value observed in a willing buyer/willing seller market transaction.

Total compensation expense recorded in the accompanying statements of operations associated with option grants made to employees for the years ended December 31, 2007 and 2006 was $1.7 million and $968,000. We recorded no tax benefit related to these options since we currently maintain a full valuation allowance.

As of December 31, 2007, the total compensation cost related to nonvested options not yet recognized in the financial statements is approximately $5.5 million, net of estimated forfeitures, and the weighted average period over which it is expected to be recognized is 1.65 years.

As of December 31, 2007, the intrinsic value of the options outstanding was $2.0 million, of which $1.6 million related to vested options and $443,000 related to unvested options.

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Accrued Expenses

As part of the process of preparing financial statements, we are required to estimate accrued expenses. This process involves identifying services which have been performed on our behalf and estimating the level of service performed and the associated cost incurred for such service as of each balance sheet date in our financial statements.

In accruing service fees, we estimate the time period over which services will be provided and the level of effort in each period. If the actual timing of the provision of services or the level of effort varies from the estimate, we will adjust the accrual accordingly. The majority of our service providers invoice us monthly in arrears for services performed. In the event that we do not identify costs that have begun to be incurred or we underestimate or overestimate the level of services performed or the costs of such services, our actual expenses could differ from such estimates. The date on which some services commence, the level of services performed on or before a given date and the cost of such services are often subjective determinations. We make judgments based upon facts and circumstances known to us in accordance with GAAP.

Results of Operations

Results of operations may vary from period to period depending on numerous factors, including the timing of payments received under existing or future strategic alliances, joint ventures or financings, if any, the progress of our research and development projects, technological advances and determinations as to the commercial potential of proposed products.

Comparison of Years Ended December 31, 2007 and 2006

Revenue. Revenue was $4.0 million and $3.3 million for the years ended December 31, 2007 and 2006, respectively. The increase in revenue in 2007 is primarily due to lower revenue in 2006 resulting from a significant change in estimate of our remaining performance obligations as of December 31, 2006, under our collaboration with Gilead. In February 2007, we discontinued further development of ACH-806. We also revised our research program with Gilead to focus on next-generation NS4A antagonists. Additionally, our efforts under the collaboration, which were previously estimated to be complete in March 2007, were extended through mid 2009. In March 2007, we and Gilead Sciences agreed to continue to equally share external costs, but effective April 1, 2007, internal full-time equivalents would no longer be subject to this cost sharing arrangement. Instead, each party would bear the costs of their respective full-time equivalents. Accordingly, in the fourth quarter of 2006, we recorded a reduction of revenue under the cumulative catch-up method to reflect our proportionate performance through December 31, 2006. This adjustment reflected our increased remaining performance obligations, which effectively reduced the proportion of our performance obligations that had been completed to date. Revenue consisted of the following:

	Years Ended December 31,		
	2007	2006	Change
	(in thousands)		
Gilead collaboration revenue	$ 4,003	$ 2,979	$ 1,024
Grant revenue	35	313	(278)
Total revenue	$ 4,038	$ 3,292	$ 746

Through the completion of our performance obligations in 2009, we expect to recognize additional revenue of approximately $2.6 million, offset by any payments we are obligated to make to Gilead in satisfaction of external costs paid by Gilead under our external cost-sharing agreement. It is possible that we will recognize negative revenue in future quarters based upon the timing of our performance under the collaboration, and on the timing and magnitude of external costs borne by Gilead.

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Research and development expenses. Research and development expenses were $28.1 million and $22.7 million for the years ended December 31, 2007 and 2006, respectively. The approximate $5.4 million increase from 2006 to 2007 was the result of: (i) increased personnel costs for our research and development staff, including an increase in headcount as well as increased wages, combined with increased non-cash stock based compensation (ii) the costs associated with three clinical trials using elvucitabine during 2007, two of which had longer durations and greater number of patients than those conducted during 2006, and (iii) the costs associated with additional preclinical testing of ACH-702. We expect that over the next twelve months research and development expenses will decrease somewhat due to several factors, most notably the near completion of the phase II clinical program for elvucitabine, the major expenses for which will not recur, and the lesser level of expense related to earlier stage IND-enabling testing for ACH-1095 and our HCV protease inhibitors. Research and development expenses for the years ended December 31, 2007 and 2006 are comprised as follows:

	Years Ended December 31,		
	2007	2006	Change
		(in thousands)	
Personnel costs	$ 6,565	$ 6,031	$ 534
Stock based compensation	676	330	346
Outsourced research and supplies	16,266	11,758	4,508
Professional and consulting fees	1,646	1,525	121
Facilities costs	2,657	2,808	(151)
Travel and other costs	310	289	21
Total	$ 28,120	$ 22,741	$ 5,379

General and administrative expenses. General and administrative expenses were $6.5 and $4.9 million for the years ended December 31, 2007 and 2006, respectively. The $1.6 million increase from 2006 to 2007 was primarily due to increased professional fees related to certain market studies and increased insurance premiums, combined with increased recognition of non-cash stock based compensation. We expect that general and administrative expenses will remain substantially unchanged over the next twelve months, but may increase in the future due to increased payroll, expanded infrastructure, increased consulting, legal, accounting and investor relations expenses associated with being a public company. General and administrative expenses for the years ended December 31, 2007 and 2006 are comprised as follows:

	Years Ended December 31,		
	2007	2006	Change
		(in thousands)	
Personnel costs	$ 1,968	$ 1,785	$ 183
Stock based compensation	1,076	695	381
Professional and consulting fees	1,744	1,206	538
Facilities costs	1,179	811	368
Travel and other costs	509	368	141
Total	$ 6,476	$ 4,865	$ 1,611

Interest income (expense). Interest income was $2.5 million and $1.1 million for the years ended December 31, 2007 and 2006, respectively. The $1.4 million increase from 2006 to 2007 was primarily due to increased average cash balances due to the receipt of $18.4 million in proceeds from our Series C-2 financing in March and May of 2006 and $53.4 million in net proceeds from our initial public offering in October 2006. Interest expense was $1.0 million and $1.0 million for the years ended December 31, 2007 and 2006, respectively.

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Tax benefit. The State of Connecticut provides companies with the opportunity to forego certain research and development tax credit carryforwards in exchange for cash. The program provides for such exchange of the research and development credits at a rate of 65% of the annual incremental and non-incremental research and development credits, as defined. The amount of tax benefit we recognized in connection with this exchange program was $960,000 and $49,000 for the years ended December 31, 2007 and 2006, respectively. The $911,000 increase from 2006 to 2007 is due to an overall increase in eligible research and development costs for the year, resulting primarily from the lack of reimbursement for internal full-time equivalent costs from Gilead Sciences, under our amended agreement which became effective April 1, 2007, combined with an increase in clinical trial costs. The reimbursement previously received by Gilead reduced the amount of research and development expense eligible for the tax credit.

Accretion of preferred stock dividends. Accretion of preferred stock dividends was $0 and $4.2 million for the years ended December 31, 2007 and 2006, respectively. Since the conversion of our preferred stock in connection with our initial public offering, there is no further accretion of dividends.

Comparison of Years Ended December 31, 2006 and 2005

Revenue. Revenue was $3.3 million and $8.5 million for the years ended December 31, 2006 and 2005, respectively. The decrease in revenue in 2006 is primarily due to a significant change in estimate of our remaining performance obligations as of December 31, 2006 under our collaboration with Gilead. In February 2007, we discontinued further development of ACH-806. We also revised our research program with Gilead to focus on next-generation NS4A antagonists. Additionally, our efforts under the collaboration, which were previously estimated to be complete in March 2007, will extend through mid 2009. In addition, in March 2007, we and Gilead Sciences agreed to continue to equally share external costs, but that effective April 1, 2007, each party would bear the costs of their respective full-time equivalents. Accordingly, in the fourth quarter of 2006, we recorded a reduction of revenue under the cumulative catch-up method to reflect our proportionate performance through December 31, 2006. This adjustment reflected our increased remaining performance obligations, which effectively reduced the proportion of our performance obligations that have been completed to date. Revenue consisted of the following:

	Years Ended December 31,		
	2006	2005	Change
	(in thousands)		
Gilead collaboration revenue	$ 2,979	$ 8,277	$ (5,298)
Grant revenue	313	249	64
Total revenue	$ 3,292	$ 8,526	$ (5,234)

Our revenue recognized during the fourth quarter of 2006 was negative due primarily to the material change in estimate to our proportionate performance measure. It is possible that we will recognize negative revenue in future quarters based upon the timing of our performance under the collaboration, and on the timing and magnitude of external costs borne by Gilead.

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Research and development expenses. Research and development expenses were $22.7 million and $18.1 million for the years ended December 31, 2006 and 2005, respectively. The approximate $4.6 million increase from 2005 to 2006 was the result of: (i) increased personnel costs for our research and development staff, including an increase in headcount as well as increased wages, combined with the recognition of non-cash stock based compensation required with our adoption of FAS 123R (ii) the costs associated with three clinical trials using elvucitabine during 2006, as compared to one on-going trial in 2005, and (iii) the costs associated with proof of concept clinical development of ACH-806 in 2006 that were not incurred in 2005. Research and development expenses for the years ended December 31, 2006 and 2005 are comprised as follows:

	Years Ended December 31,		
	2006	2005	Change
		(in thousands)	
Personnel costs	$ 6,031	$ 5,301	$ 730
Stock based compensation	330	38	292
Outsourced research and supplies	11,758	8,227	3,531
Professional and consulting fees	1,525	1,410	115
Facilities costs	2,808	2,870	(62)
Travel and other costs	289	266	23
Total	$ 22,741	$ 18,112	$ 4,629

General and administrative expenses. General and administrative expenses were $4.9 and $3.1 million for the years ended December 31, 2006 and 2005, respectively. The $1.8 million increase from 2005 to 2006 was primarily due to increased professional fees, particularly legal and accounting fees associated with our status as a public company, combined with the recognition of non-cash stock based compensation required with our adoption of FAS 123R. General and administrative expenses for the years ended December 31, 2006 and 2005 are comprised as follows:

	Years Ended December 31,		
	2006	2005	Change
		(in thousands)	
Personnel costs	$ 1,785	$ 1,803	$ (18)
Stock based compensation	695	32	663
Professional and consulting fees	1,206	392	814
Facilities costs	811	627	184
Travel and other costs	368	247	121
Total	$ 4,865	$ 3,101	$ 1,764

Interest income (expense). Interest income was $1.1 million and $0.2 million for the years ended December 31, 2006 and 2005, respectively. The $0.9 million increase from 2005 to 2006 was primarily due to increased average cash balances due to the receipt of $18.4 million in proceeds from our Series C-2 financing in March and May of 2006 and $53.4 million in net proceeds from our initial public offering in October 2006. Interest expense was $1.0 million and $1.2 million for the years ended December 31, 2006 and 2005, respectively. The $0.2 million decrease from 2005 to 2006 was primarily attributable to conversion of notes payable in November 2005, offset in part by interest expense on a debt facility entered into in December 2005 and May 2006.

Tax benefit. The State of Connecticut provides companies with the opportunity to forego certain research and development tax credit carryforwards in exchange for cash. The program provides for such exchange of the research and development credits at a rate of 65% of the annual incremental and non-incremental research and development credits, as defined. The amount of tax benefit we recognized in connection with this exchange program was $49,000 and $88,000 for the years ended December 31, 2006 and 2005, respectively. The $39,000

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decrease from 2005 to 2006 was due to the specific types of research and development expenses incurred and the decreasing amount of such costs incurred within the State of Connecticut combined with a $19,000 decrease in 2006 to account for 2005 expenses that were originally claimed but deemed unallowable. In January 2007 we offset this benefit by $8,000, the result of a reclassification of accrued taxes.

Accretion of preferred stock dividends. Accretion of preferred stock dividends was $4.1 million and $2.9 million for the years ended December 31, 2006 and 2005, respectively. The $1.2 million increase from 2005 to 2006 was due to an increased number of shares outstanding, particularly 23,425,462 shares of series C-2 convertible preferred stock issued in November 2005, March 2006 and May 2006, offset by the lack of dividends accrued during the last two months of 2006 following our initial public offering. Since the conversion of the Company s preferred stock in connection with our initial public offering, there is no further accretion of dividends.

Liquidity and Capital Resources

Since our inception in August 1998, we have financed our operations primarily through the issuance of our convertible preferred stock and borrowings under debt facilities, as well as through receipts from our collaboration with Gilead Sciences. Through December 31, 2007, we had received approximately $161.2 million in aggregate net proceeds from stock issuances, $18.5 million from Gilead Sciences under our collaboration agreement with them and approximately $17.1 million under the following debt facilities:

Lender	Date	Interest Rate (per annum)	Principal Amount	Maturity Date
Connecticut Innovations, Inc.	November 2000	7.5%	$ 1,400,000	September 2010
Connecticut Innovations, Inc.	May 2002	7.5%	$ 278,000	October 2007
General Electric Capital Corporation	March 2002	8.01% -10.17%	$ 3,264,182	March 2005-May 2007
Webster Bank	May 2003	6.72% -9.27%	$ 972,185	June 2006-Dec 2009
Oxford Finance Corporation	December 2005	10.92%	$ 2,500,000	November 2008
General Electric Capital Corporation	December 2005	10.92%	$ 2,500,000	November 2008
Oxford Finance Corporation	May 2006	11.56%	$ 2,500,000	April 2009
General Electric Capital Corporation	May 2006	11.56%	$ 2,500,000	April 2009
Oxford Finance Corporation	June 2007	11.58%	$ 400,000	June 2010
General Electric Capital Corporation	June 2007	11.58%	$ 400,000	June 2010
Webster Bank	December 2007	7.46%	$ 414,623	December 2010

The amounts reflected above represent original maturities under our debt agreements. As of December 31, 2007, our debt balance due to borrowings is $6.6 million with a weighted average interest rate of 10.7%.

In February 2008, we entered into a credit facility with General Electric Capital Corporation and Oxford Finance Corporation for an additional $5 million to fund our working capital needs.

We had $31.1 million, $62.6 million and $9.6 million in cash, cash equivalents and marketable securities as of December 31, 2007, 2006 and 2005, respectively. On May 12, 2006, we received $13.8 million in gross proceeds from the sale of 9,166,167 additional shares of our series C-2 convertible preferred stock at $1.50 per share, and $5.0 million in proceeds from the issuance of promissory notes under existing debt facilities. In October 2006, we received $53.4 million in net proceeds from our initial public offering of 5,175,000 shares of common stock, at a public offering price of $11.50 per share.

Cash used in operating activities was $29.9 million for the year ended December 31, 2007 and was primarily attributable to our $28.1 million net loss and $2.7 million amortization of deferred revenue, offset primarily by $2.5 million in non cash charges related to depreciation, amortization and non-cash stock based compensation.

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Cash used in operating activities was $21.1 million for the year ended December 31, 2006 and was primarily attributable to our $24.1 million net loss, offset by our $1.7 million increase in accounts payable and $1.8 million in non-cash charges related to depreciation, amortization and non-cash stock based compensation.

Cash provided by investing activities was $18.3 million for the year ended December 31, 2007 and was primarily attributable to maturities of marketable securities offset by purchases of marketable securities and $1.3 million in property and equipment purchases. Cash used in investing activities was $40.1 million for the year ended December 31, 2006 and was primarily attributable to the purchase of marketable securities.

Cash used in financing activities was $2.1 million for the year ended December 31, 2007 and was attributable to $3.7 million used for repayments of debt, offset primarily by $1.2 million in receipt of proceeds under a debt facility. Cash provided by financing activities was $74.3 million for the year ended December 31, 2006 and was primarily attributable to $18.2 million in proceeds from the sale of 12,270,815 shares of our Series C-2 Preferred Stock, $53.4 million in net proceeds from our initial public offering of 5,175,000 shares of common stock and $5.4 million in proceeds from the issuance of debt, offset by $3 million used for repayments of debt.

We expect to incur continuing and increasing losses from operations for at least the next several years as we seek to:

- complete the open-label extension phases of our phase II clinical trials for elvucitabine;
- complete assessment of ACH-702 preclinical data and prepare for early clinical testing;
- complete IND-enabling preclinical testing of ACH-1095;
- advance our HCV protease inhibitor for chronic hepatitis C infection; and
- progress additional drug candidates.

We do not expect our existing capital resources, together with the milestone payments and research and development funding we expect to receive, to be sufficient to fund the completion of the development of any of our drug candidates. As a result, we will need to raise additional funds prior to being able to market any drug candidates, to, among other things, obtain regulatory approvals, fund operating losses, and, if deemed appropriate, establish manufacturing and sales and marketing capabilities. We will seek to raise such additional financing through public or private equity or debt financings, collaborative or other arrangements with third parties or through other sources of financing.

We believe that our existing cash and cash equivalents, supplemented by $5,000 received under a credit facility entered in February 2008 with General Electric Capital Corporation and Oxford Finance Corporation, will be sufficient to meet our projected operating requirements for at least the next twelve months. However, our funding resources and requirements may change and will depend upon numerous factors, including but not limited to:

- the progress of our research and development programs;
- the cost, timing and results of preclinical testing and clinical studies;
- the receipt and timing of regulatory approvals, if any;

determinations as to the commercial potential of our proposed products;

the status of competitive products;

our ability to establish and maintain collaborative arrangements with others for the purpose of funding certain research and development programs;

the acquisition of technologies or drug candidates; and

our participation in the manufacture, sale and marketing of any approved drugs.

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We anticipate that we will augment our cash balance in 2008 through financing transactions, including the issuance of debt or equity securities, and further corporate alliances. In February 2008, we entered into a new credit facility which provided $5,000 to fund our working capital needs. No additional arrangements have been entered into for any future financing, and there can be no assurance that we will be able to obtain adequate levels of additional funding or favorable terms, if at all. If adequate funds are not available during 2008, we will be required to:

- delay, reduce the scope of or eliminate our research and development programs;
- reduce our planned commercialization efforts;
- obtain funds through arrangements with collaborators or others on terms unfavorable to us or that may require us to relinquish rights to certain drug candidates that we might otherwise seek to develop or commercialize independently; and/or
- pursue merger or acquisition strategies.

Additionally, any future equity funding may dilute the ownership of our equity investors.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements or relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities.

Contractual Obligations and Commitments

The following table sets forth a summary of our commitments as of December 31, 2007:

		Payment Due by Period			
	Total	Less Than 1 Year	1-3 Years	3-5 Years	More than 5 Years
			(in thousands)		
Long-term debt, including interest	$ 7,385	$ 7,385	$	$	$
Operating lease obligations	2,618	969	1,628	21	
Clinical research obligations	3,282	2,792	490		
Other research obligations and licenses	2,933	2,048	690	195	
Total	$ 16,218	$ 13,194	$ 2,808	$ 216	$

The above amounts exclude potential payments that are based on the progress of our drug candidates in development, to be made under our license agreements, as these payments are not yet determinable.

All of the Company s debt agreements contain certain subjective acceleration clauses, which upon the occurrence of a material adverse change in the financial condition, business or operations of Achillion in the view of the respective lenders, may cause amounts due under the agreements to become immediately due and payable. As stated in Note 1 to the financial statements, we will need additional financing to fund operations which we will seek to raise through public or private equity or debt financings, collaborative or other arrangements with third parties or through other sources of financing. There can be no assurance that such funding will be available on terms favorable us, if at all. As such funding cannot be assured, our debt balances have been classified as short term at December 31, 2007. We are not in default with respect to any debt agreements and none of our lenders have accelerated scheduled loan payments.

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Related Party Transactions

In November 2004, we entered into the Gilead Arrangement with Gilead Sciences Inc. to jointly develop and commercialize compounds for use in treating hepatitis C infection which inhibit viral replication through a specified novel mechanism of action. Commercialization efforts will commence only if such compounds are found to be commercially viable and all appropriate regulatory approvals have been obtained.

In addition to being a collaboration partner, Gilead Sciences Inc. is also a shareholder of Achillion. As of December 31, 2007, Gilead holds 1,116 shares, representing 7% of total shares outstanding.

Recently Issued Accounting Pronouncements

In September 2006, the FASB issued SFAS No.157, *Fair Value Measurements.* SFAS No. 157 defines fair value, establishes a framework for measuring fair value in generally accepted accounting principles, and expands disclosures about fair value measurements. The standard is effective for financial statements issued for fiscal years beginning after November 15, 2007 and interim periods within those fiscal years. On December 14, 2007, the FASB issued a proposed FASB Staff Position that would amend SFAS 157 to delay the effective date of Statement 157 for all non-financial assets and non-financial liabilities, except those that are recognized or disclosed at fair value in the financial statements on a recurring basis (at least annually). The proposed Staff Position defers the effective date of Statement 157 to fiscal years beginning after November 15, 2008, and interim periods within those fiscal years for items within the scope of the proposed Staff Position. On February 12, 2008, the FASB issued FASB Staff Position (FSP) FAS 157-2. This FSP permits a delay in the effective date of SFAS 157 to fiscal years beginning after November 15, 2008, for nonfinancial assets and nonfinancial liabilities, except for items that are recognized or disclosed at fair value in the financial statements on a recurring basis (at least annually). We do not believe that its adoption will have a material impact on our financial statements.

In February 2007, the FASB issued SFAS No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities*. SFAS No. 159 permits an entity to elect to report many financial assets and liabilities at fair value. Entities electing the fair value option would be required to recognize changes in fair value in earnings and are required to distinguish, on the face of the statement of financial position, the fair value of assets and liabilities for which the fair value option has been elected and similar assets and liabilities measured using another measurement attribute. The initial adjustment to reflect the difference between the fair value and the carrying amount would be accounted for as a cumulative-effect adjustment to retained earnings as of the date of initial adoption. SFAS No. 159 is effective as of the beginning of an entity s first fiscal year beginning after November 15, 2007. We are currently evaluating the impact, if any, of SFAS 159 on our financial statements.

In June 2007, the Emerging Issues Task Force, or EITF, reached a consensus on EITF Issue No. 07-03, *Accounting for Nonrefundable Advance Payments for Goods or Services to Be Used in Future Research and Development Activities*, or EITF 07-03. EITF 07-03 concludes that non-refundable advance payments for future research and development activities should be deferred and capitalized until the goods have been delivered or the related services have been performed. If an entity does not expect the goods to be delivered or services to be rendered, the capitalized advance payment should be charged to expense. This consensus is effective for fiscal years beginning after December 15, 2007. The initial adjustment to reflect the effect of applying the consensus as a change in accounting principle would be accounted for as a cumulative-effect adjustment to retained earnings as of the beginning of the year of adoption. We do not believe that our adoption of EITF 07-03 in the first quarter of 2008 will have a material impact on our financial statements.

In December 2007, the EITF reached a consensus on EITF Issue No. 07-01, *Accounting for Collaborative Arrangements Related to the Development and Commercialization of Intellectual Property*, or EITF 07-01. EITF- 07-01 prescribes the accounting for collaborations. It requires certain transactions between collaborators to be recorded in the income statement on either a gross or net basis within expenses when certain characteristics exist in the collaboration relationship. EITF 07-01 is effective for our collaborations existing after January 1, 2009. We are currently evaluating the impact this standard will have on our financial statements.

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In December 2007, the FASB issued SFAS No. 141R, *Business Combinations*, which changes the accounting for business acquisitions. SFAS No. 141R requires the acquiring entity in a business combination to recognize all (and only) the assets acquired and liabilities assumed in the transaction and establishes the acquisition-date fair value as the measurement objective for all assets acquired and liabilities assumed in a business combination. Certain provisions of this standard will, among other things, impact the determination of acquisition-date fair value of consideration paid in a business combination (including contingent consideration); exclude transaction costs from acquisition accounting; and change accounting practices for acquired contingencies, acquisition-related restructuring costs, in-process research and development, indemnification assets, and tax benefits. SFAS No. 141R is effective for business combinations and adjustments to an acquired entity s deferred tax asset and liability balances occurring after December 31, 2008. We are currently evaluating the impact, if any, of SFAS 141R on our financial statements.

In December 2007, the FASB issued SFAS No. 160, *Noncontrolling Interests in Consolidated Financial Statements*, an amendment of ARB No. 51, which establishes new standards governing the accounting for and reporting of noncontrolling interests (NCIs) in partially owned consolidated subsidiaries and the loss of control of subsidiaries. Certain provisions of this standard indicate, among other things, that NCIs (previously referred to as minority interests) be treated as a separate component of equity, not as a liability; that increases and decrease in the parent s ownership interest that leave control intact be treated as equity transactions, rather than as step acquisitions or dilution gains or losses; and that losses of a partially owned consolidated subsidiary be allocated to the NCI even when such allocation might result in a deficit balance. This standard also requires changes to certain presentation and disclosure requirements. SFAS No. 160 is effective for fiscal years beginning after December 31, 2008. We do not believe that our adoption of SFAS 160 will have an impact on our financial statements.

In December 2007, the SEC issued Staff Accounting Bulletin No. 110, or SAB 110. SAB 110 expresses the views of the staff regarding the use of a simplified method, as discussed in SAB No. 107, in developing an estimate of expected term of plain vanilla share options in accordance with Statement of Financial Accounting Standards No. 123 (revised 2004), *Share-Based Payment*. In particular, the SEC staff will continue to accept, under certain circumstances, the use of the simplified method in developing an estimate of expected term of plain vanilla share options beyond December 31, 2007. We intend to apply the provisions of SAB 110 and do not believe that our adoption will have an impact on our financial statements.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Interest Rate Risk. Our exposure to market risk is confined to our cash, cash equivalents and marketable securities. We invest in high-quality financial instruments, primarily money market funds, federal agency notes, asset backed securities, corporate debt securities and U.S. treasury notes, with the effective duration of the portfolio less than six months and no security with an effective duration in excess of 12 months, which we believe are subject to limited credit risk. We currently do not hedge interest rate exposure. Due to the short-term nature of our investments, we do not believe that we have any material exposure to interest rate risk or changes in credit ratings arising from our investments.

Capital Market Risk. We currently have no product revenues and depend on funds raised through other sources. One source of funding is through further equity offerings. Our ability to raise funds in this manner depends upon capital market forces affecting our stock price.

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ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The information required by this Item is included in our Financial Statements and Supplementary Data listed in Item 15 of Part IV of this annual report on Form 10-K.

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

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our chief executive officer and chief financial officer, evaluated the effectiveness of our disclosure controls and procedures as of December 31, 2007. The term disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company s management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of December 31, 2007, the Company s chief executive officer and chief financial officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

Management s Annual Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is defined in Rule 13a-15(f) and 15d-15(f) promulgated under the Securities Exchange Act of 1934 as a process designed by, or under the supervision of, the Company s principal executive and principal financial officers and effected by the Company s board of directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles and includes those policies and procedures that:

- Pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of the company;
- Provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and
- Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the company s assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

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Our management assessed the effectiveness of the Company s internal control over financial reporting as of December 31, 2007. In making this assessment, our management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control-Integrated Framework*.

Based on this assessment, management concluded that, as of December 31, 2007, our internal control over financial reporting is effective based on the criteria set forth in *Internal Control Integrated Framework* issued by the COSO.

The effectiveness of the Company s internal control over financial reporting as of December 31, 2007 has been audited by PricewaterhouseCoopers LLP, an independent registered accounting firm, as stated in their report which is included herein.

Changes in Internal Control over Financial Reporting

No change in our internal control over financial reporting occurred during the fiscal quarter ended December 31, 2007 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

None.

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PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

We intend to file with the Securities and Exchange Commission a definitive Proxy Statement, which we refer to herein as the Proxy Statement, not later than 120 days after the close of the fiscal year ended December 31, 2007. The information required by this item is incorporated herein by reference to the information contained under the sections captioned Election of Class II Directors, Section 16(a) Beneficial Ownership Reporting Compliance and Corporate Governance of the Proxy Statement. The information required by this item relating to executive officers is included in Part I, Item 1 Business- Executive Officers of the Registrant of this Annual Report on Form 10-K on page 28 and is incorporated by reference.

We have adopted a written code of business conduct and ethics, which applies to our principal executive officer, principal financial or accounting officer or person serving similar functions and all of our other employees and members of our board of directors. The text of our amended code of ethics is available on our website at www.achillion.com. We did not waive any provisions of the code of business ethics during the year ended December 31, 2007. If we amend, or grant a waiver under, our code of business ethics that applies to our principal executive officer, principal financial or accounting officer, or persons performing similar functions, we intend to post information about such amendment or waiver on our website at www.achillion.com.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this item is incorporated herein by reference to the information contained under the sections captioned Executive Compensation, Compensation of Directors, Compensation Committee Interlocks and Insider Participation and Employment Arrangements of the Proxy Statement.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this item is incorporated herein by reference to the information contained under the sections captioned Security Ownership of Certain Beneficial Owners and Management and Equity Compensation Plan Information of the Proxy Statement.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by this item is incorporated herein by reference to the information contained under the sections captioned Employment Arrangements and Certain Relationships and Related Transactions of the Proxy Statement.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by this item is incorporated herein by reference to the information contained under the sections captioned Auditor s Fees and Pre-Approval Policies and Procedures of the Proxy Statement.

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PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a)(1) Financial Statements

The following documents are included on pages F-1 through F-29 attached hereto and are filed as part of this annual report on Form 10-K.

(a)(2) Financial Statement Schedules

Not applicable

(a)(3) List of Exhibits

The exhibits which are filed with this report or which are incorporated herein by reference are set forth in the Exhibit Index hereto.

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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, on March 5, 2008.

ACHILLION PHARMACEUTICALS, INC.

By: /s/ MICHAEL D. KISHBAUCH
Michael D. Kishbauch
President and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, the Report has been signed below by the following persons on behalf of the Registrant and in the capacities indicated as of March 5, 2008.

Signature	Title	Date
/s/ MICHAEL D. KISHBAUCH **Michael D. Kishbauch**	President and Chief Executive Officer and Director (Principal executive officer)	March 5, 2008
/s/ MARY KAY FENTON **Mary Kay Fenton**	Vice President and Chief Financial Officer (Principal financial and accounting officer)	March 5, 2008
/s/ JAMES GARVEY **James Garvey**	Director	March 5, 2008
/s/ JASON FISHERMAN, M.D. **Jason Fisherman, M.D.**	Director	March 5, 2008
/s/ JEAN-FRANCOIS FORMELA, M.D. **Jean-Francois Formela, M.D.**	Director	March 5, 2008
/s/ MICHAEL GREY **Michael Grey**	Director	March 5, 2008
/s/ DAVID SCHEER **David Scheer**	Director	March 5, 2008
/s/ ROBERT VAN NOSTRAND **Robert Van Nostrand**	Director	March 5, 2008
/s/ DAVID WRIGHT **David Wright**	Director	March 5, 2008

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Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders

of Achillion Pharmaceuticals, Inc.

In our opinion, the accompanying balance sheets and the related statements of operations, of stockholders equity (deficit) and of cash flows, present fairly, in all material respects, the financial position of Achillion Pharmaceuticals, Inc. at December 31, 2007 and 2006, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2007 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2007, based on criteria established in *Internal Control Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company s management is responsible for these financial statements, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in Management s Annual Report on Internal Controls Over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on these financial statements and on the Company s internal control over financial reporting based on our audits (which was an integrated audit in 2007). We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

As discussed in Note 14 to the financial statements, the Company changed the manner in which it accounts for uncertain tax positions, effective January 1, 2007.

As discussed in Note 2 to the financial statements, the Company changed the manner in which it accounts for stock-based compensation, effective January 1, 2006.

A company s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company s internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company s assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ PricewaterhouseCoopers LLP

Hartford, Connecticut

March 5, 2008

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Achillion Pharmaceuticals, Inc.

Balance Sheets

(in thousands, except per share amounts)

	As of December 31, 2007	2006
Assets		
Current assets:		
Cash and cash equivalents	$ 8,971	$ 22,662
Marketable securities	22,138	39,904
Accounts receivable	136	796
Prepaid expenses and other current assets	1,671	1,502
Total current assets	32,916	64,864
Fixed assets, net	2,475	1,966
Deferred financing costs	36	59
Restricted cash	205	257
Total assets	$ 35,632	$ 67,146
Liabilities and Stockholders Equity		
Current liabilities:		
Accounts payable	$ 2,083	$ 2,633
Accrued expenses	2,748	2,639
Deferred revenue	1,298	2,830
Current portion of long-term debt	6,563	3,572
Total current liabilities	12,692	11,674
Long-term debt, net of current portion		5,327
Accrued expenses, net of current portion	130	340
Deferred revenue	1,272	2,435
Total liabilities	14,094	19,776
Commitments (Notes 12 and 13)		
Stockholders Equity:		
Preferred Stock, undesignated, $.01 par value; 5,000 shares authorized at December 31, 2007 and 2006; no shares issued or outstanding		
Common Stock, $.001 par value; 100,000 shares authorized at December 31, 2007 and 2006; 15,637 and 15,535 shares issued and outstanding at December 31, 2007 and 2006, respectively	16	16
Additional paid-in capital	172,817	170,650
Stock warrants	484	644
Stock subscription receivable		(50)
Accumulated deficit	(151,830)	(123,908)
Accumulated other comprehensive income	51	18
Total stockholders equity	21,538	47,370
Total liabilities and stockholders equity	$ 35,632	$ 67,146

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

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Achillion Pharmaceuticals, Inc.

Statements of Operations

(in thousands, except per share amounts)

	Years Ended December 31,		
	2007	2006	2005
Revenue	$ 4,038	$ 3,292	$ 8,526
Operating expenses			
Research and development	28,120	22,741	18,112
General and administrative	6,476	4,865	3,101
Total operating expenses	34,596	27,606	21,213
Loss from operations	(30,558)	(24,314)	(12,687)
Other income (expense)			
Interest income	2,460	1,144	224
Interest expense	(964)	(965)	(1,200)
Net loss before tax benefits	(29,062)	(24,135)	(13,663)
Tax benefit	960	49	88
Net loss	(28,102)	(24,086)	(13,575)
Accretion of preferred stock dividends		(4,163)	(2,939)
Loss attributable to common stockholders	$ (28,102)	$ (28,249)	$ (16,514)
Basic and diluted net loss per share attributable to common stockholders (Note 3)	$ (1.80)	$ (9.35)	$ (32.96)
Weighted average shares used in computing basic and diluted net loss per share attributable to common stockholders	15,583	3,022	501

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

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Achillion Pharmaceuticals, Inc.

Statements of Stockholders Equity (Deficit) and Comprehensive Loss for the Years Ended December 31, 2005, 2006 and 2007

(in thousands)

	Common Stock							
	Shares	Amount	Additional Paid-In Capital	Stock Warrants	Stock Subscription Receivable	Accumulated Deficit	Accumulated Other Comprehensive Income (Loss)	Total Stockholders Equity (Deficit)
Balances at December 31, 2004	496	4		392	(282)	(79,790)	(3)	(79,679)
Net loss						(13,575)		(13,575)
Unrealized gain on marketable securities							3	3
Comprehensive loss								(13,572)
Stock compensation			70					70
Exercise of stock options	16		26					26
Repayment of stock subscriptions receivable	1				101			101
Expiration of warrants			22	(22)				
Reclassification of preferred stock warrants in accordance with FSP 150-5				(29)				(29)
Convertible preferred stock dividends			(118)			(2,821)		(2,939)
Balances at December 31, 2005	513	4		341	(181)	(96,186)		(96,022)
Net loss						(24,086)		(24,086)
Unrealized gain on marketable securities							18	18
Comprehensive loss								(24,068)
Stock compensation			1,025					1,025
Exercise of stock options	13	1	21					22
Conversion of preferred warrants to common warrants				303				303
Repayment of stock subscriptions receivable					131			131
Issuance of common stock in initial public offering, net of issuance costs of $1,900	5,175	5	53,395					53,400
Conversion of preferred stock into common stock	9,834	6	116,736					116,742
Convertible preferred stock dividends			(527)			(3,636)		(4,163)
Balances at December 31, 2006	15,535	16	170,650	644	(50)	(123,908)	18	47,370
Net loss						(28,102)		(28,102)
Unrealized gain on marketable securities							33	33
Comprehensive loss								(28,069)
Adoption of FASB Interpretation No. 48						180		180
Stock compensation			1,752					1,752
Issuance of common stock upon exercise stock options	59		101					101
Issuance of common stock upon exercise of warrants	9		160	(160)				
Issuance of common stock under ESPP Plan	34		154					154
Repayment of stock subscriptions receivable					50			50

Balances at December 31, 2007	15,637	$ 16	$ 172,817	$ 484	$	$ (151,830)	$ 51	$ 21,538

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

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Achillion Pharmaceuticals, Inc.

Statements of Cash Flows

(in thousands)

	Years Ended December 31,		
	2007	2006	2005
Cash flows from operating activities			
Net loss	$ (28,102)	$ (24,086)	$ (13,575)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	773	785	1,079
Noncash stock-based compensation	1,752	1,025	70
Noncash interest expense	116	92	977
Noncash interest income on debt warrant adjustment		24	
Loss(gain) on disposal of equipment	(19)	3	
Amortization of premium (discount) on securities	(1,782)	(173)	
Changes in operating assets and liabilities:			
Accounts receivable	660	(35)	(399)
Prepaid expenses and other current assets	(169)	(783)	236
Account payable	(550)	1,737	(664)
Accrued expenses and other liabilities	79	317	590
Deferred revenue	(2,695)	63	(2,328)
Net cash (used in) operating activities	(29,937)	(21,031)	(14,014)
Cash flows from investing activities			
Purchase of property and equipment	(1,240)	(436)	(98)
Release of restriction on cash	52	53	52
Purchase of marketable securities	(59,479)	(40,713)	
Maturities of marketable securities	79,060	1,000	4,900
Net cash provided by (used in) investing activities	18,393	(40,096)	4,854
Cash flows from financing activities			
Proceeds from issuance of Series C-2 Preferred Stock, net of issuance costs of $182		18,224	5,287
Proceeds from issuance of Common Stock in initial public offering, net of issuance costs of $1,900		53,400	
Proceeds from exercise of stock options	101	23	26
Proceeds from sale of stock under the Employee Stock Purchase Plan	154		
Proceeds from repayment of stock subscription receivable	50	131	101
Borrowings under notes payable	1,215	5,381	5,151
Repayments of notes payable	(3,667)	(2,953)	(1,178)
Payment of deferred financing costs			(125)
Net cash provided by (used in) financing activities	(2,147)	74,206	9,262
Net increase (decrease) in cash and cash equivalents	(13,691)	13,079	102
Cash and cash equivalents, beginning of period	22,662	9,583	9,481
Cash and cash equivalents, end of period	$ 8,971	$ 22,662	$ 9,583
Supplemental disclosure of cash flow information			
Cash paid for interest	$ 848	$ 847	$ 179
Cash received from tax credits	$	$ 336	$

Supplemental disclosure of noncash financing activities			
Issuance of warrants in connection with debt financing	$	$ 174	$ 174
Conversion of notes payable to Series C-2 Preferred Stock	$	$	$ 11,388
Conversion of Preferred stock into Common stock in connection with initial public offering	$	$ 116,742	$
Conversion of preferred warrants to common warrants	$	$ 303	$
Cashless exercise of warrants	$ 288	$	$

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

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Achillion Pharmaceuticals, Inc.

Notes to Financial Statements

(in thousands, except per share amounts)

1. Nature of the Business

Achillion Pharmaceuticals, Inc. (the Company) was incorporated on August 17, 1998 in Delaware. The Company was established to discover, develop and commercialize innovative anti-infective drug therapies. The Company is devoting substantially all of its efforts towards product research and development.

The Company incurred losses of $137,967 from inception through December 31, 2007 and had an accumulated deficit of $151,830 through December 31, 2007. The Company has funded its operations primarily through the sale of equity securities, borrowings from debt facilities, and the receipt of milestone and cost-sharing receipts from its collaboration partner, Gilead Sciences, Inc. (Gilead).

In October 2006, the Company completed an initial public offering of 5,175 shares of its common stock, including the underwriters overallotment option that closed in November 2006, at a public offering price of $11.50 per share. Net proceeds to the Company were approximately $53,400, after deducting underwriting discounts and commissions and offering expenses. In connection with the Company s initial public offering in October 2006, the then outstanding shares of Series A, Series B, Series C, Series C-1 and Series C-2 Convertible Preferred Stock (the Preferred Stock) were converted into 9,834 shares of common stock, including shares issued in satisfaction of $15,400 of accrued but unpaid dividends on the Preferred Stock as of October 31, 2006, the closing date of the initial public offering transaction.

The Company expects to incur substantial and increasing losses for at least the next several years and will need substantial additional financing to obtain regulatory approvals, fund operating losses, and, if deemed appropriate, establish manufacturing and sales and marketing capabilities, which the Company will seek to raise through public or private equity or debt financings, collaborative or other arrangements with third parties or through other sources of financing. The Company expects that potential collaboration agreements for its programs could include significant up-front license fees as well as milestone payments. The Company also expects that a collaborator may share a majority of costs associated with further clinical development of the respective programs. There can be no assurance that such funding will be available on terms favorable to the Company, if at all.

The Company has developed a contingency plan which provides for changes in its operations in the event that the Company is unable to secure additional funding within the next twelve months. The Company believes that this plan would reduce its operating expenses and believes that implementation of this contingency plan, if necessary, would permit it to conduct its operations for at least the next twelve months.

In addition to the normal risks associated with early-stage companies, there can be no assurance that the Company will successfully complete its research and development, obtain adequate patent protection for its technology, obtain necessary government regulatory approval for drug candidates the Company develops or that any approved drug candidates will be commercially viable. In addition, the Company may not be profitable even if it succeeds in commercializing any of its drug candidates.

2. Summary of Significant Accounting Policies

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States (GAAP) requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

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Revenue Recognition

The Company recognizes revenue from contract research and development and research progress payments in accordance with Staff Accounting Bulletin (SAB), No. 104, *Revenue Recognition* (SAB 104) and Financial Accounting Standards Board (FASB), Emerging Issue Task Force Issue No. 00-21, *Accounting for Revenue Arrangements with Multiple Deliverables* (EITF 00-21). Revenue-generating research and development collaborations are often multiple element arrangements, providing for a license as well as research and development services. Such arrangements are analyzed to determine whether the deliverables, including research and development services, can be separated or whether they must be accounted for as a single unit of accounting in accordance with EITF 00-21. The Company recognizes upfront license payments as revenue upon delivery of the license only if the license has standalone value and the fair value of the undelivered performance obligations can be determined. If the fair value of the undelivered performance obligations can be determined, such obligations would then be accounted for separately as performed. If the license is considered to either (i) not have standalone value or (ii) have standalone value but the fair value of any of the undelivered performance obligations cannot be determined, the arrangement would then be accounted for as a single unit of accounting and the upfront license payments are recognized as revenue over the estimated period of when the Company s performance obligations are performed.

When the Company determines that an arrangement should be accounted for as a single unit of accounting, it must determine the period over which the performance obligations will be performed and revenue related to upfront license payments will be recognized. Revenue will be recognized using either a proportionate performance or straight-line method. The Company recognizes revenue using the proportionate performance method provided that it can reasonably estimate the level of effort required to complete its performance obligations under an arrangement and such performance obligations are provided on a best-efforts basis. Under the proportionate performance method, periodic revenue related to up-front license payments is recognized as the percentage of actual effort expended in that period to total effort expected for all of the Company s performance obligations under the arrangement. Actual effort is generally determined based upon actual direct labor hours or full-time equivalents incurred and includes research and development activities performed by internal scientists. Total expected effort is generally based upon the total direct labor hours of full-time equivalents incorporated into the detailed budget and project plan that is agreed to by both parties to the collaboration. Significant management judgment is required in determining the level of effort required under an arrangement and the period over which the Company expects to complete the related performance obligations. Typically, a governing joint research committee periodically reviews and updates the research and development plan and the related level of effort. In the event that a change in estimate occurs, the change will be accounted for using the cumulative catch-up method which provides for an adjustment to revenue in the current period. Estimates of the Company s level of effort may change in the future, resulting in a material change in the amount of revenue recognized in future periods. The Company revised its joint research program with Gilead Sciences in early 2007 to focus on next-generation NS4A antagonists which extended the period over which its remaining obligations under the arrangement would be completed. In the most recently updated project plan, approved by the Joint Research Committee in December 2007, the Company s remaining obligations under the plan continue through mid 2009. Accordingly, the period over which the Company recognizes amounts received under the arrangement has been extended.

Generally under collaboration arrangements, payments received during the period of performance may include up-front payments, time- or performance-based milestones and reimbursement of internal and external costs. The proportion of actual performance to total expected performance is applied to these payments in determining periodic revenue, but will be limited by the aggregate cash received or receivable to date by the Company.

Substantive milestone payments are considered to be performance bonuses that are recognized upon achievement of the milestone only if all of the following conditions are met: (1) the milestone payments are non-refundable, (2) achievement of the milestone involves a degree of risk and was not reasonably assured at the inception of the arrangement, (3) substantive effort is involved in achieving the milestone, (4) the amount of the

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milestone payment is reasonable in relation to the effort expended or the risk associated with achievement of the milestone and (5) a reasonable amount of time passes between the upfront license payment and the first milestone payment as well as between each subsequent milestone payment (the Substantive Milestone Method).

Reimbursement of costs is recognized as revenue provided the provisions of EITF Issue No. 99-19 are met, the amounts are determinable and collection of the related receivable is reasonably assured.

The Company also recognized revenue from the National Institutes of Health (NIH), which was used to subsidize certain of the Company s research projects. NIH grant revenue was recognized as efforts were expended and as eligible project costs were incurred. The Company performed work under the NIH grants on a best-effort basis. Efforts under the Small Business Innovation Research, or SBIR, grant were completed in the first quarter of 2007. No additional grant revenue related to this grant will be recognized.

Stock-Based Compensation Employee Stock-Based Awards

Through December 31, 2005, the Company accounted for grants of stock options and restricted stock utilizing the intrinsic value method in accordance with Accounting Principle Board (APB) Opinion No. 25, *Accounting for Stock Issued to Employees* (APB 25), and, accordingly, recognized no compensation expense for an option when the option had an exercise price equal to or greater than the fair market value at the date of grant. Under APB 25, compensation expense was computed to the extent that fair market value of the underlying stock on the date of grant exceeded the exercise price of the employee stock option or stock award. Compensation so computed was then recognized on a straight-line basis over the vesting period. Through December 31, 2005, the Company had adopted the disclosure-only provisions of SFAS No. 123, *Accounting for Stock-Based Compensation (SFAS 123),* as amended by SFAS No. 148, *Accounting for Stock Based Compensation Transition and Disclosure* (SFAS 148).

Effective January 1, 2006, the Company adopted SFAS No. 123R, *Share-Based Payment* (SFAS 123R), which requires measurement and recognition of compensation expense for all stock-based awards made to employees and directors, including employee stock options and employee stock purchases under our 2006 Employee Stock Purchase Plan based on estimated fair values. SFAS 123R supersedes our previous method of accounting under APB 25. In March 2005, the Securities and Exchange Commission issued Staff Accounting Bulletin No. 107 (SAB 107) providing supplemental guidance for SFAS 123R implementation. The Company has applied the provisions of SAB 107 in our adoption of SFAS 123R.

Adoption of SFAS 123R was implemented utilizing modified prospective application (MPA). Under MPA, the Company applied SFAS 123R for new awards granted after December 31, 2005 and for any awards that were granted prior to December 31, 2005 but were still vesting after December 31, 2005. As of December 31, 2007, no liability awards have been granted.

The Company primarily grants qualified stock options for a fixed number of shares to employees with an exercise price equal to the market value of the shares at the date of grant. To the extent that the amount of the aggregate fair market value of qualified stock options that become exercisable for an individual exceeds $100 during any tax year, those stock options are treated as non qualified stock options. Under the fair value recognition provisions of Financial Accounting Standards No. 123 (revised 2004), *Share-Based Payment*, or SFAS 123R, stock-based compensation cost is based on the value of the portion of stock-based awards that is ultimately expected to vest during the period. Stock-based compensation expense recognized during the years ended December 31, 2007 and 2006 includes compensation expense for stock-based awards granted prior to, but not yet vested as of December 31, 2005, based on the fair value on the grant date estimated in accordance with the pro forma provisions of SFAS 123. Compensation expense also includes amounts related to the stock-based awards granted subsequent to December 31, 2005, based on the fair value on the grant date, estimated in accordance with the provisions of SFAS 123R.

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Upon adoption of SFAS 123R, the Company selected the Black-Scholes option pricing model as the most appropriate method for determining the estimated fair value for stock-based awards. The Black-Scholes model requires the use of assumptions which determine the fair value of the stock-based awards. Determining the fair value of stock-based awards at the grant date requires judgment, including estimating the expected term of stock options, the expected volatility of our stock and expected dividends. In addition, the Company previously accounted for forfeitures as they occurred. In accordance with SFAS 123R, the Company is required to estimate forfeitures at the grant date and recognize compensation costs for only those awards that are expected to vest. Judgment is required in estimating the amount of stock-based awards that are expected to be forfeited.

The Company uses the straight-line attribution method for allocating compensation cost under SFAS 123R which allocates expense on a straight-line basis over the requisite service period of the last separately vesting portion of an award.

The Company utilizes the simplified method for plain vanilla options as discussed within SAB 107. The Company believes that all factors listed within SAB 107 as pre-requisites for utilizing the simplified method are true for the Company and its share-based payment arrangements.

During the fourth quarter of 2007, the Company changed its calculation of volatility from peer group volatility to incorporate both a weighted average rate of historical volatility, and the volatility of its peer group. The Company s actual volatility from the end of its lock-up period to the end of the current reporting period is weighted as a percentage of actual time to the 6.1 year term, determined under the simplified method. The Company will continue to monitor these and other relevant factors used to measure expected volatility for future option grants.

The risk-free rate utilized when valuing share-based payment arrangements is based on the U.S. Treasury yield curve in effect at the time of grant for the expected term of the particular instrument being valued. This is consistent with the approach the Company utilized when valuing share-based payment awards reported via pro forma results for SFAS 123 and SFAS 148.

If factors change and the Company employs different assumptions in the application of SFAS 123R in future periods, the compensation expense recorded under SFAS 123R may differ significantly from what was recorded in the current period. Therefore, the Company believes it is important for investors to be aware of the degree of subjectivity involved when using option pricing models to estimate share-based compensation under SFAS 123R. There is risk that the Company s estimates of the fair values of its share-based compensation awards on the grant dates may differ from the actual values realized upon the exercise, expiration, early termination or forfeiture of those share-based payments in the future. Certain share-based payments, such as employee stock options, may expire worthless or otherwise result in zero intrinsic value as compared to the fair values originally estimated on the grant date and reported in our financial statements. Alternatively, value may be realized from these instruments that is significantly in excess of the fair values originally estimated on the grant date and reported in our financial statements. Although the fair value of employee share-based awards is determined in accordance with SFAS 123R and SAB 107 using an option pricing model, that value may not be indicative of the fair value observed in a willing buyer/willing seller market transaction.

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Had compensation cost for the Company s stock option plans been determined based on the fair value at the grant dates of awards under these plans consistent with the method prescribed by SFAS 123, the Company s net loss and pro forma net loss would have been as follows for the year ending December 31, 2005:

	Year Ended December 31, 2005
Net loss attributable to common shareholders as reported	$ (16,514)
Add: Stock-based employee compensation expense included in net loss	57
Less: Total stock based employee compensation expense determined under fair-value based methods for all awards	(391)
Pro Forma net loss attributable to common shareholders	$ (16,848)
Net loss per share attributable to common shareholders (basic and diluted):	
As Reported	$ (32.96)
Pro Forma	$ (33.63)

Accrued Expenses

As part of the process of preparing financial statements, the Company is required to estimate accrued expenses. This process involves identifying services which have been performed on our behalf and estimating the level of service performed and the associated cost incurred for such service as of each balance sheet date in our financial statements.

In accruing service fees, the Company estimates the time period over which services will be provided and the level of effort in each period. If the actual timing of the provision of services or the level of effort varies from the estimate, the Company will adjust the accrual accordingly. The majority of our service providers invoice us monthly in arrears for services performed. In the event that we do not identify costs that have begun to be incurred or the Company underestimates or overestimates the level of services performed or the costs of such services, our actual expenses could differ from such estimates. The date on which some services commence, the level of services performed on or before a given date and the cost of such services are often subjective determinations. The Company makes judgments based upon facts and circumstances known to us in accordance with GAAP.

Cash, Cash Equivalents and Restricted Cash

Cash and cash equivalents are stated at cost, which approximates market, and include short-term, highly-liquid investments with original maturities of less than three months. The Company also holds certificates of deposit, which collateralize the Company s facility lease which are classified as restricted cash in the accompanying balance sheets. The restricted cash will be released from restriction at various dates through 2010.

Marketable Securities and Equity Investments

The Company classifies its marketable securities as available for sale and carries these investments at fair value, using quoted market prices at the end of the reporting period. Unrealized gains or losses on these investments are included as a separate component of stockholders equity (deficit). The specific identification method is used to determine amortized cost in computing unrealized gain or loss. Investments are regularly reviewed to determine whether a decline in fair value below the cost basis is other than temporary. If the decline in fair value is judged to be other than temporary, the cost basis of the security is written down to fair value. The Company s marketable securities as of December 31, 2007, consisted of U.S. Government bonds and agency securities and short term corporate commercial paper. As of December 31, 2007, these securities had a maximum maturity of less than twelve months and none of the Company s investments were determined to be other than temporarily impaired.

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Fair Value of Financial Instruments

The Company s financial instruments, including cash, cash equivalents, accounts receivable, and accounts payable are carried at cost, which approximates their fair value because of the short-term maturity of these instruments.

Concentration of Risk

Concentration of credit risk exists with respect to cash and cash equivalents, accounts receivable, and investments. The Company maintains its cash and cash equivalents and investments with high quality financial institutions. At times, amounts may exceed federally insured deposit limits.

For the years ended December 31, 2007, 2006 and 2005, 99%, 90% and 97% of the Company s revenue was generated from an agreement with one collaboration partner (see Note 4) and at December 31, 2007 and 2006, 100% and 97% of accounts receivable was due from the same collaboration partner.

Fixed Assets

Property and equipment are recorded at cost and are depreciated and amortized over the shorter of their remaining lease term or their estimated useful lives on a straight-line basis as follows:

Laboratory equipment	4-7 years
Office equipment	3-5 years
Leasehold improvements	3-10 years

Expenditures for maintenance and repairs, which do not improve or extend the useful lives of the respective assets, are expensed as incurred. When assets are sold or retired, the related cost and accumulated depreciation are removed from their respective accounts and any resulting gain or loss is included in income (loss).

Long-lived Assets

SFAS No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets,* addresses the financial accounting and reporting for impairment or disposal of long-lived assets. The Company reviews the recorded values of long-lived assets for impairment whenever events or changes in business circumstance indicate that the carrying amount of an asset or group of assets may not be fully recoverable.

Research and Development Expenses

All costs associated with internal research and development, research and development services for which the Company has externally contracted and licensed technology are expensed as incurred. Research and development expense includes direct costs for salaries, employee benefits, subcontractors, including clinical research organizations (CROs), operating supplies, facility-related expenses and depreciation.

Patent Costs

The Company expenses the costs of obtaining patents.

Convertible Preferred Stock

The carrying value of convertible preferred stock was increased by periodic accretion to account for accrued but unpaid dividends (see Note 10.) These increases were effected through charges against additional paid-in-capital, if any, and then accumulated deficit.

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In connection with the 2006 initial public offering, the Company s outstanding shares of Series A, Series B, Series C, Series C-1 and Series C-2 Convertible Preferred Stock were converted into 9,834 shares of common stock, including shares issued in satisfaction of $15,400 of accrued but unpaid dividends on the Preferred Stock as of October 31, 2006, the closing date of the initial public offering (see Note 1).

Comprehensive Loss

The Company reports and presents comprehensive loss in accordance with SFAS No. 130, *Reporting Comprehensive Income*, which establishes standards for reporting and display of comprehensive loss and its components in a full set of general purpose financial statements. The objective of the statement is to report a measure of all changes in equity of an enterprise that result from transactions and other economic events of the period other than transactions with owners (comprehensive loss). The Company s other comprehensive loss arises from net unrealized gains on marketable securities.

Details relating to unrealized gains and losses and other comprehensive loss are as follows (in thousands):

	Years Ended December 31,		
	2007	2006	2005
Net loss	$ (28,102)	$ (24,086)	$ (13,575)
Change in unrealized gain arising during the year	33	18	3
Total comprehensive loss	$ (28,069)	$ (24,068)	$ (13,572)

Income Taxes

The Company uses an asset and liability approach for financial accounting and reporting of income taxes. Deferred tax assets and liabilities are determined based on temporary differences between financial reporting and tax basis assets and liabilities and are measured by applying enacted rates and laws to taxable years in which differences are expected to be recovered or settled. Further, the effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date.

Effective January 1, 2007, the Company adopted Financial Accounting Standards Board (FASB) Interpretation No.48, *Accounting for Uncertainty in Income Taxes an interpretation of FASB Statement No.109,* or FIN 48. FIN 48 prescribes a comprehensive model for how a company should recognize, measure, present, and disclose in its financial statements uncertain tax positions that the company has taken or expects to take on a tax return (including a decision whether to file or not file a return in a particular jurisdiction). Under FIN 48, the financial statements reflect expected future tax consequences of such positions presuming the taxing authorities full knowledge of the position and all relevant facts.

As a result of implementation of FIN 48, the Company recognized a decrease of $180 in its liability for unrecognized tax benefits, which was accounted for as a decrease to the January 1, 2007 retained deficit. The Company does not have any unrecognized tax benefits as of the date of adoption or December 31, 2007. The Company reviews all tax positions to ensure the tax treatment selected is sustainable based on its technical merits and that the position would be sustained if challenged.

Segment Information

The Company is engaged solely in the discovery and development of innovative anti-infective drug therapies. Accordingly, the Company has determined that it operates in one operating segment.

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Recently Issued Accounting Pronouncements

In September 2006, the FASB issued SFAS No.157, *Fair Value Measurements.* SFAS No. 157 defines fair value, establishes a framework for measuring fair value in generally accepted accounting principles, and expands disclosures about fair value measurements. The standard is effective for financial statements issued for fiscal years beginning after November 15, 2007 and interim periods within those fiscal years. On December 14, 2007, the FASB issued a proposed FASB Staff Position that would amend SFAS 157 to delay the effective date of Statement 157 for all non-financial assets and non-financial liabilities, except those that are recognized or disclosed at fair value in the financial statements on a recurring basis (at least annually). On February 12, 2008, the FASB issued FASB Staff Position (FSP) FAS 157-2. This FSP permits a delay in the effective date of SFAS 157 to fiscal years beginning after November 15, 2008, for nonfinancial assets and nonfinancial liabilities, except for items that are recognized or disclosed at fair value in the financial statements on a recurring basis (at least annually). The Company does not believe that its adoption will have a material impact on the Company s financial statements.

In February 2007, the FASB issued SFAS No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities*. SFAS No. 159 permits an entity to elect to report many financial assets and liabilities at fair value. Entities electing the fair value option would be required to recognize changes in fair value in earnings and are required to distinguish, on the face of the statement of financial position, the fair value of assets and liabilities for which the fair value option has been elected and similar assets and liabilities measured using another measurement attribute. The initial adjustment to reflect the difference between the fair value and the carrying amount would be accounted for as a cumulative-effect adjustment to retained earnings as of the date of initial adoption. SFAS No. 159 is effective as of the beginning of an entity s first fiscal year beginning after November 15, 2007. The Company is currently evaluating the impact, if any, of FAS 159 on its financial statements.

In June 2007, the Emerging Issues Task Force, or EITF, reached a consensus on EITF Issue No. 07-03, *Accounting for Nonrefundable Advance Payments for Goods or Services to Be Used in Future Research and Development Activities*. EITF 07-03 concludes that non-refundable advance payments for future research and development activities should be deferred and capitalized until the goods have been delivered or the related services have been performed. If an entity does not expect the goods to be delivered or services to be rendered, the capitalized advance payment should be charged to expense. This consensus is effective for new contracts entered into after January 1, 2008. The Company does not believe that adoption of EITF 07-03 in the first quarter of 2008 will have a material impact on its financial statements.

In December 2007 the EITF, reached a consensus on EITF Issue No. 07-01, Accounting for Collaborative Arrangements Related to the Development and Commercialization of Intellectual Property, or EITF 07-01. EITF- 07-01 prescribes the accounting for collaborations. It requires certain transactions between collaborators to be recorded in the income statement on either a gross or net basis within expenses when certain characteristics exist in the collaboration relationship. EITF 07-01 is effective for our collaborations existing after January 1, 2009. The Company is currently evaluating the impact this standard will have on its financial statements.

In December 2007, the FASB issued SFAS No. 141R, Business Combinations, which changes the accounting for business acquisitions. SFAS No. 141R requires the acquiring entity in a business combination to recognize all (and only) the assets acquired and liabilities assumed in the transaction and establishes the acquisition-date fair value as the measurement objective for all assets acquired and liabilities assumed in a business combination. Certain provisions of this standard will, among other things, impact the determination of acquisition-date fair value of consideration paid in a business combination (including contingent consideration); exclude transaction costs from acquisition accounting; and change accounting practices for acquired contingencies, acquisition-related restructuring costs, in-process research and development, indemnification assets, and tax benefits. SFAS No. 141R is effective for business combinations and adjustments to an acquired entity s deferred tax asset and liability balances occurring after December 31, 2008. The Company is currently evaluating the impact, if any, of SFAS 141R on our financial statements.

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In December 2007, the FASB issued SFAS No. 160, Noncontrolling Interests in Consolidated Financial Statements, an amendment of ARB No. 51, which establishes new standards governing the accounting for and reporting of noncontrolling interests (NCIs) in partially owned consolidated subsidiaries and the loss of control of subsidiaries. Certain provisions of this standard indicate, among other things, that NCIs (previously referred to as minority interests) be treated as a separate component of equity, not as a liability; that increases and decrease in the parent s ownership interest that leave control intact be treated as equity transactions, rather than as step acquisitions or dilution gains or losses; and that losses of a partially owned consolidated subsidiary be allocated to the NCI even when such allocation might result in a deficit balance. This standard also requires changes to certain presentation and disclosure requirements. SFAS No. 160 is effective for fiscal years beginning after December 31, 2008. The Company does not believe that our adoption of SFAS 160 will have an impact on our financial statements.

In December 2007, the SEC issued Staff Accounting Bulletin No. 110 (SAB 110). SAB 110 expresses the views of the staff regarding the use of a simplified method, as discussed in SAB No. 107 (SAB 107), in developing an estimate of expected term of plain vanilla share options in accordance with Statement of Financial Accounting Standards No. 123 (revised 2004), *Share-Based Payment*. In particular, the SEC staff will continue to accept, under certain circumstances, the use of the simplified method in developing an estimate of expected term of plain vanilla share options beyond December 31, 2007. The Company intends to apply the provisions of SAB 110 and does not believe that our adoption will have an impact on our financial statements.

3. Earnings (Loss) Per Share (EPS)

Basic EPS is calculated in accordance with SFAS No. 128, *Earnings per Share*, by dividing net income or loss attributable to common stockholders by the weighted average common stock outstanding. Diluted EPS is calculated in accordance with SFAS No. 128 by adjusting weighted average common shares outstanding for the dilutive effect of common stock options, warrants, convertible preferred stock and accrued but unpaid convertible preferred stock dividends. In periods where a net loss is recorded, no effect is given to potentially dilutive securities, since the effect would be antidilutive. Total securities that could potentially dilute basic EPS in the future that were not included in the computation of diluted EPS because to do so would have been antidilutive were as follows (prior to consideration of the treasury stock method):

	Years Ended December 31,		
	2007	2006	2005
Options	1,857	1,208	864
Warrants	311	336	315
Convertible Preferred Stock, as converted			6,936
Accrued but unpaid Convertible Preferred Stock dividends			846
Total potentially dilutive securities outstanding	2,168	1,544	8,961

4. Collaboration Arrangement

In November 2004, the Company entered into a collaboration arrangement (the Gilead Arrangement) with Gilead Sciences Inc. (Gilead) to jointly develop and commercialize compounds for use in treating hepatitis C infection which inhibit viral replication through a specified novel mechanism of action. Commercialization efforts will commence only if such compounds are found to be commercially viable and all appropriate regulatory approvals have been obtained. In connection with this arrangement, Gilead paid to the Company $10,000 as payment for both a non-refundable upfront licenses fee and 2,300 shares of Series C-1 Convertible Preferred Stock (Series C-1).

Under the Gilead Arrangement, the Company and Gilead are working together to develop one or more compounds for use in treating hepatitis C infection until proof-of-concept in one compound, as defined, is achieved (the Research Period). Subsequent to the achievement of proof-of-concept, the Company has no

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further obligation to continue providing services to Gilead but, at Gilead s request, the Company may elect to extend the Research Period for up to an additional two years after proof-of-concept is established, based upon good faith negotiations at that point in time. Further, if it is agreed that potential back-up compounds should continue to be researched, good faith negotiations would also be conducted to determine the specifics of any arrangement to continue to research backup compounds.

Gilead has agreed to make milestone payments to the Company upon the achievement of various defined clinical, regulatory and commercial milestones, such as regulatory approval in the United States, the European Union, or Japan. The Company could receive up to $157,500 in development, regulatory and sales milestone payments, assuming the successful simultaneous development of a lead and back-up compound, and annual sales in excess of $600,000. The Company could also receive royalties on net sales of products if commercialization is achieved.

The up-front payment of $10,000, received in 2004, was first allocated to the fair value of the Series C-1, as determined by management after considering a valuation analysis performed by an unrelated third-party valuation firm, Fletcher Spaght, at the direction of the Company, in which each share of the Series C-1 was determined to be worth $0.88 per share, or approximately $2,000 in aggregate. The remaining $8,000 balance of the $10,000 is being accounted for as a non-refundable up-front license fee. Due to certain provisions contained within the Gilead Arrangement relating to services to be performed on both the primary and backup compounds, as defined in the Gilead Arrangement, the non-refundable up-front license fee of $8,000, as well as a $2,000 milestone achieved during the Research Period, is being accounted for under the proportionate performance model. Future milestones, if any, will occur after the Research Period and are not accounted for under the proportionate performance model. Revenue recognized under the proportionate performance model is limited by the aggregate cash received or receivable to date by the Company. Milestones achieved, if any, after the termination of the Research Period, will be recognized when the milestone is achieved as the Company has no further research or development obligations after the Research Period.

Under the Gilead Arrangement through March 31, 2007, agreed upon research or development expenses, including internal full-time equivalent (FTE) costs and external costs, incurred by both companies during the period up to proof-of-concept were borne equally by both parties. Prior to March 31, 2007, the Company was incurring the majority of those expenses and, therefore, was the net receiver of funds under this cost-sharing portion of the arrangement. Effective April 1, 2007, internal full-time equivalent costs are no longer subject to this cost-sharing arrangement. Instead, each party bears its own internal costs, including FTE costs. External costs continue to be shared equally by both parties. In March 2007, the Company and Gilead also revised their joint research program to focus on next-generation NS4A antagonists, after discontinuing clinical trials for ACH-806, an NS4A antagonist the Company was previously evaluating. In the most recently updated project plan, approved by the Joint Research Committee in December 2007, the Company s remaining obligations under the plan continue through mid 2009.

Gilead has the right to terminate the agreement without cause upon 120 days written notice to the Company. Upon termination of the agreement for any reason, all cost share amounts due and payable through the date of termination shall be paid by the appropriate party and no previously paid amounts will be refundable.

During the years ended December 31, 2007, 2006 and 2005, the Company recognized revenue of $4,003, $2,978 and $8,277, respectively, under this collaboration agreement, respectively, of which $2,091, $1,511 and $4,328, respectively, related to the recognition of the non-refundable upfront fee and a pre-proof-of-concept milestone under the proportionate performance model. The remaining $1,912, $1,468 and $3,949 recognized during 2007, 2006 and 2005, respectively, relate to FTE reimbursements recognized under the proportionate performance model and external costs billed under the Gilead Arrangement, net of payments made to Gilead of $462, $1,646 and $725 for the years ended December 31, 2007, 2006 and 2005, respectively. Payments to Gilead under this collaboration are recognized as a reduction in revenue.

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Included in the accompanying 2007 and 2006 balance sheets are $136 and $772, respectively, of accounts receivable resulting from this collaboration agreement and $2,570 and $5,265, respectively, of deferred revenue resulting from the up-front fee, a milestone payment, and FTE costs. In addition to Gilead s rights to unilaterally terminate this agreement, each party has the right to terminate for material breach; however, the Company may terminate for Gilead s breach only on a market-by-market basis, and, if applicable, a product-by-product basis.

5. Marketable Securities

The Company classifies its entire investment portfolio as available for sale as defined in SFAS No. 115, Accounting for Certain Investments in Debt and Equity Securities. As of December 31, 2007 and 2006, the Company s investment portfolio consisted of U.S. government and agency securities and short term corporate commercial paper held by a major banking institution. The maturities of all marketable securities held at December 31, 2007 are less than one year.

Securities are carried at fair value with the unrealized gains (losses) reported as a separate component of stockholders equity. The unrealized gain from marketable securities was $51 and $18 at December 31, 2007 and 2006, respectively.

The following table summarizes our investments:

	As of December 31,					
	Amortized Cost	2007 Unrealized Gain (Loss)	Estimated Fair Value	Amortized Cost	2006 Unrealized Gain (Loss)	Estimated Fair Value
Commercial Paper	$ 18,330	$ 53	$ 18,383	$ 35,436	$ 20	$ 35,456
Corporate bonds	3,757	(2)	3,755	4,450	(2)	4,448
Total	$ 22,087	$ 51	$ 22,138	$ 39,886	$ 18	$ 39,904

As of December 31, 2007 and 2006, none of the Company s investments were determined to be other than temporarily impaired.

6. Other Current Assets

A summary of other current assets is as follows:

	As of December 31,	
	2007	2006
Prepaid research and development costs	$ 160	$ 768
Tax credit receivable	1,036	68
Maintenance agreements	289	272
Prepaid other	186	394
Total	$ 1,671	$ 1,502

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7. Fixed Assets

A summary of property and equipment is as follows:

	As of December 31, 2007	2006
Laboratory equipment	$ 3,695	$ 4,331
Office equipment	601	786
Leasehold improvements	3,495	2,919
	7,791	8,036
Less accumulated depreciation and amortization	(5,316)	(6,070)
Total	$ 2,475	$ 1,966

Depreciation expense was $750, $762 and $955 for the years ended December 31, 2007, 2006 and 2005, respectively.

8. Accrued Expenses

Current and long-term accrued expenses consist of the following:

	As of December 31, 2007	2006
Accrued compensation	$ 720	$ 749
Accrued research and development expenses	1,618	1,425
Accrued professional	294	296
Other accrued expenses	246	509
Total	$ 2,878	$ 2,979

Accrued clinical trial and preclinical trial expenses are comprised of amounts owed to third-party contract research organizations or CROs , clinical investigators, laboratories and data managers for research and development work performed on behalf of the Company. At each period end the Company evaluates the accrued clinical trial expense balance based upon information received from each third party and ensures that the estimated accrual balance is reasonably stated based upon the information available to the Company. Such estimates are subject to change as additional information becomes available.

9. Debt

Debt consists of the following:

	As of December 31, 2007	2006
CII Term Loan, payable in monthly installments of $13 through September 2010 with a final balloon payment of $686, with interest at 7.5% per annum	$ 933	$ 1,015
2003 Credit Facility, payable in monthly installments as the individual notes mature through May 2008, with interest ranging from 7.75% to 9.06% per annum	675	458
2005 Credit Facility, payable in monthly installments as notes mature through December 2009, with interest of 10.92% to 11.58% per annum	4,955	7,346

Other debt agreements, payable in monthly installments through October 2007 with interest ranging from 7.5% to 10.17% per annum		
Total long-term debt	6,563	8,899
Less: current portion	(6,563)	(3,572)
Total long-term debt, net of current portion	$	$ 5,327

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During November 2000, the Company entered into a $1,400 term loan (CII Term Loan) with Connecticut Innovations, Inc. (CII), a stockholder of the Company. The CII Term Loan is collateralized by personal and real property located at the Company s facility in New Haven, Connecticut. The current carrying value of the personal and real property located at the Company s facility that acts as collateral for the loan was $487 as of December 31, 2007. The CII Term Loan contains certain non-financial covenants, including the requirement that the Company maintain its principal place of business and conduct the majority of its operations in Connecticut (Connecticut Presence). If the Company fails to maintain its Connecticut Presence, all amounts due under the CII Term Loan shall be immediately due and payable. Maintaining a Connecticut Presence is within management s control, and the Company currently has no plans to relocate the majority of its operations.

In 2003, the Company entered into a credit facility with Webster Bank (2003 Credit Facility) for the purchase of capital equipment. The purchased equipment serves as collateral for credit facility. In December 2007, the Company expanded the 2003 Credit Facility, drawing down an additional $415 for the purchase of capital equipment. The purchased equipment serves as collateral for the credit facility.

On December 30, 2005, the Company entered into a credit facility with two lenders (2005 Credit Facility). In connection therewith, the Company issued warrants to purchase 167 shares of Series C-2 at an exercise price of $1.50 per share. Following the Company s initial public offering, these automatically converted to warrants to purchase 21 shares of common stock at an exercise price of $12.00 (See Note 10).

In May 2006, the Company expanded the 2005 Credit Facility, drawing down an additional $5,000 to fund the Company s working capital needs and issued warrants to purchase an additional 167 shares of Series C-2 at an exercise price of $1.50 per share. Following the Company s initial public offering, these automatically converted to warrants to purchase 21 shares of common stock at an exercise price of $12.00 (See Note 10). In June 2007, the Company again expanded the 2005 Credit Facility, drawing down an additional $800 to fund an office and lab expansion project. Substantially all of the Company s tangible assets are collateral for the 2005 Credit Facility.

All of the Company s debt agreements contain certain subjective acceleration clauses, which upon the occurrence of a material adverse change in the financial condition, business or operations of the Company in the view of the lenders (Material Adverse Change), may cause amounts due under the agreement to become immediately due and payable. As stated in Note 1, the Company will need additional financing to fund operations which the Company will seek to raise through public or private equity or debt financings, collaborative or other arrangements with third parties or through other sources of financing. There can be no assurance that such funding will be available on terms favorable to the Company, if at all. As such funding cannot be assured, the Company s debt balances have been classified as short term at December 31, 2007. The Company has no indication that it is in default of any such clauses and none of the Company s lenders have accelerated scheduled loan payments as a result of these provisions.

10. Capital Structure

Preferred Stock

At December 31, 2007, the Company had 5,000 authorized shares of undesignated Preferred Stock of which no shares were issued and outstanding. Immediately prior to the Company s initial public offering, the Company had 80,620 authorized shares of Convertible Preferred Stock, of which 250, 15,817, 22,436, 2,300 and 24,000 were designated as Series A, Series B, Series C, Series C-1 and Series C-2 shares, respectively, and 250, 15,817, 22,418, 2,300 and 23,425, respectively, were issued and outstanding.

In October 2006, the Company completed an initial public offering of its common stock. In connection with the initial public offering, the then outstanding shares of Series A, Series B, Series C, Series C-1 and Series C-2 Convertible Preferred Stock (the Preferred Stock) were converted into 9,834 shares of common stock, including shares issued in satisfaction of $15,400 of accrued but unpaid dividends on the Preferred Stock as of

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October 31, 2006, the closing date of the initial public offering transaction. In addition, outstanding warrants to purchase Series C preferred stock were automatically converted into a warrant to purchase 3 shares of the Company s common stock at an exercise price of $12.11 per share, and outstanding warrants to purchase Series C-2 preferred stock were automatically converted into warrants to purchase 42 shares of the Company s common stock at an exercise price of $12.00 per share.

In March 2006 and May 2006, the Company raised $18,224, net of $182 of issuance costs, through the issuance of 12,271 shares of Series C-2 Preferred Stock, under a second and third closing of the Series C-2 financing. Per share price, rights and preferences were the same as those offered in a November 2005 close of the Series C-2 financing.

During 2005, the Company issued 3,563 shares of Series C-2 Preferred stock, raising $5,289, net of issuance costs. As part of this issuance, holders of convertible notes converted all outstanding principal and interest, totaling $11,400, into an additional 7,592 shares of Series C-2 Preferred Stock at a conversion price of $1.50 per share. As part of this issuance, the purchasers of the Series C-2 Preferred Stock committed to purchase, subject to the satisfaction of certain representations and warranties, an additional 3,104 shares of Series C-2 at identical terms during a second closing to be held before June 30, 2006. The Company determined that the fair value of this option to purchase additional shares was de minimus both at the time of issuance and at December 31, 2005.

During 2004, the Company issued 2,300 shares of Series C-1 Preferred Stock in connection with the collaboration agreement with Gilead Sciences, Inc. The Company determined, after considering an unrelated third party valuation, that the fair value of these newly issued shares of the Company s Series C-1 Convertible Preferred Stock was $0.88 per share, or $2,000 in aggregate. The stated terms of the agreement with Gilead provided that accrued dividends, liquidation rights, and conversion rights related to these shares be based upon a $2.17 per share price, as discussed in the significant terms section below.

The significant terms of the Series A, Series B, Series C, Series C-1 and Series C-2 were as follows, prior to the conversion of the preferred into common stock in connection with the company s initial public offering.

Dividends. Through October 31, 2006, cumulative dividends accrued whether or not declared, except with respect to the Series A. When and if declared by the board of directors, such accrued but unpaid dividends would be payable in cash. Upon an optional conversion at the option of the holder, or a mandatory conversion in connection with a firm commitment underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933, all such accrued but unpaid dividends on the Series B, Series C, Series C-1 and Series C-2 preferred stock would be payable in additional shares of Series B, Series C, Series C-1 and Series C-2 preferred stock calculated by dividing the accrued but unpaid dividends by $1.81, $1.81, $2.17 and $1.50, respectively. Upon the Company s initial public offering, such shares of Series B, Series C, Series C-1 and Series C-2 would then automatically convert into shares of common stock. Given that conversion of the preferred stock was at the option of the holder at any time, and that upon conversion the holder was entitled to receive cumulative accrued but unpaid dividends, and given that the Company had the option to declare and pay such dividends in cash, the Company s policy had been to accrue dividends at the stated dividend rates.

Each share of Series B, Series C and Series C-1 earned cumulative dividends at 4% per annum. Each share of Series C-2 earned cumulative dividends at 8% per annum. No dividends or other distributions were made with respect to the Series A or the common stock. The following reflects dividends accrued prior to the Company s initial public offering:

	Years ended December 31,	
	2006	2005
Series B	$ 792	$ 949
Series C	1,349	1,623
Series C-1	166	200
Series C-2	1,856	167
Total	$ 4,163	$ 2,939

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Upon the closing of the Company s initial public offering 8,722 shares of convertible preferred stock were issued to the holders of our series B, series C, series C-1 and series C-2 convertible preferred stock in satisfaction of $15,442 of accumulated dividends.

Conversion. At the option of the holder, the Series A, Series B, Series C, Series C-1 and Series C-2 stockholders could elect to convert their preferred shares into common stock at an initial conversion price of $1.00, $1.50, $1.81, $2.17 and $1.50 per share, respectively, subject to certain anti-dilution adjustments, as defined.

The Company had determined that none of its preferred stock required liability classification under SFAS 150, *Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity*, as the preferred stock outstanding had no date certain mandatory redemption that was unconditional. In addition, the Company had determined there had been no beneficial conversion features related to any of its outstanding preferred stock from each date of issuance through October 31, 2006, the date of conversion.

Common Stock

At December 31, 2007 and 2006, the Company had 100,000 authorized shares of $0.001 par value common stock. There are 2,431 shares reserved for future exercise of outstanding stock options, warrants and shares available for issuance under the Company s 2006 Employee Stock Purchase Plan.

In October 2006, the Company amended its articles of incorporation to effect a 1-for-8 reverse stock split of outstanding common stock. Such reverse stock split had been previously approved by the Company s Board of Directors in September 2006. Such reverse stock split has been retroactively reflected within the accompanying financial statements. As a result of the reverse stock split, the conversion ratios of the Company s preferred stock changed as follows:

	Prior	After
Series A	1 : 1	1 : 0.1250
Series B	1 : 1	1 : 0.1250
Series C	1 : 1.196	1 : 0.1495
Series C-1	1 : 1.196	1 : 0.1495
Series C-2	1 : 1	1 : 0.1250

Warrants

A summary of the status of the Company s warrant activity for the years ended December 31, 2005, 2006 and 2007 is presented in converted amounts below:

	Shares Attributable to Warrants	Weighted Average Exercise price
Outstanding at January 1, 2005	319	$ 4 .92
Granted	21	12 .00
Exercised		
Expired	(25)	1.20
Outstanding at December 31, 2005	315	$ 5.68
Granted	21	12.00
Exercised		
Expired		
Outstanding at December 31, 2006	336	$ 6.08
Granted		
Exercised	(25)	11.57
Expired		

Outstanding at December 31, 2007	311	$	5.64

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As part of the 2005 Credit Facility, the Company issued a warrant to the lenders to purchase 167 shares of Series C-2 Preferred Stock exercisable for a period of seven years at an exercise price of $1.50 per share. Following the Company s initial public offering, these automatically converted to a warrant to purchase 21 shares of Common Stock at an exercise price of $12.00 per share. The relative fair value of such warrants at the date of issuance was estimated to be $174, utilizing the Black-Scholes method, using assumptions similar to those outlined in Note 2. Such value was recorded as a debt discount which is being amortized as interest expense over the life of the related obligation.

In May 2006, the Company expanded the 2005 Credit Facility and issued warrants to purchase an additional 167 shares of Series C-2 at an exercise price of $1.50 per share. Following the Company s initial public offering, these automatically converted to a warrant to purchase 21 shares of Common Stock at an exercise price of $12.00 per share. The relative fair value of such warrants at the date of issuance was estimated to be $174, utilizing the Black-Scholes method, using assumptions similar to those outlined in Note 2. Such value was recorded as a debt discount which is being amortized as interest expense over the life of the related obligation.

The Company s preferred stock warrants were marked to market through the date of the Company s initial public offering in October 2006, at which point, these warrants automatically converted to warrants to purchase shares of Common Stock.

11. Stock-Based Compensation

1998 Stock Option Plan

The Company s 1998 stock option plan, or the 1998 Plan, as amended and restated, was adopted by the Company s board of directors in January 2000 and approved by its stockholders in March 2000. A maximum of 1,094 shares of common stock were authorized for issuance under the 1998 Plan.

The 1998 Plan, as amended, provided for the grant of options intended to qualify as incentive stock options under Section 422 of the Internal Revenue Code of 1986, as amended, and nonqualified stock options. The Company s employees, officers, directors, consultants and advisors were eligible to receive options under the 1998 plan. Under present law, however, incentive stock options may only be granted to the Company s employees. The Plan was administered by the Company s board of directors.

Following the adoption of the 2006 stock incentive plan described below, the Company no longer grants stock options or other awards under the 1998 Plan.

2006 Stock Incentive Plan

The Company s 2006 stock incentive plan, or the 2006 Plan, was adopted by the Company s board of directors in May 2006, amended by its board of directors in September 2006, approved by its stockholders in September 2006 and became effective in October 2006, upon the closing of our initial public offering. The Company originally reserved for issuance 750 shares of common stock under the 2006 Plan. In addition, the Plan contains an evergreen provision, which allows for an annual increase in the number of shares available for issuance under the plan on the first day of each fiscal year during the period beginning on the first day of fiscal year 2007 and ending on the second day of fiscal year 2010. The annual increase in the number of shares shall be equal to the lowest of:

750 shares;

a number of shares that, when added to the number of shares already reserved under the plan, equals 5% of our outstanding shares as of such date; or

an amount determined by the Company s board of directors.

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The 2006 Plan provides for the grant of incentive stock options, nonstatutory stock options, restricted stock, restricted stock units, stock appreciation rights and other stock-based awards. The Company s officers, employees, consultants, advisors and directors, and those of any subsidiaries, are eligible to receive awards under the 2006 Plan; however, incentive stock options may only be granted to our employees.

The Company s board of directors administers the 2006 Plan, although it may delegate its authority to a committee. The board, or a committee to which it has delegated its authority, will select the recipients of awards and determine, subject to any limitations in the 2006 Plan:

- the number of shares of common stock covered by options and the dates upon which those options become exercisable;
- the exercise prices of options;
- the duration of options;
- the methods of payment of the exercise price; and
- the number of shares of common stock subject to any restricted stock or other stock-based awards and the terms and conditions of those awards, including the conditions for repurchase, issue price and repurchase price.

Options granted under the Company s 1998 Stock Option Plan and 2006 Stock Option Plan (the Plans), are exercisable for a period determined by the Company, but in no event longer than ten years from the date of the grant. Options generally vest ratably over four years.

Under the evergreen provision, the Company registered an additional 438 shares of common stock to be issued under the Company s 2006 plan in March 2007. There were 47 shares available under the Plans as of December 31, 2007.

A summary of the status of the Company s stock option activity for the year ended December 31, 2007 is presented in the table and narrative below:

	2007	
	Options	Weighted Average Exercise Price
Outstanding at January 1, 2007	1,208	$ 6.53
Granted	772	5.17
Exercised	(59)	1.73
Forfeited/Cancelled	(64)	10.84
Outstanding at December 31, 2007	1,857	$ 5.97
Options exercisable at December 31, 2007	686	$ 4.42
Options vested and expected to vest at December 31, 2007	1,733	$ 5.93
Weighted-average fair value of options granted during the period		$ 3.03

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The following table summarizes information about stock options outstanding at December 31, 2007:

	Options Outstanding			Options Vested	
Range of Exercise Prices	Number Outstanding	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price	Number Vested	Weighted Average Exercise Price
$ 1.00 $ 1.99	500	5.9	$ 1.59	429	$ 1.59
$ 4.00 $ 4.99	811	9.4	4.61	108	4.00
$ 5.00 $ 5.99	143	9.5	5.72	15	5.76
$ 7.00 $ 7.99	30	9.7	7.38	19	7.41
$ 14.00 $14.99	368	9.0	14.75	115	14.75
$ 19.00 $19.99	5	9.1	19.00		
	1,857	8.4	$ 5.97	686	$ 4.42

As of December 31, 2007, the intrinsic value of the options outstanding was $2,011, of which $1,568 related to vested (exercisable) options and $443 related to unvested options. The intrinsic value of options vested and expected to vest is $1,943. The intrinsic value for stock options is calculated based on the difference between the exercise prices of the underlying awards and the quoted stock price of our common stock as of the reporting date.

The total intrinsic value, the amount by which the stock price exceeds the exercise of the option on the date of exercise, of stock options exercised for the years ended December 31, 2007, 2006 and 2005 was $254, $172 and $65, respectively.

The weighted-average grant-date fair value of options granted during the years ended December 31, 2007 and 2006 was $3.03 and $9.82, respectively. The weighted-average grant-date fair value of options vested at December 31, 2007 and 2006 was $3.97 and $2.67, respectively.

The weighted average remaining contractual life is 6.9 years for options exercisable and 8.4 years for options vested and expected to vest.

2006 Employee Stock Purchase Plan

The Company established an Employee Stock Purchase Plan effective December 1, 2006 (the 2006 ESPP Plan). A total of 250 shares of common stock are available for issuance under the 2006 ESPP Plan. Eligible employees can purchase common stock pursuant to payroll deductions at a price equal to 85% of the lower of the fair market value of the common stock at the beginning or end of each six-month offering period.

The Company measures the fair value of issuances under the employee stock purchase plan using the Black-Scholes option pricing model at the end of each reporting period. The compensation cost for the Plan consists of the discount (15% of the grant date stock price) and the fair value of the option features. The assumptions used to value issuances under the Plan are based on an expected term of six months. Volatility for the year ended December 31, 2007 ranged from 46% to 56%. The Company recorded compensation cost of $54 and $12 for the years ended December 31, 2007 and 2006, respectively. As of December 31, 2007, 216 shares remained available for future issuance under the 2006 ESPP Plan.

Stock Based Compensation

Effective January 1, 2006, the Company adopted SFAS 123R, Share-Based Payment , which requires measurement and recognition of compensation expense for all stock-based awards made to employees and directors, including employee stock options and employee stock purchases under our 2006 ESPP Plan based on estimated fair values. SFAS 123R supersedes our previous method of accounting under APB 25. In March 2005, the SEC issued SAB 107 providing supplemental guidance for SFAS 123R implementation. We applied the provisions of SAB 107 in our adoption of SFAS 123R.

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Under the fair value recognition provisions of SFAS No. 123R, stock-based compensation cost is based on the value of the portion of stock-based awards that is ultimately expected to vest during the period. Stock-based compensation expense recognized during the years ended December 31, 2007 and 2006 includes compensation expense for stock-based awards granted prior to, but not yet vested as of December 31, 2005, based on the fair value on the grant date estimated in accordance with the pro forma provisions of SFAS 123, and compensation expense for the stock-based awards granted subsequent to December 31, 2005, based on the fair value on the grant date, estimated in accordance with the provisions of SFAS 123R.

Upon adoption of SFAS 123R, the Company selected the Black-Scholes option pricing model as the most appropriate method for determining the estimated fair value for stock-based awards. The Black-Scholes model requires the use of assumptions which determine the fair value of the stock-based awards. Determining the fair value of stock-based awards at the grant date requires judgment, including estimating the expected term of stock options, the expected volatility of our stock and expected dividends. In addition, the Company previously accounted for forfeitures as they occurred. In accordance with SFAS 123R, the Company is required to estimate forfeitures at the grant date and recognize compensation costs for only those awards that are expected to vest. Judgment is required in estimating the amount of stock-based awards that are expected to be forfeited. The assumptions used to value options granted are as follows:

	For the Years Ended December 31,		
	2007	2006	2005
Expected term of option	6.1 years	6.1 years	5 years
Expected volatility	64% - 70%	70%	70%
Risk free interest rate	3.58-4.94%	4.69-4.83%	4.30%
Expected dividend yield	0%	0%	0%

Total compensation expense recorded in the accompanying statements of operations associated with option grants made to employees for the years ended December 31, 2007 and 2006 was $1,662 and $968, respectively. The Company recorded no tax benefit related to these options since the Company currently maintains a full valuation allowance.

As of December 31, 2007, the total compensation cost related to nonvested options not yet recognized in the financial statements is approximately $5,501, net of estimated forfeitures, and the weighted average period over which it is expected to be recognized is 1.65 years.

The Company also occasionally grants stock option awards to consultants. Such grants are accounted for pursuant to EITF Issue No. 96-18, *Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services*, and, accordingly, we recognize compensation expense equal to the fair value of such awards and amortize such expense over the performance period. We estimate the fair value of each award using the Black-Scholes model. The unvested equity instruments are revalued on each subsequent reporting date until performance is complete, with an adjustment recognized for any changes in their fair value. We amortize expense related to non-employee stock options in accordance with FASB Interpretation 28. Total expense for the years ended December 31, 2007, 2006, and 2005 was $36, $45 and $13, respectively.

12. License and Research and Development Agreements

The Company has entered into certain license and collaborative research agreements with third parties relating to the Company s drug discovery and development initiatives. Under these agreements, the Company has been granted certain worldwide exclusive licenses to use the licensed compounds or technologies. Included in the accompanying 2007, 2006 and 2005 statements of operations is $95, $27 and $311, respectively, of research and development expense resulting from these arrangements, respectively. In order to maintain its rights under these agreements, and provided that the Company does not terminate such agreements, the Company may also be

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required to pay an additional $570 of aggregate minimum payments over the next five years. The Company may also be required to make future payments to these licensors upon achievement of certain product development milestones for anti-viral products utilizing the third party s intellectual property, as well as pay royalties on future net sales, if any.

13. Commitments

401(k) Retirement Plan

The Company has a 401(k) defined contribution retirement plan covering substantially all full-time employees. The Company currently matches employee contributions at a rate of $0.50 cents for each dollar contribution, up to 6% of salary deferrals. However, the decision to match any employee contributions is at the sole discretion of the Company. The Company made matching contributions of $180 and $0 for the years ended December 31, 2007 and 2006.

Operating Leases

The Company leases its operating facility located in New Haven, Connecticut. The lease agreements require monthly lease payments through March 2011. The Company is recording the expense associated with the lease on a straight-line basis over the expected ten-year minimum term of the lease and, as a result, has accrued amounts of $130 and $160 outstanding as long-term accruals at December 31, 2007 and 2006, respectively.

The future minimum annual lease payments under these operating leases at December 31, 2007 are as follows:

Years Ended December 31,	
2008	$ 969
2009	991
2010	637
2011	21

Rent expense under operating leases was approximately $978, $991 and $1,006 for the years ended December 31, 2007, 2006 and 2005, respectively.

14. Income Taxes

The Company uses an asset and liability approach for financial accounting and reporting of income taxes. Deferred tax assets and liabilities are determined based on temporary differences between financial reporting and tax basis assets and liabilities and are measured by applying enacted rates and laws to taxable years in which differences are expected to be recovered or settled. Further, the effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date.

Effective January 1, 2007, the Company adopted Financial Accounting Standards Board (FASB) Interpretation No.48, *Accounting for Uncertainty in Income Taxes an interpretation of FASB Statement No.109,* or FIN 48. FIN 48 prescribes a comprehensive model for how a company should recognize, measure, present, and disclose in its financial statements uncertain tax positions that the company has taken or expects to take on a tax return (including a decision whether to file or not file a return in a particular jurisdiction). Under FIN 48, the financial statements reflect expected future tax consequences of such positions presuming the taxing authorities full knowledge of the position and all relevant facts.

The Company does not have any interest or penalties accrued related to uncertain tax positions as it does not have any unrecognized tax benefits. In the event the Company determines that accrual of interest or penalties is necessary in the future, the amount will be presented as a component of income taxes.

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The income tax provision (benefit) consists of the following:

	As of December 31,		
	2007	2006	2005
Current:			
Federal	$	$	$
State	(960)	(49)	(88)
Total Current	$ (960)	$ (49)	$ (88)
Deferred:			
Federal and state	$ (12,974)	$ (10,882)	$ (5,823)
Valuation allowance	12,974	10,882	5,823
Total deferred	$	$	$
Total provision	$ (960)	$ (49)	$ (88)

A reconciliation of the provision for income taxes at statutory rates to the provision in the financial statements is as follows:

	Years Ended December 31,		
	2007	2006	2005
Federal statutory rate	(34.0)%	(34.0)%	(34.0)%
State tax, net of federal benefit	(5.0)%	(5.0)%	(5.0)%
Other	0.1%	0.1%	0.1%
Share-based compensation	2.4%	2.3%	
Valuation allowance	36.5%	36.6%	38.9%
Research & development credit saleback	(3.4)%	(0.2)%	(0.6)%
	(3.4)%	(0.2)%	(0.6)%

Future tax benefits (deferred tax assets) related to temporary differences are as follows:

	As of December 31,	
	2007	2006
Gross deferred tax assets:		
Net operating losses	$ 54,076	$ 42,111
Tax credits (Federal and State)	5,564	3,957
Deferred revenue	1,067	2,185
Other	1,337	816
	$ 62,044	$ 49,069
Less valuation allowance	(62,044)	(49,069)
Net deferred tax asset	$	$

At December 31, 2007 and 2006, the Company had gross deferred income tax assets of approximately $62,044 and $49,069, respectively, which result primarily from net operating loss and tax credit carryforwards. Statement of Financial Standards No. 109 *Accounting for Income Taxes* (SFAS 109) requires that a valuation allowance be established when it is more likely than not that all or a portion of deferred tax assets will not

be realized. A review of all positive and negative evidence is required when measuring the need for a valuation allowance. The Company s cumulative loss from inception represents sufficient negative evidence to require a valuation allowance. The Company concluded that it is appropriate to maintain a full valuation allowance for its net deferred tax assets. Additionally, the Company intends to maintain a valuation allowance until sufficient positive evidence exists to support its reversal.

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At December 31, 2007 and 2006, the Company had available the following net operating loss and credit carryforwards:

	As of December 31,	
	2007	2006
Federal net operating loss carryforwards	$ 130,186	$ 101,201
State net operating loss carryforwards	131,774	102,709
Federal research and development carryforwards	3,672	2,393
State research and development carryforwards	1,892	1,563

The Company s federal net operating loss carryforwards expire commencing in fiscal 2018 through 2027 and state net operating loss carryforwards which expire commencing in fiscal 2020 through 2027.

Utilization of the net operating losses and research and development credit carryforwards may be subject to a substantial annual limitation under Section 382 of the Internal Revenue Code of 1986, or Section 382, due to changes in ownership of the Company that have occurred previously or that could occur in the future. These ownership changes may limit the amount of net operating losses and research and development credit carryforwards that can be utilized annually to offset future taxable income and tax. In general, an ownership change, as defined by Section 382, results from transactions increasing the ownership of certain shareholders or public groups in the stock of a corporation by more than 50 percentage points over a three-year period. Since the Company s formation, the Company has raised capital through the issuance of capital stock on several occasions which, combined with the purchasing shareholders subsequent disposition of those shares, may have resulted in a change of control, as defined by Section 382. Due to the significant complexity and cost associated with a change in control study, and because there could be additional changes in control in the future, the Company has not assessed whether there has been one or more changes in control since the Company s formation. If the Company has experienced a change of control at any time since Company formation, utilization of its net operating losses or research and development credit carryforwards would be subject to an annual limitation under Section 382. Any limitation may result in expiration of a portion of the net operating loss or research and development credit carryforwards before utilization which would reduce the Company s gross deferred tax assets.

The State of Connecticut provides companies with the opportunity to exchange certain research and development credit carryforwards for cash in exchange for foregoing the carryforward of the research and development credit. The program provides for such exchange of the research and development credits at a rate of 65% of the annual research and development credit, as defined. During the years ended December 31, 2007, 2006 and 2005, the Company had recorded a benefit of approximately $960, $49 and $88, respectively, for the estimated proceeds from this exchange.

The Company believes that it is entitled to a larger cash refund for tax credit carryovers from the State of Connecticut for certain prior years. The Company filed complaints with the Superior Court for the tax year 2003 seeking cash refunds of certain unused research and development tax credits that the Company alleges were wrongfully disallowed by the State of Connecticut. The Company and the State have filed cross-motions for partial judgment. Further proceedings are scheduled.-The Company has not recorded a receivable related to this pending judgment.

The federal and state tax authorities could challenge tax positions taken by the Company for the periods for which there are open tax years. Years subject to audit are years in which unused net operating losses were generated that remain open by the statute of limitations. The Company is open to challenge for the periods of 1998 through 2007 in federal and the State of Connecticut jurisdictions.

As a result of implementation of FIN 48, the Company recognized a decrease of $180 in its liability for uncertain tax positions, which was accounted for as a decrease to the January 1, 2007 accumulated deficit. The Company did not have any unrecognized tax benefits as of the date of adoption or December 31, 2007.

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A reconciliation of the unrecognized tax benefits at the beginning and end of the year is:

Balance at January 1, 2007	$ 180
Additions based on tax positions related to the current period	
Reductions based on tax positions related to the current period	
Additions based on tax positions related to prior periods	
Reductions based on tax positions related to prior periods	(180)
Balance at December 31, 2007	$

15. Related Party

In November 2004, the Company entered into the Gilead Arrangement with Gilead Sciences Inc. to jointly develop and commercialize compounds for use in treating hepatitis C infection which inhibit viral replication through a specified novel mechanism of action. Commercialization efforts will commence only if such compounds are found to be commercially viable and all appropriate regulatory approvals have been obtained (see Note 4).

In addition to being a collaboration partner, Gilead Sciences Inc. is also a shareholder of the Company. As of December 31, 2007, Gilead holds 1,116 shares, representing 7% of total shares outstanding.

16. Unaudited Quarterly Results

The following tables summarize unaudited quarterly financial data for the years ended December 31, 2007 and 2006. This data has been derived from unaudited financial statements that, in the Company s opinion, include all adjustments necessary for a fair presentation of such information. The operating results for any quarter are not necessarily indicative of results for any future period.

	2007 Quarters			
	First	Second	Third	Fourth
Total operating revenue	$ 1,550	$ 1,195	$ 900	$ 393
Total operating expenses	9,915	9,442	7,461	7,778
Net loss	(7,670)	(7,653)	(5,894)	(6,885)
Net loss per share basic and diluted	$ (.49)	$ (.49)	$ (.38)	$ (.44)
Weighted average number of shares outstanding basic and diluted	15,540	15,556	15,607	15,628

	2006 Quarters			
	First	Second	Third	Fourth
Total operating revenue	$ 2,151	$ 2,167	$ 1,196	$ (2,222)
Total operating expenses	7,406	5,949	6,323	7,928
Net loss	(5,347)	(3,819)	(5,116)	(9,804)
Net loss attributable to common shareholders	(6,375)	(5,077)	(6,523)	(10,274)
Net loss per share attributable to common shareholders basic and diluted	$ (12.52)	$ (9.92)	$ (12.69)	$ (0.98)
Weighted average number of shares outstanding basic and diluted	509	512	514	10,470

17. Subsequent Events

In February 2008, the Company entered into a credit facility with the same lenders, and under substantially the same terms, as the 2005 Credit Facility. The Company combined the amounts outstanding under the 2005 Credit Facility with the newly issued notes (the 2008 Credit Facility.) The 2008 Credit Facility provides for $5,000 to fund the Company s working capital needs, and is secured by substantially all of the Company s tangible assets. In connection with the 2008 Credit Facility, the Company issued warrants to purchase 43 shares of common stock at an exercise price of $4.68 per share.

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EXHIBIT INDEX

Exhibit No.	Exhibit
3.1(1)	Amended and Restated Certificate of Incorporation of the Registrant, as amended.
3.2(1)	Amended and Restated Bylaws.
4.1(2)	Specimen Certificate evidencing shares of common stock.
10.1(2)	Research Collaboration and License Agreement, dated November 24, 2004, by and between the Registrant and Gilead Sciences, Inc.
10.2(1)	Amendment Number 1 to Research Collaboration and License Agreement, dated November 24, 2004 by and between the Registrant and Gilead Sciences, Inc., dated March 26, 2007.
10.3(2)	License Agreement, dated February 3, 2000, by and between Vion Pharmaceuticals, Inc. and the Registrant, as amended on January 28, 2002.
10.4(2)	Letter Agreement, dated September 22, 2006, by and between the Registrant and Yale University.
10.5(2)	License Agreement, dated July 19, 2002 by and between the Registrant and Emory University.
10.6*(2)	Employment Agreement between the Registrant and Michael Kishbauch, dated as of July 19, 2004.
10.7*(2)	Employment Agreement between the Registrant and Milind Desphande, dated as of September 10, 2003, as amended January 1, 2006.
10.8*(2)	Employment Agreement between the Registrant and Elizabeth Olek, dated as of November 6, 2007.
10.9*(1)	Employment Agreement between the Registrant and Mary Kay Fenton, dated as of September 10, 2003, as amended January 1, 2006.
10.10*(2)	Employment Agreement between the Registrant and Gautam Shah, dated as of May 26, 2004, as amended January 1, 2006.
10.11(2)	Second Amended and Restated Investor Rights Agreement, dated as of November 17, 2005, by and among the Registrant and the Holders named therein.
10.12(2)	Third Amended and Restated Stockholders Agreement, dated as of November 17, 2005, by and among the Registrant and the Stockholders named therein.
10.13#	Master Security Agreement and Promissory Notes by and between the Registrant and GE Capital Corporation and Oxford Finance Corporation, dated as of February 26, 2008.
10.14#	Form of Common Stock Warrant under Loan and Security Agreement of GE Capital Corporation and Oxford Finance Corporation
10.15(2)	Lease Agreement by and between the Registrant and WE George Street LLC for Suite 202, dated as of March 6, 2002.
10.16(2)	Lease Agreement by and between the Registrant and WE George Street LLC, dated as of May, 2000.
10.17(2)	Lease Agreements and subsequent Assignment and Assumption of Lease Agreements by and between the Registrant, Yale University and WE George Street LLC for Suites 802, 803, 804.
10.18*(2)	1998 Stock Option Plan, as amended, dated March 30, 2001.
10.19*(2)	2006 Stock Incentive Plan as amended.
10.20*(2)	Form of Incentive Stock Option Agreement under the 1998 Stock Option Plan.
10.21*(2)	Form of Incentive Stock Option Agreement for Non-Executives under the 1998 Stock Option Plan.

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Exhibit No.	Exhibit
10.22*(2)	Form of Nonstatutory Stock Option Agreement under the 1998 Stock Option Plan.
10.23*(2)	Form of Incentive Stock Option Agreement under the 2006 Stock Incentive Plan.
10.24*(2)	Form of Nonstatutory Stock Option Agreement under the 2006 Stock Incentive Plan.
10.25*(2)	2006 Employee Stock Purchase Plan as amended.
10.26(2)	Form of Common Stock Warrant.
10.27(2)	Form of Series C-2 Convertible Preferred Stock Warrant.
10.28#	Promissory Notes and Master Security Agreement by and between the Registrant and Webster Bank, dated as of May 15, 2003, as amended by the First, Second, Third, Fourth and Fifth Amendments to Master Security Agreement, dated May 15, 2003, October 29, 2004, March 24, 2005, August 7, 2006 and December 7, 2007, respectively.
10.29(2)	Loan Agreement by and between the Registrant and Connecticut Innovations, Incorporated, dated March 30, 2001.
10.30(2)	Common Stock Warrants issued to Connecticut Innovations, Inc. on March 29, 2001 and November 7, 2000.
23.1#	Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm.
31.1#	Certification of Chief Executive Officer pursuant to Rule 13a- 14(a)/Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended
31.2#	Certification of Chief Financial Officer pursuant to Rule 13a- 14(a)/Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended
32.1#	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2#	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

* Management contracts or compensatory plans or arrangement
Indicates confidential treatment requested as to certain portions, which portions were omitted and filed separately with the Securities and Exchange Commission pursuant to a Confidential Treatment Request.

\# Filed herewith
(1) Incorporated herein by reference to our annual report on Form 10-K filed on March 29, 2007.
(2) Incorporated herein by reference to our Registration Statement on Form S-1 filed on March 31, 2006, as amended (File No. 333-132921).