

ACHILLION PHARMACEUTICALS INC
Form S-1/A
October 02, 2006
Table of Contents

As filed with the Securities and Exchange Commission on September 29, 2006.

Registration No. 333-132921

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

AMENDMENT NO. 5

TO

FORM S-1

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

Achillion Pharmaceuticals, Inc.

(Exact Name of Registrant as Specified in its Charter)

Delaware
(State or Other Jurisdiction of
Incorporation or Organization)

2834
(Primary Standard Industrial
Classification Code Number)

52-2113479
(I.R.S. Employer
Identification Number)

300 George Street
New Haven, Connecticut 06511
(203) 624-7000

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Michael D. Kishbauch

President and Chief Executive Officer

300 George Street

New Haven, Connecticut 06511

(203) 624-7000

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Steven D. Singer, Esq.

Wilmer Cutler Pickering Hale and Dorr LLP

60 State Street

Boston, MA 02109

(617) 526-6000

Jonathan L. Kravetz, Esq.

Brian P. Keane, Esq.

Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.

One Financial Center

Boston, MA 02111

(617) 542-6000

Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this registration statement.

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

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

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. "

If this form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. "

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

Table of Contents

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

PROSPECTUS (Subject to Completion)

Dated September 29, 2006

4,500,000 Shares

Common Stock

This is an initial public offering of shares of our common stock. We are offering 4,500,000 shares of our common stock. Prior to this offering, there has been no public market for our common stock. We will apply for listing of our common stock on the NASDAQ Global Market under the symbol ACHN. We expect that the public offering price will be between \$14.00 and \$16.00 per share.

Our business and an investment in our common stock involve significant risk. These risks are described under the caption Risk Factors beginning on page 6 of this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

	<i>Per Share</i>	<i>Total</i>
Public offering price	\$	\$
Underwriting discount	\$	\$
Proceeds, before expenses, to Achillion	\$	\$

The underwriters may also purchase up to an additional 675,000 shares from us at the public offering price, less the underwriting discount, within 30 days from the date of this prospectus to cover overallotments.

The underwriters expect to deliver the shares against payment in New York, New York on _____, 2006.

Cowen and Company

CIBC World Markets

JMP Securities

, 2006

Table of Contents

TABLE OF CONTENTS

<u>Prospectus Summary</u>	1
<u>Risk Factors</u>	6
<u>Special Note Regarding Forward-Looking Statements</u>	24
<u>Use of Proceeds</u>	25
<u>Dividend Policy</u>	26
<u>Capitalization</u>	27
<u>Dilution</u>	29
<u>Selected Financial Data</u>	31
<u>Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	32
<u>Business</u>	46
<u>Management</u>	73
<u>Principal Stockholders</u>	85
<u>Certain Relationships and Related Party Transactions</u>	88
<u>Description of Capital Stock</u>	91
<u>Shares Eligible for Future Sale</u>	94
<u>Underwriting</u>	97
<u>Legal Matters</u>	101
<u>Experts</u>	101
<u>Where You Can Find More Information</u>	101
<u>Index to Financial Statements</u>	F-1

You should rely only on the information contained in this prospectus. We have not, and the underwriters have not, authorized anyone to provide you with information that is different. We are offering to sell and seeking offers to buy shares of common stock only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of the common stock.

Table of Contents

PROSPECTUS SUMMARY

The following summary is qualified in its entirety by, and should be read in conjunction with, the more detailed information and financial statements and notes thereto appearing elsewhere in this prospectus. Before you decide to invest in our common stock, you should read the entire prospectus carefully, including the risk factors and financial statements and related notes included in this prospectus.

Our Company

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. All of our drug candidates are in the early stages of development, and none of our drug candidates have been approved for commercial sale. We do not expect to have any approved drugs on the market for at least several years. Our two lead drug candidates are elvucitabine, which we are currently evaluating in phase II clinical trials in HIV-infected patients, and ACH-806 (also known as GS 9132), which we are currently evaluating in collaboration with Gilead Sciences, Inc. in a proof-of-concept clinical trial for the treatment of chronic hepatitis C. We are also evaluating our third drug candidate, ACH-702, in late-stage preclinical studies for the treatment of serious hospital-based bacterial infections. Currently available anti-infective therapies have significant therapeutic limitations, such as inadequate potency, diminishing efficacy due to the emergence of drug resistance, and patient non-compliance with treatment regimens due to adverse side effects, complex dosing schedules and inconvenient routes of administration. We believe that our drug candidates have the potential to address these limitations and that our drug discovery capabilities, which have thus far produced two of our three lead drug candidates, will allow us to further expand our product portfolio.

We believe that drug development of anti-infectives offers significant advantages. 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. In addition, infectious disease research and development programs generally have shorter development cycle times when compared to other therapeutic areas such as oncology, cardiovascular and central nervous system disorders.

According to reports published by Datamonitor, worldwide sales for therapies to treat HIV infection, chronic hepatitis C and bacterial infections were \$32.6 billion in 2004.

Our Drug Candidates

Elvucitabine

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

Our lead clinical-stage drug candidate is elvucitabine, an antiviral we are evaluating in phase II clinical trials for the treatment of HIV infection. Elvucitabine is a member of a class of compounds called nucleoside reverse transcriptase inhibitors, or NRTIs, the predominant class of drugs used in the current standard of care for HIV therapy known as Highly Active Antiretroviral Therapy, or HAART. HAART regimens typically consist of a combination of two NRTIs and a third drug from a different class of drugs. However, currently marketed drugs have several therapeutic limitations, including the emergence of HIV strains that are resistant to the drugs, short half-lives which exacerbate drug resistance, inadequate patient compliance due to adverse side effects and complex dosing schedules, and limited combination 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. We believe that this profile, along with a long half-life that may delay the emergence of drug resistance, will allow us to position elvucitabine, if approved, favorably in the NRTI market. We are

Table of Contents

currently evaluating elvucitabine in phase II clinical trials to further explore the safety and efficacy of elvucitabine in HIV-infected patients. We recently completed one of these phase II clinical trials. Results from this trial demonstrated 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. 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. If we receive additional favorable data from our other phase II trials, we expect to initiate phase III clinical trials in 2007. We currently retain full development and marketing rights to elvucitabine.

According to reports published by Datamonitor, the worldwide market for HIV therapeutics was \$6.6 billion in 2004.

ACH-806

Our second clinical-stage drug candidate is ACH-806 (also known as GS 9132), an inhibitor of HCV replication by a novel mechanism involving an enzyme known as HCV protease, which we are currently evaluating in a proof-of-concept clinical trial for the treatment of chronic hepatitis C in collaboration with Gilead Sciences. In preclinical studies, ACH-806 demonstrated potent inhibition of replication of hepatitis C virus, or HCV. The current standard of care, pegylated interferon (which must be administered via injection) in combination with ribavirin, has several limitations, including lack of efficacy against genotype 1 HCV, the most prevalent type of HCV in the United States, and significant side effects. We believe ACH-806 offers several potential advantages compared to currently available treatments, including strong potency, a novel mechanism of action, lack of cross resistance and oral administration. Further, we believe ACH-806 could be used in combination with the current standard of care or with other therapies in development to significantly improve treatment outcomes. In the second quarter of 2006, we completed a phase I clinical trial to evaluate the safety and pharmacokinetics of ACH-806 in healthy volunteers. Results from this trial indicated that ACH-806 is safe and well tolerated in healthy volunteers. Based on these results, we initiated a proof-of-concept clinical trial in August 2006. 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 (e.g., a reduction in viral RNA levels). We expect results of this trial to be available in the first quarter of 2007.

In November 2004, we entered into a collaboration and exclusive license agreement with Gilead Sciences for the research, development and commercialization of compounds for the treatment of chronic hepatitis C, including ACH-806. We received \$10.0 million from Gilead Sciences upon the execution of this agreement in the form of a license fee and equity purchase, and we are entitled to receive up to \$157.5 million in development, regulatory and sales milestone payments, assuming simultaneous successful development of a lead and back-up compound, as well as royalties on net sales of products.

According to reports published by Datamonitor, the annual worldwide market for hepatitis C treatment was \$2 billion in 2004.

ACH-702

In addition to our antiviral compounds, we are developing ACH-702 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 recent methicillin resistant *staphylococcus aureus* strains, or MRSA, highly prevalent hospital-based infections. We expect to submit an Investigational New Drug Application, or IND, for ACH-702 to the U.S. Food and Drug Administration, or FDA, during the first quarter of 2007.

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

According to an industry report published by Espicom, the 2006 worldwide market for anti-MRSA antibacterials is projected to be approximately \$2.0 billion.

Table of Contents

Discovery and Technological Capabilities

We believe that continued expansion of our product pipeline will provide strong growth potential and reduce our reliance on the success of any single drug candidate. We have extensive expertise in virology, microbiology and synthetic chemistry and have thus far internally discovered our lead HCV compound, ACH-806, and our late-stage preclinical candidate, ACH-702. In the aggregate, members of our drug discovery, preclinical and clinical development team have contributed to the selection and development of more than 80 clinical candidates and 50 marketed products throughout their careers.

Our Strategy

Our objective is to become a leading infectious disease-focused biopharmaceutical company. In order to achieve this objective, we intend to:

advance the development of our current drug candidates;

expand our infectious disease portfolio;

accelerate growth through selective collaborations; and

pursue a diversified commercial strategy to maximize the value of each of our drug candidates.

Risks Associated with Our Business

Our business is subject to numerous risks, as more fully described in the section entitled "Risk Factors" beginning on page 6 immediately following this prospectus summary. We may be unable, for many reasons, including those that are beyond our control, to implement our current business strategy. Those reasons could include unfavorable clinical trial results, delays in obtaining, or a failure to obtain, regulatory approvals for our drug candidates, problems that may arise under our current or future licensing and collaboration agreements, inability to raise additional capital to fund our operations and failure to maintain and protect our proprietary intellectual property assets.

We have incurred significant losses since our inception in 1998. We incurred net losses of \$15.8 million in 2003, \$17.5 million in 2004, \$13.6 million in 2005 and \$9.0 million in the six months ended June 30, 2006. At June 30, 2006, our accumulated deficit was \$107.3 million, and we expect to continue to incur losses for at least the next several years. We have been able to generate only limited amounts of revenue, primarily from payments under our collaboration with Gilead Sciences. None of our drug candidates have been approved for commercial sale. We expect that our annual operating losses will increase significantly over the next several years as we advance elvucitabine, ACH-806, ACH-702 and our other drug candidates through the clinical development process. We are unable to predict the extent of future losses or when we will become profitable, if at all. Even if we succeed in developing and commercializing one or more of our drug candidates, we may never generate sufficient revenue to achieve and sustain profitability.

Company Information

We were incorporated in Delaware in August 1998. Our principal executive office is located at 300 George Street, New Haven, Connecticut 06511, and our telephone number is (203) 624-7000. Our internet address is www.achillion.com. The information on our web site is not incorporated by reference into this prospectus and should not be considered to be a part of this prospectus. Our internet address is included in this prospectus as an inactive technical reference only.

Unless otherwise stated, all references to us, our, Achillion, we, the Company and similar designations refer to Achillion Pharmaceuticals, Inc. Our logo, trademarks and service marks are the property of Achillion. Other trademarks or service marks appearing in this prospectus are the property of their respective holders.

Table of Contents

The Offering

Common stock offered by us	4,500,000 shares
Common stock to be outstanding after this offering	14,830,391 shares
Use of proceeds	We intend to use the net proceeds of this offering to further develop our drug candidates, fund our research and development activities and fund working capital, capital expenditures and other general corporate purposes. See <u>Use of Proceeds</u> on page 25 for a more complete description of our intended use of the proceeds from the offering.
Proposed NASDAQ Global Market symbol	ACHN

The number of shares of common stock to be outstanding after the offering is based on 10,330,391 shares of common stock outstanding as of September 15, 2006. Unless otherwise indicated, the information contained in this prospectus, including the information above, excludes:

807,548 shares of common stock issuable upon the exercise of stock options outstanding as of September 15, 2006, with a weighted average exercise price of \$2.28 per share;

335,739 shares of common stock issuable upon the exercise of outstanding warrants as of September 15, 2006, with a weighted average exercise price of \$6.08 per share; and

an additional 56,544 shares of common stock reserved as of September 15, 2006 for future stock option grants and purchases under our 1998 stock option plan and an aggregate of 1,000,000 shares of common stock to be reserved for future stock option grants and purchases under our 2006 stock incentive plan and employee stock purchase plan. See Management Employee Benefit Plans on page 82 for a more detailed description of our equity compensation plans.

In addition, except where we state otherwise, the information we present in this prospectus:

gives effect to the issuance of 8,584,356 shares of convertible preferred stock to the holders of our series B, series C, series C-1 and series C-2 convertible preferred stock upon the closing of this offering in satisfaction of \$15,214,791 of accumulated dividends (of which \$13,565,496 were accrued for as of June 30, 2006), as required by the terms of the series B, series C, series C-1 and series C-2 convertible preferred stock, which we refer to as the accumulated dividends, assuming for this purpose that the closing of this offering occurs on October 16, 2006;

gives effect to the automatic conversion of all outstanding shares of convertible preferred stock, including accumulated dividends, into 9,815,718 shares of common stock upon the closing of this offering;

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

reflects a 1-for-8 reverse stock split of our outstanding shares of common stock to be effected prior to the closing of this offering;

reflects the adoption of our restated certificate of incorporation, which we refer to as our certificate of incorporation, and our amended and restated bylaws, which we refer to as our bylaws, to be effective upon the completion of this offering; and

assumes no exercise of the underwriters' overallotment option to purchase an additional 675,000 shares of our common stock.

Table of Contents**Summary Financial Data**

The following tables present our summary statement of operations data for the years 2001 through 2005 and for the six months ended June 30, 2005 and June 30, 2006 and our summary balance sheet dated as of June 30, 2006. We have derived the financial data for the years ended December 31, 2003, 2004 and 2005 from our audited financial statements which are included elsewhere in this prospectus. We have derived the financial data for the years ended December 31, 2001 and 2002 from our audited financial statements, which are not included in this prospectus. The financial data as of June 30, 2006 and for the six months ended June 30, 2005 and June 30, 2006 are derived from our condensed unaudited financial statements, which in the opinion of management reflect all adjustments, consisting only of normal recurring adjustments, necessary for a fair statement of the financial data. Operating results for these periods are not necessarily indicative of the operating results for a full year. The summary balance sheet data is presented on (a) an actual basis, (b) a pro forma basis to reflect the automatic conversion of all shares of our convertible preferred stock outstanding at June 30, 2006, including accumulated dividends (assuming for this purpose that the closing of the offering occurs on October 16, 2006), into an aggregate of 9,815,718 shares of our common stock effective upon the completion of this offering and (c) a pro forma as adjusted basis to reflect the sale of shares of common stock offered by us in this offering at an assumed initial public offering price of \$15.00 per share and after deducting estimated underwriting discounts and commissions and offering expenses payable by us. You should read this information in conjunction with our financial statements, including the related notes, and Management's Discussion and Analysis of Financial Condition and Results of Operations included elsewhere in this prospectus.

	Years Ended December 31,					Six Months Ended June 30,	
	2001	2002	2003	2004	2005	2005	2006
							(unaudited)
(in thousands, except per share data)							
Statement of Operations Data:							
Total operating revenue	\$	\$	\$	\$ 807	\$ 8,526	\$ 4,865	\$ 4,318
Research and development	9,658	16,670	13,194	14,841	18,112	9,415	10,969
General and administrative	3,073	4,824	3,261	3,181	3,101	1,619	2,216
Total operating expenses	12,731	21,494	16,455	18,022	21,213	11,034	13,185
Net loss	(11,649)	(21,042)	(15,754)	(17,460)	(13,575)	\$ (6,628)	(8,996)
Net loss applicable to common shareholders	\$ (12,153)	\$ (23,597)	\$ (18,326)	\$ (20,048)	\$ (16,514)	\$ (8,014)	\$ (11,282)
Net loss per share basic and diluted	\$ (57.60)	\$ (70.86)	\$ (44.16)	\$ (43.77)	\$ (32.96)	\$ (16.16)	\$ (22.08)
Weighted average number of shares outstanding basic and diluted	211	333	415	458	501	496	511

	As of June 30, 2006		
	Actual	Pro Forma	Pro Forma As Adjusted
	(unaudited)		
(in thousands)			
Balance Sheet Data:			
Cash, cash equivalents and marketable securities	\$ 20,214	\$ 20,214	\$ 81,289
Working capital	13,142	13,142	74,217
Total assets	25,444	25,444	86,519
Long-term liabilities	7,605	7,605	7,605
Total liabilities	17,615	17,615	17,615

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

Convertible preferred stock	114,864		
Total stockholders' equity (deficit)	(107,035)	7,829	68,904

Table of Contents

RISK FACTORS

This offering involves a high degree of risk. You should carefully consider the risks and uncertainties described below and the other information in this prospectus, including the financial statements and the related notes included at the end of this prospectus, before deciding to invest in shares of our common stock. If any of the following risks or uncertainties actually occurs, our business, prospects, financial condition and operating results would likely suffer, possibly materially. In that event, the market price of our common stock could decline and you could lose all or part of your investment.

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 June 30, 2006, our accumulated deficit was approximately \$107.3 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 phase II clinical trials for elvucitabine and, if supported by favorable data from the phase II clinical trials, moving into pivotal phase III clinical trials;

completing the proof-of-concept clinical trial for ACH-806 (also known as GS 9132);

advancing ACH-702 through preclinical testing, submitting an IND application to the FDA and beginning a phase I clinical trial; 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.

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

We believe that our existing cash and cash equivalents, excluding the proceeds of this offering, as supplemented by research funding pursuant to our collaboration with Gilead Sciences, will be sufficient to support our current operating plan into at least the second quarter of 2007. If we are unable to successfully complete this offering, we will need to obtain alternative financing and/or modify our operational plans. 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, the terms may include adverse liquidation or other preferences. 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.

Table of Contents

We believe that the net proceeds from this offering, together with interest thereon and our existing cash and cash equivalents, as supplemented by research funding pursuant to our collaboration with Gilead Sciences, will be sufficient to meet our projected operating requirements into the third quarter of 2008. However, we may need to seek additional funding within this period of time. Our drug development programs and the potential commercialization of our drug candidates will require substantial additional cash to fund expenses that we will incur in connection with preclinical and clinical testing, regulatory review, manufacturing and sales and marketing efforts. Our operating plan may change as a result of many factors, including:

the costs involved in the preclinical and clinical development and manufacturing of elvucitabine, ACH-806 and ACH-702;

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;

the costs associated with manufacturing our drug candidates;

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

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

competing technological and market developments currently unknown to us.

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.

Raising additional capital may cause dilution to our existing stockholders, restrict our operations or require us to relinquish rights

We may seek additional capital through a combination of private and public equity offerings, debt financings and collaboration, strategic 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 liquidation or other preferences that adversely affect your rights as a stockholder. Debt

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

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. If we are unable to obtain adequate financing on a timely basis, we could be required to delay, reduce or eliminate one or more of our drug development programs.

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

Table of Contents

will depend heavily on the successful development and commercialization of this drug candidate. The commercial success of elvucitabine will depend on several factors, including the following:

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 phase II clinical trials. One or both of these clinical trials may not be successful, and the results of our phase II clinical trials, 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.

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-806 and ACH-702 to compete with the following approved drugs and drug candidates currently under development:

Elvucitabine. If approved, we would expect elvucitabine to compete with currently approved drugs for the treatment of HIV infection, including Epivir (3TC), Retrovir (AZT) and Ziagen (abacavir), marketed by GlaxoSmithKline, Emtriva (FTC) and Viread (tenofovir), marketed by Gilead Sciences, and Zerit (d4T) and Videx (ddI), marketed by Bristol-Myers Squibb. Elvucitabine may also compete with NRTI drug candidates currently in clinical development by other companies such as Avexa, Medivir, Pharmasset and Koronis, as well as other classes of drugs currently in clinical development by companies such as Abbott, Boehringer Ingelheim, Johnson & Johnson, Merck, Panacos, Pfizer, Roche, Schering-Plough, Trimeris and Vertex.

ACH-806. If approved, we would expect ACH-806 to compete with currently approved drugs for the treatment of chronic hepatitis C, including Pegasys and Roferon-A, marketed by Roche, and Intron-A and Peg-Intron, marketed by Schering-Plough. ACH-806 may also compete with drug candidates currently in clinical development by other companies such as Abbott, Anadys, Arrow Pharmaceuticals, Boehringer Ingelheim, Bristol-Myers Squibb, Gilead Sciences, GlaxoSmithKline, Human Genome

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

Sciences, Idenix Pharmaceuticals, Intermune, Johnson & Johnson, Medivir, Merck, Novartis, Panacos, Pfizer, Pharmasset, Roche, Schering-Plough, Trimeris, Valeant and Vertex.

ACH-702. If approved, we would expect ACH-702 to compete with currently approved drugs for the treatment of bacterial infections, including Cubicin (daptomycin), marketed by Cubist Pharmaceuticals, Zyvox (linezolid), marketed by Pfizer, and Synercid (dalbapristin + quinupristin), marketed by King Pharmaceuticals. ACH-702 may also compete with drug candidates currently in clinical development by other companies such as Intermune, Theravance, Basilea and Johnson & Johnson.

Table of Contents

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;

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, Dr. Milind Deshpande, our senior vice president and chief scientific officer, and Dr. John Pottage, our senior vice president and chief medical officer. Our employment agreements with all of 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. 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

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

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.

Table of Contents

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 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 candidates are elvucitabine, which is currently in phase II clinical trials, and ACH-806 (also known as GS 9132), which is in a proof-of-concept clinical trial. Our other drug 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;

meet applicable regulatory standards;

be capable of being produced in commercial quantities at acceptable costs; or

be successfully commercialized.

Positive results in preclinical studies of a drug candidate may not be predictive of similar results in humans during clinical trials, and promising results from early clinical trials of a drug candidate may not be replicated in later clinical trials. A number of companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in late-stage clinical trials even after achieving promising results in early-stage development. Accordingly, the results from the completed preclinical studies and clinical trials and ongoing clinical trials for elvucitabine, ACH-806, 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 development, clinical trials, manufacturing and commercialization. Rigorous preclinical testing and clinical trials and an extensive regulatory approval process 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-806, ACH-702 and any other drug candidate we may seek to develop in the future, we face risks that:

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

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

Table of Contents

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 generate revenues from the particular drug candidate. Furthermore, any regulatory approval to market a product may be subject to limitations on the indicated uses for which we may market the product. 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 or suspend 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;

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.

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

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 are experiencing and may continue to experience delays in patient enrollment in connection with our phase II trial of elvicitabine in HIV infected patients who have failed a HAART regimen which included Efavirenz (EFV) due to the strict entry criteria for this trial. We are taking steps we believe will prevent future delays in the enrollment of this trial, including expanding the number of sites at which the trial will be conducted and changing the protocol of the trial to include additional treatment with elvicitabine after the initial 14 days of treatment. We cannot assure you that these actions will prevent further delays in patient enrollment in connection with this trial. In addition, subjects may drop out of our clinical trials, and thereby impair the validity or statistical significance of the trials.

Table of Contents

We, the FDA or other applicable regulatory authorities 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.

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, 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.

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 handling and disposing of these materials comply with the standards prescribed by state and federal 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

Table of Contents

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 companies for commercialization. For example, we have entered into an agreement with Gilead Sciences for the development and commercialization of ACH-806. 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-806 and ACH-702, 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. Physicians may elect not to recommend these drugs for a variety of reasons including:

timing of market introduction of competitive drugs;

lower demonstrated clinical safety and efficacy compared to other drugs;

lack of cost-effectiveness;

lack of availability of reimbursement from managed care plans and other third-party payors;

convenience and ease of administration;

prevalence and severity of adverse side effects;

other potential advantages of alternative treatment methods; and

ineffective 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.

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

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,

Table of Contents

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 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 ACH-806 and, under certain circumstances, other HCV compounds with a similar mechanism of action, and we may enter into additional collaborative arrangements in the future. For example, we may enter into alliances with major biotechnology or pharmaceutical companies to jointly develop specific drug

candidates and to jointly commercialize them if they are approved. In such alliances, we would expect our biotechnology or pharmaceutical collaborators to provide substantial funding, as well as significant capabilities

Table of Contents

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 after the earlier of (i) proof-of-concept of ACH-806 or (ii) November 24, 2006. If Gilead Sciences were to exercise this right, the development and commercialization of ACH-806 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 our collaboration partners fail 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.

Table of Contents

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 assure you 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.

Table of Contents

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 September 15, 2006, our patent portfolio included a total of 156 patents and patent applications worldwide. We own or hold exclusive licenses to a total of seven U.S. issued patents and 21 U.S. pending patent applications, as well as 122 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

Table of Contents

substantially identical products for sale, which could adversely affect our competitive business position and harm our business prospects.

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 and The University of Maryland, 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.

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

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

Table of Contents

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.

Risks Relating to Our Common Stock and this Offering

An active trading market for our common stock may not develop, and you may not be able to resell your shares at or above the initial public offering price.

Prior to this offering, there has been no public market for our common stock. Although we have applied to have our common stock approved for quotation on the NASDAQ Global Market, an active trading market for our shares may never develop or be sustained following this offering. The initial public offering price for our common stock will be determined through negotiations between us and the underwriters. This initial public offering price may not be indicative of the market price of our common stock after the offering. The market price of our stock may decline below the initial public offering price, and you may not be able to resell your shares at or above the initial public offering price.

Our stock price is likely to be volatile, and the market price of our common stock after this offering may drop below the price you pay.

The market price of our common stock could be subject to significant fluctuations after this offering, and may decline below the initial public offering price. You should consider an investment in our common stock as risky and invest only if you can withstand a significant loss and wide fluctuations in the market value of your investment. Market prices for securities of early stage pharmaceutical, biotechnology and other life sciences companies have historically been particularly volatile. As a result of this volatility, you may not be able to sell your common stock at or above the initial public offering price. Some of the factors that may cause the market price of our common stock to fluctuate include:

the results of our current phase II and any future clinical trials for elvucitabine;

the results of our current proof-of-concept and any future clinical trials for ACH-806;

the results of ongoing preclinical studies and planned clinical trials of our preclinical drug candidates, including ACH-702;

the entry into, or termination of, key agreements, in particular our collaboration agreement with Gilead Sciences or our sublicense agreement with Vion Pharmaceuticals;

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;

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

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;

Table of Contents

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.

Management will have broad discretion in the use of the net proceeds from this offering and may not use them effectively or in a manner that is consistent with the uses described in the prospectus.

Although we intend to use the net proceeds of this offering to, among other things, finance working capital needs, including the continued development of elvicitabine, ACH-806 and ACH-702, as well as to fund continuing operations, because of the number and variability of factors that will determine our use of these proceeds, we cannot specify with certainty the particular uses of the net proceeds that we will receive from this offering. We will have broad discretion in the application of the net proceeds, including for any of the purposes described in Use of Proceeds on page 25 of this prospectus. However, our plans may change, and we could use the net proceeds in ways with which stockholders do not agree, or for corporate purposes that may not result in a significant or any return on your investment. In addition, we may invest the net proceeds from this offering in a manner that does not produce income or that loses value.

If you purchase our common stock in this offering, you will experience immediate and substantial dilution in the book value of your shares.

The assumed initial public offering price is substantially higher than the net tangible book value per share of our common stock. As a result, investors purchasing common stock in this offering will incur immediate dilution of \$10.36 per share, based on an assumed initial public offering price of \$15.00 per share, the midpoint of the price range set forth on the cover page of this prospectus. Further, investors purchasing common stock in this offering will contribute approximately 40% of the total amount invested by stockholders since our inception, but will own only approximately 30% of the shares of common stock outstanding.

This dilution is due to our existing investors having purchased shares prior to this offering for substantially less than the price offered to the public in this offering, as well as the exercise of stock options granted to our employees with exercise prices lower than the price offered to the public in this offering. As of September 15, 2006, options to purchase 807,548 shares of common stock at a weighted average exercise price of \$2.28 per share were outstanding, and warrants to purchase 335,739 shares of our common stock, with an exercise price of \$6.08, were outstanding. The exercise of any of these options or warrants would result in additional dilution. As a result of this dilution, investors purchasing stock in this offering may receive significantly less than the purchase price paid in this offering in the event of liquidation.

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

After this offering, our directors, executive officers and current holders of more than 5% of our outstanding common stock, together with their affiliates and related persons, will beneficially own, in the

Table of Contents

aggregate, approximately 63% of our outstanding common stock, or 61% if the underwriters exercise their overallotment option in full. As a result, these stockholders, if acting together, will 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.

Anti-takeover provisions in our certificate of incorporation and bylaws and under Delaware law could make our acquisition by another company more difficult and may prevent attempts by our stockholders to replace or remove our current management.

Provisions in our certificate of incorporation and our bylaws that will become effective upon the completion of this offering may delay or prevent our acquisition by another company. In addition, these provisions may frustrate or prevent attempts by our stockholders to replace or remove members of our board of directors. Because our board of directors is responsible for appointing the members of our management team, these provisions could in turn affect any attempt by our stockholders to replace current members of our management team. These provisions include:

a classified board of directors;

a prohibition on actions by our stockholders by written consent and limitations on who may call stockholder meetings;

the ability of our board of directors to issue preferred stock without stockholder approval, which could be used to institute a poison pill that would work to dilute the stock ownership of a potential hostile acquirer, effectively preventing acquisitions that have not been approved by our board of directors;

limitations on the removal of directors;

a supermajority stockholder vote requirement to amend certain provisions of our certificate of incorporation and our bylaws;

advance notice requirements for nominations of directors or stockholder proposals; and

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

the requirement that board vacancies be filled by a majority of our directors then in office.

Our certificate of incorporation and our bylaws that will become effective upon the completion of this offering also provide that directors may be removed only for cause and only by the affirmative vote of the holders of at least 75% or more of our outstanding voting stock. In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which prohibits a person who owns in excess of 15% of our outstanding voting stock from merging or combining with us for a period of three years after the date of the transaction in which the person acquired in excess of 15% of our outstanding voting stock, unless the merger or combination is approved in a prescribed manner. These provisions would apply even if the offer may be considered beneficial by some stockholders.

Table of Contents

If there are substantial sales of our common stock in the market by our existing stockholders, our stock price could decline.

If our existing stockholders sell a large number of shares of our common stock or the public market perceives that existing stockholders might sell shares of common stock, the market price of our common stock could decline significantly. After this offering, we will have outstanding 14,830,391 shares of common stock based on the number of shares outstanding as of September 15, 2006. This includes the 4,500,000 shares that we are selling in this offering, which may be immediately resold in the public market without restriction, unless those shares are purchased by our affiliates. Any shares purchased by our affiliates in this offering may only be sold in compliance with the volume limitations of Rule 144. These volume limitations restrict the number of shares that may be sold by an affiliate in any three-month period to the greater of 1% of the number of shares then outstanding, which will equal approximately 148,304 shares immediately after this offering based on the number of shares outstanding as of September 15, 2006, or the average weekly trading volume of our common stock during the four calendar weeks preceding the filing of a notice on Form 144 with respect to the sale. The remaining 10,330,391 shares not issued in this offering, or 69.7% of our outstanding shares after this offering, are currently restricted as a result of securities laws or lock-up agreements but will be able to be sold in the near future as set forth below:

<u>Number of Shares</u>	<u>Date</u>
259,017	On the date of this prospectus.
54,222	After 90 days from the date of this prospectus.
8,831,827	After 180 days* from the date of this prospectus (subject, in some cases, to volume limitations).
1,185,325	At various times after 180 days* from the date of this prospectus (subject, in some cases, to volume limitations).

* 180 days corresponds to the end of the lock-up period described in *Shares Eligible for Future Sale Lock-up Agreements* on page 96 of this prospectus. This lock-up period may be extended or shortened under certain circumstances as described in that section. However, Cowen and Company, LLC may in its sole discretion, at any time without prior notice, release all or any portion of the shares from the restrictions in any of these agreements. In considering any request to release shares from a lock-up agreement, Cowen and Company, LLC will consider the facts and circumstances relating to a request at the time of the request.

Subject to certain conditions, after the lock-up period, holders of an aggregate of approximately 9,815,718 shares of common stock will have rights with respect to the registration of these shares of common stock with the Securities and Exchange Commission, or SEC. If we register their shares of common stock following the expiration of the lock-up agreements, they can sell those shares in the public market.

Promptly following this offering, we intend to register approximately 1,807,548 shares of common stock that are authorized for issuance under our 2006 stock incentive plan, employee stock purchase plan and outstanding stock options. As of September 15, 2006, 807,548 shares were subject to outstanding options. Once we register the shares authorized for issuance under our stock plans, they can be freely sold in the public market upon issuance, subject to the lock-up agreements referred to above and the restrictions imposed on our affiliates under Rule 144.

Table of Contents

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 investors in this offering. Investors seeking cash dividends should not invest in our common stock.

Table of Contents

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements that involve substantial risks and uncertainties. All statements, other than statements of historical fact, included in this prospectus regarding our strategy, future operations, future financial position, future revenues, projected costs, prospects and plans and objectives of management are forward-looking statements. The words anticipates, believes, estimates, expects, intend, may, plans, projects, will, would and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Forward-looking statements assume our ability to continue as a going concern. Forward-looking statements contained in this prospectus include, but are not limited to, statements about:

our discussion of current and future markets for our drug candidates and our ability to address those markets, including our belief that substantial opportunities exist for improved treatments for HIV infection, chronic hepatitis C and bacterial infections;

our research, development and commercialization activities and projected expenditures;

our ability to obtain and maintain collaborators for some of our development programs;

the receipt of regulatory approvals;

the timing of clinical trials for our drug candidates;

the completion and success of clinical trials for our drug candidates;

future statistical information concerning the markets in which we expect our drug candidates to compete, if approved;

our ability to protect our intellectual property rights in our drug candidates and operate our business without infringing upon the intellectual property rights of others;

our spending of the proceeds from this offering;

our cash needs;

our estimates regarding the sufficiency of our cash resources; and

our financial performance.

We have based these forward-looking statements on our current expectations and projections about future events. Although we believe that the expectations underlying any of our forward-looking statements are reasonable, these expectations may prove to be incorrect, and all of these statements are subject to risks and uncertainties. Therefore, you should not place undue reliance on our forward-looking statements. We have

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

included important risks and uncertainties in the cautionary statements included in this prospectus, particularly in the section entitled "Risk Factors" beginning on page 6, that we believe could cause actual results or events to differ materially from the forward-looking statements that we make. Should one or more of these risks and uncertainties materialize, or should underlying assumptions, projections or expectations prove incorrect, actual results, performance or financial condition may vary materially and adversely from those anticipated, estimated or expected. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments we may make. We do not assume any obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

Table of Contents

USE OF PROCEEDS

We estimate that we will receive net proceeds from this offering of approximately \$61.1 million, assuming an initial public offering price of \$15.00 per share, the midpoint of the price range set forth on the cover of this prospectus, and after deducting the underwriting discounts and commissions and estimated offering expenses payable by us. If the underwriters' overallotment option is exercised in full, we estimate our net proceeds will be approximately \$70.5 million.

We expect to use the majority of the net proceeds of this offering as follows:

approximately \$26.3 million to complete the current phase II clinical trials of elvucitabine and to further its clinical development into phase III clinical trials, including approximately \$3.7 million of external costs related to current phase II clinical trials.

approximately \$3.2 million to support our share of ACH-806 development costs pursuant to our collaboration with Gilead Sciences through the proof-of-concept stage;

approximately \$1.5 million to complete the preclinical development of ACH-702, followed by approximately \$11.5 million to fund further clinical development of ACH-702; and

approximately \$9.3 million to support research activities over the next 12 months on other HIV, chronic hepatitis C and antibacterial drug candidates.

We anticipate using the remaining \$9.3 million of the net proceeds of this offering:

to expand our other research and development programs to identify additional drug candidates for the treatment of HIV infection, chronic hepatitis C and bacterial infections; and

to fund working capital, make capital expenditures, hire additional personnel necessary for operating as a public company and other general corporate purposes.

This foregoing use of net proceeds of this offering represents our current intentions based upon our present plans and business condition. The amounts and timing of our actual expenditures depend on numerous factors, including the amount of proceeds actually raised in this offering, the progress of our clinical trials and research and development efforts and our ability to enter into strategic collaborations, as well as the amount of cash used in our operations. Accordingly, our management will have broad discretion in the application of the proceeds of this offering. We do not expect the net proceeds from this offering and our other available funds to be sufficient to fund the completion of the development of any of our drug candidates, and we expect that we will need to raise additional funds prior to being able to market any drugs. In particular, to complete two phase III clinical trials for elvucitabine, we believe we may need to raise at least an additional \$35.0 million.

We reserve the right to change the use of these proceeds as a result of certain contingencies such as the results of our drug discovery and development activities, competitive developments, opportunities to acquire products, technologies or businesses and other factors.

Pending the uses described above, we plan to invest the net proceeds of this offering in short and intermediate-term, interest-bearing obligations, investment-grade instruments, certificates of deposit or direct or guaranteed obligations of the U.S. government.

We believe that the net proceeds from this offering, together with interest thereon and our existing cash and cash equivalents, as supplemented by research funding pursuant to our collaboration with Gilead Sciences, will be sufficient to meet our projected operating requirements into the third quarter of 2008. We will need to raise substantial additional funds before we can expect to commercialize any drug candidate. We expect to satisfy our future cash needs through the sale of equity securities, debt financings, corporate collaborations and licensing agreements and grant funding, as well as through interest income earned on cash balances.

Table of Contents

DIVIDEND POLICY

We have never declared or paid any dividends on our common stock. We currently intend to retain any future earnings to finance our research and development efforts, the development of our drug candidates and the expansion of our business and do not intend to declare or pay cash dividends on our capital stock in the foreseeable future. Any future determination to pay dividends will be at the discretion of our board of directors and will depend upon a number of factors, including our results of operations, financial condition, future prospects, contractual restrictions, restrictions imposed by applicable law and other factors our board of directors deems relevant.

Table of Contents

CAPITALIZATION

The following table sets forth our capitalization as of June 30, 2006:

on an actual basis;

on a pro forma basis to give effect to (i) the issuance of 8,584,356 shares of convertible preferred stock upon the closing of this offering in satisfaction of accumulated dividends on our series B, series C, series C-1 and series C-2 convertible preferred stock and the related incremental charge to retained deficit of \$2.6 million to account for the difference between the stated dividend rate and the fair value of the preferred stock issued in satisfaction of the accrued but unpaid dividends, assuming the closing of this offering occurs on October 16, 2006 and (ii) the automatic conversion of all of our shares of convertible preferred stock outstanding as of June 30, 2006, including shares issued in satisfaction of such accumulated dividends, into 9,815,718 shares of common stock upon completion of this offering; and

on a pro forma as adjusted basis to give effect to the receipt of net proceeds of \$61.1 million from the sale of the 4,500,000 shares of common stock in this offering at an assumed initial public offering price of \$15.00 per share, less underwriting discounts and commissions and estimated offering expenses payable by us.

You should read this information together with our financial statements and the related notes and Management's Discussion and Analysis of Financial Condition and Results of Operations appearing elsewhere in this prospectus.

Table of Contents

<u>\$ in thousands, except per share data</u>	<u>As of June 30, 2006</u>		
	<u>Actual</u>	<u>Pro Forma</u>	<u>Pro Forma As Adjusted</u>
Cash, cash equivalents and marketable securities	\$ 20,214	\$ 20,214 (unaudited) (in thousands)	\$ 81,289
Long-term debt, including current portion	10,200	10,200	10,200
Redeemable, Convertible Preferred Stock:			
Series A preferred stock, \$.01 par value; 250 shares authorized actual and 0 shares authorized pro forma and pro forma as adjusted, 250 issued and outstanding actual and 0 shares issued and outstanding pro forma and pro forma as adjusted (liquidation preference of \$250 at June 30, 2006)	250		
Series B preferred stock, \$.01 par value; 15,817 shares authorized actual and 0 shares authorized pro forma and pro forma as adjusted, 15,817 issued and outstanding actual and 0 shares issued and outstanding pro forma and pro forma as adjusted (liquidation preference of \$28,442 at June 30, 2006)	28,367		
Series C preferred stock, \$.01 par value; 22,436 shares authorized actual and 0 shares authorized pro forma and pro forma as adjusted, 22,418 issued and outstanding actual and 0 shares issued and outstanding pro forma and pro forma as adjusted (liquidation preference of \$48,069 at June 30, 2006)	47,940		
Series C-1 preferred stock, \$.01 par value; 2,300 shares authorized actual and 0 shares authorized pro forma and pro forma as adjusted, 2,300 issued and outstanding actual and 0 shares issued and outstanding pro forma and pro forma as adjusted (liquidation preference of \$5,316 at June 30, 2006)	2,341		
Series C-2 preferred stock, \$.01 par value; 24,000 shares authorized actual and 0 shares authorized pro forma and pro forma as adjusted, 23,425 shares issued and outstanding actual and 0 shares issued and outstanding pro forma and pro forma as adjusted (liquidation preference of \$72,411 at June 30, 2006)	35,966		
	<u>114,864</u>		
Stockholders' equity (deficit):			
Preferred stock, \$.01 par value; 0 shares authorized actual and pro forma and 5,000 shares authorized pro forma as adjusted; 0 shares outstanding actual, pro forma and pro forma as adjusted			
Common stock, \$.001 par value; 90,000 shares authorized actual; 95,000 shares authorized pro forma, and 100,000 shares authorized pro forma as adjusted; 515 shares issued and outstanding actual, 10,330 shares issued and outstanding pro forma and 14,830 shares issued and outstanding pro forma as adjusted, respectively	4	10	15
Additional paid-in capital		117,427	178,497
Stock warrants	341	341	341
Stock subscription receivable	(114)	(114)	(114)
Retained deficit	(107,270)	(109,839)	(109,839)
Unrealized gain on marketable securities	4	4	4
Total stockholders' (deficit) equity	<u>(107,035)</u>	<u>7,829</u>	<u>68,904</u>
Total capitalization	<u>\$ 18,029</u>	<u>\$ 18,029</u>	<u>\$ 79,104</u>

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

The number of shares of our common stock, as reflected in the table above, is based on 514,673 shares of our common stock outstanding as of June 30, 2006, and excludes:

828,729 shares of common stock issuable upon the exercise of stock options outstanding as of June 30, 2006, with a weighted average exercise price of \$2.26 per share;

335,739 shares of common stock issuable upon exercise of outstanding warrants as of June 30, 2006, with a weighted average exercise price of \$6.08 per share; and

an additional 35,358 shares of common stock reserved as of June 30, 2006 for future stock option grants and purchases under our 1998 stock option plan and an aggregate of 1,000,000 shares of common stock to be reserved for future stock option grants and purchases under our 2006 stock incentive plan and employee stock purchase plan.

Table of Contents**DILUTION**

If you invest in our common stock, your interest will be immediately diluted to the extent of the difference between the public offering price per share of our common stock and the pro forma net tangible book value per share of our common stock after this offering. Historical net tangible book value per share represents our total tangible assets less total liabilities divided by the number of common shares outstanding as of June 30, 2006. The pro forma net tangible book value of our common stock as of June 30, 2006 was \$7.8 million, or approximately \$0.75 per share. Pro forma net tangible book value per share represents our June 30, 2006 total tangible assets less total liabilities divided by 10,330,391 shares of common stock outstanding at that date, after giving effect to the assumed issuance of 8,584,356 shares of convertible preferred stock upon the closing of this offering in satisfaction of accumulated dividends on our series B, series C, series C-1 and series C-2 convertible preferred stock (assuming for this purpose that the closing of the offering occurs on October 16, 2006) and the conversion of all outstanding shares of our convertible preferred stock into common stock.

Pro forma net tangible book value dilution per share to new investors represents the difference between the amount per share paid by purchasers of common stock in this offering and the pro forma as adjusted net tangible book value per share of common stock immediately after completion of this offering. After giving effect to our sale of 4,500,000 shares of common stock in this offering, after deducting estimated underwriting discounts and commissions and offering expenses, assuming an initial public offering price of \$15.00 per share, our pro forma as adjusted net tangible book value as of June 30, 2006 would have been \$68.8 million, or approximately \$4.64 per share. This represents an immediate increase in pro forma net tangible book value of \$3.89 per share to existing stockholders and an immediate dilution in pro forma net tangible book value of \$10.36 per share to purchasers of common stock in this offering, as illustrated in the following table:

Assumed initial public offering price per share		\$ 15.00
Historical net tangible book value per share as of June 30, 2006	15.08	
Decrease per share attributable to issuance of common shares in satisfaction of convertible preferred stock and related accrued dividends	(14.33)	
	<hr/>	
Pro forma net tangible book value per share before this offering	0.75	
Pro forma increase per share attributable to new investors	3.89	
Pro forma as adjusted net tangible book value per share after this offering		4.64
		<hr/>
Pro forma dilution per share to new investors		\$ 10.36
		<hr/>

Assuming the exercise in full of the underwriters' overallotment option, our pro forma as adjusted net tangible book value at June 30, 2006 would have been approximately \$5.05 per share, representing an immediate increase in the pro forma net tangible book value of \$4.30 per share to our existing stockholders and an immediate dilution in pro forma net tangible book value of \$9.95 per share to new investors.

The following table summarizes, on a pro forma basis, as of June 30, 2006, the difference between the number of shares of common stock purchased from us, assuming the issuance of 8,584,356 shares of convertible preferred stock upon the closing of this offering in satisfaction of accumulated dividends on our series B, series C, series C-1 and series C-2 convertible preferred stock (assuming for this purpose that the closing of the offering occurs on October 16, 2006) and the conversion of all outstanding shares of our convertible preferred stock into common stock, the total consideration paid to us and the average price per share paid by existing stockholders and by new investors in this offering at an assumed initial public offering price of \$15.00 per share, before deducting underwriting discounts and estimated offering expenses.

Shares Purchased	Total Consideration	Average Price Per Share
------------------	---------------------	-------------------------

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

	Number	%	Amount	%	
Existing stockholders	10,330,391	70%	101,718,000	60%	\$ 9.85
New investors	4,500,000	30%	67,500,000	40%	\$ 15.00
Total	14,830,391	100%	169,218,000	100%	

Table of Contents

Assuming the underwriters' overallotment option is exercised in full, sales by us in this offering will reduce the percentage of shares held by existing stockholders to 67% and will increase the number of shares held by new investors to 5,175,000, or 33%.

This information is based on 514,673 shares of our common stock outstanding as of June 30, 2006 and excludes:

828,729 shares of common stock issuable upon the exercise of stock options outstanding as of June 30, 2006, with a weighted average exercise price of \$2.26 per share;

335,739 shares of common stock issuable upon exercise of outstanding warrants as of June 30, 2006, with a weighted average exercise price of \$6.08 per share; and

an additional 35,358 shares of common stock reserved as of June 30, 2006 for future stock option grants and purchases under our 1998 stock option plan and an aggregate of 1,000,000 shares of common stock to be reserved for future stock option grants and purchases under our 2006 stock incentive plan and employee stock purchase plan.

To the extent these outstanding options or warrants are exercised, there will be further dilution to the new investors.

Table of Contents**SELECTED FINANCIAL DATA**

The following tables summarize our financial data for the periods presented. The selected statements of operations data for the fiscal years ended December 31, 2003, 2004 and 2005 and the selected balance sheet data as of December 31, 2004 and 2005 have been derived from financial statements audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, which appear elsewhere in this prospectus. The report of PricewaterhouseCoopers LLP, which also appears herein, contains an explanatory paragraph relating to the removal of an explanatory paragraph relating to our ability to continue as a going concern. The selected statements of operations data for the years ended December 31, 2001 and 2002, and the balance sheet data at December 31, 2001, 2002 and 2003 are derived from audited financial statements not included in this prospectus. The selected financial data as of June 30, 2006 and for the periods ended June 30, 2005 and June 30, 2006 are derived from our condensed unaudited financial statements. The condensed unaudited financial statements have been prepared on the same basis as our audited financial statements and include, in the opinion of management, all adjustments, consisting of only normal recurring adjustments, that management considers necessary for the fair statement of the financial information set forth in those statements. Historical results are not necessarily indicative of the results to be expected in future periods.

The selected financial data presented below should be read in conjunction with the more detailed information contained in the financial statements and notes thereto and Management's Discussion and Analysis of Financial Condition and Results of Operations appearing elsewhere in this prospectus.

	Years Ended December 31,					Six Months Ended June 30,	
	2001	2002	2003	2004	2005	2005	2006
							(unaudited)
	(in thousands, except per share data)						
Statement of Operations Data:							
Total operating revenue	\$	\$	\$	\$ 807	\$ 8,526	\$ 4,865	\$ 4,318
Research and development	9,658	16,670	13,194	14,841	18,112	9,415	10,969
General and administrative	3,073	4,824	3,261	3,181	3,101	1,619	2,216
Total operating expenses	12,731	21,494	16,455	18,022	21,213	11,034	13,185
Net loss	(11,649)	(21,042)	(15,754)	(17,460)	(13,575)	(6,628)	(8,996)
Net loss applicable to common shareholders	\$ (12,153)	\$ (23,597)	\$ (18,326)	\$ (20,048)	\$ (16,514)	\$ (8,014)	\$ (11,282)
Net loss per share - basic and diluted	\$ (57.60)	\$ (70.86)	\$ (44.16)	\$ (43.77)	\$ (32.96)	\$ (16.16)	\$ (22.08)
Weighted average number of shares outstanding - basic and diluted	211	333	415	458	501	496	511
							(unaudited)
	(in thousands, except per share data)						
Balance Sheet Data:							
Cash, cash equivalents and marketable securities	\$ 41,054	\$ 25,784	\$ 9,992	\$ 14,378	\$ 9,583		\$ 20,214
Working capital	39,676	23,815	8,393	6,264	654		13,142
Total assets	45,981	32,165	16,072	19,291	13,750		25,444
Long-term liabilities	1,780	3,390	3,046	14,811	5,021		7,605
Total liabilities	4,242	6,293	5,916	24,230	15,418		17,615
Convertible preferred stock	59,900	67,555	70,127	74,740	94,354		114,864
Total stockholders' (deficit)	(18,161)	(41,683)	(59,971)	(79,679)	(96,022)		(107,035)

Table of Contents

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

You should read the following discussion and analysis of our financial condition and results of operations together with our financial statements and related notes appearing elsewhere in this prospectus. Some of the information contained in this discussion and analysis or set forth elsewhere in this prospectus, including information with respect to our plans and strategy for our business, includes forward-looking statements that involve risks and uncertainties. You should review the Risk Factors section beginning on page 6 of this prospectus for a discussion of important factors that could cause actual results to differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.

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 \$94.8 million from inception to June 30, 2006 and had an accumulated deficit of \$107.3 million through June 30, 2006. Our net losses were \$15.8 million, \$17.5 million and \$13.6 million for the years ended December 31, 2003, 2004 and 2005, respectively, and \$9.0 million for the six months ended June 30, 2006. We have funded our operations to date primarily through:

proceeds of \$101.8 million from the sale of equity securities;

borrowings of \$15.5 million from debt facilities; and

receipts of \$10.0 million from up-front and milestone payments, as well as \$5.2 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 our phase II clinical trials for elvucitabine and, if supported by favorable data from the phase II trials, initiate phase III clinical trials;

complete our proof-of-concept clinical trial for ACH-806 (also known as GS 9132);

advance ACH-702 through preclinical testing, submit an IND to the FDA and begin a phase I clinical trial; and

continue to advance our other research and development programs in HIV and HCV and identify 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.

Table of Contents

Financial Operations Overview

Revenue

To date, we have not generated any 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. Through June 30, 2006, we have recognized approximately \$13.2 million in revenue from our collaboration with Gilead Sciences.

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 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, are borne equally by both parties. As we are 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.

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. Through June 30, 2006, we have recognized approximately \$406,000 in revenue under this grant.

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 research and development costs to increase significantly over the next several years as our drug development programs progress.

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.

Years Ended December 31,

Six

	Months Ended June 30,				
	2003	2004	2005	2005	2006
	(in thousands)				
Direct external costs:					
Elvucitabine	\$ 1,927	\$ 1,550	\$ 2,520	\$ 1,215	\$ 2,609
ACH-806	404	2,277	4,047	2,523	2,034
ACH-702	248	530	1,025	491	919
	2,579	4,357	7,592	4,229	5,562
Direct internal personnel costs	5,482	5,108	5,301	2,600	3,028
Sub-total direct costs	8,061	9,465	12,893	6,829	8,590
Indirect costs and overhead	5,133	5,376	5,219	2,586	2,379
Total research and development	\$ 13,194	\$ 14,841	\$ 18,112	\$ 9,415	\$ 10,969

Table of Contents

Currently, we are conducting two phase II clinical trials for elvucitabine, a proof-of-concept clinical trial for ACH-806 and preclinical studies for ACH-702. From the inception of each respective program through June 30, 2006, we incurred approximately \$28.6 million in total costs for elvucitabine, approximately \$18.3 million in total costs for ACH-806 and approximately \$10.0 million in total costs for ACH-702. These figures include our internal research and development personnel costs and related facilities overhead. We expect our research and development costs to increase substantially in the foreseeable future. We currently estimate that the clinical trial costs for two phase III clinical trials of elvucitabine in different HIV populations, which we expect to begin in 2007, will be approximately \$48.0 million, exclusive of the internal personnel costs associated with conducting these trials. We anticipate that our costs associated with ACH-806 will cease after the first quarter of 2007 after completion of our proof-of-concept trial under our collaboration with Gilead Sciences. We estimate that the costs associated with completing preclinical studies and phase I clinical trials for ACH-702, which we expect to complete in 2007, will be approximately \$3.0 million, exclusive of the internal personnel costs associated with conducting these studies and trials.

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, ACH-806, ACH-702 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 ACH-806, the rate at which our collaboration partner, Gilead Sciences, is able to complete later phase II and phase III 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 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.

Table of Contents

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 our general and administrative expenses to increase as we continue to hire additional employees, increase our recruiting efforts, expand our infrastructure and incur additional costs related to the growth of our business and operations as a public company.

Critical Accounting Policies

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, 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 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. Direct labor hours or full-time equivalents are typically used as the measure of performance. Under the proportionate performance method, periodic revenue related to upfront license payments is recognized as the percentage of actual

effort expended in that period to total effort budgeted for all of our performance obligations under the arrangement. Significant management judgment is required in determining the level of effort required under an arrangement and the period over which

Table of Contents

we expect to complete our related performance obligations. Estimates may change in the future, resulting in a change in the amount of revenue recognized in future periods.

Collaborations may also involve substantive milestone payments. 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.

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

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 Opinion No. 25, *Accounting for Stock Issued to Employees*, 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. In addition, prior to the adoption of Statement of Financial Accounting Standards, or SFAS, No. 123R, *Share-Based Payment*, or SFAS No. 123R, we followed the disclosure-only provisions of SFAS No. 123, *Accounting for Stock-Based Compensation*, or SFAS No. 123, as amended by SFAS No. 148, *Accounting for Stock-Based Compensation Transition and Disclosure*, or SFAS No. 148.

We occasionally grant 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-Merton, or Black-Sholes, 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.

Effective January 1, 2006, we began accounting for grants of stock options and restricted stock to employees utilizing the fair value recognition provisions of SFAS No. 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. Under the fair value recognition provisions of SFAS No. 123R, stock-based compensation cost is measured at the grant date based on the value of the award and is recognized as expense over the requisite service period of the award. 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, judgment is also required in estimating the amount of stock-based awards that are expected to be forfeited. If actual results differ significantly from these estimates, stock-based compensation expense and our results of operations could be materially impacted. The fair value of each award is estimated using the Black-Scholes model. Please see note 10 to the financial statements included in this prospectus for additional information regarding the adoption of SFAS No. 123R.

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

We adopted SFAS No. 123R utilizing modified prospective application, or MPA. Under MPA, we applied SFAS No. 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 June 30, 2006, no liability awards have been granted.

Table of Contents

We also had a choice of two attribution methods for allocating compensation cost under SFAS No. 123R: the straight-line method, which allocates expense on a straight-line basis over the requisite service period of the last separately vesting portion of an award, or the graded vesting attribution method, which allocates expense on a straight-line basis over the requisite service period for each separately vesting portion of the award as if the award was, in-substance, multiple awards. We chose the straight-line method.

We also chose to continue utilizing the Black-Scholes model as our option-pricing model. We concluded that this was the most appropriate method for valuing our share-based payment arrangements. However, if we grant any share-based payment instruments for which the Black-Scholes method does not meet the measurement objective as stated within SFAS No. 123R, we would utilize a more appropriate method for valuing that instrument. At this time, we do not believe that any instruments granted to date and accounted for under SFAS No. 123R would require a method other than Black-Scholes in order to meet the measurement objective discussed above.

We also revisited our conclusions regarding the assumptions that underlie the valuation of share-based payment awards. With respect to the calculation of expected term, we chose to utilize the simplified method for plain vanilla options as discussed within SAB No. 107, or SAB 107. We believe that all factors listed within SAB 107 as prerequisites for utilizing the simplified method are true for our share-based payment arrangements. We currently intend to utilize the simplified method through December 31, 2007, at which point we anticipate that more detailed information about exercise behavior will be more widely available. When valuing share-based payment awards reported via pro forma results for SFAS No. 123 and SFAS No. 148 prior to the adoption of SFAS No. 123R, an estimate of a five-year expected term for all employees as one weighted-average group was utilized, as this represented an estimate at the lower end of the reasonable range of possible expected terms, given the vesting schedule and maximum contractual maturity, in accordance with the guidance for estimates provided in SFAS No. 123.

For the calculation of expected volatility, because we are currently a private company and therefore lack company-specific historical and implied volatility information, we based our estimate of expected volatility on the historical volatility of similar entities whose share prices are publicly available. We intend to continue to consistently apply this process using the same group of similar entities until sufficient historical information regarding the volatility of our share price becomes available, or unless circumstances change such that the identified entities are no longer similar to us. In this latter case, more suitable, similar entities whose share prices are publicly available would be utilized in the calculation. This conclusion and approach is consistent with the approach utilized by management when valuing share-based payment awards reported via pro forma results for SFAS No. 123 and SFAS No. 148.

Under SFAS No. 123R, we have separated our employees into two groupings: management, including the board of directors, and non-management. However, given our current use of the simplified method, as discussed above, the establishment of these groupings will not affect the expected term we utilize until we cease to employ the simplified method of estimating expected term. We viewed all employees as one grouping when valuing share-based payment awards reported via pro forma results for SFAS No. 123 and SFAS No. 148 prior to the adoption of SFAS No. 123R.

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 we utilized when valuing share-based payment awards reported via pro forma results for SFAS No. 123 and SFAS No. 148.

As of June 30, 2006, due to the adoption of SFAS No. 123R, the total compensation cost related to nonvested options not yet recognized in the financial statements is approximately \$760,000 (unaudited), and the weighted average period over which it is expected to be recognized is 1.6 years.

Table of Contents

Based on an expected initial public offering price of \$15.00 per share, the intrinsic value of the options outstanding at June 30, 2006 was \$10,558,435, of which \$4,763,266 related to vested options and \$5,795,169 related to unvested options.

Determining the market value of our stock requires making complex and subjective judgments. Our management and board of directors concluded on the market value of our common stock after performing an internal evaluation, which included consideration of market conditions, comparable companies and, in 2005, an unrelated third-party valuation analysis. Our approach to enterprise valuation is based on an analysis of comparable companies, as well as on an income approach, which uses discounted future cash flow that includes our estimates of revenue, driven by assumed market growth rates, and estimated costs as well as appropriate discount rates. These estimates are consistent with the plans and estimates we use to manage our business. The enterprise value is then allocated to preferred and common shares using the option-pricing method. The option-pricing method involves making estimates of the anticipated timing of a potential liquidity event, such as a sale of our company or an initial public offering, and estimates of the volatility of our enterprise value. The anticipated timing is based on the plans of our board of directors and management. Estimating the volatility of the share price of a privately held company is complex because there is no readily available market for the shares. We estimated the volatility of our enterprise value based on available information on volatility of stocks of publicly traded companies in our industry. Had we used different estimates, the allocations between preferred and common shares would have been different.

As disclosed in notes 4 and 10 to our financial statements included elsewhere in this prospectus, during 2005, we engaged Fletcher Spaght Inc., a third-party valuation firm, to assist our board of directors in assessing the market value of our common stock as of November 2004. This valuation analysis utilized the methods outlined above, as well as the AICPA Practice Aid, *Valuation of Privately Held Company Equity Securities Issued as Compensation*. During 2005, we granted stock options to acquire 15,159 shares of common stock at an exercise price of \$1.60 per share and 252,618 shares at an exercise price of \$4.00 per share, of which 250,118 options were granted on December 20, 2005 as part of our recurring year-end compensation adjustments. For purposes of determining the market value of common stock underlying these grants, the board of directors considered company specific information, comparable companies, market conditions and the analysis of Fletcher Spaght and determined that the market value of our common stock throughout 2005 was \$4.00 per share. Our board of directors made this valuation assessment based on feedback on our value from third-party prospective investors during fund-raising activities during 2005, as well as the absence of value-accreting business or scientific milestones during the intervening period from the independent valuation to the grant date. Specifically, we had not yet initiated any key clinical trials or received any key clinical trial data related to either elvucitabine or ACH-806.

There is inherent uncertainty in making valuation estimates. Although it is reasonable to expect that the completion of the initial public offering will add value to the shares because they will have increased liquidity and marketability, the amount of additional value cannot be measured with precision or certainty.

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.

Table of Contents

In July 2006, FASB issued 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 will reflect expected future tax consequences of such positions presuming the taxing authorities' full knowledge of the position and all relevant facts, but without considering time values. FIN 48 substantially changes the applicable accounting model and is likely to cause greater volatility in income statements as more items are recognized discretely within income tax expense. FIN 48 also revises disclosure requirements and introduces a prescriptive, annual tabular rollforward of the unrecognized tax benefits. FIN 48 is effective for Achillion beginning January 1, 2007. We are evaluating the impact of adopting FIN 48 on our financial position and results of operations.

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 Six Months Ended June 30, 2005 and 2006

Revenue. Revenue was \$4.9 million and \$4.3 million for the six months ended June 30, 2005 and 2006, respectively. The decrease in 2006 as compared to 2005 was due to the fewer number of Achillion personnel hours charged to the ACH-806 program, as well as increased costs related to ACH-806 formulation and manufacturing incurred by Gilead Sciences. Under our collaboration with Gilead Sciences, we recognize cost-sharing revenue as one-half of our costs under the ACH-806 program, less one-half of Gilead Sciences' costs. Revenue consisted of the following:

	Six Months Ended June 30,	
	2005	2006
	(in thousands)	
Amortization of up-front and milestone payments	\$ 2,705	\$ 2,500
Cost-sharing revenue	2,107	1,660
Grant revenue	53	158
Total revenue	\$ 4,865	\$ 4,318

Through the joint research committee established by our collaboration agreement with Gilead Sciences, we are currently in discussions with Gilead Sciences regarding whether certain full-time employee or equivalent time billed by Gilead Sciences to the collaboration during 2006 is allowed under the collaboration agreement. During 2006, we reduced our collaboration revenue from Gilead Sciences by these billed amounts and recorded only the revenue to date under the collaboration that is fixed and determinable. We will recognize additional revenue, if any, in future periods if the joint research committee determines that such amounts billed were not allowed under the collaboration agreement. We expect that such amounts, if any, would be less than \$400,000.

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

In the first quarter of 2007, we expect to complete the proof-of-concept clinical trial for ACH-806, after which our cost-sharing and amortization revenue under the collaboration with Gilead Sciences will have been substantially recognized.

Research and development expenses. Research and development expenses were \$9.4 million and \$11.0 million for the six months ended June 30, 2005 and 2006, respectively. The approximate \$1.6 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, (ii) the costs associated with on-going clinical trials using elvucitabine, as compared to one on-going trial during the first half of 2005, and (iii) the costs

Table of Contents

associated with phase I clinical development of ACH-806. In addition, during the first half of 2006, we incurred increased costs associated with the manufacturing and formulation of both elvucitabine and ACH-806. Research and development expenses for the six months ended June 30, 2005 and 2006 are comprised as follows:

	Six Months Ended June 30,		
	2005	2006	Change
	(in thousands)		
Personnel costs	\$ 2,600	\$ 3,028	\$ 428
Outsourced research and supplies	4,582	5,582	1,000
Professional and consulting fees	667	873	206
Facilities costs	1,423	1,353	(70)
Travel and other costs	143	133	(10)
Total	\$ 9,415	\$ 10,969	\$ 1,554

General and administrative expenses. General and administrative expenses were \$1.6 and \$2.2 million for the six months ended June 30, 2005 and 2006, respectively. The approximate \$597,000 increase from 2005 to 2006 was due to increased professional fees, particularly legal and accounting fees. We expect that general and administrative expenses will 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 six months ended June 30, 2005 and 2006 are comprised as follows:

	Six Months Ended		
	June 30,		
	2005	2006	Change
	(in thousands)		
Personnel costs	\$ 887	\$ 995	\$ 108
Professional and consulting fees	213	709	496
Facilities costs	321	350	29
Travel and other costs	198	162	(36)
Total	\$ 1,619	\$ 2,216	\$ 597

Interest income (expense). Interest income was \$142,000 and \$267,000 for the six months ended June 30, 2005 and 2006, respectively. The \$125,000 increase from 2005 to 2006 was primarily due to increased average cash balances over the six-month period. Cash balances increased on March 22, 2006 and May 12, 2006 with receipt of \$18.4 million in proceeds from the sale of shares of our series C-2 convertible preferred stock and \$5.0 million in proceeds from a debt facility. Interest expense was \$661,000 and \$446,000 for the six months ended June 30, 2005 and 2006, respectively. The \$215,000 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 on December 30, 2005.

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

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 \$60,000 and \$50,000 for the six months ended June 30, 2005 and 2006, respectively. The \$10,000 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.

Accretion of preferred stock dividends. Accretion of preferred stock dividends was \$1.4 and \$2.3 million for the six months ended June 30, 2005 and 2006, respectively. The \$900,000 increase from 2005 to 2006 was due to an increased number of shares outstanding during the period, particularly 23,425,462 shares of series C-2 convertible preferred stock issued in November 2005, March 2006 and May 2006, some of which were outstanding for the first and second quarters of 2006 but not for the corresponding quarters of 2005.

Table of Contents**Comparison of Years Ended December 31, 2003, 2004 and 2005**

Revenue. Revenue was \$0, \$807,000 and \$8.5 million for the years ended December 31, 2003, 2004 and 2005, respectively. The increase in 2004 as compared to 2003 is due to the recognition of collaboration revenue under our agreement with Gilead Sciences, which was executed in November 2004. The increase in 2005 as compared to 2004 is due to recognition of a full year of collaboration revenue under this agreement. Revenue consisted of the following:

	Years Ended December 31,		
	2003	2004	2005
		(in thousands)	
Amortization of up-front and milestone payments	\$	\$ 446	\$ 4,328
Cost-sharing revenue		361	3,949
Grant revenue			249
Total revenue	\$	\$ 807	\$ 8,526

Research and Development Expenses. Research and development expenses were \$13.2 million, \$14.8 million, and \$18.1 million for the years ended December 31, 2003, 2004 and 2005, respectively.

The \$1.6 million increase from 2003 to 2004 was the result of: (i) increased costs associated with early preclinical development of ACH-806, (ii) increased license costs associated with our collaboration with Gilead Sciences and (iii) increased consulting fees, offset somewhat by decreased personnel costs. Research and development expenses for the years ended December 31, 2003 and 2004 are comprised as follows:

	Years Ended December 31,		
	2003	2004	Change
		(in thousands)	
Personnel costs	\$ 5,482	\$ 5,108	\$ (374)
Outsourced research and supplies	3,688	5,200	1,512
Professional and consulting fees	620	1,131	511
Facility costs	3,118	3,145	27
Travel and other costs	286	257	(29)
Total	\$ 13,194	\$ 14,841	\$ 1,647

The \$3.3 million increase from 2004 to 2005 was the result of: (i) the increased costs (\$1.0 million) associated with elvucitabine phase II clinical trials, (ii) the increased costs (\$1.8 million) associated with completing IND-enabling preclinical testing of our HCV candidate, ACH-806, as well as costs associated with phase I clinical testing of ACH-806 and (iii) the costs (\$495,000) associated with early preclinical toxicology research on our antibacterial candidate, ACH-702. In addition, we incurred increased costs associated with manufacturing and formulation of

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

both elvucitabine and ACH-806.

Research and development expenses for the years ended December 31, 2004 and 2005 are comprised as follows:

	Years Ended December 31,		
	2004	2005	Change
	(in thousands)		
Personnel costs	\$ 5,108	\$ 5,301	\$ 193
Outsourced research and supplies	5,200	8,227	3,027
Professional and consulting fees	1,131	1,448	317
Facility costs	3,145	2,870	(275)
Travel and other costs	257	266	9
Total	\$ 14,841	\$ 18,112	\$ 3,271

Table of Contents

The majority of research and development expenses can be directly attributed to our two clinical-stage programs. We expect research and development costs to increase significantly over the next several years as our drug development programs progress.

General and Administrative Expenses. General and administrative expenses were \$3.3 million, \$3.2 million and \$3.1 million for the years ended December 31, 2003, 2004 and 2005, respectively. The approximate \$80,000 decrease from 2003 to 2004 was primarily attributable to cost savings in professional fees, partially offset by increases in facility, travel and other costs and personnel costs. General and administrative expenses for the years ended December 31, 2003 and 2004 are comprised as follows:

	Years Ended December 31,		
	2003	2004	Change
	(in thousands)		
Personnel costs	\$ 1,635	\$ 1,709	\$ 74
Professional fees	808	547	(261)
Facility costs	525	584	59
Travel and other costs	293	341	48
Total	\$ 3,261	\$ 3,181	\$ (80)

The approximate \$80,000 decrease from 2004 to 2005 was primarily a result of reduced professional fees and travel and other costs, partially offset by an increase in personnel costs, specifically annual pay increases, and increased facility costs. General and administrative expenses for the years ended December 31, 2004 and 2005 are comprised as follows:

	Years Ended December 31,		
	2004	2005	Change
	(in thousands)		
Personnel costs	\$ 1,709	\$ 1,803	\$ 94
Professional fees	547	424	(123)
Facility costs	584	627	43
Travel and other costs	341	247	(94)
Total	\$ 3,181	\$ 3,101	\$ (80)

We expect that general and administrative expenses will increase significantly in the future due to increased payroll, expanded infrastructure and the increased consulting, legal, accounting and investor relations expenses associated with being a public company.

Interest Income/(Expense). Interest income was \$178,000, \$84,000 and \$224,000 for the years ended December 31, 2003, 2004 and 2005, respectively. The \$94,000 decrease from 2003 to 2004 was the result of decreased cash balances upon which interest is earned. The \$140,000 increase from 2004 to 2005 was primarily due to increased cash balances resulting from receipts from the issuance of convertible notes in 2004.

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

Interest expense was \$348,000, \$593,000 and \$1.2 million for the years ended December 31, 2003, 2004 and 2005, respectively. The \$245,000 increase from 2003 to 2004 was attributable to the issuance of convertible promissory notes in the second half of 2004. The \$607,000 increase from 2004 to 2005 was primarily due to interest due on convertible promissory notes issued in 2004, outstanding for eleven months during 2005 as compared to five months in 2004.

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 \$871,000, \$264,000 and \$88,000 for the years ended December 31, 2003, 2004 and 2005, respectively. The \$607,000 decrease from 2003 to 2004 was due to a reduction in the rate at which our research

Table of Contents

and development costs increased, as the rate of increase is one factor in determining the amount of tax credit allowed. The \$176,000 decrease from 2004 to 2005 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, as well as the partial reimbursement of expenses by Gilead Sciences.

Accretion of Preferred Stock Dividends. Accretion of convertible preferred stock dividends was \$2.6 million, \$2.6 million and \$2.9 million for the years ended December 31, 2003, 2004 and 2005, respectively. The \$16,000 increase from 2003 to 2004 was attributable to the issuance of series C-1 convertible preferred stock to Gilead Sciences in connection with the execution of our agreement with Gilead Sciences in November 2004. The \$351,000 increase from 2004 to 2005 was due to this issuance of series C-1 convertible preferred stock in November 2004, which was outstanding for the entire period in 2005, as well as the issuance of series C-2 convertible preferred stock in November 2005.

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 June 30, 2006, we had received approximately \$101.8 million in aggregate net proceeds from stock issuances, \$15.2 million from Gilead Sciences under our collaboration agreement with them and approximately \$15.5 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%-8.72%	\$ 591,630	June 2006-May 2008
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

Please see note 8 to the financial statements included in this prospectus for additional information regarding our debt facilities.

We had \$14.4 million, \$9.6 million and \$20.2 million in cash, cash equivalents and marketable securities as of December 31, 2004 and 2005 and June 30, 2006, 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.

Cash used in operating activities was \$14.0 million for the year ended December 31, 2005 and was primarily attributable to our \$13.6 million net loss, and the \$2.3 million amortization of deferred revenue, offset somewhat by \$2.1 million in non-cash charges such as depreciation, amortization and non-cash interest expense. Cash used in operating activities was \$6.8 million for the corresponding period in 2004, and was primarily attributable to our \$17.5 million net loss, offset in part by receipt of an \$8.0 million up-front payment under our agreement with Gilead Sciences. Cash used in operating activities was \$11.4 million for the six months ended June 30, 2006 and was primarily attributable to our net operating loss and the \$2.5 million amortization of deferred revenue.

Cash provided by investing activities was \$4.9 million for the year ended December 31, 2005 and was primarily attributable to the maturity of marketable securities. Cash used in investing activities was \$3.2 million

Table of Contents

for the corresponding period in 2004, and was primarily attributable to the purchase of marketable securities, offset by maturities of marketable securities. Cash used in investing activities was \$10,000 during the six months ended June 30, 2006.

Cash provided by financing activities was \$9.3 million for the year ended December 31, 2005 and was primarily attributable to the receipt of proceeds from the sale of series C-2 convertible preferred stock, as well as the receipt of proceeds under a debt facility. Cash provided by financing activities was \$11.3 million for the corresponding period in 2004, and was primarily attributable to the issuance of convertible promissory notes in July 2004 and November 2004. Cash provided by financing activities was \$22.0 million for the six months ended June 30, 2006 and was primarily attributable to \$18.2 million in proceeds from the issuance of an additional 12,270,815 shares of our series C-2 convertible preferred stock on March 22, 2006 and May 12, 2006 and \$5.0 million in proceeds from the issuance of debt on May 12, 2006.

We expect to incur continuing and increasing losses from operations for at least the next several years. In particular, as described above, we expect to incur increasing research and development expenses and general and administrative expenses in the future. We anticipate that our cash balance, excluding the proceeds from this offering, and interest thereon, as supplemented by research funding pursuant to our collaboration with Gilead Sciences, will be sufficient to fund our current and planned operations into at least the second quarter of 2007. Prior to our May 2006 financings, there was substantial doubt about our ability to continue as a going concern. After consideration of such financings, management believes this substantial doubt has been alleviated and that we have adequate liquidity to fund operations for at least twelve months from the date of the May 2006 financings.

We believe that the net proceeds from this offering, together with interest thereon and our existing cash and cash equivalents, as supplemented by research funding pursuant to our collaboration with Gilead Sciences, will be sufficient to meet our projected operating requirements into the third quarter of 2008.

However, our funding requirements may change and will depend upon numerous factors, including but not limited to:

the progress of our research and development programs;

the 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

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

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

We anticipate that we will augment our cash balance through financing transactions, including the issuance of debt or equity securities and further corporate alliances. No 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 on favorable terms, if at all. If adequate funds are not available, we may 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.

Table of Contents

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

Contractual Obligations

The following table sets forth a summary of our commitments as of June 30, 2006:

	Payment Due by Period				
	Total	Less Than 1 Year	1-3 Years	3-5 Years	More than 5 Years
	(in thousands)				
Long-term debt	\$ 12,315	\$ 4,376	\$ 7,072	\$ 867	\$
Operating lease obligations	4,057	947	1,953	1,157	
Clinical research obligations	4,666	4,666			
Other research obligations and licenses	3,608	3,137	243	228	
Total	\$ 24,646	\$ 13,126	\$ 9,268	\$ 2,252	\$

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.

Off-Balance Sheet Arrangements

As more fully explained in notes 9 and 10 to the audited financial statements included elsewhere in this prospectus, our preferred stock and certain of our warrants have conversion or other rights which meet the definition of a derivative; the majority of these meet the scope exception within SFAS 133, *Accounting for Derivative Instruments and Hedging Activities*. Otherwise, we currently have no other off-balance sheet arrangements.

Qualitative and Quantitative 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 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.

Table of Contents

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 and our second clinical-stage drug candidate, ACH-806 for the treatment of chronic hepatitis C, into a proof-of-concept clinical trial in collaboration with Gilead Sciences. In addition, we are evaluating our third drug candidate, ACH-702 for the treatment of serious hospital-based bacterial infections, in late-stage preclinical studies.

We believe that the development of anti-infective drugs offers significant advantages. 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. Infectious disease research and development programs generally have shorter development cycle times when compared to other therapeutic areas such as oncology, cardiovascular and central nervous system disorders.

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

Elvucitabine for HIV Infection. Elvucitabine, an antiviral we are developing for the treatment of HIV infection, is our most advanced clinical-stage drug candidate. We are currently evaluating elvucitabine in phase II clinical trials to further explore its safety and efficacy in HIV-infected patients. We have recently completed one of these phase II clinical trials. Results from this trial demonstrated 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. 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. If we receive additional favorable data from our other phase II trials, we expect to initiate phase III clinical trials in 2007. Elvucitabine is a member of the NRTI class of compounds, the predominant class of drugs used in the current standard of care for HIV therapy. 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 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.

ACH-806 for Chronic Hepatitis C Infection. Our second clinical-stage drug candidate, ACH-806 (also known as GS 9132), which we are developing in collaboration with Gilead Sciences, is currently being evaluated in a proof-of-concept clinical trial for the treatment of chronic hepatitis C that we initiated in August 2006. We expect to complete this clinical trial and have results available in the first quarter of 2007. In preclinical studies, ACH-806 demonstrated potent inhibition of the replication of HCV, the virus that causes hepatitis C. In a recently completed phase I clinical trial, results indicated that ACH-806 was safe and well tolerated in healthy volunteers. We believe ACH-806 offers 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 ACH-806 could be used in combination with the current standard of

Table of Contents

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 ACH-806. We received \$10.0 million from Gilead Sciences upon the execution of this agreement in the form of a license fee and equity purchase, and we are entitled to receive up to \$157.5 million in development, regulatory and sales milestone payments, assuming successful development of a lead and back-up compound as well as royalties on net sales of products.

ACH-702 for Serious Hospital-Based Bacterial Infections. Our most advanced 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. We expect to submit an IND for ACH-702 to the FDA in the first quarter of 2007.

In addition to our three lead drug candidates, we have earlier-stage preclinical programs focused on the treatment of HIV infection through the inhibition of viral proteins not targeted by currently marketed drugs, such as the capsid protein, and the treatment of HCV infection through compounds that have mechanisms of action that are distinct from ACH-806.

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 lead HCV compound, ACH-806, and our late-stage preclinical candidate, ACH-702. In the aggregate, members of our drug discovery, preclinical and clinical development team have contributed to the selection and development of more than 80 clinical candidates and 50 marketed products throughout their careers. We believe that our drug discovery capabilities will allow us to further expand our product 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. According to reports published by Datamonitor, in 2004, there were approximately \$6.6 billion in worldwide sales of drugs to treat HIV infection, \$2 billion in worldwide sales of antivirals for the treatment of chronic hepatitis C and \$24 billion in worldwide sales of antibacterials.

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.

Table of Contents

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

that 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 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

Table of Contents

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.

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 developing our other clinical compound, ACH-806, in a collaboration and exclusive license arrangement with Gilead Sciences, for the treatment of chronic HCV infection. In addition, we are developing ACH-702 for the treatment of serious hospital-based bacterial infections and are progressing additional discovery stage candidates for the treatment of HIV infection and chronic hepatitis C. In particular, we expect to:

complete our phase II clinical trials for elvucitabine in the first half of 2007 and, if supported by favorable data from the phase II trials, initiate phase III clinical trials in 2007;

complete our proof-of-concept clinical trial of ACH-806 in the first quarter of 2007; and

submit an IND to the FDA for ACH-702 in the first quarter of 2007.

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 program (ACH-806) and antibacterial program

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

(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 additional discovery technologies.

Table of Contents

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. As part of this strategy, we entered into a collaboration with Gilead Sciences in November 2004 for the development and commercialization of HCV compounds, including ACH-806, pursuant to which we received a significant up-front payment and are utilizing Gilead Sciences' broad capabilities to accelerate the progress of this drug candidate.

Pursue a Diversified Commercial Strategy. On a selected basis, we plan to participate in the eventual commercialization of our products. While we have granted Gilead Sciences worldwide commercialization rights for certain of our HCV compounds, including ACH-806, we have the option to participate on a limited basis in marketing efforts in the United States. In addition, we have retained all commercialization rights for elvucitabine and ACH-702. We intend eventually to build and deploy a focused, North American sales force to support the sales and marketing of those drug candidates for which it is possible to effectively and efficiently access the market. In addition, we may collaborate with other companies to co-promote our drug candidates in North America in instances where we believe a larger sales and marketing presence will expand the market or accelerate market penetration. We intend to utilize strategic alliances with third parties to commercialize our drugs in markets outside North America.

Table of Contents**Our Drug Candidates**

The following table summarizes key information regarding our drug candidates:

Drug	Indication	Target	Stage of Development	Current Status	Current Marketing Rights
	Elvucitabine	HIV reverse transcriptase	Phase II	Phase II placebo-controlled viral kinetics, safety and pharmacokinetics trial in HIV treatment-naive patients recently completed	Achillion
	<i>HIV Infection</i>			Phase II comparative viral kinetics, safety and pharmacokinetics trial in HIV treatment-experienced patients; currently screening expected completion and data available in the first half of 2007	
	ACH-806	HCV protease	Proof-of-Concept	Phase II comparative safety, antiviral efficacy and pharmacokinetics trial in HIV treatment-naive patients expected completion in the first quarter of 2007, with data anticipated to be available in the first half of 2007 Proof-of-concept multiple dose trial in HCV-infected patients commenced in August, 2006 expected completion and data available in the first quarter of 2007	Gilead Sciences*
	<i>(also known as GS 9132) Chronic Hepatitis C Infection</i>				
	ACH-702	DNA replication enzymes	IND-enabling preclinical studies	IND-enabling preclinical studies in progress expected in the first quarter of 2007	Achillion
	<i>Serious Hospital-Based Bacterial Infections</i>				
	HIV Inhibitor	Nucleocapsid protein	Discovery	Lead optimization studies in progress	Achillion
	<i>HIV Infection</i>				
	HCV Inhibitor	Undisclosed	Discovery	Lead optimization studies in progress	Achillion
	<i>Chronic HCV Infection</i>				

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

Table of Contents

Elvucitabine for HIV

Elvucitabine is an 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 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 recently completed the first of our phase II clinical trials. Because of the strict entry criteria for our second phase II trial, which is based on genotype analysis, we anticipate that the enrollment period will take several months. Therefore, we anticipate that the data from this trial will be available in the first half of 2007. We expect that the data from our third trial will be available in the first half of 2007.

If supported by favorable data from the phase II trials, we intend to initiate phase III trials in 2007.

Overview of HIV and 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, an estimated 40 million people worldwide are infected with HIV. In addition, over 25 million people have died from AIDS since the epidemic began. The Centers for Disease Control and Prevention, or CDC, estimates that in the United States there were between 1,039,000 and 1,185,000 people living with HIV/AIDS in 2003, with 40,000 new infections annually. According to the Joint United Nations Programme on HIV/AIDS and the World Health Organization, in Europe and Central Asia there were approximately 2,320,000 people living with HIV/AIDS in 2005, with 292,000 new infections annually.

According to reports published by Datamonitor, the worldwide market for HIV therapeutics was \$6.6 billion in 2004. A majority of these sales are derived from the North American and European pharmaceutical markets.

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 four drug classes that have

been approved for the treatment of HIV infection:

NRTIs;

non-nucleoside reverse transcriptase inhibitors, or NNRTIs;

Table of Contents

protease inhibitors; and

fusion inhibitors.

NRTIs and NNRTIs prevent HIV replication by interacting with reverse transcriptase. NRTIs, such as Efavirenz (EFV), Emtriva (FTC), Viread (tenofovir), Retrovir (AZT) and Zidovudine (ZDV), 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, also known as entry inhibitors, such as Fuzeon (enfuvirtide), prevent HIV from fusing to CD4 cells, thereby preventing the initial infection of CD4 cells by HIV.

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 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. 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.

Table of Contents

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.

Achillion Approach: Elvucitabine

Elvucitabine is an L-cytosine NRTI, belonging to the same class as 3TC and FTC. L-cytosine NRTIs represent the most frequently prescribed class of NRTIs based upon sales, accounting for approximately 34% of the worldwide NRTI market in 2004. 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 3TC 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 over 100 hours, or up to 20 times greater than that of Efavirenz (EFV) and up to ten times greater than that of Emtriva (FTC). In addition, elvucitabine's intracellular half-life has recently been demonstrated in a clinical trial to be over 100 hours, or more than five times greater than that of Efavirenz (EFV) 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.

Superior 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 Efavirenz (EFV) and Emtriva (FTC), including those associated with Viread (tenofovir), Retrovir (AZT) and Zerit (d4T). In addition, although elvucitabine's resistance profile is similar to Efavirenz (EFV) and Emtriva (FTC), elvucitabine retains greater antiviral activity in laboratory tests against HIV with resistance to Efavirenz (EFV) and Emtriva (FTC). 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 Efavirenz (EFV), we also believe elvucitabine could be an attractive candidate as part of a combination product for use in HAART regimens.

Table of Contents***Ongoing and Planned Clinical Development***

Our current plans for clinical development of elvucitabine include the following phase II trials to further 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	Ten sites in the United States, with an expected seven additional sites in Latin America and Europe	20	14 days, with an expected extension of 24 additional weeks	Currently screening; trial expected to be completed in the first half of 2007, with data available in the first half of 2007.
Phase II comparative safety, antiviral efficacy and pharmacokinetics trial	HIV treatment-naïve patients	20 sites in the United States	60	12 weeks, with extension to 24 weeks	Currently screening; trial expected to be completed in the first quarter of 2007, with data available in the first half of 2007.

We recently 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 <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 <1% in patients receiving a placebo. This trial further demonstrated that the plasma half-life of elvucitabine is greater than 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 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, although we do not have any data from this clinical trial to support this belief. 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 initiated a randomized, double-blind phase II trial in December 2005 in which we are evaluating the viral kinetics, safety and pharmacokinetics of elvucitabine in 20 HIV-infected patients who have failed a HAART regimen which included Epivir (3TC). Treatment failure is defined as the presence of the M184V mutation, which signifies Epivir (3TC) drug resistance. Patients receive either 10 mg of elvucitabine once daily in place of Epivir (3TC) or continue receiving 300 mg of Epivir (3TC) once daily for 14 days. The patients' other two HAART regimen drugs remain unchanged. An acceptable treatment response for this trial is defined as the elvucitabine cohort demonstrating greater reduction in HIV viral load on day 14, as compared to the viral load

Table of Contents

observed in patients remaining on Epivir (3TC). If patients respond favorably, we expect to allow them to receive an additional 24 weeks of therapy with elvucitabine. Because of the strict entry criteria for this trial, which is based on genotype analysis, we anticipate that the enrollment period will take several months; therefore, we anticipate data from this trial will be available in the first half of 2007.

We initiated a randomized, double-blind phase II trial in May 2006 of elvucitabine in combination with two additional antiretrovirals (Sustiva (efavirenz) and Viread (tenofovir)), as compared to Epivir (3TC) in combination with the same two additional antiretrovirals, in 60 treatment-naïve HIV patients. We will evaluate the safety, antiviral efficacy and pharmacokinetics of 12 weeks of therapy with these two treatment regimens. An acceptable treatment response for this trial is defined as the patients demonstrating a viral load less than a specified level at the end of the initial 12-week period. If patients respond favorably, they may receive an additional 12 weeks of therapy with elvucitabine. We anticipate data from this trial to be available in the first half of 2007.

If we receive favorable data from these trials, following discussion with the FDA and European regulatory authorities, we expect to initiate phase III clinical trials in HIV-infected individuals in the United States and Europe in 2007, collecting data during 48 weeks of dosing in over 1,000 patients.

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 $.7\log_{10}$ 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.

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*

in vitro than Efavir (3TC) against wild-type HIV, meaning HIV without mutations associated with drug resistance. In addition, elvicitabine demonstrates greater potency *in vitro* against HIV with resistance to most of the commonly used NRTIs such as

Table of Contents

Eпивir (3TC), 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-806 for HCV Infection

ACH-806 (also known as GS 9132) is a potent inhibitor of HCV replication with a novel mechanism of action involving HCV protease that we identified through our internal drug discovery capabilities. In November 2004, we entered into a strategic alliance with Gilead Sciences for the discovery, development and commercialization of compounds to treat chronic hepatitis C, including ACH-806. Pursuant to this collaboration, we are currently testing ACH-806 in a proof-of-concept clinical trial, and we expect data to be available from this trial in the first quarter of 2007.

Overview of HCV and 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.

It is currently estimated that 170 million people worldwide are chronically infected with HCV with three to four million new HCV infections annually. As of 2001, there were approximately 2.7 million individuals chronically infected with HCV within the United States. According to the National Institutes of Health, or NIH, hepatitis C is responsible for 10,000 to 12,000 deaths each year in the United States. Based upon genetic sequence analysis, HCV can be classified into one of six major classes or genotypes. The genotype 1 strain of HCV is the most common genotype in the United States, Europe and Japan and accounts for 79% of all HCV infections in the United States.

According to reports published by Datamonitor, the worldwide market for HCV therapeutics in 2004 was estimated to be \$2 billion, and is projected to exceed \$4 billion by 2013.

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

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

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:

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.

Table of Contents

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: ACH-806

ACH-806 (also known as GS 9132) is a novel small molecule potent inhibitor of HCV replication which we identified through our internal research program. We believe ACH-806 has the following benefits:

Novel Mechanism of Action. Based upon extensive virology and biochemistry studies, we have established that the mechanism of action of ACH-806 is novel and involves an interaction with NS3 protease which is distinct from that observed with other known NS3 protease inhibitors. ACH-806 prevents the formation of the 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 ACH-806 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 ACH-806 has 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, ACH-806 has 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 ACH-806 could be administered orally.

Potential for Combination Treatment. Because of the lack of cross resistance with all other known classes of HCV inhibitors, we believe that ACH-806 is 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 the second half of 2005, we initiated a single dose-escalating phase I clinical trial with 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 a tablet formulation of ACH-806 in a single dose-escalating phase I clinical trial in 20 subjects. We completed this trial in the second quarter of 2006, and results revealed the drug was safe and well tolerated in healthy volunteers. These results are based on a small number of patients and are not necessarily predictive of results in trials with larger and more diverse patient

populations. In August 2006, we initiated a multiple dose proof-of-concept clinical trial 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. We expect to complete this trial and have results available in the first quarter of 2007.

Table of Contents

As appropriate, based upon the clinical experience gained with ACH-806 in the proof-of-concept clinical trial, our collaborative partner, Gilead Sciences, may conduct phase II and/or phase III clinical trials and will assume financial and operational responsibility for the development of ACH-806 if it chooses to conduct such trials.

Preclinical Development History

In our preclinical studies, we demonstrated that ACH-806 inhibits HCV replication in cell-based replicon assays that have developed resistance to other HCV protease and polymerase inhibitors.

In 2005, we compared the potency of ACH-806 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-806, 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-806 is approximately 14-fold more potent than SCH-503034, and approximately 21-fold more potent than VX-950. The following table describes these results:

HCV Inhibitor	Potency (nM)
ACH-806	14
VX-950	300
SCH-503034	200

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

Back-up Program

Based on our experience in the HCV area, and as part of our collaboration with Gilead Sciences, we have developed a series of HCV inhibitors with the following characteristics:

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

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

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

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

We are currently conducting late stage preclinical studies on these compounds, and we expect to submit an IND to the FDA in 2007 for one of these compounds.

Under the terms of the collaboration with Gilead Sciences, we are responsible for preclinical development, regulatory filing and clinical development of ACH-806 through the completion of the proof-of-concept clinical trial according to a jointly agreed upon research plan. We are also responsible for research activities associated with the identification of a back-up compound until such time as proof-of-concept is achieved with respect to one compound. Research activities prior to demonstration of proof-of-concept will be overseen by a research committee comprised of equal numbers of our representatives and representatives from Gilead Sciences. 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. In connection with commercialization of products, we have a one-time option to participate on a limited basis in the marketing effort in the United States.

Table of Contents

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 are currently assessing ACH-702 in IND-enabling preclinical studies to support clinical evaluation of this drug. We expect to submit an IND to the FDA during the first quarter of 2007.

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 2002, 57% of *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), Zynox (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.

According to an industry report published by Espicom, the 2006 worldwide market for anti-MRSA antibacterials is projected to be approximately \$2.0 billion.

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.

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

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

Table of Contents

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.

Compound	MIC (µg/ml)		
	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

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.

Discovery Programs

While pursuing the development of our lead programs in the HIV, HCV and antibacterial areas, we continue to engage in the preclinical development of earlier-stage drug candidates. Currently, our principal early-stage programs are the following:

HIV Capsid Program

We believe current HIV combination therapies will benefit from discovery and development of therapeutics that inhibit viral proteins not targeted by currently marketed drugs. One such protein is the capsid protein, an essential component for HIV replication. Capsid protein is required for maturation and production of HIV. We have identified small molecule inhibitors that prevent HIV replication through their interactions with the capsid protein. The cornerstone of our research is our exclusive access to the proprietary, three-dimensional structure of capsid protein, and to three-dimensional structures of inhibitors bound to the capsid protein. We have combined this information with our expertise in computational chemistry, medicinal chemistry and virology to design, synthesize and optimize inhibitors of HIV capsid protein. We have demonstrated that our inhibitors prevent HIV replication through interactions with the capsid protein. Our research efforts in this area are supported by an SBIR grant from the NIH.

HCV Inhibitor Program

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. We have leveraged our experience in HCV drug discovery to identify inhibitors that are distinct from ACH-806 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 inhibitors are efficacious against genotype 1 virus, are not cross resistant to ACH-806 and potentially can be administered orally.

Drug Discovery and Development Capabilities

We have successfully advanced two drug candidates into human clinical trials, with a third drug candidate in late-stage preclinical studies. We discovered two of these drug candidates, ACH-806 and ACH-702, 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 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.

Table of Contents

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.

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 over 45 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 80 clinical candidates and 50 marketed products throughout their careers.

Competition

Our industry is highly competitive and subject to rapid and significant technological change. All of the drugs we are developing, if approved, will compete against existing therapies. In addition, we believe a significant number of drug candidates are currently under development and may become available for the

Table of Contents

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, or 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, will compete with the NRTIs currently marketed for treatment of HIV infection, including: Epivir (3TC), Retrovir (AZT), Ziagen (abacavir), Combivir (3TC + AZT), Trizivir (3TC + AZT + abacavir) and Epzicom (3TC + 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 classes of drugs are also under development for the treatment of HIV infection by companies such as Abbott, Boehringer Ingelheim, Johnson & Johnson, Merck, Panacos, Pfizer, Roche, Schering-Plough, Trimeris and Vertex.

ACH-806, HCV

ACH-806 (also known as GS 9132), if approved, will 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, ACH-806 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, Arrow Pharmaceuticals, Boehringer Ingelheim, Bristol-Myers Squibb, Gilead Sciences, GlaxoSmithKline, Human Genome Sciences, Idenix Pharmaceuticals, 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, will 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 (dalbavancin + 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

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

treatment of bacterial infections: Abbott, Aventis, Bristol-Myers Squibb, Cubist, GlaxoSmithKline, Merck, Novartis, Replidyne, Roche and Wyeth.

Table of Contents

Intellectual Property

Our policy 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, nine associated issued non-U.S. patents, 25 associated pending non-U.S. patent applications, one pending U.S. non-provisional application and two pending PCT applications. 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 two U.S. provisional patent applications, nine pending U.S. non-provisional applications, one associated issued non-U.S. patent, 68 associated pending non-U.S. patent applications and five pending PCT applications. These patent applications, if issued, will expire between 2023 and 2026. The patent applications contain claims directed to compounds, method of use, process for synthesis, mechanism of action and research assays.

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 ACH-806, compounds chemically related to ACH-806, any additional compounds which inhibit HCV via a mechanism similar to that of ACH-806, and intellectual property relating to the mechanism of action of ACH-806. 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 Corporation, Apath, L.L.C. and ReBlikon, GmbH.

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

Our antibacterial patent portfolio currently consists of six pending U.S. patent applications, one pending U.S. provisional patent application, 14 associated pending non-U.S. applications and five pending international patent applications filed under the Patent Cooperation Treaty. These patent applications, if issued, will expire between 2024 and 2026. The patent applications contain claims directed to compounds, method of use, process for synthesis and mechanism of action.

Our HIV capsid patent portfolio currently consists of four pending U.S. patent applications, one pending international patent application filed under the Patent Cooperation Treaty and ten associated non-U.S. patent filings. These patent applications, if issued, will expire between 2022 and 2026. We have obtained an exclusive worldwide license to these patent applications from the University of Maryland Baltimore County.

Table of Contents

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 C, including ACH-806 (also known as GS 9132), which inhibits HCV replication through a novel mechanism of action involving HCV protease. After proof-of-concept, if requested by Gilead Sciences, we may elect to assume responsibility for additional discovery activities on terms to be negotiated with Gilead Sciences at such time. We will perform preclinical development and clinical development through the completion of a proof-of-concept clinical trial in HCV patients according to a jointly-agreed upon research plan. Gilead Sciences will be responsible for manufacturing and formulation activities. 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 research committee shall agree upon a budget for the research program, and the parties will equally share such costs. In addition, the parties may agree at any time to increase or decrease the research budget. Through June 30, 2006, the parties have expended an aggregate of \$17.9 million on research and development activities. Prior to proof-of-concept, any disputes within the research committee that cannot be resolved between designated executives of each party will be resolved by Gilead Sciences.

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 bear the costs associated with the commercial participation of our field-based personnel; provided, however, 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, as well as royalties on net sales of products. We will share equally with Gilead Sciences all costs of the research program through proof-of-concept, subject to an agreed-upon cap. Thereafter, Gilead Sciences will assume all costs for development and commercialization of compounds, other than a portion of patent prosecution costs that we have agreed to pay.

The agreement will expire on the last to expire royalty term. In addition, Gilead Sciences may terminate the agreement for any reason after the earlier of (i) proof-of-concept or (ii) November 24, 2006, 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.

Table of Contents

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 June 30, 2006, 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 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 sublicensees under specified circumstances. Through June 30, 2006, 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.

University of Maryland Baltimore County

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

In November 2002, we entered into a license agreement with the University of Maryland Baltimore County, or UMBC, under which we obtained an exclusive license from UMBC for drug discovery technology that is useful for screening and identifying compounds that bind to the HIV capsid protein. Through June 30,

Table of Contents

2006, we have made aggregate payments of \$22,500 to UMBC under this agreement, including an initial license fee of \$7,500 and annual license payments totaling \$15,000. If we have not achieved a specified development milestone prior to November 15, 2006, which we currently do not expect to achieve, we will be required to make an additional annual license payment of \$10,000 for the year beginning November 15, 2005 and each year thereafter until the milestone is met or this agreement is terminated. We may also be required to make additional payments of up to an aggregate of \$650,000 based on the achievement of specified development and regulatory approval milestones. In addition, we are required to pay UMBC 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, unless earlier terminated. There are currently no issued patents under this agreement. Each party has the right to terminate the agreement upon 60 days notice for an uncured material breach, and we may terminate this agreement for convenience upon 60 days notice.

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 certain of our HCV compounds, including ACH-806. 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.

Table of Contents

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, packaging, promotion, storage, advertising, distribution, marketing and export and import of products such as those we are developing. Our drugs must be approved by FDA through the new drug application, or NDA, process before they may be legally marketed in the United States.

In the United States, the FDA regulates drugs under the Federal Food, Drug and Cosmetic Act, or FDCA, and implementing regulations. 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 Good Laboratory Practices;

submission of an IND, which must become effective before human clinical trials may begin;

performance of adequate and well-controlled human clinical trials according to Good Clinical Practices to establish the safety and efficacy of the proposed drug for its intended use;

submission to 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, 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. An 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

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

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.

All clinical trials must be conducted under the supervision of one or more qualified investigators in accordance with good clinical practice regulations. These regulations include the requirement that all research subjects provide informed consent. Further, an institutional review board, or IRB, at each institution participating in the clinical trial must review and approve the plan for any clinical trial before it commences at that institution.

Table of Contents

Each new clinical protocol must be submitted to the IND for FDA review, and to the IRBs for approval. 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 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 must 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.

U.S. Review and Approval Processes

The results of product development, preclinical studies and clinical studies, along with descriptions of the manufacturing process, analytical tests conducted on the chemistry of the drug, results of chemical studies and other relevant information are submitted to the FDA as part of an NDA requesting approval to market the product. The FDA reviews all NDAs submitted to ensure that they are sufficiently complete for substantive review before it accepts them for filing. The FDA may request additional information rather than accept a 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 subject to the payment of user fees; a waiver of such fees may be obtained under certain limited circumstances. 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 reviews an NDA to determine, among other things, whether a product is safe and effective for its intended use and whether its manufacturing is cGMP-compliant to assure and preserve the product's identity, strength, quality and purity. Before approving an NDA, the FDA will inspect the facility or facilities where the product is manufactured.

Table of Contents

NDA receive either standard or priority review. A drug representing a 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.

Pediatric Research Equity Act and Pediatric Exclusivity

The Pediatric Research Equity Act of 2003 (PREA), codified as section 505B of the FDCA, provides the FDA with authority to require NDAs or NDA supplements for new active ingredients, new indications, new dosage forms, new dosing regimens, or new routes of administration to include pediatric assessments in all relevant pediatric populations. The FDA Modernization Act of 1997 included a pediatric exclusivity provision, codified as section 505A of the FDCA that was extended by the Best Pharmaceuticals for Children Act of 2002. Pediatric exclusivity is designed to provide a voluntary incentive to manufacturers to conduct research about the safety of their products in children. Pediatric exclusivity, if granted, provides an additional six months of market exclusivity in the United States to any patent or non-patent market exclusivity in place for new or currently marketed drugs. Both provisions expire on October 1, 2007, and may not be reauthorized.

PREA requirements. PREA requires new drug applications (NDAs) and biologics licensing applications (BLAs) (or supplements to applications) for a new active ingredient, new indication, new dosage form, new dosing regimen or new route of administration to contain a pediatric assessment, unless the applicant has obtained a waiver or deferral, with data adequate to assess the safety and effectiveness of the drug for the claimed indications in all relevant pediatric subpopulations and to support dosing and administration for each pediatric subpopulation for which the drug is safe and effective. Such assessments may require separate safety and effectiveness studies in all relevant pediatric populations including data gathered using appropriate formulations for each age group for which an assessment is required. If pediatric studies are required, in order to obtain six months of pediatric exclusivity under section 505A, the applicant must obtain a Written Request from FDA offering the opportunity to qualify for pediatric exclusivity under section 505A before submitting the required studies under section 505B, and must also comply with all the requirements of section 505A. Section 505B further authorizes FDA, after providing written notice and the opportunity to meet, to require holders of approved NDAs to submit pediatric assessments for drugs that are used by many children for the labeled indications and inadequate labeling that could pose significant risks; or that represent a significant improvement over existing pediatric therapies. However, no pediatric assessment for a marketed drug may be required unless a Written Request offering the opportunity to qualify for pediatric exclusivity under section 505A of the FDCA has been made by the agency.

Pediatric Exclusivity. Under Section 505A of the Federal Food, Drug, and Cosmetic Act, six months of market exclusivity may be granted in exchange for the voluntary completion of pediatric studies in accordance with an FDA-issued Written Request. The FDA may issue a Written Request for studies on unapproved or approved indications, where it determines that information relating to the use of a drug in a pediatric population, or part of the pediatric population, may produce health benefits in that population. We have not requested or received a Written Request for such pediatric studies, although we may ask the FDA to issue a Written Request for such studies in the future. To receive the six-month pediatric market exclusivity, we would have to receive a Written Request from the FDA, and conduct the requested studies and submit reports of the studies in accordance with a written agreement with the FDA. If we receive a Written Request, but do not have a written agreement with FDA regarding the conduct of the studies, the studies must fairly respond to the Written Request, have been conducted in accordance with commonly accepted scientific principles and protocols, and meet filing requirements. There is no guarantee that the FDA will issue a Written Request for such studies or accept the reports of the studies.

Table of Contents

Post-approval Requirements

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 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 changes, complying with certain electronic records and signature requirements, and complying with FDA promotion and advertising requirements. 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 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.

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 approval by one or more other, or concerned, Member States of an assessment of an application performed by one Member State, known as the reference Member State. Under this procedure, an applicant submits an application, or dossier, and related materials (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.

Table of Contents

Reimbursement

Sales of pharmaceutical products depend in significant part on the availability of third-party reimbursement. It is time consuming and expensive for us 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. At this point, it is not clear what effect the MMA will have on the prices paid for currently approved drugs and the pricing options for new drugs approved after January 1, 2006. Moreover, 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.

We expect that there will continue to be a number of federal and state proposals to implement governmental pricing controls. 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 September 15, 2006, we had 63 employees, 26 of whom hold doctoral degrees. Approximately 50 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.

Property and Facilities

We are currently leasing approximately 37,000 square feet of laboratory and office space in New Haven, Connecticut, which we occupy under a ten-year lease expiring in 2010. 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.

Legal Proceedings

We are not currently subject to any material legal proceedings.

Table of Contents**MANAGEMENT**

The following table sets forth our executive officers and directors, their ages and the positions they held as of September 15, 2006.

Name	Age	Position
Michael D. Kishbauch	57	Director, President and Chief Executive Officer
Milind S. Deshpande, Ph.D.	50	Senior Vice President and Chief Scientific Officer
John C. Pottage, Jr., M.D.	53	Senior Vice President and Chief Medical Officer
Mary Kay Fenton	42	Vice President and Chief Financial Officer
Gautam Shah, Ph.D.	50	Senior Vice President and Chief Compliance Officer
Jason Fisherman, M.D. (3)	50	Director
Jean-Francois Formela, M.D. (1)	50	Director
James Garvey (1)(3)	59	Director
Michael Grey (2)	53	Director
Stefan Ryser, Ph.D. (1)(2)	46	Director
David Scheer (3)	53	Director
Christopher White (2)	41	Director

- (1) Member of the Compensation Committee
(2) Member of the Audit Committee
(3) Member of the Nominating and Corporate Governance Committee

Executive Officers and Directors

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., Senior 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 and Senior Vice President and Chief Scientific Officer in December 2004. 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.

John C. Pottage, Jr., M.D., Senior Vice President and Chief Medical Officer. Dr. Pottage joined Achillion in May 2002. Prior to Achillion, Dr. Pottage was Medical Director of Antivirals at Vertex Pharmaceuticals. During this time he also served as an associate attending physician at the Tufts New England Medical Center in Boston. From 1984 to 1998, Dr. Pottage was a faculty member at Rush Medical College in Chicago, where he held the position of Associate Professor, and also served as the Medical Director of the Outpatient HIV Clinic at Rush-Presbyterian-St. Luke's Medical Center. Dr. Pottage is a graduate of St. Louis University School of Medicine and Colgate University.

Table of Contents

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.

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.

Jason S. Fisherman, M.D., Director. Dr. Fisherman has served as a director of Achillion since March 2000. Dr. Fisherman is a Senior Vice President of Advent International Corporation, a global private equity firm where he specializes in biotechnology and emerging pharmaceutical investments, which he joined in 1996. From 1991 to 1994, Dr. Fisherman served as Senior Director of Medical Research for Enzon, Inc., a biopharmaceutical company, and previously managed the clinical development of a number of oncology drugs at the National Cancer Institute. Dr. Fisherman is currently a director of several private healthcare companies. Dr. Fisherman received his B.A. from Yale University, his M.D. from the University of Pennsylvania and his M.B.A. from the Wharton School of the University of Pennsylvania.

Jean-Francois Formela, M.D., Director. Dr. Formela has served as a director of Achillion since January 2000. Dr. Formela is a Senior Partner of Atlas Venture, which he joined in September 1993. Previously, he was Senior Director, Medical Marketing and Scientific Affairs at Schering-Plough, a pharmaceutical company, in the United States. As a medical doctor, Dr. Formela practiced emergency medicine at Necker University Hospital in Paris. Dr. Formela serves on the Board of Directors of ARCA Discovery, Inc. Cellzome AG, Compound Therapeutics, Inc., NxStage Medical, Inc., Resolvix Pharmaceuticals, Inc. and SGX Pharmaceuticals, Inc. Dr. Formela holds an M.D. from Paris University School of Medicine and an M.B.A. from Columbia Business School.

James Garvey, Director. Mr. Garvey has served as a director of Achillion since March 2001. Mr. Garvey joined SV Life Sciences Advisers, LLC, or SVLS (formerly Schroder Ventures Life Sciences Advisers, Inc.), a venture capital firm, in May 1995 and currently serves as the Chief Executive Officer and Managing Partner of SVLS. Prior to joining SVLS, Mr. Garvey was Managing Director for the Venture Capital division of Allstate Corporation, preceded by managing Allstate's healthcare investment activity. He has held several senior management positions in companies with multinational operations including Kendall (Tyco) and Millipore. He was also President/CEO of start-ups Allegheny International Medical Technology and National Teledata. Mr. Garvey currently serves on the board of directors of CardioFocus, CHF Solutions, Cellutions, NeoVista and Sunrise At Home. Mr. Garvey received a B.S. degree from Northern Illinois University in 1969.

Michael Grey, Director. Mr. Grey has served as a director of Achillion since November 2001. Since January 2005, he has served as President and Chief Executive Officer of SGX Pharmaceuticals (formerly Structural GenomiX, Inc.), a biotechnology company, where he previously served as President from June 2003 to January 2005 and as Chief Business Officer from April 2001 until June 2003. Between December 1998 and April 2001, he served as a director of Trega Biosciences, Inc., a biopharmaceutical company acquired by Lion bioscience AG in 2001. Prior to joining Trega, from November 1994 to August 1998, Mr. Grey served as President of BioChem Therapeutics, Inc., a division of BioChem Pharma, Inc., a pharmaceutical company. During 1994, Mr. Grey served as President and Chief Operating Officer of Ansan, Inc., a biopharmaceutical company. From 1974 to 1993, Mr. Grey served in various roles with Glaxo, Inc. and Glaxo Holdings, plc, a pharmaceutical company, culminating in his position as Vice President, Corporate Development. Mr. Grey also serves on the

Table of Contents

Board of Directors of IDM Pharma, Inc. (formerly known as Epimmune Inc.) and Biomarin Pharmaceutical, Inc. Mr. Grey received a B.Sc. in Chemistry from the University of Nottingham, United Kingdom.

Stefan Ryser, Ph.D., Director. Dr. Ryser has served as a director of Achillion since November 2001. Since April 2000, Dr. Ryser has served as founding partner of Bear Stearns Health Innoventures L.P., a venture capital fund. From 1998 to 2000, Dr. Ryser was co-founder and managing partner of International Biomedicine Management Partners, a \$70 million biotech venture fund. From January 1989 until December 1997, Dr. Ryser held various positions at F. Hoffmann-La Roche Ltd., a pharmaceutical company, including Scientific Assistant to the President of Global Research and Development. From January 1991 until December 1997, Dr. Ryser served as a member of the Brussels-based senior advisory group of EuropaBio, a European biotechnology organization. Dr. Ryser is a director of Telik, Inc., Raven Biotechnologies, Inc. and TolerRx, Inc. Dr. Ryser holds a Ph.D. degree in molecular biology and a B.S. in biochemistry from the University of Basel.

David I. Scheer, Director. Mr. Scheer has served as a director of Achillion since August 1998. Since 1981, Mr. Scheer has been President of Scheer & Company, Inc., a firm that provides corporate strategic advisory services, including with respect to corporate alliances, licensing arrangements, divestments and mergers and acquisitions, to publicly- and privately-held companies, focusing on companies in the life sciences industry. Mr. Scheer is a director and Chairman of the Board of Tengion, Inc. and Aegerion Pharmaceuticals, Inc. Mr. Scheer is also a member of the Advisory Board to the Harvard Malaria Initiative and to the Leadership Council for the Harvard School of Public Health. Mr. Scheer received an A.B., *cum laude*, from Harvard College and an M.S. from Yale University.

Christopher A. White, Director. Mr. White has served as a director of Achillion since December 2003. Mr. White has served as Chief of Staff of Cowen and Company, LLC since December 2005 and as Chief Administrative Officer of Cowen and Company, LLC since June 2006. Mr. White has been the Vice President of Cowen Group, Inc. since its formation in February 2006. Previously, Mr. White served in the Merchant Banking Division of Cowen and Company, LLC, from 2003 to December 2005. Prior to joining the Merchant Banking Division, Mr. White served in the Equity Capital Markets Group of Cowen and Company, LLC where he covered the technology and consumer sectors. Prior to Cowen and Company, LLC, Mr. White worked at Salomon Smith Barney in the Equity Capital Markets Group. In addition, Mr. White has over seven years of experience as a practicing securities and mergers and acquisitions lawyer. Mr. White earned his B.A. from Amherst College and J.D. from the University of Michigan Law School.

Scientific and Clinical Advisory Boards

We seek advice from a number of leading scientists and physicians on scientific and medical matters. Our advisory boards regularly assess:

our research and development programs;

our publication strategies;

new technologies relevant to our research and development programs; and

specific scientific and technical issues relevant to our business.

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

The current members of our scientific advisory board are:

<u>Name</u>	<u>Position</u>	<u>Affiliation</u>
Paul S. Anderson, Ph.D.	Former Vice President, Drug Discovery	Bristol-Myers Squibb Pharmaceuticals
Gordon L. Archer, M.D.	Associate Dean of Research, School of Medicine	Virginia Commonwealth University Medical College
Jerome Birnbaum, Ph.D.	Co-founder and Senior Scientific Advisor	Achillion Pharmaceuticals

Table of Contents

<u>Name</u>	<u>Position</u>	<u>Affiliation</u>
Yung-Chi (Tommy) Cheng, Ph.D.	Henry Bronson Professor of Pharmacology and Professor of Medicine Director, Developmental Therapeutics Program	Yale University School of Medicine Yale Comprehensive Cancer Center Yale University
Andrew D. Hamilton, Ph.D.	Provost, Benjamin Silliman Professor of Chemistry and Professor of Molecular Biophysics and Biochemistry	Yale University
Michael Lai, M.D., Ph.D.	Distinguished Professor Molecular Microbiology and Immunology, Neurology	University of Southern California School of Medicine
Richard Whitley, M.D.	Professor of Pediatrics, Microbiology, Medicine and Neurosurgery Loeb Eminent Scholar Chair in Pediatrics	University of Alabama at Birmingham

The current members of our clinical advisory board are:

<u>Name</u>	<u>Position</u>	<u>Affiliation</u>
Gordon L. Archer, M.D.	Associate Dean of Research, School of Medicine	Virginia Commonwealth University Medical Center
Jules L. Dienstag, M.D.	Carl W. Walter Professor of Medicine and Physician, Gastrointestinal Unit	Harvard Medical School and Massachusetts General Hospital
David Ho, M.D.	Director and Chief Executive Officer and Irene Diamond Professor	Aaron Diamond AIDS Research Center and Rockefeller University
John W. Mellors, M.D.	Professor of Medicine and Chief, Division of Infectious Diseases Director, HIV/AIDS Program	University of Pittsburgh School of Medicine University of Pittsburgh Health System
Douglas D. Richman, M.D.	Director, Center for AIDS Research, Professor of Pathology and Medicine,	University of California, San

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

Eugene Schiff, M.D.

Florence Seeley Riford Chair in AIDS
Research

Leonard Miller Professor of Medicine

Chief, Division of Hepatology

Diego School of
Medicine

University of
Miami School of
Medicine

Robert T. (Chip) Schooley, M.D.

Director, Center for Liver Disease

Professor of Medicine and Head Chief,
Division of Infectious Diseases

University of
California, San
Diego, School of
Medicine

Table of Contents

<u>Name</u>	<u>Position</u>	<u>Affiliation</u>
Richard Whitley, M.D.	Professor of Pediatrics, Microbiology, Medicine and Neurosurgery Loeb Eminent Scholar Chair in Pediatrics	University of Alabama at Birmingham

Board of Directors

Our board of directors consists of eight members. Upon completion of this offering, the board of directors will be divided into three classes, with each class serving for a staggered three-year term. The board of directors will consist of three class I directors, Dr. Formela, Mr. Scheer and Mr. Garvey; three class II directors, Mr. Grey, Mr. Kishbauch and Dr. Ryser; and two class III directors, Dr. Fisherman and Mr. White. At each annual meeting of stockholders, a class of directors will be elected for a three-year term to succeed the directors of the same class whose terms are then expiring. The terms of the class I directors, class II directors and class III directors expire upon the election and qualification of successor directors at the annual meeting of stockholders held during the calendar years 2007, 2008 and 2009, respectively.

Our bylaws provide that any vacancies in our board of directors and newly created directorships may be filled only by our board of directors and that the authorized number of directors may be changed only by our board of directors. Any additional directorships resulting from an increase in the number of directors will be distributed among the three classes, so that, as nearly as possible, each class will consist of one-third of the total number of directors. These provisions of our bylaws and the classification of the board of directors may have the effect of delaying or preventing changes in the control or management of Achillion.

Each executive officer is elected by, and serves at the discretion of, the board of directors. Each of our executive officers and directors, other than non-employee directors, devotes his or her full time to our affairs. Each of our directors currently serves on the board of directors pursuant to a stockholders agreement. The stockholders agreement, including the provisions relating to the nomination and election of directors, will terminate upon the closing of this offering. There are no family relationships among any of our directors or officers.

Committees of the Board of Directors

Our board currently has three committees: the audit committee, the compensation committee and the nominating and corporate governance committee. The information set forth below assumes the completion of the proposed offering.

Audit Committee

The members of our audit committee are Mr. Grey, Mr. White and Dr. Ryser. Mr. Grey chairs the audit committee. Our audit committee, among other duties:

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

appoints a firm to serve as independent auditor to audit our financial statements;

is responsible for reviewing the independence, qualifications and quality control procedures of the independent auditors;

discusses the scope and results of the audit with the independent auditor, and reviews with management and the independent accountant our interim and year-end operating results;

Table of Contents

considers the adequacy of our internal accounting controls, critical accounting policies and audit procedures; and

approves (or, as permitted, pre-approves) all audit and non-audit services to be performed by the independent auditor.

The audit committee has the sole and direct responsibility for appointing, evaluating and retaining our independent auditors and for overseeing their work. All audit services and all non-audit services, other than de minimis non-audit services, to be provided to us by our independent auditors must be approved in advance by our audit committee. We believe that the composition of our audit committee meets the requirements for independence under the current NASDAQ Global Market and SEC rules and regulations.

Compensation Committee

The members of our compensation committee are Mr. Garvey, Dr. Ryser and Dr. Formela. Mr. Garvey chairs the compensation committee. The purpose of our compensation committee is to discharge the responsibilities of our board of directors relating to compensation of our executive officers. Specific responsibilities of our compensation committee include:

reviewing and recommending approval of compensation of our executive officers;

administering our stock incentive plans; and

reviewing and making recommendations to our board with respect to incentive compensation and equity plans.

Nominating and Corporate Governance Committee

The members of our nominating and corporate governance committee are Dr. Fisherman, Mr. Scheer and Mr. Garvey. Mr. Scheer chairs the nominating and corporate governance committee. Our nominating and corporate governance committee identifies, evaluates and recommends nominees to our board of directors and committees of our board of directors, conducts searches for appropriate directors and evaluates the performance of our board of directors and of individual directors. The nominating and corporate governance committee is also responsible for reviewing developments in corporate governance practices, evaluating the adequacy of our corporate governance practices and reporting and making recommendations to the board concerning corporate governance matters.

Director Compensation

Our directors are eligible to participate in our 1998 stock option plan, as amended, and will be eligible to participate in our 2006 stock incentive plan upon completion of this offering. None of our directors receives a fee for serving on the board of directors or any committee of the board. We reimburse each member of our board of directors who is not a company employee for reasonable travel and other expenses incurred in connection with attending meetings of the board of directors and its committees.

Compensation Committee Interlocks and Insider Participation

The current members of our compensation committee of our board of directors are Mr. Garvey, Dr. Ryser and Dr. Formela. No interlocking relationship exists between our board of directors or compensation committee and the board of directors or compensation committee of any other company, nor has any interlocking relationship existed in the past.

Table of Contents**Executive Compensation**

The following table sets forth the compensation earned by the individual who served as our chief executive officer in 2005 and the four other highest paid executive officers whose salary and bonus exceeded \$100,000 for services rendered in all capacities to us during the fiscal year ended December 31, 2005. We use the term *named executive officers* to refer to these people later in this prospectus. No other executive officers who would have otherwise been includable in the following table on the basis of salary and bonus earned for the year ended December 31, 2005 have been excluded by reason of their termination of employment or change in executive status during that year.

Name and Principal Position	Annual Compensation			Long-Term Compensation Awards	
	Salary (\$)	Bonus (\$)	Other Annual Compensation (\$)	Securities Underlying Options (#)	All Other Compensation
Michael D. Kishbauch <i>President and CEO</i>	\$ 320,000	\$ 157,120		116,997	\$ 1,290(1)
John Pottage, Jr., M.D. <i>Senior Vice President and Chief Medical Officer</i>	226,000	58,815		16,250	690(1)
Milind Deshpande, Ph.D. <i>Senior Vice President and Chief Scientific Officer</i>	220,000	55,275		16,250	450(1)
Kevin L. Eastwood(2) <i>Senior Vice President, Business Development</i>	215,000	51,760		16,250	300(1)
Gautam Shah, Ph.D. <i>Senior Vice President and Chief Compliance Officer</i>	200,000	54,800		13,125	450(1)

(1) Consists of premiums paid on group term life insurance.

(2) Mr. Eastwood resigned from Achillion effective May 30, 2006.

Option Grants in Last Fiscal Year

The following table lists each grant of stock options during fiscal year 2005 to the named executive officers. No stock appreciation rights have been granted to these individuals. The potential realizable value set forth in the last column of the table is calculated based on the term of the option at the time of grant, which is ten years. This value is based on assumed rates of stock price appreciation of 5% and 10% compounded annually from the date of grant until their expiration date, assuming a fair market value equal to an assumed initial public offering price of \$15.00, minus the applicable exercise price. These numbers are calculated based on the requirements of the SEC and do not reflect our estimate of future stock price growth. Actual gains, if any, on stock option exercises will depend on the future performance of the common stock on the date on which the options are exercised.

Individual Grants

Name	Number of Securities Underlying Options Granted	Percent of Total Options Granted to Employees in Fiscal Year	Exercise Price (\$/share)(1)	Expiration Date	Potential Realizable Value at	
					Assumed Annual Rates of Stock Price Appreciation for Option Term	
					5%	10%
Michael D. Kishbauch	116,997	44%	\$ 4.00	12/20/15	\$ 2,390,649	\$ 4,083,913
John Pottage, M.D.	16,250	6	4.00	12/20/15	332,043	567,225
Milind Deshpande, Ph.D.	16,250	6	4.00	12/20/15	332,043	567,225
Kevin L. Eastwood(2)	16,250	6	4.00	8/28/06		
Gautam Shah, Ph.D.	13,125	5	4.00	12/20/15	268,189	458,143

- (1) This exercise price represents the fair market value per share of our common stock on the date of grant as determined by our board of directors.
- (2) Mr. Eastwood resigned from Achillion effective May 30, 2006. Mr. Eastwood's right to exercise options expired on August 28, 2006.

Table of Contents**Option Exercises and Fiscal Year-End Values**

The following table sets forth information for each of the named executive officers regarding the number of shares subject to both exercisable and unexercisable stock options, as well as the value of unexercised in-the-money options, as of December 31, 2005. There was no public trading market for our common stock as of December 31, 2005. Accordingly, the value of the unexercised in-the-money options at fiscal year-end has been calculated by determining the difference between the exercise price per share and the fair market value of our common stock at fiscal year end, as determined by our board of directors. None of the named executive officers exercised options during the fiscal year ended December 31, 2005.

Name	Number of Securities Underlying		Value of Unexercised	
	Unexercised Options		In-the-Money Options at	
	at December 31, 2005(#)(1)		December 31, 2005(\$)	
	Exercisable	Unexercisable	Exercisable	Unexercisable
Michael D. Kishbauch	387,624		\$ 649,505	
John Pottage, M.D.	46,250		\$ 72,000	
Milind Deshpande, Ph.D.	60,625		\$ 106,500	
Kevin L. Eastwood (2)	51,375		\$ 84,300	
Gautam Shah, Ph.D.	37,500		\$ 58,500	

- (1) Each of these options is immediately exercisable on the date of grant for shares of restricted stock, which are subject to vesting over a specified period of time. As of December 31, 2005, these options were vested as to 84,570, 13,125, 23,203, 19,500 and 8,359 shares for Mr. Kishbauch, Dr. Pottage, Dr. Deshpande, Mr. Eastwood and Dr. Shah, respectively.
- (2) Mr. Eastwood resigned from Achillion effective May 30, 2006, and his right to exercise options expired on August 28, 2006.

Employment Agreements***Michael D. Kishbauch***

In July 2004, we entered into an employment agreement with Michael D. Kishbauch, our President and Chief Executive Officer, for an initial term that expires on December 31, 2006. The agreement is automatically renewable after the initial term for successive one-year periods unless either party provides written notice to the other party at least six months prior to the expiration of the applicable term. Under the agreement, Mr. Kishbauch currently receives an annual base salary of \$340,800, subject to adjustment at the discretion of our board of directors. In addition, Mr. Kishbauch is entitled to receive an annual performance bonus of up to 50% of his annual base salary, to be paid at the discretion of the board of directors if he achieves certain performance goals mutually agreed upon between the board and Mr. Kishbauch. Mr. Kishbauch is also entitled to participate in all benefit programs available to our other employees, to the extent his position, salary, age and other qualifications make him eligible to participate. In connection with the execution of the agreement, we paid Mr. Kishbauch a signing bonus of \$50,000 and granted him an option to purchase 270,627 shares of our common stock, which vests over four years.

Under the agreement, either we or Mr. Kishbauch may terminate the agreement at any time upon at least 15 days prior written notice. In addition, Mr. Kishbauch may terminate the agreement (i) if we require him to relocate such that his daily commute exceeds 60 miles or (ii) for

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

good reason within 12 months following a change in control or similar corporate transaction. If Mr. Kishbauch terminates his employment with us for either of the reasons described in (i) or (ii) above, or if we elect to terminate his employment upon 15 days' notice, we are required to continue to pay Mr. Kishbauch his then-current salary until the earlier of eighteen months following the date of employment termination or the date upon which Mr. Kishbauch commences full-time employment with another company, but in any event for at least 12 months. If Mr. Kishbauch terminates his employment as described in (i) or (ii) above or if we terminate his employment within 12 months following a change in control or similar corporate transaction, all of the stock options granted to Mr. Kishbauch will

Table of Contents

immediately vest and become exercisable. In addition, in the event we experience a change of control or similar corporate transaction, 25% of the original number of common shares subject to stock options held by Mr. Kishbauch will vest and become immediately exercisable.

John C. Pottage, Jr., M.D.

In September 2003, we entered into an amended and restated employment agreement with John C. Pottage, which was further amended in February 2006. The agreement expires on December 31, 2007 and is thereafter automatically renewable for successive one-year periods unless either party provides written notice to the other party at least six months prior to the expiration of the applicable term. Under this agreement, Dr. Pottage currently receives an annual base salary of \$248,600, subject to adjustment at the discretion of our board of directors. In addition, Dr. Pottage is entitled to receive an annual performance bonus of up to 25% of his annual base salary, to be paid at the discretion of the board of directors if he achieves certain performance goals. Dr. Pottage is entitled to participate in all benefit programs available to our other employees, to the extent his position, salary, age and other qualifications make him eligible to participate. In connection with the execution of the agreement, we granted Dr. Pottage an option to purchase 15,000 shares of our common stock, which vests over four years.

The agreement may be terminated (i) by us for cause, (ii) by Dr. Pottage for good reason within 12 months following a change in control or similar corporate transaction or (iii) at the election of either party upon at least 15 days prior written notice. If Dr. Pottage's employment with us is terminated by Dr. Pottage pursuant to (ii) above or by us pursuant to (iii) above, we are required to continue to pay Dr. Pottage his then-current salary until the earlier of the date that is six months after the date of termination or the date when Dr. Pottage commences full-time employment with another company. If Dr. Pottage terminates his employment as described in (ii) above or if we terminate his employment within 12 months following a change in control or similar corporate transaction, 50% of the original number of stock options granted to Dr. Pottage will immediately vest and become exercisable. In addition, in the event we experience a change of control or similar corporate transaction, 25% of the original number of stock options granted to Dr. Pottage will vest and become immediately exercisable.

Milind S. Deshpande, Ph.D.

In September 2003, we entered into an amended and restated employment agreement with Milind Deshpande, Ph.D., which was further amended in February 2006. The agreement expires on December 31, 2007 and is thereafter automatically renewable for successive one-year periods unless either party provides written notice to the other party at least six months prior to the expiration of the applicable term. Under this agreement, Dr. Deshpande currently receives an annual base salary of \$236,500, subject to adjustment at the discretion of our board of directors. In addition, Dr. Deshpande is entitled to receive an annual performance bonus of up to 25% of his annual base salary, to be paid at the discretion of the board of directors if he achieves certain performance goals. Dr. Deshpande is entitled to participate in all benefit programs available to our other employees, to the extent his position, salary, age and other qualifications make him eligible to participate. In connection with the execution of the agreement, we granted Dr. Deshpande an option to purchase 18,750 shares of our common stock, which vests over four years.

The agreement may be terminated (i) by us for cause, (ii) by Dr. Deshpande for good reason within 12 months following a change in control or similar corporate transaction or (iii) at the election of either party upon at least 15 days prior written notice. If Dr. Deshpande's employment with us is terminated by Dr. Deshpande pursuant to (ii) above or by us pursuant to (iii) above, we are required to continue to pay Dr. Deshpande his then-current salary until the earlier of the date that is six months after the date of employment termination or the date when Dr. Deshpande commences full-time employment with another company. If Dr. Deshpande terminates his employment as described in (ii) above or if we terminate his employment within 12 months following a change in control or similar corporate transaction, 50% of the original number of stock options granted to Dr. Deshpande will immediately vest and become exercisable. In addition, in the event we experience a change of control or similar corporate transaction, 25% of the original number of stock options granted to Dr. Deshpande will vest and become immediately exercisable.

Table of Contents

Gautam Shah, Ph.D.

In May 2004, we entered into an employment agreement with Gautam Shah, Ph.D., which was amended in February 2006. The agreement expires on December 31, 2007 and is thereafter automatically renewable for successive one-year periods unless either party provides written notice to the other party at least six months prior to the expiration of the applicable term. Under this agreement, Dr. Shah currently receives an annual base salary of \$215,000, subject to adjustment at the discretion of our board of directors. In addition, Dr. Shah is entitled to receive an annual performance bonus of up to 25% of his annual base salary, to be paid at the discretion of the board of directors if he achieves certain performance goals. Dr. Shah is entitled to participate in all benefit programs available to our other employees, to the extent his position, salary, age and other qualifications make him eligible to participate. In connection with the execution of the agreement, we granted Dr. Shah an option to purchase 18,125 shares of our common stock, which vests over four years.

The agreement may be terminated (i) by us for cause, (ii) by Dr. Shah for good reason within 12 months following a change in control or similar corporate transaction or (iii) at the election of either party upon at least 15 days' prior written notice. If Dr. Shah's employment with us is terminated by Dr. Shah pursuant to (ii) above or by us pursuant to (iii) above, we are required to continue to pay Dr. Shah his then-current salary until the earlier of the date that is six months after the date of employment termination or the date when Dr. Shah commences full-time employment with another company. If Dr. Shah terminates his employment as described in (ii) above or if we terminate his employment within 12 months following a change in control or similar corporate transaction, 50% of the original number of stock options granted to Dr. Shah will immediately vest and become exercisable. In addition, in the event we experience a change of control or similar corporate transaction, 25% of the original number of stock options granted to Dr. Shah will vest and become immediately exercisable.

Employee Benefit Plans

1998 Stock Option Plan

Our 1998 stock option plan, or 1998 plan, as amended and restated, was adopted by our board of directors in January 2000 and approved by our stockholders in March 2000. A maximum of 1,093,750 shares of common stock are authorized for issuance under the 1998 plan. As of September 15, 2006, there were options to purchase 807,548 shares of common stock outstanding under the 1998 plan at a weighted average exercise price of \$2.28 per share, 557,534 shares of common stock have been issued pursuant to the exercise of options granted under this plan and 56,544 shares of common stock are available for future grants under this plan. After the effective date of the 2006 stock incentive plan described below, we will grant no further stock options or other awards under the 1998 plan.

The 1998 plan, as amended, provides 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. Our employees, officers, directors, consultants and advisors are eligible to receive options under the 1998 plan. Under present law, however, incentive stock options may only be granted to our employees. In accordance with the terms of the 1998 plan, our board of directors administers the 1998 plan.

Pursuant to the terms of the 1998 plan, in the event of a proposed liquidation or dissolution of Achillion, our board of directors will provide that all unexercised options will become exercisable in full at least 10 business days prior to the liquidation or dissolution and will terminate upon the liquidation or dissolution.

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

In the event of a merger or other reorganization event, all outstanding options shall be assumed, or substituted for, by the acquiror. If the acquiror does not agree to assume, or substitute for, such options, then the board will (i) provide that all unexercised options will become immediately exercisable in full prior to completion of the reorganization event for shares subject to a right of repurchase by us, and will terminate if not exercised prior to such time or (ii) if holders of common stock will receive a cash payment for each share surrendered in such an event, provide for a cash payment to optionees in accordance with the terms of the plan.

Table of Contents

Any repurchase rights of Achillion under any option that may be exercised shall inure to the benefit our successor and shall apply to the cash, securities or other property into which the common stock was converted into or exchanged for pursuant to such event.

2006 Stock Incentive Plan

Our 2006 stock incentive plan, which we refer to as the 2006 plan, was adopted by our board of directors in May 2006, amended by our board of directors in September 2006 and approved by our stockholders in September 2006 and will become effective as of the date of this prospectus. We have reserved for issuance 750,000 shares of common stock under the 2006 plan. In addition, our 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:

750,000 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 our board of directors.

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

Our board of directors will administer the 2006 plan, although it may delegate its authority to a committee. Our 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.

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

Upon the occurrence of a reorganization event (as defined in the 2006 plan), or the signing of an agreement with respect to a reorganization event, all outstanding awards will be assumed or equivalent awards substituted by the successor corporation. Notwithstanding the foregoing, if the acquiring or succeeding corporation in a reorganization event does not agree to assume or substitute for outstanding awards, our board of directors will provide that all unexercised awards will become exercisable in full prior to the reorganization event and the awards, if unexercised, will terminate on the date the reorganization event takes place. If under the terms of the reorganization event holders of our common stock receive cash for their shares, our board may instead provide for a cash-out of the value of any outstanding awards less the applicable exercise price.

Upon the occurrence of a reorganization event, or the signing of an agreement with respect to a reorganization event, our repurchase and other rights with respect to shares of restricted stock will inure to the benefit of our successor and will apply equally to the cash, securities or other property into which our common stock is then converted.

No award may be granted under the 2006 plan after May 2016, but the vesting and effectiveness of awards granted before that date may extend beyond that date.

Table of Contents

Our board of directors may amend, modify or terminate any outstanding award, provided that the consent of a holder of an outstanding award is required unless our board of directors determines that the amendment, modification or termination would not materially and adversely affect the holder. Our board of directors may at any time amend, suspend or terminate the 2006 plan, except that, to the extent determined by our board of directors, no amendment requiring stockholder approval under any applicable legal, regulatory or listing requirement will become effective until the requisite stockholder approval is obtained.

Employee Stock Purchase Plan

Our 2006 employee stock purchase plan, which we refer to as the purchase plan, was adopted by our board of directors in May 2006, amended by our board of directors in September 2006 and approved by our stockholders in September, 2006 and will become effective upon the completion of this offering. We have reserved a total of 250,000 shares of our common stock for issuance to participating employees under the purchase plan.

All of our employees, including our directors who are employees and all employees of any of our participating subsidiaries, who have been employed by us for at least six months prior to enrolling in the purchase plan, who are employees on the first day of the purchase plan period, and whose customary employment is for more than 20 hours a week and for more than five months in any calendar year, will be eligible to participate in the purchase plan. Employees who would, immediately after being granted an option to purchase shares under the purchase plan, own 5% or more of the total combined voting power or value of our common stock will not be eligible to participate in the purchase plan.

We will make one or more offerings to our employees to purchase stock under the purchase plan. Offerings will begin on each of December 1 and June 1, or the first business day thereafter, provided that our first offering commencement date will begin on the later of December 1, 2006 or first day of trading following the initial public offering. Each offering commencement date will begin a six-month period during which payroll deductions will be made and held for the purchase of the common stock at the end of the purchase plan period.

On the first day of a designated payroll deduction period, or offering period, we will grant to each eligible employee who has elected to participate in the purchase plan an option to purchase shares of our common stock. The employee may authorize up to 15% of his or her compensation to be deducted by us during the offering period. On the last day of the offering period, the employee will be deemed to have exercised the option, at the option exercise price, to the extent of accumulated payroll deductions. Under the terms of the purchase plan, the option exercise price shall be determined by our board of directors or a committee appointed by our board of directors to administer the purchase plan, based on the lesser of the closing price of the common stock on the first business day of the plan period or the exercise date, as defined in the plan, or shall be based solely on the closing price of the common stock on the exercise date, provided that the option exercise price shall be at least 85% of the applicable closing price. In the absence of a determination by our board of directors or the committee, the option exercise price will be the 85% of the lesser of the closing price of the common stock on (i) the first business day of the offering period or (ii) the exercise date.

An employee who is not a participant on the last day of the offering period will not be entitled to exercise any option, and the employee's accumulated payroll deductions will be refunded. An employee's rights under the purchase plan will terminate upon voluntary withdrawal from the purchase plan at any time, or when the employee ceases employment for any reason, except that upon termination of employment because of death, the balance in the employee's account will be paid to the employee's beneficiary.

401(k) Plan

Our employee savings plan is intended to qualify under Section 401 of the Internal Revenue Code. Our employees may elect to reduce their current compensation by up to the statutorily prescribed annual limit and have the amount of such reduction contributed to the 401(k) plan. We may make matching contributions or additional contributions to the 401(k) plan in amounts to be determined annually by our board of directors.

Table of Contents**PRINCIPAL STOCKHOLDERS**

The following table sets forth certain information known to us regarding beneficial ownership of our common stock as of September 15, 2006 and as adjusted to reflect the sale of the shares of common stock in this offering, assuming the exercise of the underwriters' overallotment option by:

each person known by us to be the beneficial owner of more than 5% of our common stock;

each of our named executive officers;

each of our directors; and

all executive officers and directors as a group.

Beneficial ownership is determined in accordance with the rules of the Securities and Exchange Commission and generally includes voting or investment power with respect to securities. Under these rules, beneficial ownership includes any shares as to which the individual or entity has sole or shared voting power or investment power and includes any shares that an individual or entity has the right to acquire beneficial ownership of within 60 days of September 15, 2006 through the exercise of any warrant, stock option or other right. Except as noted by footnote, and subject to community property laws where applicable, the stockholders named in the table below have sole voting and investment power with respect to all shares of common stock shown as beneficially owned by them.

Percentage of common stock beneficially owned before the offering is based on 10,330,391 shares of common stock outstanding on September 15, 2006, which assumes the conversion of all outstanding shares of our convertible preferred stock, including shares of convertible preferred stock to be issued upon the closing of this offering in satisfaction of accumulated dividends (assuming for this purpose that the closing of the offering occurs on October 16, 2006), into 9,815,718 shares of common stock. Percentage of common stock beneficially owned after the offering reflects 14,830,391 shares of common stock outstanding after the completion of this offering. Except as set forth below, the address of all stockholders is c/o Achillion Pharmaceuticals, Inc., 300 George Street, New Haven, Connecticut 06511.

Name and Address of Beneficial Owner	Number of Shares Beneficially Owned	Percentage of Shares Beneficially Owned	
		Before Offering	After Offering
5% Stockholders			
Atlas Venture Fund V, L.P. and affiliated entities (1)	2,036,432	19.58%	13.67%

890 Winter St., Suite 320

Waltham, MA 02451

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

Schroder Ventures International Life Sciences Fund II LP1 and affiliated entities (2)	1,770,236	17.03	11.89
22 Church St.			
Hamilton, HM 11			
Bermuda			
Funds affiliated with Advent International Corporation (3)	1,157,600	11.16	7.78
75 State St., 29 th Fl.			
Boston, MA 02109			
Gilead Sciences, Inc.	1,112,944	10.77	7.50
333 Lakeside Dr.			
Foster City, CA 94404			
Bear Stearns Health Innoventures, L.P. and affiliated entities (4)	1,012,972	9.77	6.81
383 Madison Ave., 30 th Fl.			
New York, NY 10179			

Table of Contents

Name and Address of Beneficial Owner	Number of Shares Beneficially Owned	Percentage of Shares Beneficially Owned	
		Before Offering	After Offering
SGC Partners I LLC and affiliated entities (5) 1221 Avenue of the Americas New York, NY 10020	934,168	9.03	6.29
Connecticut Innovations, Incorporated and affiliated entities (6) 999 West St. Rocky Hill, CT 06067	613,939	5.19	4.13
Named Executive Officers and Directors			
Michael D. Kishbauch (7)	387,624	3.62	2.55
Milind S. Deshpande, Ph.D. (8)	76,250	*	*
John C. Pottage, Jr., M.D. (9)	58,750	*	*
Gautam Shah, Ph.D. (10)	37,500	*	*
Jason Fisherman, M.D. (3)	1,157,600	11.16	7.78
Jean-Francois Formela, M.D. (1)	2,036,432	19.58	13.67
James Garvey (14)	1,856,441	17.86	12.46
Michael Grey (11)	12,500	*	*
Stefan Ryser, Ph.D. (4)	1,012,972	9.77	6.81
David I. Scheer (12)	63,328	*	*
Christopher A. White (13)	936,403	9.05	6.31
All current executive officers and directors as a group (12 individuals) (15)	7,680,925	69.02%	49.15%

* Represents beneficial ownership of less than one percent of our outstanding common stock.

- Consists of 25,856 shares held by Atlas Venture Entrepreneurs Fund V, L.P., 1,553,490 shares held by Atlas Venture Fund V, L.P. and 385,932 shares held by Atlas Venture Parallel Fund V-A, C.V. Also includes 71,154 shares issuable upon exercise of warrants. Jean-Francois Formela, M.D., a director of Achillion, is a senior partner of Atlas Venture. Dr. Formela disclaims beneficial ownership of such shares except to the extent of his proportionate pecuniary interest therein.
- Consists of 20,449 shares held by Schroder Ventures International Life Sciences Fund II Group Co-Investment Scheme, 1,000,325 shares held by Schroder Ventures International Life Sciences Fund II LP1, 426,032 shares held by Schroder Ventures International Life Sciences Fund II LP2, 113,533 shares held by Schroder Ventures International Life Sciences Fund II LP3, 15,429 shares held by Schroder Ventures International Life Sciences Fund II Strategic Partners L.P., 123,207 shares held by SV (Nominees) Limited as nominee of Schroder Ventures Investments Limited and 8,317 shares held by SITCO Nominees Ltd. VC01903. Also includes 62,944 shares issuable upon exercise of warrants. James Garvey, a director of Achillion, is a member of SV Life Sciences Advisers, LLC which serves as investment adviser to the Schroder Ventures Life Sciences Funds. Mr. Garvey disclaims beneficial ownership of such shares except to the extent of his proportionate pecuniary interest therein.
- Consists of 1,004,923 shares held by Advent Healthcare and Life Sciences II Limited Partnership, 78,242 shares held by Advent Healthcare and Life Sciences II Beteiligung GmbH & Co. KG, 22,290 shares held by Advent Partners HLS II Limited Partnership and 9,137 shares held by Advent Partners Limited Partnership. Also includes 43,008 shares issuable upon exercise of warrants. Jason Fisherman, a director of Achillion, is managing director of Advent International. Dr. Fisherman disclaims beneficial ownership of such shares except to the extent of his proportionate pecuniary interest therein.
- Consists of 91,827 shares held by Bear Stearns Health Innoventures Employee Fund, L.P., 116,457 shares held by Bear Stearns Health Innoventures Offshore, L.P., 141,561 shares held by Bear Stearns Health Innoventures, L.P., 65,793 shares held by BSHI Members, L.L.C. and 562,530 shares held by BX, L.P.

Table of Contents

- Also includes 34,804 shares issuable upon exercise of warrants. Stefan Ryser, a director of Achillion, is a managing partner of Bear Stearns Health Innoventures, L.P. Dr. Ryser disclaims beneficial ownership of such shares except to the extent of his proportionate pecuniary interest therein.
- (5) Consists of 222,126 shares held by SG Cowen Ventures I, L.P., 698,807 shares held by SGC Partners I 13,235 shares issuable upon exercise of warrants. Christopher White, a director of Achillion, is Chief of Staff and Chief Administrative Officer of Cowen and Company, LLC and is Vice President of Cowen Group, Inc. Mr. White disclaims beneficial ownership of such shares except to the extent of his proportionate pecuniary interest therein.
 - (6) Consists of 77,918 shares held by Connecticut Emerging Enterprises, L.P. and 484,980 shares held by Connecticut Innovations, Inc. Also includes 51,041 shares issuable upon exercise of warrants.
 - (7) Consists of stock options to purchase shares of our common stock currently exercisable or exercisable within 60 days after September 15, 2006.
 - (8) Includes stock options to purchase 60,625 shares of our common stock currently exercisable or exercisable within 60 days after September 15, 2006.
 - (9) Includes stock options to purchase 46,250 shares of our common stock currently exercisable or exercisable within 60 days after September 15, 2006.
 - (10) Consists of stock options to purchase shares of our common stock currently exercisable or exercisable within 60 days after September 15, 2006.
 - (11) Consists of stock options to purchase shares of our common stock currently exercisable or exercisable within 60 days September 15, 2006.
 - (12) Consists of 63,246 shares held by Scheer Investment Holdings III, LLC. Also includes 82 shares issuable upon exercise of warrants. David Scheer, a director of Achillion, is the managing member of Scheer Investment Holdings III, LLC. As such, he may be deemed to have sole or shared voting and investment power with respect to the shares held by this fund. Mr. Scheer disclaims beneficial ownership of these shares except to the extent of his pecuniary interest therein.
 - (13) Includes 222,126 shares held by SG Cowen Ventures I, L.P. and 698,807 shares held by SGC Partners I LLC. Also includes 13,235 shares issuable upon exercise of warrants. Christopher White, a director of Achillion, is Chief of Staff and Chief Administrative Officer of Cowen and Company, LLC and is Vice President of Cowen Group, Inc. Mr. White disclaims beneficial ownership of such shares except to the extent of his proportionate pecuniary interest therein.
 - (14) Consists of 20,449 shares held by Schroder Ventures International Life Sciences Fund II Group Co-Investment Scheme, 1,000,325 shares held by Schroder Ventures International Life Sciences Fund II LP1, 426,032 shares held by Schroder Ventures International Life Sciences Fund II LP2, 113,533 shares held by Schroder Ventures International Life Sciences Fund II LP3, 15,429 shares held by Schroder Ventures International Life Sciences Fund II Strategic Partners L.P., 123,207 shares held by SV (Nominees) Limited as nominee of Schroder Ventures Investments Limited, 8,317 shares held by SITCO Nominees Ltd. VC01903 and 86,205 shares held by International Biotechnology Trust plc, or IBT. Also includes 62,944 shares issuable upon exercise of warrants. James Garvey, a director of Achillion, is a member of SV Life Sciences Advisers, LLC, which serves as investment adviser to the Schroder Ventures Life Sciences Funds. Mr. Garvey disclaims beneficial ownership of the shares held by the Schroder funds and IBT except to the extent of his proportionate pecuniary interest therein.
 - (15) Includes stock options to purchase 572,624 shares of our common stock currently exercisable or exercisable within 60 days after September 15, 2006 and 225,227 shares issuable upon exercise of warrants.

Table of Contents**CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS**

Since January 1, 2003, we have engaged in the following transactions with our directors, executive officers and holders of more than 5% of our common stock, on an as converted basis, and affiliates of our directors, executive officers and 5% stockholders.

Preferred Stock Issuances***Issuance of Series C-1 Convertible Preferred Stock***

On November 24, 2004, we sold an aggregate of 2,300,437 shares of series C-1 convertible preferred stock at a price per share of \$2.1735 for an aggregate purchase price of \$5,000,000. All shares of our series C-1 convertible preferred stock, including 174,533 shares of series C-1 convertible preferred stock to be issued upon completion of this offering in satisfaction of accumulated dividends on our series C-1 convertible preferred stock (assuming for this purpose that the closing of the offering occurs on October 16, 2006), will be automatically converted into 369,934 shares of our common stock upon completion of this offering. All of the series C-1 convertible preferred shares were sold to Gilead Sciences, Inc., a holder of more than five percent of our voting securities.

Issuances of Series C-2 Convertible Preferred Stock

In November 2005, March 2006 and May 2006, we sold an aggregate of 23,425,462 shares of series C-2 convertible preferred stock at a price per share of \$1.50 for an aggregate purchase price of \$35,138,193. All shares of our series C-2 convertible preferred stock, including 1,275,700 shares of series C-2 convertible preferred stock to be issued upon completion of this offering in satisfaction of accumulated dividends on our series C-2 convertible preferred stock (assuming for this purpose that the closing of the offering occurs on October 16, 2006), will be automatically converted into 3,087,614 shares of our common stock upon completion of this offering. Of the 23,425,462 shares of series C-2 convertible preferred stock issued, an aggregate of 18,501,707 shares were sold to the following director and holders of more than five percent of our voting securities:

<u>Name</u>	<u>Shares of Series C-2</u>	
	<u>Convertible Preferred Stock</u>	<u>Purchase Price</u>
Atlas Venture Fund V, L.P. and affiliated entities (1)	3,870,578	\$ 5,805,867.00
Schroder Ventures International Life Sciences Fund II LP1 and affiliated entities (2)	3,416,618	5,124,926.50
Funds affiliated with Advent International Corporation (3)	1,987,159	2,980,738.50
Bear Stearns Health Innoventures, L.P. and affiliated entities (4)	1,781,965	2,672,947.50
SGC Partners I LLC and affiliated entities	1,169,079	1,753,618.50
Connecticut Innovations, Incorporated	531,295	796,942.50
Gilead Sciences, Inc.	5,728,347	8,592,520.50
Christopher A. White	16,666	24,999.00

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

Total	18,501,707	\$ 27,752,560.00
-------	------------	------------------

- (1) Consists of 50,927 shares held by Atlas Venture Entrepreneurs Fund V, L.P., 3,059,559 shares held by Atlas Venture Fund V, L.P. and 760,092 shares held by Atlas Venture Parallel Fund V-A, C.V.
- (2) Consists of 57,569 shares held by Schroder Ventures International Life Sciences Fund II Group Co-Investment Scheme, 2,001,830 shares held by Schroder Ventures International Life Sciences Fund II LP1, 852,569 shares held by Schroder Ventures International Life Sciences Fund II LP2, 227,205 shares held by Schroder Ventures International Life Sciences Fund II LP3, 30,882 shares held by Schroder Ventures International Life Sciences Fund II Strategic Partners L.P. and 246,563 shares held by SV (Nominees) Limited as nominee of Schroder Ventures Investments Limited.
- (3) Consists of 1,791,624 shares held by Advent Healthcare and Life Sciences II Limited Partnership, 139,498 shares held by Advent Healthcare and Life Sciences II Beteiligung GmbH & Co. KG, 39,743 shares held by Advent Partners HLS II Limited Partnership and 16,294 shares held by Advent Partners Limited Partnership.

Table of Contents

- (4) Consists of 167,286 shares held by Bear Stearns Health Innoventures Employee Fund, L.P., 212,154 shares held by Bear Stearns Health Innoventures Offshore, L.P., 257,888 shares held by Bear Stearns Health Innoventures, L.P., 119,860 shares held by BSHI Members, L.L.C. and 1,024,777 shares held by BX, L.P.

Bridge Financing***Issuance of Convertible Promissory Notes and Warrants***

In July and October 2004, we sold convertible promissory notes for an aggregate purchase price of \$10,410,706. The convertible promissory notes accrued interest at a rate of 8% per annum and had a maturity date of January 1, 2006. In November 2005, the convertible notes, along with accrued but unpaid interest, converted into an aggregate of 7,592,128 shares of series C-2 convertible preferred stock at a conversion price of \$1.50 per share. In connection with the issuance of the convertible promissory notes, we issued warrants for the purchase of shares of our common stock. Upon conversion of the convertible promissory notes, these warrants became exercisable for an aggregate of 248,684 shares of common stock at an exercise price of \$4.00 per share.

The following table summarizes the participation in the bridge financing by holders of more than five percent of our voting securities:

Name	Aggregate Consideration Paid	Series C-2 Convertible Preferred Shares Issued upon Conversion of Notes	Number of Shares of Common Stock Underlying Warrants
Atlas Venture Fund V, L.P. and affiliated entities (1)	\$ 2,846,330.00	2,075,725	71,154
Schroder Ventures International Life Sciences Fund II LP1 and affiliated entities (2)	2,517,998.00	1,836,284	62,944
Funds affiliated with Advent International Corporation (3)	1,720,479.21	1,254,681	43,008
Bear Stearns Health Innoventures, L.P. and affiliated entities (4)	1,392,343.00	1,015,383	34,804
SGC Partners I LLC	794,186.00	579,170	13,235
Connecticut Innovations, Incorporated	500,000.00	364,629	8,333
Total	\$ 9,771,336.21	7,125,872	233,478

- (1) Consists of 27,311 shares of series C-2 convertible preferred stock and warrants to purchase 935 shares of common stock held by Atlas Venture Entrepreneurs Fund V, L.P., 1,640,789 shares of series C-2 convertible preferred stock and warrants to purchase 56,247 shares of common stock held by Atlas Venture Fund V, L.P. and 407,625 shares of series C-2 convertible preferred stock and warrants to purchase 13,972 shares of common stock held by Atlas Venture Parallel Fund V-A, C.V.
- (2) Consists of 30,941 shares of series C-2 convertible preferred stock and warrants to purchase 1,060 shares of common stock held by Schroder Ventures International Life Sciences Fund II Group Co-Investment Scheme, 1,075,896 shares of series C-2 convertible preferred stock and warrants to purchase 36,882 shares of common stock held by Schroder Ventures International Life Sciences Fund II LP1, 458,219 shares of series C-2 convertible preferred stock and warrants to purchase 15,707 shares of common stock held by Schroder Ventures International Life Sciences Fund II LP2, 122,113 shares of series C-2 convertible preferred stock and warrants to purchase 4,185 shares of common stock held by Schroder Ventures International Life Sciences Fund II LP3, 16,598 shares of series C-2 convertible preferred stock and warrants to purchase 568 shares of common stock held by Schroder Ventures International Life Sciences Fund II Strategic Partners L.P. and 132,517 shares of series C-2 convertible preferred stock and warrants to purchase 4,542 shares of common

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

- stock held by SV (Nominees) Limited as nominee of Schroder Ventures Investments Limited.
- (3) Consists of 1,131,222 shares of series C-2 convertible preferred stock and warrants to purchase 38,778 shares of common stock held by Advent Healthcare and Life Sciences II Limited Partnership, 88,078 shares of series C-2 convertible preferred stock and warrants to purchase 3,018 shares of common stock held by

Table of Contents

- Advent Healthcare and Life Sciences II Beteiligung GmbH & Co. KG, 25,093 shares of series C-2 convertible preferred stock and warrants to purchase 860 shares of common stock held by Advent Partners HLS II Limited Partnership and 10,288 shares of series C-2 convertible preferred stock and warrants to purchase 352 shares of common stock held by Advent Partners Limited Partnership.
- (4) Consists of 95,322 shares of series C-2 convertible preferred stock and warrants to purchase 3,267 shares of common stock held by Bear Stearns Health Innoventures Employee Fund, L.P., 120,887 shares of series C-2 convertible preferred stock and warrants to purchase 4,143 shares of common stock held by Bear Stearns Health Innoventures Offshore, L.P., 146,948 shares of series C-2 convertible preferred stock and warrants to purchase 5,037 shares of common stock held by Bear Stearns Health Innoventures, L.P., 68,297 shares of series C-2 convertible preferred stock and warrants to purchase 2,340 shares of common stock held by BSHI Members, L.L.C. and 583,929 shares of series C-2 convertible preferred stock and warrants to purchase 20,017 shares of common stock held by BX, L.P.

Registration Rights

The holders of 9,815,718 shares of common stock, which assumes the conversion of all outstanding shares of our convertible preferred stock, including shares of convertible preferred stock to be issued upon the closing of this offering in satisfaction of accumulated dividends (assuming for this purpose that the closing of the offering occurs on October 16, 2006), into shares of common stock upon completion of this offering, and the holders of warrants to purchase 291,392 shares of our common stock have rights to require us to file registration statements under the Securities Act of 1933, as amended, or the Securities Act, or to include their shares in registration statements that we may file in the future for ourselves or other stockholders. These rights are provided under the terms of an investor rights agreement between us and these holders. These holders include the following director and holders of more than five percent of our voting securities and their affiliates:

<u>Name</u>	<u>Number of Shares</u>
Atlas Venture Fund V, L.P. and affiliated funds	2,036,432
Schroder Ventures International Life Sciences Fund II LP1 and affiliated funds	1,770,236
Funds affiliated with Advent International Corporation	1,157,600
Bear Stearns Health Innoventures, L.P. and affiliated funds	1,012,972
SGC Partners I LLC and affiliated funds	934,168
Connecticut Innovations, Incorporated and affiliated entities	613,939
Gilead Sciences, Inc.	1,112,944
Christopher A. White	2,235
Total	8,640,526

The holders of registration rights in connection with this offering have waived their right to participate in this offering.

Stock Option Grants

We have granted options to purchase shares of our common stock to our executive officers and directors. See Management Director Compensation on page 78 and Management Executive Compensation and Management Option Grants in Last Fiscal Year on page 79.

Other Considerations

We have adopted a policy providing that all material transactions between us and our officers, directors and other affiliates must be:

approved by a majority of the members of our board of directors and by a majority of the disinterested members of our board of directors; and

on terms no less favorable to us than those that we believe could be obtained from unaffiliated third parties.

Table of Contents

DESCRIPTION OF CAPITAL STOCK

The following description of our capital stock and provisions of our certificate of incorporation and bylaws are summaries and are qualified by reference to the certificate of incorporation and the bylaws that will become effective upon closing of this offering. Copies of these documents will be filed with the SEC as exhibits to our registration statement, of which this prospectus forms a part. The descriptions of the common stock and preferred stock reflect changes to our capital structure that will occur upon the closing of this offering.

Upon the completion of this offering, our authorized capital stock will consist of 100,000,000 shares of common stock, par value \$0.001 per share, and 5,000,000 shares of preferred stock, par value \$0.01 per share, all of which shares of preferred stock will be undesignated. Our board of directors may establish the rights and preferences of the preferred stock from time to time. As of September 15, 2006, after giving effect to the conversion of all outstanding shares of convertible preferred stock, including shares of convertible preferred stock to be issued in satisfaction of accumulated dividends (assuming for this purpose that the closing of the offering occurs on October 16, 2006) into shares of common stock, there would have been 10,330,391 shares of common stock issued and outstanding. As of September 15, 2006 there were 109 stockholders of record of our capital stock.

Common Stock

Holders of common stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders and do not have cumulative voting rights. Accordingly, holders of a majority of the shares of common stock entitled to vote in any election of directors may elect all of the directors standing for election. Holders of common stock are entitled to receive proportionately any dividends as may be declared by our board of directors, subject to any preferential dividend rights of outstanding preferred stock. Upon our liquidation, dissolution or winding up, the holders of common stock are entitled to receive proportionately our net assets available after the payment of all debts and other liabilities and subject to the prior rights of any outstanding preferred stock. Holders of common stock have no preemptive, subscription, redemption or conversion rights. Our outstanding shares of common stock are, and the shares offered by us in this offering will be, when issued and paid for, fully paid and nonassessable. The rights, preferences and privileges of holders of common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock that we may designate and issue in the future.

Preferred Stock

Under the terms of our certificate of incorporation, our board of directors is authorized to issue shares of preferred stock in one or more series without stockholder approval. Our board of directors has the discretion to determine the rights, preferences, privileges and restrictions, including voting rights, dividend rights, conversion rights, redemption privileges and liquidation preferences, of each series of preferred stock.

The purpose of authorizing our board of directors to issue preferred stock and determine its rights and preferences is to eliminate delays associated with a stockholder vote on specific issuances. The issuance of preferred stock, while providing flexibility in connection with possible future acquisitions and other corporate purposes, will affect, and may adversely affect, the rights of holders of any preferred stock that may be issued in the future. It is not possible to state the actual effect of the issuance of any shares of preferred stock on the rights of holders of common stock until the board of directors determines the specific rights attached to that preferred stock. The effects of issuing preferred stock could include one or more of the following:

restricting dividends on the common stock;

diluting the voting power of the common stock;

impairing the liquidation rights of the common stock; or

delaying or preventing changes in control or management of Achillion.

We have no present plans to issue any shares of preferred stock.

Table of Contents

Warrants

As of September 15, 2006 there were issued and outstanding:

warrants to purchase an aggregate of 248,684 shares of common stock at a purchase price equal to \$4.00 per share;

warrants to purchase an aggregate of 42,708 shares of common stock at a purchase price equal to \$12.00 per share;

warrants to purchase an aggregate of 17,956 shares of series C convertible preferred stock at a purchase price equal to \$1.81 per share; and

warrants to purchase an aggregate of 333,332 shares of series C-2 convertible preferred stock at a purchase price equal to \$1.50 per share.

These warrants provide for adjustments in the event of stock dividends, stock splits, reclassifications or other changes in our corporate structure. Certain of the holders of these warrants have registration rights that are outlined below under the heading Registration Rights.

Options

As of September 15, 2006, options to purchase an aggregate of 807,548 shares of common stock at a weighted average exercise of \$2.28 per share were outstanding.

Registration Rights

The holders of 9,815,718 shares of common stock, after giving effect to the conversion of outstanding convertible preferred stock, including shares of convertible preferred stock to be issued in satisfaction of accumulated dividends (assuming for this purpose that the closing of the offering occurs on October 16, 2006), into shares of common stock upon completion of this offering, and the holders of warrants to purchase 291,392 shares of our common stock, have rights to require us to file registration statements under the Securities Act or to include their shares in registration statements that we may file in the future for ourselves or other stockholders. These rights are provided under the terms of an investor rights agreement between us and these holders. The holders of registration rights in connection with this offering have waived their right to participate in this offering.

At any time after the earliest of (i) six months following the effective date of this registration statement, (ii) six months after we have become a reporting company under Section 12 of the Securities Act and (iii) November 17, 2008, the holders of at least 20% of the shares carrying registration rights may demand that we use our reasonable best efforts to register all or a portion of their common stock for sale under the Securities Act, so long as either (A) the aggregate offering price of such securities is reasonably anticipated to exceed \$5,000,000 or (B) the shares for which registration has been requested constitute at least 30% of the total outstanding shares having registration rights. We are required

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

to use our reasonable best efforts to effect only three of these registrations. If, at any time, we become eligible to file a registration statement on Form S-3, or any successor form, holders of registration rights may make unlimited requests for us to use our best efforts to effect a registration on such forms of their common stock having an aggregate offering price reasonably anticipated to exceed \$1,000,000.

If we register any of our common stock, either for our own account or for the account of other securityholders, the holders of registration rights are entitled to notice of the registration and to include all or a portion of their common stock in the registration, subject to the right of the underwriters to limit the number of shares included in the offering.

Anti-Takeover Provisions of Delaware Law, our Certificate of Incorporation and our Bylaws

We are subject to the provisions of Section 203 of the General Corporation Law of Delaware. Subject to certain exceptions, Section 203 prohibits a publicly held Delaware corporation from engaging in a business combination with an interested stockholder for a period of three years after the person became an interested stockholder, unless the interested stockholder attained such status with the approval of our board of directors or the

Table of Contents

business combination is approved in a prescribed manner. A business combination includes, among other things, a merger or consolidation involving us and the interested stockholder and the sale of more than 10% of our assets. In general, an interested stockholder is any entity or person beneficially owning 15% or more of our outstanding voting stock and any entity or person affiliated with or controlling or controlled by such entity or person.

Our certificate of incorporation and our bylaws divide our board of directors into three classes with staggered three-year terms. In addition, our certificate of incorporation provides that directors may be removed only for cause by the affirmative vote of the holders of 75% of our shares of capital stock entitled to vote. Under our certificate of incorporation, any vacancy on our board of directors, including a vacancy resulting from an enlargement of our board of directors, may only be filled by vote of a majority of our directors then in office. The classification of our board of directors and the limitations on the removal of directors and filling of vacancies could make it more difficult for a third party to acquire, or discourage a third party from acquiring, control of us.

Our certificate of incorporation and our bylaws also provide that any action required or permitted to be taken by our stockholders at an annual meeting or special meeting of stockholders may only be taken if it is properly brought before the meeting and may not be taken by written action in lieu of a meeting. Our certificate of incorporation and our bylaws further provide that, except as otherwise required by law, special meetings of the stockholders may only be called by the chairman of the board, chief executive officer or our board of directors. In addition, our bylaws establish an advance notice procedure for stockholder proposals to be brought before an annual meeting of stockholders, including proposed nominations of persons for election to the board of directors. Stockholders at an annual meeting may only consider proposals or nominations specified in the notice of meeting or brought before the meeting by or at the direction of the board of directors or by a stockholder of record on the record date for the meeting, who is entitled to vote at the meeting and who has delivered timely written notice in proper form to our secretary of the stockholder's intention to bring such business before the meeting. These provisions could have the effect of delaying until the next stockholders' meeting stockholder actions that are favored by the holders of a majority of our outstanding voting securities. These provisions may also discourage a third party from making a tender offer for our common stock, because even if it acquired a majority of our outstanding voting securities, the third party would be able to take action as a stockholder, such as electing new directors or approving a merger, only at a duly called stockholders' meeting, and not by written consent.

The General Corporation Law of Delaware provides generally that the affirmative vote of a majority of the shares entitled to vote on any matter is required to amend a corporation's certificate of incorporation or bylaws, unless a corporation's certificate of incorporation or bylaws, as the case may be, requires a greater percentage. Our certificate of incorporation and bylaws require the affirmative vote of the holders of at least 75% of the shares of our capital stock issued and outstanding and entitled to vote to amend or repeal any of the provisions described in the prior two paragraphs.

Limitation of Liability and Indemnification

Our certificate of incorporation contains provisions permitted under the General Corporation Law of Delaware relating to the liability of directors. The provisions eliminate a director's liability for monetary damages for a breach of fiduciary duty, except in circumstances involving wrongful acts, such as the breach of a director's duty of loyalty or acts or omissions that involve intentional misconduct or a knowing violation of law. Further, our certificate of incorporation contains provisions to indemnify our directors and officers to the fullest extent permitted by the General Corporation Law of Delaware.

Transfer Agent and Registrar

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

The transfer agent and registrar for our common stock is Computershare, with offices at 250 Royall Street, Canton, Massachusetts 02021.

NASDAQ Global Market

We have applied for the quotation of our common stock on the NASDAQ Global Market under the symbol ACHN.

Table of Contents**SHARES ELIGIBLE FOR FUTURE SALE**

Prior to this offering, there has been no market for our common stock and we cannot assure you that a significant public market for our common stock will develop or be sustained after this offering. Future sales of substantial amounts of our common stock in the public market, or the possibility of these sales could adversely affect trading prices of our common stock. Furthermore, since only a limited number of shares will be available for sale shortly after this offering because of certain contractual and legal restrictions on resale described below, sales of substantial amounts of our common stock in the public market after the restrictions lapse could also adversely affect the trading price of our common stock and our ability to raise equity capital in the future.

Sales of Restricted Shares

Upon completion of this offering, we will have outstanding an aggregate of 14,830,391 shares of common stock, after giving effect to the conversion of outstanding convertible preferred stock, including shares of convertible preferred stock to be issued in satisfaction of accumulated dividends (assuming for this purpose that the closing of the offering occurs on October 16, 2006), assuming no exercise of the underwriters overallotment option and no exercise of outstanding options or warrants that were outstanding as of September 15, 2006. Of these shares, the shares sold in this offering will be freely tradable without restrictions or further registration under the Securities Act, unless one of our existing affiliates as that term is defined in Rule 144 under the Securities Act purchases such shares, in which case such shares will remain subject to the resale limitations of Rule 144.

The remaining 10,330,391 shares of our common stock held by existing stockholders are restricted shares or are restricted by the contractual provisions described below. Restricted shares may be sold in the public market only if registered or if they qualify for an exemption from registration under Rules 144, 144(k) or 701 of the Securities Act, which are summarized below. Of these restricted shares, 1,511,294 shares will be available for resale in the public market in reliance on Rule 144(k), 1,252,277 of which shares are restricted by the terms of the lock-up agreements described below. The remaining 8,819,097 shares become eligible for resale in the public market at various dates thereafter, all of which shares are restricted by the terms of the lock-up agreements. The table below sets forth the approximate number of shares eligible for future sale:

Days after Date of this Prospectus	Approximate Additional Number of Shares Becoming Eligible for Future Sale
On effectiveness	259,017
90 days	54,222
180 days*	8,831,827
At various times after 180 days*	1,185,325

* 180 days corresponds to the lock-up period described below in Lock-up Agreements. This lock-up period may be extended or shortened under certain circumstances as described in that section. However, Cowen and Company, LLC may in its sole discretion, at any time without prior notice, release all or any portion of the shares from the restrictions in any of these agreements. In considering any request to release shares from a lock-up agreement, Cowen and Company, LLC will consider the facts and circumstances relating to a request at the time of the request.

Table of Contents

Under Rule 144 as currently in effect, beginning 90 days after the date of this prospectus, a person who has beneficially owned restricted shares for at least one year and has complied with the requirements described below would be entitled to sell some of its shares within any three-month period. That number of shares cannot exceed the greater of one percent of the number of shares of our common stock then outstanding, which will equal approximately 148,304 shares immediately after this offering, or the average weekly trading volume of our common stock on the NASDAQ Global Market during the four calendar weeks preceding the filing of a notice on Form 144 reporting the sale.

Sales under Rule 144 are also restricted by manner of sale provisions, notice requirements and the availability of current public information about our company. Rule 144 also provides that our affiliates who are selling shares of our common stock that are not restricted shares must nonetheless comply with the same restrictions applicable to restricted shares with the exception of the holding period requirement.

Under Rule 144(k), a person who is not deemed to have been one of our affiliates at any time during the 90 days preceding a sale and who has beneficially owned the shares proposed to be sold for at least two years is entitled to sell those shares without complying with the manner of sale, public information, volume limitation or notice provisions of Rule 144. Accordingly, unless otherwise restricted or subject to lock-up agreements, these shares may be sold immediately upon the completion of this offering.

Options

Rule 701 provides that the shares of common stock acquired upon the exercise of currently outstanding options or other rights granted under our equity plans may be resold, to the extent not restricted by the terms of the lock-up agreements, by persons, other than affiliates, beginning 90 days after the date of this prospectus, restricted only by the manner of sale provisions of Rule 144, and by affiliates in accordance with Rule 144, without compliance with its one-year minimum holding period. All outstanding shares available for resale in the public market in reliance on Rule 701 are restricted by the terms of the lock-up agreements.

As of September 15, 2006, our board of directors had authorized an aggregate of up to 1,843,750 shares of common stock for issuance under our existing equity plan as well as equity plans that will be effective upon the closing of this offering, excluding 250,000 shares that will be reserved for issuance under our employee stock purchase plan which will become effective upon completion of this offering. As of September 15, 2006, options to purchase a total of 807,548 shares of common stock were outstanding, all of which options are exercisable and all shares issuable upon exercise of these options are restricted by the terms of the lock-up agreements and by our right to repurchase unvested shares upon the termination of an optionee's business relationship with us. Of these currently exercisable options, upon the closing of this offering shares no longer will be restricted by our right of repurchase and will be eligible for sale in the public market in accordance with Rule 701 under the Securities Act beginning 180 days after the date of this prospectus.

We intend to file one or more registration statements on Form S-8 under the Securities Act following this offering to register all shares of our common stock which have been issued or are issuable upon exercise of outstanding stock options or other rights granted under our equity plans. These registration statements are expected to become effective upon filing. Shares covered by these registration statements will thereupon be eligible for sale in the public market, upon the expiration or release from the terms of the lock-up agreements, to the extent applicable, or subject in certain cases to vesting of such shares.

Warrants

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

As of September 15, 2006, there were warrants outstanding to purchase a total of 335,739 shares of common stock (on an as-converted to common stock basis) at a weighted average exercise price of \$6.08 per share.

Table of Contents

Lock-up Agreements

Except for sales of common stock to the underwriters in accordance with the terms of the underwriting agreement, we, each of our directors, executive officers and holders of a substantial majority of our outstanding stock and options to acquire our stock have agreed not to sell or otherwise dispose of, directly or indirectly, any shares of our common stock (or any security convertible into or exchangeable or exercisable for common stock) without the prior written consent of Cowen and Company, LLC for a period of 180 days from the date of this prospectus. The lock-up agreements also provide that (i) if we issue an earnings release or material news or a material event relating to us occurs during the last 17 days of the lock-up period, or (ii) prior to the expiration of the lock-up period, we announce that we will release earnings results during the 16-day period beginning on the last day of the lock-up period, the restrictions imposed by the lock-up agreements shall continue to apply until the expiration of the 18-day period beginning on the issuance of the earnings release or the occurrence of the material news or material event. In addition, for a period of 180 days from the date of this prospectus, except as required by law, we have agreed that our board of directors will not consent to any offer for sale, sale or other disposition, or any transaction which is designed or could be expected to result in the disposition by any person, directly or indirectly, of any shares of our common stock without the prior written consent of Cowen and Company, LLC. Cowen and Company, LLC, in its sole discretion, at any time or from time to time and without notice, may release for sale in the public market all or any portion of the shares restricted by the terms of the lock-up agreements.

Table of Contents**UNDERWRITING**

We and the underwriters for the offering named below have entered into an underwriting agreement with respect to the common stock being offered. Subject to the terms and conditions of the underwriting agreement, each underwriter has severally agreed to purchase from us the number of shares of our common stock set forth opposite its name below. Cowen and Company, LLC, CIBC World Markets Corp. and JMP Securities LLC are the representatives of the underwriters.

<u>Underwriter</u>	<u>Number of Shares</u>
Cowen and Company, LLC	
CIBC World Markets Corp.	
JMP Securities LLC	
Total	4,500,000

The underwriting agreement provides that the obligations of the underwriters are conditional and may be terminated at their discretion based on their assessment of the state of the financial markets. The obligations of the underwriters may also be terminated upon the occurrence of the events specified in the underwriting agreement. The underwriters have agreed, severally and not jointly, to purchase all of the shares sold under the underwriting agreement if any of these shares are purchased, other than those shares covered by the overallotment option described below. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the non-defaulting underwriters may be increased or the underwriting agreement may be terminated.

We have agreed to indemnify the underwriters against specified liabilities, including liabilities under the Securities Act, and to contribute to payments the underwriters may be required to make in respect thereof.

The underwriters are offering the shares, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel and other conditions specified in the underwriting agreement. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

Overallotment Option to Purchase Additional Shares. We have granted to the underwriters an option to purchase up to 675,000 additional shares of common stock at the public offering price, less the underwriting discount. This option is exercisable for a period of 30 days. The underwriters may exercise this option solely for the purpose of covering overallotments, if any, made in connection with the sale of common stock offered hereby. To the extent that the underwriters exercise this option, the underwriters will purchase additional shares from us in approximately the same proportion as shown in the table above.

Discounts and Commissions. The following table shows the public offering price, underwriting discount and proceeds, before expenses, to us. These amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase additional shares.

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

We estimate that the total expenses of the offering, excluding underwriting discount, will be approximately \$1,700,000 and are payable by us.

	<u>Per Share</u>	<u>Total</u>	
		<u>Without Over- Allotment</u>	<u>With Over- Allotment</u>
Public offering price			
Underwriting discount			
Proceeds, before expenses, to Achillion			

Table of Contents

The underwriters propose to offer the shares of common stock to the public at the public offering price set forth on the cover of this prospectus. The underwriters may offer the shares of common stock to securities dealers at the public offering price less a concession not in excess of \$ _____ per share. The underwriters may allow, and the dealers may reallow, a discount not in excess of \$ _____ per share to other dealers. If all of the shares are not sold at the public offering price, the underwriters may change the offering price and other selling terms.

Discretionary Accounts. The underwriters do not intend to confirm sales of the shares to any accounts over which they have discretionary authority.

Market Information. Prior to this offering, there has been no public market for shares of our common stock. The initial public offering price will be determined by negotiations between us and the representatives of the underwriters. An active trading market for the shares may not develop. It is also possible that after the offering the shares will not trade in the public market at or above the initial public offering price.

We have applied for the listing of our common stock on the NASDAQ Global Market under the symbol ACHN.

Stabilization. In connection with this offering, the underwriters may engage in stabilizing transactions, overallotment transactions, syndicate covering transactions, penalty bids and purchases to cover positions created by short sales.

Stabilizing transactions permit bids to purchase shares of common stock so long as the stabilizing bids do not exceed a specified maximum, and are engaged in for the purpose of preventing or retarding a decline in the market price of the common stock while the offering is in progress.

Overallotment transactions involve sales by the underwriters of shares of common stock in excess of the number of shares the underwriters are obligated to purchase. This creates a syndicate short position which may be either a covered short position or a naked short position. In a covered short position, the number of shares over-allotted by the underwriters is not greater than the number of shares that they may purchase in the overallotment option. In a naked short position, the number of shares involved is greater than the number of shares in the overallotment option. The underwriters may close out any short position by exercising their overallotment option and/or purchasing shares in the open market.

Syndicate covering transactions involve purchases of common stock in the open market after the distribution has been completed in order to cover syndicate short positions. In determining the source of shares to close out the short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared with the price at which they may purchase shares through exercise of the overallotment option. If the underwriters sell more shares than could be covered by exercise of the overallotment option and, therefore, have a naked short position, the position can be closed out only by buying shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that after pricing there could be downward pressure on the price of the shares in the open market that could adversely affect investors who purchase in the offering.

Penalty bids permit the representatives to reclaim a selling concession from a syndicate member when the common stock originally sold by that syndicate member is purchased in stabilizing or syndicate covering transactions to cover syndicate short positions.

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

These stabilizing transactions, syndicate covering transactions and penalty bids may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of our common stock. As a result, the price of our common stock in the open market may be higher than it would otherwise be in the absence of these transactions. Neither we nor the underwriters make any representation

Table of Contents

or prediction as to the effect that the transactions described above may have on the price of our common stock. These transactions may be effected on the NASDAQ Global Market, in the over-the-counter market or otherwise and, if commenced, may be discontinued at any time.

Passive Market Making. In connection with this offering, underwriters and selling group members may engage in passive market making transactions in our common stock on the NASDAQ Global Market in accordance with Rule 103 of Regulation M under the Securities Exchange Act of 1934, as amended, or the Exchange Act, during a period before the commencement of offers or sales of common stock and extending through the completion of the distribution. A passive market maker must display its bid at a price not in excess of the highest independent bid of that security. However, if all independent bids are lowered below the passive market maker's bid, that bid must then be lowered when specified purchase limits are exceeded.

Lock-Up Agreements. Pursuant to certain lock-up agreements, we and our executive officers, directors and certain of our other stockholders, have agreed, subject to certain exceptions, not to offer, sell, contract to sell, announce any intention to sell, pledge or otherwise dispose of, enter into any swap or other agreement that transfers, in whole or in part, the economic consequence of ownership of, directly or indirectly, or file with the SEC a registration statement under the Securities Act relating to, any common stock or securities convertible into or exchangeable or exercisable for any common stock without the prior written consent of Cowen and Company, LLC, for a period of 180 days after the date of the pricing of the offering. The 180-day restricted period will be automatically extended if (i) during the last 17 days of the 180-day restricted period we issue an earnings release or material news or a material event relating to us occurs or (ii) prior to the expiration of the 180-day restricted period, we announce that we will release earnings results or become aware that material news or a material event will occur during the 16-day period beginning on the last day of the 180-day restricted period, in either of which case the restrictions described above will continue to apply until the expiration of the 18-day period beginning on the issuance of the earnings release or the occurrence of the material news or material event.

This lock-up provision applies to common stock and to securities convertible into or exchangeable or exercisable for or repayable with common stock. It also applies to common stock owned now or acquired later by the person executing the agreement or for which the person executing the agreement later acquires the power of disposition. The exceptions permit us, among other things and subject to restrictions, to: (a) issue shares pursuant to our existing employee benefit plans, qualified stock option plans or other employee compensation plans or (b) pursuant to currently outstanding options, warrants or rights. The exceptions permit parties to the lock-up agreements, among other things and subject to restrictions, to transfer securities: (a) by gift, (b) to a trust for the benefit of the stockholder or an immediate family of the stockholder, (c) by will or intestate succession, (d) to its affiliates, (e) to its wholly-owned subsidiaries or (f) to its partners or members, so long as the transferee agrees to be bound by the terms of the lock-up agreement. Cowen and Company, LLC may, in its sole discretion, at any time without prior notice, release all or any portion of the shares from the restrictions in any such agreement. In addition, the lock-up provision will not restrict broker-dealers from engaging in market making and similar activities conducted in the ordinary course of their business.

In addition, our securities acquired or held by affiliates of the underwriters will not be sold, transferred, assigned, pledged or hypothecated for a period of 180 days from the effective date of the offering except in accordance with the National Association of Securities Dealers, Inc.'s, or NASD, Rule 2710(g)(2).

Electronic Offer, Sale and Distribution of Shares. A prospectus in electronic format may be made available on the websites maintained by one or more of the underwriters or selling group members, if any, participating in this offering and one or more of the underwriters participating in this offering may distribute prospectuses electronically. The representatives may agree to allocate a number of shares to underwriters and selling group members for sale to their online brokerage account holders. Internet distributions will be allocated by the underwriters and selling group members that will make internet distributions on the same basis as other allocations. Other than the prospectus in electronic format, the information on these websites is not part of this prospectus or the registration statement of which this prospectus forms a part, has not been approved or endorsed by us or any underwriter in its capacity as underwriter, and should not be relied upon by investors.

Table of Contents

Qualified Independent Underwriter. Under the rules of the NASD, Cowen and Company, LLC may be deemed to be an affiliate of us and/or may be deemed to have a conflict of interest with us. Accordingly, the offering will be made in conformity with certain applicable provisions of NASD Rule 2720. Pursuant to those rules, the initial public offering price can be no higher than that recommended by a qualified independent underwriter, or QIU, which has participated in the preparation of this prospectus and performed its usual standard of due diligence with respect to this prospectus. CIBC World Markets Corp. has agreed to act as a QIU in respect of the offering. The initial public offering price of our common stock will not be higher than the price recommended by CIBC World Markets. CIBC World Markets will not receive any additional compensation for acting in this capacity in connection with the offering. We have agreed to indemnify CIBC World Markets against liabilities incurred in connection with acting as a QIU, including liabilities under the Securities Act.

Other Relationships. The underwriters may, from time to time, engage in transactions with or provide financial advisory services to us in the ordinary course of business. Cowen and Company, LLC received a fee for financial advisory services rendered to us in connection with the third closing of our series C-2 financing in May 2006. Christopher White, a director of Achillion, is Chief of Staff and Chief Administrative Officer of Cowen and Company, LLC and is Vice President of Cowen Group, Inc.

Table of Contents

LEGAL MATTERS

The validity of the shares of common stock we are offering will be passed upon for us by Wilmer Cutler Pickering Hale and Dorr LLP, Boston, Massachusetts. Legal matters in connection with this offering will be passed upon for the underwriters by Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., Boston, Massachusetts.

EXPERTS

The financial statements as of December 31, 2005 and December 31, 2004 and for each of the three years in the period ended December 31, 2005 included in this prospectus have been so included in reliance on the report (which contains an explanatory paragraph relating to the removal of an explanatory paragraph relating to our ability to continue as a going concern) of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

Fletcher Spaght, Inc. has consented to reference in this prospectus of its report setting forth the appraisal of our securities, and to the use in this prospectus of its name and any statements contained in such report.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the Securities and Exchange Commission, or the SEC, a registration statement on Form S-1 under the Securities Act, with respect to our common stock offered hereby. This prospectus, which forms part of the registration statement, does not contain all of the information set forth in the registration statement and the exhibits and schedules to the registration statement. Some items are omitted in accordance with the rules and regulations of the SEC. For further information about us and our common stock, we refer you to the registration statement and the exhibits and schedules to the registration statement filed as part of the registration statement. Statements contained in this prospectus as to the contents of any contract or other document filed as an exhibit are qualified in all respects by reference to the actual text of the exhibit. You may read and copy the registration statement, including the exhibits and schedules to the registration statement, at the SEC's Public Reference Room at 100 F. Street, N.E., Washington, D.C. 20549. You can obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. In addition, the SEC maintains an Internet site at www.sec.gov, from which you can electronically access the registration statement, including the exhibits and schedules to the registration statement.

Upon completion of the offering, we will become subject to the full informational and periodic reporting requirements of the Exchange Act. We will fulfill our obligations with respect to such requirements by filing periodic reports and other information with the SEC. We intend to furnish our stockholders with annual reports containing financial statements certified by an independent registered public accounting firm. We also maintain an Internet site at www.achillion.com. Our internet site is not a part of this prospectus.

Table of Contents

Achillion Pharmaceuticals, Inc.

INDEX TO FINANCIAL STATEMENTS

	Page
<u>Report of Independent Registered Public Accounting Firm</u>	F-2
<u>Financial Statements:</u>	
<u>Balance Sheets at December 31, 2004 and 2005 and June 30, 2006 (unaudited)</u>	F-3
<u>Statements of Operations for the Years Ended December 31, 2003, 2004 and 2005 and the six months ended June 30, 2005 and 2006 (unaudited)</u>	F-4
<u>Statements of Stockholders' (Deficit) for the Years Ended December 31, 2003, 2004 and 2005 and the six months ended June 30, 2005 and 2006 (unaudited)</u>	F-5
<u>Statements of Cash Flows for the Years Ended December 31, 2003, 2004 and 2005 and the six months ended June 30, 2005 and 2006 (unaudited)</u>	F-6
<u>Notes to Financial Statements</u>	F-7

Table of Contents

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of

Achillion Pharmaceuticals, Inc.

The reverse stock split described in Note 14 to the financial statements has not been consummated at September 20, 2006. When it has been consummated, we will be in a position to furnish the following report:

In our opinion, the accompanying balance sheets and the related statements of operations, of stockholders' (deficit) and of cash flows, present fairly, in all material respects, the financial position of Achillion Pharmaceuticals, Inc. at December 31, 2005 and 2004, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2005, in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

Our report dated March 31, 2006 included an explanatory paragraph relating to the Company's ability to continue as a going concern. As discussed in "Liquidity" in Note 1, the Company has obtained additional financing which has alleviated our substantial doubt about the Company's ability to continue as a going concern.

/s/ PricewaterhouseCoopers LLP

Hartford, Connecticut

March 31, 2006, except for "Liquidity" in Note 1, as to which the date is May 12, 2006 and except for Note 14, as to which the date is September 18, 2006.

F-2

Table of Contents**Achillion Pharmaceuticals, Inc.****Balance Sheets**

(in thousands, except per share amounts)

	<u>As of December 31,</u>			Pro Forma Stockholders Equity at June 30,
	<u>2004</u>	<u>2005</u>	<u>2006</u>	2006
				(Note 2)
				(Unaudited)
Assets				
Current assets:				
Cash and cash equivalents	\$ 9,481	\$ 9,583	\$ 20,214	
Marketable securities	4,897			
Accounts receivable	362	761	825	
Prepaid expenses and other current assets	943	707	2,113	
	<u>15,683</u>	<u>11,051</u>	<u>23,152</u>	
Total current assets				
Fixed assets, net	3,153	2,295	1,912	
Deferred financing costs, net	93	94	70	
Restricted cash	362	310	310	
	<u>19,291</u>	<u>13,750</u>	<u>25,444</u>	
Total assets				
Liabilities and Stockholders (Deficit) Equity				
Current liabilities:				
Current portion of long-term debt	\$ 988	\$ 2,083	\$ 3,415	
Accounts payable	1,560	896	1,061	
Accrued expenses	1,554	2,216	2,832	
Deferred revenue	5,317	5,202	2,702	
	<u>9,419</u>	<u>10,397</u>	<u>10,010</u>	
Total current liabilities				
Long-term debt, net of current portion	12,080	4,373	6,785	
Accrued expenses, net of current portion	338	267	265	
Deferred revenue, net of current portion	2,213			
Other long-term liabilities	180	381	555	
	<u>24,230</u>	<u>15,418</u>	<u>17,615</u>	
Total liabilities				
Commitments (Notes 11 and 12)				
Redeemable Convertible Preferred Stock:				
Series A Preferred Stock, \$.01 par value; 250 shares authorized, issued and outstanding at December 31, 2004 and 2005 and June 30, 2006 (unaudited) and 0 shares issued and outstanding at June 30, 2006 Pro Forma (unaudited) (liquidation preference of \$250 at December 31, 2005 and \$250 at June 30, 2006 (unaudited))	250	250	250	
Series B Preferred Stock, \$.01 par value; 15,817 shares authorized, issued and outstanding at December 31, 2004 and 2005 and June 30, 2006 (unaudited) and 0 shares issued and outstanding at June 30, 2006 Pro Forma (unaudited) (liquidation preference of \$27,968 at December 31, 2005 and \$28,442 at June 30, 2006 (unaudited))	26,944	27,893	28,367	
Series C Preferred Stock, \$.01 par value; 22,436 shares authorized, 22,418 shares issued and outstanding at December 31, 2004 and 2005 and June 30, 2006 (unaudited) and 0 shares issued and outstanding at June 30, 2006 Pro Forma (unaudited) (liquidation preference of \$47,258 at December 31, 2005 and \$48,069 at June 30, 2006 (unaudited))	45,505	47,128	47,940	

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

Series C-1 Preferred Stock, \$.01 par value; 2,300 shares authorized, issued and outstanding at December 31, 2004 and 2005 and June 30, 2006 (unaudited) and 0 shares issued and outstanding at June 30, 2006 Pro Forma (unaudited) (liquidation preference of \$5,217 at December 31, 2005 and \$5,316 at June 30, 2006 (unaudited))

2,041 2,241 2,341

Series C-2 Preferred Stock, \$.01 par value; 20,334 and 24,000 shares authorized at December 31, 2005 and June 30, 2006 (unaudited) 11,155 and 23,425 shares issued and outstanding at December 31, 2005 and June 30, 2006 (unaudited), respectively and 0 shares issued and outstanding at June 30, 2006 Pro Forma (unaudited) (liquidation preference of \$33,631 at December 31, 2005 and \$72,411 at June 30, 2006 (unaudited))

16,842 35,966

74,740 94,354 114,864

Stockholders' (Deficit):

Common stock, \$.001 par value; 65,000, 85,000, and 90,000 shares authorized at December 31, 2004, and 2005 and June 30, 2006 (unaudited); 496 and 513 shares issued and outstanding at December 31, 2004 and December 31, 2005 and 515 and 9,683 shares issued and outstanding at June 30, 2006 (unaudited) and June 30, 2006, Pro Forma (unaudited), respectively

4 4 4 10

Additional paid-in capital

114,858

Stock warrants

392 341 341 341

Stock subscription receivable

(282) (181) (114) (114)

Retained deficit

(79,790) (96,186) (107,270) (107,270)

Unrealized loss on marketable securities

(3) 4 4

Total stockholders' (deficit) equity

(79,679) (96,022) (107,035) \$ 7,829

Total liabilities and stockholders' (deficit) equity

\$ 19,291 \$ 13,750 \$ 25,444

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

Table of Contents**Achillion Pharmaceuticals, Inc.****Statements of Operations**

(in thousands, except per share amounts)

	Years Ended December 31,			Six Months Ended June 30,	
	2003	2004	2005	2005	2006
				(Unaudited)	
Revenue	\$	\$ 807	\$ 8,526	\$ 4,865	\$ 4,318
Operating expenses					
Research and development	13,194	14,841	18,112	9,415	10,969
General and administrative	3,261	3,181	3,101	1,619	2,216
Total operating expenses	16,455	18,022	21,213	11,034	13,185
Loss from operations	(16,455)	(17,215)	(12,687)	(6,169)	(8,867)
Other income (expense)					
Interest income	178	84	224	142	267
Interest expense	(348)	(593)	(1,200)	(661)	(446)
Net loss before benefit from state taxes	(16,625)	(17,724)	(13,663)	(6,688)	(9,046)
Tax benefit	871	264	88	60	50
Net loss	(15,754)	(17,460)	(13,575)	(6,628)	(8,996)
Accretion of preferred stock dividends	(2,572)	(2,588)	(2,939)	(1,386)	(2,286)
Loss attributable to common stockholders	\$ (18,326)	\$ (20,048)	\$ (16,514)	\$ (8,014)	\$ (11,282)
Basic and diluted net loss per share attributable to common stockholders (Note 3)	\$ (44.16)	\$ (43.77)	\$ (32.96)	\$ (16.16)	\$ (22.08)
Weighted average shares used in computing basic and diluted net loss per share attributable to common stockholders	415	458	501	496	511
Pro forma net loss per share attributable to common stockholders, basic and diluted (unaudited)			\$ (2.00)		\$ (0.99)
Pro forma weighted average shares used in computing basic and diluted net loss per share attributable to common stockholders (unaudited) (Note 2)			6,774		9,127

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

F-4

Table of Contents**Achillion Pharmaceuticals, Inc.****Statements of Stockholders (Deficit) for the Years Ended December 31, 2003, 2004 and 2005 and the Six Months Ended June 30, 2006 (unaudited)**

(in thousands)

	Common Stock		Additional	Stock	Stock	Deferred	Retained	Unrealized	Total
	Shares	Amount	Paid-In	Warrants	Subscription	Compensation	Earnings	Gain	Stockholders
			Capital		Receivable		(Deficit)	(Loss)	(Deficit)
Balances at January 1, 2003	569	\$ 5	\$	\$ 127	\$ (427)	\$ (13)	\$ (41,366)	\$ (8)	\$ (41,682)
Amortization of stock-based deferred compensation						9			9
Stock compensation			8						8
Exercise of stock options	6		11						11
Repurchase and settlement of restricted common stock	(76)	(1)	(1)		109		(107)		
Unrealized gain on marketable securities								8	8
Net (loss)							(15,754)		(15,754)
Convertible preferred stock dividends			(18)				(2,554)		(2,572)
Balances at December 31, 2003	499	4		127	(318)	(4)	(59,781)		(59,972)
Amortization of stock-based deferred compensation						4			4
Stock compensation			8						8
Warrants issued in connection with debt financing				302					302
Exercise of stock options	1		1		36				37
Repurchase and settlement of restricted common stock	(4)		(7)						(7)
Expiration of warrants			37	(37)					
Unrealized (loss) on marketable securities								(3)	(3)
Net (loss)							(17,460)		(17,460)
Convertible preferred stock dividends			(39)				(2,549)		(2,588)
Balances at December 31, 2004	496	4		392	(282)		(79,790)	(3)	(79,679)
Stock compensation			70						70
Exercise of stock options	16		26						26
Repayment of stock subscription receivable	1				101				101
Expiration of warrants			22	(22)					
Reclassification of preferred stock warrants in accordance with FSP 150-5				(29)					(29)
Unrealized gain on marketable securities								3	3
Net (loss)							(13,575)		(13,575)
Convertible preferred stock dividends			(118)				(2,821)		(2,939)
Balances at December 31, 2005	513	4		341	(181)		(96,186)		(96,022)
Stock compensation (unaudited)			195						195
Exercise of stock options (unaudited)	2		3						3
Settlement of stock subscription receivable (unaudited)					67				67
Unrealized gain on marketable securities								4	4
Net (loss) (unaudited)							(8,996)		(8,996)
Convertible preferred stock dividends (unaudited)			(198)				(2,088)		(2,286)

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

Balances at June 30, 2006 (unaudited)	515	\$	4	\$	\$	341	\$	(114)	\$	\$	(107,270)	\$	4	\$	(107,035)
---------------------------------------	-----	----	---	----	----	-----	----	-------	----	----	-----------	----	---	----	-----------

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

F-5

Table of Contents**Achillion Pharmaceuticals, Inc.****Statements of Cash Flows**

(in thousands)

	Six Months				
	Years Ended December 31,			Ended June 30,	
	2003	2004	2005	2005	2006
	(Unaudited)				
Cash flows from operating activities					
Net loss	\$ (15,754)	\$ (17,460)	\$ (13,575)	\$ (6,628)	\$ (8,996)
Adjustments to reconcile net loss to net cash used in operating activities:					
Depreciation and amortization	1,360	1,288	1,079	521	389
Noncash stock-based compensation	17	12	70	40	195
Noncash interest expense	18	303	977	546	
Loss on disposal of equipment	11				28
Amortization of Premium on Securities				49	4
Changes in assets and liabilities:					
Accounts receivable		(362)	(399)	(2,467)	(64)
Prepaid expenses and other current assets	(337)	328	236	93	(1,406)
Account payable	271	589	(664)	(272)	165
Accrued expenses and other liabilities	(216)	926	590	409	788
Deferred revenue		7,530	(2,328)	(705)	(2,500)
Net cash (used in) operating activities	(14,630)	(6,846)	(14,014)	(8,414)	(11,397)
Cash flows from investing activities					
Purchase of property and equipment	(767)	(94)	(98)	(81)	(10)
Proceeds from sale of equipment	4				
Release of restriction on cash	52	52	52		
Purchase of marketable securities	(11,442)	(4,899)			
Maturities of marketable securities	15,972	1,750	4,900	3,600	
Net cash provided by (used in) investing activities	3,819	(3,191)	4,854	3,519	(10)
Cash flows from financing activities					
Proceeds from issuance of Series C-1 Preferred Stock		2,024			
Proceeds from issuance of Series C-2 Preferred Stock, net of issuance costs			5,287		18,224
Proceeds from exercise of stock options	11	30	26	26	3
Proceeds from repayment of subscription receivable			101	101	67
Borrowings under notes payable	594	10,501	5,151	150	5,000
Repayments of notes payable	(1,026)	(1,232)	(1,178)	(599)	(1,256)
Payment of deferred financing costs	(3)	(48)	(125)		
Net cash provided by (used in) financing activities	(424)	11,275	9,262	(322)	22,038
Net (decrease) increase in cash and cash equivalents	(11,235)	1,238	102	(5,217)	10,631

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

Cash and cash equivalents, beginning of period	19,478	8,243	9,481	9,481	9,583
Cash and cash equivalents, end of period	\$ 8,243	\$ 9,481	\$ 9,583	\$ 4,264	\$ 20,214
Supplemental disclosure of cash flow information					
Cash paid for interest	\$ 341	\$ 290	\$ 179	\$ 95	\$ 313
Cash received from tax credits	\$	\$ 993	\$		
Supplemental disclosure of noncash financing activities					
Issuance of warrants in connection with debt financing	\$	\$ 302	\$ 174		174
Conversion of notes payable to Series C-2 Preferred Stock	\$	\$	\$ 11,388		

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

Table of Contents

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 toward product research and development. During 2005, the Company recognized significant revenues, and therefore is no longer considered a development stage enterprise. The Company has incurred losses since inception of approximately \$85,800 through December 31, 2005, and has an accumulated deficit of approximately \$96,200 through December 31, 2005. From inception through December 31, 2005, the Company has issued 250, 15,817, 22,418, 2,300 and 11,155 shares of Series A Convertible Preferred Stock (Series A), Series B Convertible Preferred Stock (Series B), Series C Convertible Preferred Stock (Series C), Series C-1 Convertible Preferred Stock (Series C-1) and Series C-2 Convertible Preferred Stock (Series C-2), respectively, for aggregate net proceeds of \$83,200.

Liquidity

In March 2006 and May 2006, the Company raised \$18,406 through the issuance of 12,271 shares of Series C-2, under a second and third closing of the Series C-2. Per share price, rights and preferences were the same as those offered in the November 2005 close (see Note 9). As a result of such issuances, the conversion ratio of Series C and Series C-1 changed from 1.14 to 1.196. Simultaneous with the May 2006 issuance of Series C-2, the Company raised an additional \$5,000 through the issuance of promissory notes under its 2005 credit facility (see Note 8). As a result of the issuance of these promissory notes, the Company issued to the lenders warrants to purchase an additional 167 shares of Series C-2 at an exercise price of \$1.50 per share. The relative fair value of such warrants at the date of issuance was estimated to be \$174 (unaudited), utilizing the Black-Scholes method, using assumptions similar to those outlined in Note 3 below. Such value was recorded as a debt discount which is being amortized as interest expense over the life of the related obligation, and is classified as a liability in the accompanying June 30, 2006 (unaudited) balance sheet (see note 10). Prior to the Company's May 2006 financings, there was substantial doubt about the Company's ability to continue as a going concern. After consideration of such financings, management believes this substantial doubt has been alleviated and that the Company has adequate liquidity to fund operations for at least twelve months from the date of the May 2006 financings.

The Company expects to incur substantial expenditures in the foreseeable future for the research, development and commercialization of its potential products. The Company will need additional financing to obtain regulatory approvals, fund operating losses, and, if deemed appropriate, establish manufacturing, sales and marketing capabilities, which it will seek to raise through public or private equity or debt financings, collaborative or other arrangements with corporate sources, or through other sources of financing. Adequate additional funding may not be available to the Company on acceptable terms or at all. The Company's failure to raise capital as and when needed could have a negative impact on its financial condition and its ability to pursue its business strategies. If adequate funds are not available to the Company, the Company may be required to delay, reduce or eliminate research and development programs, reduce or eliminate planned commercialization efforts, obtain funds through arrangements with collaborators or others on terms unfavorable to the Company or pursue merger or acquisition strategies.

There can be no assurance that the Company's research and development will be successfully completed, that adequate patent protection for the Company's technology will be obtained, that any products developed will obtain necessary government regulatory approval or that any approved products will be commercially viable. In addition, the Company operates in an environment of rapid change in technology, substantial competition from pharmaceutical and biotechnology companies and is dependent upon the services of its employees and its consultants.

F-7

Table of Contents

Achillion Pharmaceuticals, Inc.

Notes to Financial Statements (Continued)

(in thousands, except per share amounts)

2. Unaudited Interim Financial Statement and Unaudited Pro Forma Presentation

The unaudited pro forma stockholders' (deficit) as of June 30, 2006 reflects the automatic conversion of all outstanding shares of Series A, Series B, Series C, Series C-1 and Series C-2 as of June 30, 2006. The pro forma net loss per share attributable to common shareholders for the six months ended June 30, 2006 and year ended December 31, 2005 reflect the automatic conversion as of January 1, 2006 or 2005, as applicable, or date of issuance, if later, of all outstanding shares of Series A, Series B, Series C, Series C-1 and Series C-2 into 9,503 and 7,549 shares, respectively, of common stock, which includes 871 and 624 shares, respectively, of common stock issuable for payment in kind dividends to the Series B, Series C, Series C-1 and Series C-2 preferred stockholders (see Note 9).

The unaudited condensed financial statements as of June 30, 2006 and for the six months ended June 30, 2005 and 2006 have been prepared in accordance with generally accepted accounting principles for interim financial information on Article 10 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by generally accepted accounting principles for complete financial statements. In the opinion of management all adjustments, consisting primarily of normal recurring accruals, considered necessary for a fair statement of the results of these interim periods have been included. The results of operations for the six months ended June 30, 2006 are not necessarily indicative of the results that may be expected for the full year.

3. Summary of Significant Accounting Policies

Use of Estimates

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

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

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

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

F-8

Table of Contents

Achillion Pharmaceuticals, Inc.

Notes to Financial Statements (Continued)

(in thousands, except per share amounts)

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. Direct labor hours or full-time equivalents are typically used as the measure of performance. Under the proportionate performance method, periodic revenue related to upfront license payments is recognized as the percentage of actual effort expended in that period to total effort budgeted for all of the Company's performance obligations under the arrangement. 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. Estimates may change in the future, resulting in a change in the amount of revenue recognized in future periods.

Collaborations may also involve substantive milestone payments. 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.

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), facility-related expenses and depreciation.

Patent Costs

The Company expenses the costs of obtaining patents.

Stock Compensation

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 options when the option grants have an exercise price equal to the fair market value at the date of grant. Under APB 25, compensation expense is computed to the extent that the fair market value of the underlying stock on the date of grant exceeds the exercise price of the employee stock option or stock award. Compensation so computed is then recognized on a straight-line basis over the vesting period. Also through December 31, 2005, the Company had adopted the disclosure-only provisions of Statement of Financial Accounting Standards (SFAS) No. 123, *Accounting for Stock-Based Compensation* (SFAS No. 123), as amended by SFAS No. 148, *Accounting for Stock Based Compensation Transition and Disclosure* (SFAS No. 148).

The Company 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*

Table of Contents**Achillion Pharmaceuticals, Inc.****Notes to Financial Statements (Continued)****(in thousands, except per share amounts)**

for Acquiring, or in Conjunction with Selling, Goods or Services, and, accordingly, recognizes non-cash compensation expense equal to the fair value of such awards and amortizes such expense over the performance period. 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. The Company amortizes expenses related to non-employee stock options in accordance with FIN 28.

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 years ending December 31, 2003, 2004 and 2005, and for the six months ending June 30, 2005:

	Years Ended December 31,			Six Months Ended
	2003	2004	2005	June 30, 2005
				(Unaudited)
Net loss attributable to common shareholders as reported	\$ (18,326)	\$ (20,048)	\$ (16,514)	\$ (8,014)
Add: Stock-based employee compensation expense included in net loss			57	40
Less: Total stock-based employee compensation expense determined under fair-value based method for all awards	(104)	(213)	(380)	(210)
Pro forma net loss attributable to common shareholders	\$ (18,430)	\$ (20,261)	\$ (16,837)	\$ (8,184)
Net loss per share attributable to common shareholders (basic and diluted):				
As reported	\$ (44.16)	\$ (43.77)	\$ (32.96)	\$ (16.16)
Pro forma	\$ (44.41)	\$ (44.24)	\$ (33.61)	\$ (16.50)

The fair value of each employee option grant is estimated on the date of grant using the Black-Scholes option pricing model with the following assumptions for the years ending December 31, 2003, 2004 and 2005:

	2003	2004	2005
Risk free interest rate	3.12%	3.60%	4.30%
Expected dividend yield	0%	0%	0%
Expected lives	5 years	5 years	5 years
Expected volatility	100%	70%	70%

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

The effects of applying the provisions of SFAS No. 123 on net loss as stated above is not necessarily representative of the effects on reported income or loss for future years due to, among other things, the number of options granted, the vesting period of the stock options, and the fair value of additional options that may be granted in future years.

The Company utilized the historical volatility of peer-group public companies to estimate expected volatility for use in the Black-Scholes option pricing model for all periods shown above.

Effective January 1, 2006, the Company began accounting for grants of stock options utilizing the fair value recognition provisions of SFAS No. 123R, *Shared-Based Payment* (SFAS No. 123R) (see Note 10 for more information regarding the adoption of SFAS No. 123R).

F-10

Table of Contents**Achillion Pharmaceuticals, Inc.****Notes to Financial Statements (Continued)****(in thousands, except per share amounts)****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 as of December 31, 2003, 2004 and 2005, and the six months ended June 30, 2005 and 2006 were as follows:

	<u>As of December 31,</u>			<u>As of</u>	<u>As of</u>
	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>June 30,</u>	<u>June 30,</u>
				<u>2005</u>	<u>2006</u>
				(Unaudited)	
Options	259	615	864	608	829
Warrants	75	319	315	319	336
Convertible Preferred Stock, as converted	4,810	5,098	6,936	5,098	8,631
Accrued but unpaid Convertible Preferred Stock dividends	464	591	846	669	1,052
Total potentially dilutive securities outstanding	5,608	6,623	8,961	6,694	10,848

Excluded from the weighted average shares are 62, 19, 4 and 1 (unaudited) restricted shares subject to repurchase as of December 31, 2003, 2004 and 2005 and June 30, 2006, respectively.

To the extent that the Company's initial public offering in 2006 (see Note 1) results in additional shares of common stock being issued upon the conversion of some portion of the above securities, those resulting shares of common stock would dilute the Company's basic and diluted net loss per common share.

Segment Information

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

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.

Convertible Preferred Stock

The carrying value of convertible preferred stock is increased by periodic accretion to account for accrued but unpaid dividends (see Note 9.) These increases are effected through charges against additional paid-in-capital, if any, and then accumulated deficit.

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 is 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. Unrealized gains or losses on these investments are included as a separate component of

Table of Contents

Achillion Pharmaceuticals, Inc.

Notes to Financial Statements (Continued)

(in thousands, except per share amounts)

stockholders' equity (deficit). The specific identification method was used to determine amortized cost in computing unrealized gain or loss. The Company's marketable securities as of December 31, 2004, consisted of U.S. Government bonds, corporate bonds and commercial paper. As of December 31, 2004, these securities had a maximum maturity of less than twelve months and carried a weighted average interest rate of approximately 2.67%. The amortized cost of these securities was more than their fair values by \$3 as of December 31, 2004. At December 31, 2005 and June 30, 2006 (unaudited), the Company had no marketable securities.

All marketable securities held by the Company during the years ending December 31, 2003, 2004 and 2005 were held until maturity, and, as such, the Company did not recognize any realized gains or losses during those years.

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, 2004 and 2005, and the six months ended June 30, 2006, 100%, 97% and 96% (unaudited) of the Company's revenue was generated from an agreement with one collaboration partner (see Note 4) and at December 31, 2004 and 2005 and June 30, 2006, 100%, 96% and 95% (unaudited) 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 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	8-10 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.

Table of Contents**Achillion Pharmaceuticals, Inc.****Notes to Financial Statements (Continued)****(in thousands, except per share amounts)****Comprehensive Income (Loss)**

The Company reports and presents comprehensive income (loss) in accordance with SFAS No. 130, *Reporting Comprehensive Income*, which establishes standards for reporting and display of comprehensive income (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 income (loss)). The Company's other comprehensive income (loss) arises from net unrealized gains (losses) on marketable securities.

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

	Years Ended December 31,			Six Months Ended June 30,	
	2003	2004	2005	2005	2006
				(unaudited)	
Net loss	\$ (15,754)	\$ (17,460)	\$ (13,575)	\$ (6,628)	\$ (8,996)
Unrealized gain (loss) arising during the year	8	(3)	3	(2)	4
Total comprehensive loss	\$ (15,746)	\$ (17,463)	\$ (13,572)	\$ (6,630)	\$ (8,992)

Income Taxes

The Company utilizes the asset and liability method of accounting for income taxes, as set forth in SFAS 109, *Accounting for Income Taxes* (SFAS 109). Under this method, deferred tax liabilities and assets are recognized for the expected future tax consequences of temporary differences between the carrying amounts and the tax bases of assets and liabilities. A valuation allowance is established against net deferred tax assets if, based on the weight of available evidence, it is more likely than not that some or all of the net deferred tax assets will not be realized.

Recently Issued Accounting Pronouncements

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

In May 2005, the FASB issued SFAS 154, *Accounting Changes and Error Corrections*, which replaces APB Opinion No. 20, *Accounting Changes*, and SFAS No. 3, *Reporting Accounting Changes in Interim Financial Statements*. SFAS 154 changes the requirements for the accounting for and reporting of a change in accounting principle, and applies to all voluntary changes in accounting principle as well as to changes required by new accounting pronouncements, if those pronouncements are silent in regards to specific transition provisions. SFAS 154 requires that retrospective applications be applied to reflect a change in accounting principle to prior periods' financial statements unless it is impracticable to determine either the period-specific effects or the cumulative effect of the change. SFAS 154 also requires that a change in depreciation, amortization, or depletion method for long-lived, nonfinancial assets be accounted for as a change in accounting estimate affected by a change in accounting principles. SFAS 154 is effective for accounting changes and corrections of errors made in fiscal years beginning after December 15, 2005. The adoption of SFAS No. 154 is not anticipated to be material to the Company's operating results or financial position.

In July 2006, the FASB issued Interpretation No. 48, *Accounting for Uncertainty in Income Taxes - an interpretation of FASB Statement No. 109* (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

Table of Contents

Achillion Pharmaceuticals, Inc.

Notes to Financial Statements (Continued)

(in thousands, except per share amounts)

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 will reflect expected future tax consequences of such positions presuming the taxing authorities' full knowledge of the position and all relevant facts, but without considering time values. FIN 48 substantially changes the applicable accounting model and is likely to cause greater volatility in income statements as more items are recognized discretely within income tax expense. FIN 48 also revises disclosure requirements and introduces a prescriptive, annual tabular rollforward of the unrecognized tax benefits. FIN 48 is effective for the Company beginning January 1, 2007. The Company is evaluating the impact of adopting FIN 48 on its financial position and results of operations.

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 2,300 newly issued shares of Series C-1 (see Note 9), and for a non-refundable up-front license fee.

Under the Gilead Arrangement, the Company and Gilead will work 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 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 that arrangement.

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, which could total up to \$157,500 assuming the successful simultaneous development and commercialization achieving more than \$600,000 in worldwide net sales of a lead and back-up compound.

The up-front payment of \$10,000 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 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, the non-refundable up-front license fee, as well as any milestones achieved during the Research Period, will not be accounted for under the substantive milestone method, but rather under the proportionate performance model (see Note 3). Revenue recognized under a proportionate performance model will be 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, 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

Table of Contents**Achillion Pharmaceuticals, Inc.****Notes to Financial Statements (Continued)****(in thousands, except per share amounts)**

proof-of-concept will be borne equally by both parties. The Company is incurring the majority of those expenses and, therefore, is the net receiver of funds under this cost-sharing portion of the arrangement. Payments of \$725 and \$907 (unaudited) made by the Company to Gilead in 2005 and for the six months ended June 2006 in connection with this collaboration, respectively, have been recognized as a reduction in revenue.

Gilead has the right to terminate the agreement without cause upon 120 days written notice to the Company beginning at the earlier of proof-of-concept or November 24, 2006. 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, 2004 and 2005 and the six months ended June 30, 2006, the Company recognized revenue of \$807, \$8,277 and \$4,160 (unaudited), respectively, under this collaboration agreement, respectively, of which \$446, \$4,328 and \$2,500 (unaudited), respectively, related to the recognition of the non-refundable fee and first milestone under the proportionate performance model. The remaining \$361, \$3,949 and \$1,660 (unaudited), respectively, recognized during 2004 and 2005 and the six months ended June 30, 2006, respectively, relate to FTE and other external costs billed under the collaboration. The Company, through the Joint Research Committee, is currently in discussions with Gilead regarding whether certain full-time employee or equivalent time billed by Gilead to the collaboration during 2006 is allowed under the Gilead Arrangement. During 2006, the Company reduced its collaboration revenue from Gilead by these billed amounts and recorded only the revenue to date under the collaboration that is fixed and determinable. The Company will recognize additional revenue, if any, in future periods if the Joint Research Committee determines that such amounts billed were not allowed under the Gilead Arrangement. The Company expects that such amounts, if any, would be less than \$400. Included in the accompanying 2004 and 2005 and June 30, 2006 balance sheets is \$7,530, \$5,202 and \$ 2,702 (unaudited), respectively, of deferred revenue resulting from the up-front fee and a \$2,000 milestone payment received during the Research Period. 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. Other Current Assets

A summary of other current assets is as follows:

	<u>As of December 31,</u>		<u>As of</u>
	<u>2004</u>	<u>2005</u>	<u>June 30,</u>
			<u>2006</u>
Tax credit receivable	\$ 264	\$ 352	(Unaudited) \$ 402

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

Prepaid expenses	498	268	1,469
Interest receivable	129	17	190
Other	52	70	52
	<u> </u>	<u> </u>	<u> </u>
Total	\$ 943	\$ 707	\$ 2,113
	<u> </u>	<u> </u>	<u> </u>

F-15

Table of Contents**Achillion Pharmaceuticals, Inc.****Notes to Financial Statements (Continued)****(in thousands, except per share amounts)****6. Fixed Assets**

A summary of property and equipment is as follows:

	<u>As of December 31,</u>		<u>As of</u>
	<u>2004</u>	<u>2005</u>	<u>June 30,</u>
			<u>2006</u>
			<u>(Unaudited)</u>
Laboratory equipment	\$ 3,866	\$ 3,964	\$ 3,974
Office equipment	745	745	717
Leasehold improvements	2,919	2,919	2,919
	<u>7,530</u>	<u>7,628</u>	<u>7,610</u>
Less accumulated depreciation and amortization	(4,377)	(5,333)	(5,698)
Total	\$ 3,153	\$ 2,295	\$ 1,912

Depreciation expense was \$1,324, \$1,260 and \$955 for the years ended December 31, 2003, 2004 and 2005, respectively. Depreciation expense was \$501 and \$390 for the six months ended June 30, 2005 and 2006, respectively (unaudited).

7. Accrued Expenses

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

	<u>As of December 31,</u>		<u>As of</u>
	<u>2004</u>	<u>2005</u>	<u>June 30,</u>
			<u>2006</u>

Edgar Filing: ACHILLION PHARMACEUTICALS INC - Form S-1/A

			(Unaudited)
Accrued compensation	\$ 599	\$ 632	\$ 624
Accrued clinical trial expense	200	859	973
Accrued preclinical trial expense	227	364	381
Accrued licenses	165	180	100
Accrued rent expense	158	167	165
Accrued manufacturing and formulation		165	175
Accrued IPO costs			126
Other accrued expenses	543	116	553
	<u> </u>	<u> </u>	<u> </u>
Total	\$ 1,892	\$ 2,483	\$ 3,097
	<u> </u>	<u> </u>	<u> </u>

Accrued clinical trial expenses are comprised of amounts owed to third-party 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 party and ensures that the estimated balance is reasonably stated based upon the information available to the Company. The clinical trial accrual balances represent the Company's best estimate of amounts owed for clinical trial services based on all information available. Such estimates are subject to change as additional information becomes available.

Table of Contents

Achillion Pharmaceuticals, Inc.

Notes to Financial Statements (Continued)

(in thousands, except per share amounts)

8. Long-Term Debt

Long-term debt consists of the following: