ACHILLION PHARMACEUTICALS INC
Form S-1
August 14, 2009
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As filed with the Securities and Exchange Commission on August 14, 2009

Registration No. 333-

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-1

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

Achillion Pharmaceuticals, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**2834**	**52-2113479**
(State or other jurisdiction of incorporation or organization)	**(Primary Standard Industrial Classification Code Number)**	**(I.R.S. Employer Identification Number)**

300 George Street

New Haven, Connecticut 06511

(203) 624-7000

(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:

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Approximate date of commencement of proposed sale to the public:

From time to time 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, check the following box. x

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

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

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. ¨

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

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

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities To be Registered	Amount to be Registered (1)	Proposed Maximum Offering Price Per Unit (2)	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Common Stock, $.001 par value per share	7,805,515	$1.99	$15,532,975	$867

(1) Represents shares offered by the selling stockholder. Includes (i) 191,302 shares issued to the selling stockholder as a commitment fee and (ii) an indeterminable number of additional shares of common stock, pursuant to Rule 416 under the Securities Act of 1933, as amended, that may be issued to prevent dilution from stock splits, stock dividends or similar transactions that could affect the shares to be offered by selling stockholder.

(2) Estimated solely for the purpose of calculating the amount of the registration fee pursuant to Rule 457 under the Securities Act of 1933, as amended. The price per share and aggregate offering price are based on the average of the high and low prices of the registrant s common stock on August 13, 2009, as quoted on the Nasdaq Global Market.

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

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Subject to Completion dated August 14, 2009

The information in this prospectus is not complete and may be changed. These securities may not be sold 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

7,805,515 Shares of Common Stock

This prospectus relates to the resale of shares of our common stock by YA Global Master SPV Ltd., (YA Global) the selling stockholder. We may from time to time issue shares of our common stock to the selling stockholder at 95% of the market price at the time of such issuance determined in accordance with the terms of our Standby Equity Distribution Agreement, dated as of July 1, 2009, or SEDA, with YA Global. The selling stockholder may sell shares from time to time in regular brokerage transactions, in transactions directly with market makers or in privately negotiated transactions.

For additional information on the methods of sale that may be used by the selling stockholder, see the section entitled Plan of Distribution on page 25. We will not receive any of the proceeds from the sale of these shares. However, we will receive proceeds from the selling stockholder from the initial sale to such stockholder of these shares. We have and will continue to bear the costs relating to the registration of these shares.

Our common stock is traded on the Nasdaq Global Market under the symbol ACHN. On August 13, 2009, the closing sale price of our common stock on the Nasdaq Global Market was $1.97 per share. You are urged to obtain current market quotations for the common stock.

We may amend or supplement this prospectus from time to time by filing amendments or supplements as required. You should read the entire prospectus and any amendments or supplements carefully before you make your investment decision.

Investment in our common stock involves risks. See Risk Factors beginning on page 3 of this prospectus.

With the exception of YA Global Master SPV Ltd., which has informed us it is an underwriter within the meaning of the Securities Act of 1933, as amended, to the best of our knowledge, no other underwriter or person has been engaged to facilitate the sale of shares of our stock in this offering. The Securities and Exchange Commission may take the view that, under certain circumstances, any broker-dealers or agents that participate with the selling stockholder in the distribution of the shares may be deemed to be underwriters within the meaning of the Securities Act of 1933, as amended. Commissions, discounts or concessions received by any such broker-dealer or agent may be deemed to be underwriting commissions under the Securities Act.

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

The date of this prospectus is , 2009

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If it is against the law in any state to make an offer to sell these shares, or to solicit an offer from someone to buy these shares, then this prospectus does not apply to any person in that state, and no offer or solicitation is made by this prospectus to any such person.

You should rely only on the information contained in this prospectus. We have not authorized anyone to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. We are not making an offer to sell these securities in any jurisdiction where the offer and sale is not permitted. You should assume that the information appearing in this prospectus is accurate only as of the date on the front cover of this prospectus. Our business, financial condition, results of operations and prospects may have changed since that date.

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COMPANY INFORMATION

Achillion Pharmaceuticals, Inc.

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 chronic hepatitis C and the development of antibacterials for the treatment of resistant bacterial infections. We are currently focusing our efforts on ACH-1625, a protease inhibitor for the treatment of chronic hepatitis C currently in phase I clinical testing, and ACH-1095, a NS4A antagonist also for the treatment of chronic hepatitis C, which has been developed in collaboration with Gilead Sciences, Inc., or Gilead, and is currently in late stage preclinical testing. In addition, we have established a pipeline of certain other product candidates for which we are currently seeking appropriate collaborative partners, but to which we are not devoting significant resources at this time. These product candidates include ACH-702 for the treatment of serious bacterial infections and elvucitabine for the treatment of HIV infection.

For more information regarding our pipeline of drug candidates and our Gilead collaboration, refer to our Quarterly Report on Form 10-Q filed on August 3, 2009.

Corporate 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, I
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.

We have not authorized anyone to provide you with information different from that contained or incorporated by reference in this prospectus. The selling stockholders are offering to sell, and seeking offers to buy, shares of our 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 common stock.

July 2009 Standby Equity Distribution Agreement

On July 1, 2009, Achillion and YA Global entered into a Standby Equity Distribution Agreement, or SEDA, pursuant to which, for a two-year period, we have the right to sell shares of our common stock to YA Global for a total purchase price of up to $15 million. We paid $25,000 to YA Global as a structuring and due diligence fee. On July 1, 2009, we issued 191,302 shares of our common stock to YA Global in lieu of payment of a $300,000 commitment fee. As of August 13, 2009, we had not sold any shares of common stock to YA Global under the SEDA.

For each share of common stock purchased under the SEDA, YA Global will pay ninety-five percent (95%) of the lowest daily volume weighted average price during the five consecutive trading days after we provide notice to YA Global. Each such advance may be for an amount not to exceed the greater of $300,000 or the average daily trading volume of our common stock for the five consecutive trading days prior to the notice date. In addition, in no event shall the number of shares of common stock issuable to YA Global pursuant to an advance cause the aggregate number of shares of common stock beneficially owned by YA Global and its affiliates to exceed 9.99%, nor shall the number of shares to be sold exceed 20% of the shares outstanding as of July 1, 2009, or 5,292,427 shares, unless we obtain the approval of our stockholders or obtain written opinion from counsel that such approval is not required.

Our right to deliver an advance notice and the obligations of YA Global hereunder with respect to an advance is subject to our satisfaction of a number of conditions, including that our common stock is trading, and we believe will continue for the foreseeable future to trade, on a principal market, that the issuance of shares of common stock with respect to the applicable advance notice will not violate the shareholder approval requirements of the principal market, that we have not received any notice threatening the continued listing of our common stock on the principal market and that a Registration Statement is effective.

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In addition, without the written consent of YA Global, we may not, directly or indirectly, offer to sell, sell, contract to sell, grant any option to sell or otherwise dispose of any shares of common stock (other than the shares offered pursuant to the provisions of the agreement) or securities convertible into or exchangeable for common stock, warrants or any rights to purchase or acquire, common stock during the period beginning on the 5th trading day immediately prior to an advance notice date and ending on the 5th trading day immediately following the settlement date.

We may terminate the SEDA upon fifteen trading days of prior notice to YA Global, as long as there are no advances outstanding and we have paid to YA Global all amounts then due. A copy of the SEDA is attached as Exhibit 10.1 to our Current Report on Form 8-K filed with the SEC on July 6, 2009.

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RISK FACTORS

Investing in our common stock involves a high degree of risk. In addition to the information, documents or reports included or incorporated by reference in this prospectus and, if applicable, any prospectus supplement or other offering materials, you should carefully consider the risks described below in addition to the other information contained in this report, before making an investment decision. Our business, financial condition or results of operations could be harmed by any of these risks. The risks and uncertainties described below are not the only ones we face. Additional risks not currently known to us or other factors not perceived by us to present significant risks to our business at this time also may impair our business operations.

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. As of June 30, 2009, our accumulated deficit was approximately $193 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 as we:

- continue clinical testing of ACH-1625;
- complete discussions with Gilead regarding revisions to our license and collaboration agreement and determine the appropriate clinical path for ACH-1095; and
- progress additional HCV 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 will be adversely affected.

We believe that our existing cash and cash equivalents, as potentially augmented by the SEDA, will be sufficient to support our current operating plan through at least the twelve months following June 30, 2009. Our operating plan may change as a result of many factors, including:

- the costs involved in the clinical development, manufacturing and formulation of ACH-1625;
- the outcome of our discussions with Gilead regarding revisions to our license and collaboration agreement and the costs associated with the appropriate clinical path for ACH-1095;
- the potential therapeutic uses for ACH-702 we may pursue as we complete our strategic and development assessment of this compound;

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

the costs involved in obtaining regulatory approvals for our drug candidates;

the scope, prioritization and number of programs we pursue;

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

our ability to have declared effective by the SEC a registration statement which registers the resale of the shares of common stock to be issued under the SEDA;

our ability to raise incremental debt or equity capital, including any changes in the credit market that may impact our ability to obtain capital in the future;

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

competing technological and market developments currently unknown to us.

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

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

We may seek additional financing through a combination of private and public equity offerings, debt financings and collaboration, strategic alliance and licensing arrangements. To the extent that we raise additional capital through the sale of equity or convertible debt securities or through SEDA advances, your ownership interest will be diluted, and the terms may include adverse liquidation or other preferences that adversely affect your rights as a stockholder. For example, in August 2008, we issued in a private placement 10,714,655 shares of our common stock, plus common stock warrants to purchase a total of 2,678,644 additional shares of stock, resulting in gross proceeds to us of $31.1 million but which substantially diluted our existing stockholders. However, there can be no assurance that the investors will exercise their warrants. Debt financing, if available, may involve covenants that limit or restrict our ability to take specific actions such as incurring additional debt, making capital expenditures or declaring dividends, or may involve immediate repayment of the debt under certain circumstances. For example, each of our debt agreements contains certain subjective acceleration clauses, such that upon the occurrence of a material adverse change in our financial condition, business or operations in the view of the lenders, amounts outstanding under the agreement may become immediately due and payable. If we raise additional funds through collaboration, strategic alliance and licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies or drug candidates, or grant licenses on terms that are not favorable to us.

We depend on the success of our HCV drug candidates, ACH-1625 and ACH-1095, which are still under development.

We have invested a significant portion of our efforts and financial resources in the development of our HCV candidates, ACH-1625 and ACH-1095, for the treatment of chronic hepatitis C infection. Our ability to generate revenues will depend heavily on the successful development and commercialization of these drug candidates. The development and commercial success of these drug candidates will depend on several factors, including the following:

- our ability to provide acceptable evidence of the safety and efficacy of these drug candidates in current and future clinical trials;
- our ability to develop a drug formulation that will deliver the appropriate drug exposures in longer term 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 drugs, whether alone or in collaboration with others; and
- acceptance of the drug in the medical community and with third-party payors.

If Gilead allows us to advance ACH-1095 on our own, we anticipate requesting a pre-IND consultation with the FDA to discuss the most appropriate clinical development path for the compound. There can be no assurance that we will gain the agency s approval for the future clinical advancement of ACH-1095, and if we are not able to advance ACH-1095, our business may be significantly harmed. Even if successful in gaining FDA approval to advance to human clinical trials, the clinical development timelines and costs may be greater than anticipated. Further,

there can be no assurance that planned long term toxicology studies in animals will indicate a safety and tolerability profile appropriate for continued dosing in human subjects.

We initiated a phase I/Ib human clinical trial for our HCV candidate, ACH-1625, in June 2009. Positive results in preclinical studies of a drug candidate may not be predictive of similar results in human clinical trials, and

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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 for ACH-1625 may not be predictive of the results we may obtain in the currently on-going phase I/Ib clinical trial or in later stage trials. We do not expect any of our drug candidates to be commercially available for at least several years, if at all.

We have recently reduced our staff level and eliminated certain personnel and other costs, which could significantly adversely affect our ability to continue to discover and develop compounds in our pipeline.

Our management team and board of directors recently performed a strategic assessment of our portfolio of therapeutic compounds, and determined that we would focus our discovery and development efforts in certain key areas, primarily focused on our HCV therapeutics. Based on that strategic assessment, we prioritized certain projects and assessed the staffing levels required to accomplish our goals in those key areas. As a result, in July 2009 we implemented a restructuring plan that reduced employee headcount to approximately 40.

We expect that our restructuring will reduce personnel and other operating costs by approximately 20-30% over the next year as we focus on development of ACH-1625, ACH-1095 and the related back-up efforts. We may not be successful in developing these compounds through preclinical and clinical trials, or in discovering or developing new compounds as a result of these lower staffing levels. In addition, there can be no guarantee that we will achieve the expected levels of savings.

We may not be able to advance ACH-1095 into human clinical development, and the program may be terminated.

We are in discussions with Gilead to restructure our license and collaboration agreement. We have proposed that we continue to develop ACH-1095 independently and at our expense, while the parties would jointly continue to advance additional compounds also operating by the NS4A mechanism of action. There can be no assurance that we will reach a definitive agreement regarding this revision to the license and collaboration agreement. If we are unsuccessful in coming to an agreement with Gilead, we will not have the right to advance ACH-1095 independently. Even if we obtain the desired revision, the terms may not be favorable to us. In addition, there can be no assurance that ACH-1095 will demonstrate efficacy, safety and tolerability in human clinical trials or that we will be able to identify or progress additional candidates that operate by the NS4A mechanism of action.

If we are not able to determine the most appropriate therapeutic use for ACH-702, or determine and execute a successful business strategy pursuant to that use, our business may be harmed.

Following preclinical studies, we completed a pre-IND consultation with the FDA on the most appropriate clinical development program for ACH-702. While the FDA provided guidance on an appropriate path toward regulatory approval for topical administration for ACH-702, the Division of Anti-Infective and Ophthalmology Products referred our request for additional guidance on systemic administration of ACH-702 to the DSTPP. We continue to assess our strategic and development options for ACH-702 for topical administration and other potential applications including use in medical biofilms, use in opthalmic infections and for use against tuberculosis. At this time, we do not anticipate moving into clinical development of ACH-702 until we complete our strategic assessment, and even then, we may not invest significantly in the future development of this compound without a collaboration partner. Even if we elect to seek a collaboration partner, we may be unable to find an appropriate collaboration partner to advance the program and our business may be 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 chronic hepatitis C, serious hospital-based bacterial infections and HIV infection. We would expect ACH-1625,

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ACH-1095, ACH-702 and elvucitabine to compete with the following approved drugs and drug candidates currently under development:

ACH-1625 and ACH-1095. If approved, our protease inhibitor, ACH-1625 and our NS4A antagonist, ACH-1095, would compete with drugs currently approved for the treatment of hepatitis C, the interferon-alpha based products from Roche (Pegasys and Roferon-A) or Schering-Plough (Intron-A or Peg-Intron) and the ribavirin based products from Schering-Plough (Rebetrol), Roche (Copegus) or generic versions sold by various companies. In addition, our HCV compounds may compete with the interferon and ribavirin based drugs currently in development such as Valeant s ribavirin analog (Viramidine) and Human Genome Sciences Albuferon. Other products are also under development for the treatment of hepatitis C by companies such as Abbott, Anadys, Boehringer Ingelheim, Bristol-Myers Squibb, Gilead, GlaxoSmithKline, Human Genome Sciences, Intermune, Johnson & Johnson, Medivir, Merck, Novartis, Pfizer, Pharmasset, Roche, Schering-Plough, Valeant and Vertex.

ACH-702. ACH-702, if approved, would compete with drugs currently marketed for the treatment of serious gram-positive nosocomial infections including: vancomycin (multiple generic forms), Cubicin (daptomycin) by Cubist Pharmaceuticals, Zyvox (linezolid) by Pfizer and Synercid (dalfopristin + quinupristin) by King Pharmaceuticals. In addition, ACH-702 may compete with other drugs currently under development for the treatment of nosocomial gram-positive infections including: dalbavancin in development by Pfizer, telavancin from Theravance, oritavancin by Intermune, doripenem by Johnson & Johnson, ceftobiprole by Basilea and Johnson & Johnson, iclaprim by Arpida and garenoxacin by Schering-Plough. In addition, ACH-702 may compete with other drugs currently marketed or under development for the treatment of topical skin infections including Altabax by GlaxoSmithKline and XOMA-629 by Xoma Therapeutics Ltd. We may also compete with the following companies that have a strategic interest in the discovery, development and marketing of drugs for the treatment of bacterial infections: Abbott, Aventis, Bristol-Myers Squibb, Cubist, GlaxoSmithKline, Merck, Novartis, Roche and Wyeth.

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

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.

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

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

If we are not successful in forming an alliance for the commercialization of elvucitabine, or are significantly delayed in doing so, our business may be harmed.

We currently plan to enter into an alliance for the phase III development and commercialization of elvucitabine. Given the limited number of global pharmaceutical companies which currently develop and market drugs for the treatment of HIV, and the strategic need for elvucitabine to be suitable for co-formulation with drugs already marketed or under development by a potential partner, the number of potential partners is relatively small. To date, we have been unsuccessful in partnering with the major pharmaceutical companies with whom we have had on-going discussions. We are continuing partnering efforts with regional companies and institutions, including those in Asia, South America and South Africa. If we are not successful in forming an alliance before the completion of the currently ongoing trial extensions, we do not plan to enter phase III clinical trials and would not independently pursue further development or commercialization of elvucitabine.

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

Our business exposes us to significant potential product liability risks that are inherent in the development, manufacturing and sales and marketing of human therapeutic products. Although we do not currently commercialize any products, claims could be made against us based on the use of our drug candidates in clinical trials. Product liability claims could delay or prevent completion of our clinical development programs. We currently have clinical trial insurance in an amount equal to up to $10.0 million in the aggregate and will seek to obtain product liability insurance prior to the sales and marketing of any of our drug candidates. However, our insurance may not provide adequate coverage against potential liabilities. Furthermore, clinical trial and product liability insurance is becoming increasingly expensive. As a result, we may be unable to maintain current amounts of insurance coverage or obtain additional or sufficient insurance at a reasonable cost to protect against losses that could have a material adverse effect on us. If a claim is brought against us, we might be required to pay legal and other expenses to defend the claim, as well as uncovered damages awards resulting from a successful claim. Furthermore, whether or not we are ultimately successful in defending any such claims, we might be required to direct significant financial and managerial resources to such defense, and adverse publicity is likely to result.

Risks Relating to Our Common Stock

We may be required to dilute our existing stockholders further in connection with capital raising activities and certain purchasers may beneficially own significant blocks of our common stock. Additionally, the market price of our common stock may fall due to the increased number of shares available in the public market.

In connection with capital raising activities, we may be required to dilute our existing stockholders substantially. For example, upon the closing of our private placement on August 12, 2008, we issued to a group of institutional investors a total of 10,714,655 shares of our common stock, plus common stock warrants to purchase a total of 2,678,664 additional shares of common stock. The issuance of these shares and warrants resulted in substantial dilution to stockholders who held our common stock prior to the private placement.

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Pursuant to our obligations under a registration rights agreement for the private placement, on October 6, 2008, we filed a registration statement with the SEC covering the resale of the 10,714,655 shares of common stock issued in the private placement and the 2,678,664 shares of common stock issuable upon exercise of the warrants which was declared effective on October 30, 2008, making such shares available for immediate resale in the public market. The market price of our common stock could fall due to an increase in the number of shares available for sale in the public market.

There are substantial risks associated with the Standby Equity Distribution Agreement with YA Global Investments, L.P. which could contribute to the decline of our stock price and have a dilutive impact on our existing stockholders.

The sale of shares of our common stock pursuant to the SEDA will have a dilutive impact on our stockholders. YA Global may re-sell some, if not all, of the shares we issue to them under the SEDA and such sales could cause the market price of our common stock to decline significantly with advances under the SEDA. To the extent of any such decline, any subsequent advances would require us to issue a greater number of shares of common stock to YA Global Investments, L.P. in exchange for each dollar of the advance. Under these circumstances, our existing stockholders would experience greater dilution. Although YA Global is precluded from short sales, the sale of our common stock under the SEDA could encourage short sales by third parties, which could contribute to the further decline of our stock price.

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

As of August 13, 2009, our directors, executive officers and current holders of more than 5% of our outstanding common stock, together with their affiliates and related persons, beneficially own, in the aggregate, approximately 76% of our outstanding common stock. As a result, these stockholders, if acting together, have the ability to determine the outcome of all matters submitted to our stockholders for approval, including the election and removal of directors and any merger, consolidation or sale of all or substantially all of our assets and other extraordinary transactions. The interests of this group of stockholders may not always coincide with our corporate interests or the interest of other stockholders, and they may act in a manner with which you may not agree or that may not be in the best interests of other stockholders. This concentration of ownership may have the effect of:

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

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

The market price of our common stock has fluctuated in the past and is likely to fluctuate in the future. During the period from January 1, 2007 to August 13, 2009, our closing stock price has ranged from a low of $0.68 to a high of $19.61. Market prices for securities of early stage pharmaceutical, biotechnology and other life sciences companies have historically been particularly volatile. Some of the factors that may cause the market price of our common stock to fluctuate include:

- the results of our on-going and planned clinical trials of ACH-1625;
- the outcome of our discussions with Gilead regarding the future of its collaboration and the determination of the appropriate clinical path for ACH-1095;

the results of our currently on-going phase II trial extensions for elvucitabine;

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the entry into, modification of, or termination of, key agreements, in particular our collaboration agreement with Gilead or our sublicense agreement with Vion Pharmaceuticals, or any new collaboration agreement we may enter for elvucitabine;

the results of regulatory reviews relating to the approval of our drug candidates;

the initiation of, material developments in, or conclusion of litigation to enforce or defend any of our intellectual property rights;

failure of any of our drug candidates, if approved, to achieve commercial success;

general and industry-specific economic conditions that may affect our research and development expenditures;

the results of clinical trials conducted by others on drugs that would compete with our drug candidates;

the failure or discontinuation of any of our research programs;

issues in manufacturing our drug candidates or any approved products;

the introduction of technological innovations or new commercial products by us or our competitors;

changes in estimates or recommendations by securities analysts, if any, who cover our common stock;

future sales of our common stock;

changes in the structure of health care payment systems;

period-to-period fluctuations in our financial results; and

low trading volume of our common stock.

In addition, if we fail to reach an important research, development or commercialization milestone or result by a publicly expected deadline, even if by only a small margin, there could be significant impact on the market price of our common stock. Additionally, as we approach the announcement of important clinical data or other significant information and as we announce such results and information, we expect the price of our common stock to be particularly volatile, and negative results would have a substantial negative impact on the price of our common stock.

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 business operations and reputation.

If we are unable to maintain compliance with Nasdaq s listing requirements, our common stock could be delisted from the Nasdaq Global Market, which would negatively impact our liquidity, our stockholders ability to sell shares and our ability to raise capital.

Our listing on the Nasdaq Global Market is conditioned upon our continued compliance with the Nasdaq Marketplace Rules, including a rule that requires that we continue to meet the minimum bid price requirement as well as certain equity or market standards including maintenance of a minimum stockholders equity level, having a minimum number of publicly held shares, and a minimum number of registered and active market makers. If we fail to comply with Nasdaq s continued listing requirements, our common stock could be delisted from the Nasdaq Global Market. The delisting of our common stock would significantly affect the ability of investors to trade our securities and would significantly negatively affect the value and liquidity of our common stock. In addition, the delisting of our common stock could materially adversely affect our ability to raise capital on terms acceptable to us or at all. Delisting from the NASDAQ Global Market could also have other negative results, including the potential loss of confidence by suppliers and employees, the loss of institutional investor interest and fewer business development opportunities.

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Unstable market and economic conditions may have serious adverse consequences on our business.

Our general business strategy may be adversely affected by the recent economic downturn and volatile business environment and continued unpredictable and unstable market conditions. If the current equity and credit markets deteriorate further, or do not improve, it may make any necessary debt or equity financing more difficult, more costly, and more dilutive. Failure to secure any necessary financing in a timely manner and on favorable terms could have a material adverse effect on our growth strategy, financial performance and stock price and could require us to delay or abandon clinical development plans. In addition, there is a risk that one or more of our current service providers, manufacturers and other partners may not survive these difficult economic times, which would directly affect our ability to attain our operating goals on schedule and on budget.

At July 31, 2009, we had $9.8 million in cash and cash equivalents and $8.4 million in marketable securities consisting of U.S. government and agency securities and FDIC guaranteed commercial paper held by a major banking institution.

There is a possibility that our stock price may decline, due in part to the volatility of the stock market and the general economic downturn.

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

Prior to our initial public offering in 2006, as a private company with limited resources, we maintained a small finance and accounting staff. As a public company, the Sarbanes-Oxley Act of 2002 and the related rules and regulations of the SEC, as well as the rules of the Nasdaq Global Market, have required us to implement additional corporate governance practices and adhere to a variety of reporting requirements and complex accounting rules. Compliance with these public company obligations places significant additional demands on our finance and accounting staff and on our financial, accounting and information systems. In particular, as a public company, our management is required to conduct an annual evaluation of our internal controls over financial reporting and include a report of management on our internal controls in our annual reports on Form 10-K. If we are unable to continue to conclude that we have effective internal controls over financial reporting, investors could lose confidence in the reliability of our financial statements, which could result in a decrease in the value of our common stock.

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

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

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 for the development and commercialization of certain of our HCV compounds involving NS4A antagonism, and we may enter into additional collaborative arrangements in the future. For example, we currently plan to enter into an alliance for the phase III development and commercialization of elvucitabine. Given the limited number of global pharmaceutical companies which currently develop and market drugs for the treatment of HIV, and the strategic need for elvucitabine to be suitable for co-formulation with drugs already marketed or under development by a potential partner, the number of potential partners is relatively small. To date we have been unsuccessful in partnering with the major pharmaceutical companies with whom we have had on-going discussions. We are continuing partnering efforts with regional companies and institutions, including those in Asia, South America, South Africa and elsewhere. If we are not successful in forming an alliance before the completion of the currently ongoing trial extensions, we do not plan to

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enter phase III clinical trials and would not independently pursue further development or commercialization of elvucitabine. In addition, as we continue to assess our strategic and development options for ACH-702, at this time, we do not anticipate moving into clinical development of ACH-702 until we complete this strategic assessment, and even then, we may not significantly invest in the future development of this compound without a collaboration partner. We also may enter into alliances with major biotechnology or pharmaceutical companies to jointly develop other specific drug candidates and to jointly commercialize them if they are approved. In such alliances, we would expect our biotechnology or pharmaceutical collaborators to provide substantial funding, as well as significant capabilities in clinical development, regulatory affairs, marketing and sales. We may not be successful in entering into any such alliances on favorable terms, if at all. Even if we do succeed in securing such alliances, we may not be able to maintain them if, for example, development or approval of a drug candidate is delayed or sales of an approved drug are disappointing. Furthermore, any delay in entering into collaboration agreements could delay the development and commercialization of our drug candidates and reduce their competitiveness even if they reach the market. Any such delay related to our collaborations could adversely affect our business.

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

If Gilead 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. For example, in May 2009, Gilead notified us that they do not intend to initiate clinical development of GS 9525, also known as ACH-1095, and if we are unable to pursue the development of ACH-1095 on our own, our business may be significantly harmed. 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, Gilead may terminate the collaboration for any reason at any time upon 120 days notice. If Gilead were to exercise this right, the development and commercialization of our HCV compounds would be adversely affected.

In addition, under our current collaboration arrangement research and development activities prior to proof-of-concept are overseen by a research committee comprised of equal numbers of our representatives and representatives from Gilead. The joint research committee assigns research and development tasks, agrees upon a budget for the research program, and shares equally in the related costs. The parties may agree at any time to increase or decrease the research budget. Prior to proof-of-concept, any disputes within the joint research committee that cannot be resolved between designated executives of each party will be resolved by Gilead. Future collaboration arrangements may be differently structured.

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, our collaborator for our chronic hepatitis C program, currently is developing

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other products for the treatment of chronic hepatitis C, and the results of its development efforts could affect its commitment to our drug candidate. For example, if Gilead pursues the development of a backup compound or another product for chronic hepatitis C, its development efforts could affect their desire to grant us the ability to pursue ACH-1095. If a collaboration partner fails to develop or effectively commercialize drug candidates or drugs for any of these reasons, we may not be able to replace the collaboration partner with another partner to develop and commercialize a drug candidate or drugs under the terms of the collaboration. We may also be unable to obtain, on terms acceptable to us, a license from such collaboration partner to any of its intellectual property that may be necessary or useful for us to continue to develop and commercialize a drug candidate.

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

We currently rely on a single manufacturer for the preclinical and clinical supplies of each of our drug candidates and do not currently have relationships for redundant supply or a second source for any of our drug candidates. To date, our third-party manufacturers have met our manufacturing requirements, but we cannot be assured that they will continue to do so. Any performance failure on the part of our existing or future manufacturers could delay clinical development or regulatory approval of our drug candidates or commercialization of any approved products. If for some reason our current contract manufacturers cannot perform as agreed, we may be required to replace them. Although we believe that there are a number of potential replacements given 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.

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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.

Risks Related to the Development of Our Drug Candidates

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

To date, we have not commercially marketed, distributed or sold any drug candidates. The success of our business depends primarily upon our ability to develop and commercialize our drug candidates successfully. Our most advanced drug candidate is elvucitabine, which is currently in phase II clinical trials. Our drug candidates must satisfy rigorous standards of safety and efficacy before they can be approved for sale. To satisfy these standards, we must engage in expensive and lengthy testing and obtain regulatory approval of our drug candidates. Despite our efforts, our drug candidates may not:

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

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

- regulators or Institutional Review Boards, or IRBs, may not authorize us to commence a clinical trial or conduct a clinical trial at a prospective trial site;
- our preclinical tests or clinical trials may produce negative or inconclusive results, and we may decide, or regulators may require us, to conduct additional preclinical testing or clinical trials, or we may abandon projects that we expect to be promising;
- enrollment in our clinical trials may be slower than we currently anticipate or participants may drop out of our clinical trials at a higher rate than we currently anticipate, resulting in significant delays;
- our third-party contractors may fail to comply with regulatory requirements or meet their contractual obligations to us in a timely manner;

- we might have to suspend or terminate our clinical trials if the participants are exposed to unacceptable health risks;

- IRBs or regulators, including the FDA, may require that we hold, suspend or terminate clinical research for various reasons, including noncompliance with regulatory requirements; and

- the supply or quality of our drug candidates or other materials necessary to conduct our clinical trials may be insufficient or inadequate.

We, and a number of other companies in the pharmaceutical and biotechnology industries, have suffered significant setbacks in later stage clinical trials even after achieving promising results in early-stage development. For example, in February 2007, we announced that we discontinued further clinical development of ACH-806 (also known as GS 9132) which was determined to have positive antiviral effect in a proof-of-concept clinical trial in HCV infected patients, but also to elevate serum creatinine levels, a marker of kidney function. There can be no assurance that we have identified the source of the serum creatinine elevation and that we will not see a similar outcome in human clinical trials with that program s successor compound, ACH-1095 (also known as GS 9525) or that observations in preclinical studies of ACH-1095 in one species may not limit or even preclude its clinical use. Accordingly, there can be no assurance that this, or another type of toxicity, will not arise in future clinical trials.

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Additionally, the results from the completed preclinical studies and clinical trials and ongoing clinical trials for ACH-1625, elvucitabine, ACH-702 and our other drug candidates may not be predictive of the results we may obtain in later stage trials. In addition, we have not yet made a final determination regarding the most appropriate therapeutic application or clinical development plan for ACH-702. We continue to assess our strategic and development options for ACH-702 for topical administration and other potential applications including use in medical biofilms, use in ophthalmic infections and for use against tuberculosis. At this time, we do not anticipate moving into clinical development of ACH-702 until we complete this strategic assessment, and even then, we may not invest significantly in the future development of this compound without a collaboration partner. We do not expect any of our drug candidates to be commercially available for several years.

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

Our drug candidates are subject to extensive governmental regulations relating to among other things, research, testing, development, manufacturing, safety, efficacy, record keeping, labeling, marketing and distribution of drugs. Rigorous preclinical testing and clinical trials and an extensive regulatory approval process 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 ACH-1625, ACH-1095, ACH-702, elvucitabine and any other drug candidate we may seek to develop in the future, we face risks that:

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

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

Any delay in obtaining or failure to obtain required approvals could materially adversely affect our ability to progress the development of a drug candidate and to generate revenues from that drug candidate. In particular, we completed a pre-IND consultation with the FDA on the most appropriate clinical development program for ACH-702. Given the complexity of the mechanism of action of ACH-702, which operates via a three-part target including gyrase, topoisomerase IV and primase, the complexity of the preclinical results noted with ACH-702, and the evolving regulatory climate for antibacterials, we decided our development strategy for this compound should be further discussed with the FDA before initiating human clinical studies. While the FDA provided guidance on an appropriate path toward regulatory approval for topical administration for ACH-702, the Division of Anti-Infective and Ophthalmology Products referred our request for additional guidance on systemic administration of ACH-702 to the Division of Special Pathogen and Transplant Products (the DSPTP). We are currently assessing our strategic and development plans for ACH-702 for topical administration and other potential applications including use in medical biofilms, use in ophthalmic infections and for use against tuberculosis. Even after receiving guidance from the DSPTP, if any, there can be no assurance that the FDA will approve our IND application once filed. Additionally, if Gilead agrees that we can advance ACH-1095 on our own, we anticipate requesting a pre-IND consultation with the FDA to discuss the most appropriate clinical path for the compound. Based on the outcome of the consultation, there can be no assurance that we will ultimately file an IND, or that if an IND is filed, that it will be approved by the FDA. Furthermore, any regulatory approval to market a product may be subject to limitations on the indicated uses for which we may market the product and affect reimbursement by third-party payors. These limitations may limit the size of the market for the product. We are also subject to numerous foreign regulatory requirements governing the conduct of clinical trials, manufacturing and marketing authorization, pricing and third-

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party reimbursement. The foreign regulatory approval process includes all of the risks associated with FDA approval described above as well as risks attributable to the satisfaction of foreign regulations. Approval by the FDA does not ensure approval by regulatory authorities outside the United States. Foreign jurisdictions may have different approval procedures than those required by the FDA and may impose additional testing requirements for our drug candidates.

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

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

- ongoing discussions with the FDA or comparable foreign authorities regarding the scope or design of our clinical trials;
- delays in receiving, or the inability to obtain, required approvals from institutional review boards or other reviewing entities at clinical sites selected for participation in our clinical trials;
- delays in enrolling volunteers and patients into clinical trials;
- a lower than anticipated retention rate of volunteers and patients in clinical trials;
- the need to repeat clinical trials as a result of inconclusive or negative results or unforeseen complications in testing;
- inadequate supply or deficient quality of drug candidate materials or other materials necessary to conduct our clinical trials; unfavorable FDA inspection and review of a clinical trial site or records of any clinical or preclinical investigation;
- serious and unexpected drug-related side effects experienced by participants in our clinical trials; or
- the placement by the FDA of a clinical hold on a trial.

Our ability to enroll patients in our clinical trials in sufficient numbers and on a timely basis will be subject to a number of factors, including the size of the patient population, the nature of the protocol, the proximity of patients to clinical sites, the availability of effective treatments for the relevant disease and the eligibility criteria for the clinical trial. Delays in patient enrollment may result in increased costs and longer development times. For example, we experienced delays in patient enrollment in connection with our phase II trial of elvucitabine in HIV infected patients who have failed a HAART regimen which included Epivir (lamivudine) due to the strict entry criteria for this trial. As a result, we expanded the number of sites at which the trial was conducted and changed the protocol of the trial to include additional treatment with elvucitabine after the initial 14 days of treatment. We may also face competition for subjects to enroll in our ACH-1625 clinical trials and may have to expand the number of sites at which the trials are conducted. As a result, we may incur increased costs and longer development times for these trials. In addition, subjects may drop out of our clinical trials, and thereby impair the validity or statistical significance of the trials.

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

We cannot predict whether any of our drug candidates will encounter problems during clinical trials which will cause us or regulatory authorities to delay or suspend these trials, or which will delay the analysis of data from these trials. In addition, it is impossible to predict whether legislative changes will be enacted, or whether FDA regulations, guidance or interpretations will be changed, or what the impact of such

changes, if any, may be. If we experience any such problems, we may not have the financial resources to continue development of the drug candidate that is affected or the development of any of our other drug candidates.

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

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

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

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

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

Our research and development efforts involve the controlled use of hazardous materials, chemicals and various radioactive compounds. Although we believe that our safety procedures for the use, manufacture, storage, handling and disposing of these materials comply with the standards prescribed by federal, state and local laws and regulations, the risk of accidental contamination or injury from these materials cannot be eliminated. If an accident occurs, we could be held liable for resulting damages, which could be substantial. We are also subject to numerous environmental, health and workplace safety laws and regulations, including those governing laboratory procedures, exposure to blood-borne pathogens and the handling of biohazardous materials. Additional federal, state and local laws and regulations affecting our operations may be adopted in the future. Although we maintain workers compensation insurance to cover us for costs we may incur due to injuries to our employees resulting from the use of these materials, this insurance may not provide adequate coverage against potential liabilities. In addition, though we have environmental liability insurance, such coverage may not provide for all related losses. We may incur substantial costs to comply with, and substantial fines or penalties if we violate any of these laws or regulations.

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Risks Related to Commercialization of Our Drug Candidates

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

We have no commercial products, and we do not currently have an organization for the sales and marketing of pharmaceutical products. In order to successfully commercialize any drugs that may be approved in the future by the FDA or comparable foreign regulatory authorities, we must build our sales and marketing capabilities or make arrangements with third parties to perform these services. For certain drug candidates in selected indications where we believe that an approved product could be commercialized by a specialty North American sales force 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 for the development and commercialization of certain of our HCV candidates involving NS4A antagonism. If we are unable to establish adequate sales, marketing and distribution capabilities, whether independently or with third parties, we may not be able to generate product revenue and may not become profitable.

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

Even if ACH-1625, ACH-1095, ACH-702, elvucitabine or any other drug candidates we may develop or acquire in the future, obtain regulatory approval, they may not gain market acceptance among physicians, health care payors, patients and the medical community. Factors that we believe could materially affect market acceptance of our product candidates include:

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

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

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

Our revenues and profits will depend significantly upon the availability of adequate reimbursement for the use of any approved drug candidates from governmental and other third-party payors, both in the United States and in foreign markets. Reimbursement by a third party may depend

upon a number of factors, including the third-party payor s determination that use of a product is:

- a covered benefit under its health plan;
- safe, effective and medically necessary;
- appropriate for the specific patient;
- cost effective; and
- neither experimental nor investigational.

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

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or even cover our costs. Interim payments for new products, if applicable, may also be insufficient 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.

Federal legislation has increased 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 covers and pays 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 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 June 30, 2009, our patent portfolio included a total of 230 patents and patent applications worldwide. We own or hold exclusive licenses to a total of 13 U.S. issued patents and 27 U.S. pending provisional and non-provisional patent applications, as well as 190 pending PCT applications and associated non-US 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

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

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

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

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

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

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

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

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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, any prospectus supplement and the documents we incorporate by reference in this prospectus include forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, which we refer to as the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, which we refer to as the Exchange Act. For purposes of these statutes, any statement contained herein, in any prospectus supplement or in the documents we incorporate by reference in this prospectus other than a statement of historical fact, may be a forward-looking statement. For example, we may, in some cases, use words such as anticipate, believe, could, estimate, expect, intend, may, plan, project, should, will, would or other words that convey uncertainty of future events identify these forward-looking statements. Our actual results may differ materially from those indicated by these forward-looking statements as a result of various important factors, including the factors referred to above under the heading Risk Factors. These important factors include the factors that we identify in the documents that we incorporate by reference in this prospectus. If one or more of these factors materialize, or if any underlying assumptions prove incorrect, our actual results, performance or achievements may vary materially from any future results, performance or achievements expressed or implied by these forward-looking statements. You should consider these factors and the other cautionary statements made in this prospectus, any prospectus supplement or the documents we incorporate by reference in this prospectus as being applicable to all related forward-looking statements wherever they appear in this prospectus, any prospectus supplement or the documents incorporated by reference. While we may elect to update forward-looking statements wherever they appear in this prospectus, any prospectus supplement or the documents incorporated by reference, we do not assume, and specifically disclaim, any obligation to do so, whether as a result of new information, future events or otherwise.

USE OF PROCEEDS

We will not receive any proceeds from the sale of shares by the selling stockholder. All net proceeds from the sale of the common stock covered by this prospectus will go to the selling stockholder. However, we will receive proceeds from any sale of shares of common stock to YA Global pursuant to the SEDA. In light of current prevailing trading prices of our common stock as reported by the Nasdaq Global Market and the formula for pricing for the issuance of shares under the SEDA described below, the shares of common stock covered by the registration statement of which this prospectus is a part are not likely to be sufficient to raise the full $15.0 million maximum amount currently available under the SEDA.

For each share of common stock purchased under the SEDA, YA Global will pay ninety-five percent (95%) of the lowest daily volume weighted average price during the five consecutive trading days after we provide advance notice to YA Global. Each such advance may be for an amount not to exceed the greater of $300,000 or the average daily trading volume of our common stock for the five consecutive trading days prior to the notice date.

We anticipate, and have represented to YA Global in the SEDA, that the proceeds received under the SEDA will be utilized only for working capital and general corporate purposes.

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 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.

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MARKET PRICE INFORMATION

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

	High	Low
2009		
First Quarter	$ 1.80	$ 0.70
Second Quarter	$ 2.10	$ 1.10
Third Quarter (through August 13, 2009)	$ 2.42	$ 1.30
2008		
First Quarter	$ 6.75	$ 3.26
Second Quarter	$ 4.50	$ 1.96
Third Quarter	$ 3.02	$ 0.85
Fourth Quarter	$ 1.84	$ 0.68
2007		
First Quarter	$ 20.00	$ 5.71
Second Quarter	$ 7.41	$ 4.91
Third Quarter	$ 8.00	$ 5.61
Fourth Quarter	$ 6.50	$ 3.68
2006		
Fourth Quarter (beginning October 26, 2006)	$ 17.94	$ 11.57

On August 13, 2009, the last reported sale price of our common stock on the NASDAQ Global Market was $1.97 per share.

Holders of record

As of August 13, 2009, there were 72 holders of record of our common stock.

SELECTED FINANCIAL DATA

The following selected consolidated financial data should be read in conjunction with our consolidated financial statements and the notes thereto and Management s Discussion and Analysis of Financial Condition and Results of Operations included in Part II, Item 7 of our Annual Report on Form 10-K for the fiscal year ended December 31, 2008 and Part I, Item 2 of our Quarterly Report on Form 10-Q for the quarter ended June 30, 2009. The historical results presented here are not necessarily indicative of future results.

	Six months ended June 30,		Year Ended December 31,				
	2009	2008	2008	2007	2006	2005	2004
	(unaudited)		(in thousands, except per share amounts)				
Statement of Operations Data:							
Total operating revenue	$ (300)	$ 1,025	$ (234)	$ 4,038	$ 3,292	$ 8,526	$ 807
Research and development	9,206	10,481	21,150	28,120	22,741	18,112	14,841
General and administrative	3,201	3,296	6,546	6,476	4,865	3,101	3,181
Total operating expenses	12,407	13,777	27,696	34,596	27,606	21,213	18,022
Loss from operations	(12,707)	(12,752)	(27,930)	(30,558)	(24,314)	(12,687)	(17,215)
Interest income (expense)	(178)	(106)	(353)	1,496	179	(976)	(509)
Tax benefit	70	72	132	960	49	88	264
Net loss	(12,815)	(12,786)	(28,151)	(28,102)	(24,086)	(13,575)	(17,460)
Net loss applicable to common shareholders	$ (12,815)	$ (12,786)	$ (28,151)	$ (28,102)	$ (28,249)	$ (16,514)	$ (20,048)
Net loss per share-basic and diluted	$ (0.48)	$ (0.82)	$ (1.42)	$ (1.80)	$ (9.35)	$ (32.96)	$ (43.77)

Weighted average number of shares outstanding-basic and diluted	26,409	15,642	19,812	15,583	3,022	501	458

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	As of June 30, 2009 (unaudited)	2008	As of December 31, 2007	2006	2005	2004
Balance Sheet Data:						
Cash and cash equivalents	$ 9,386	$ 11,060	$ 8,971	$ 22,662	$ 9,583	$ 9,481
Marketable securities	11,184	24,297	22,138	39,904		4,897
Working capital	13,966	24,359	20,224	53,190	654	6,264
Total assets	23,324	38,561	35,632	67,146	13,750	19,291
Long-term liabilities	2,489	1,361	1,402	8,102	5,021	14,811
Total liabilities	10,190	13,540	14,094	19,776	15,418	24,230
Convertible preferred stock					94,354	74,740
Total stockholders (deficit) equity	13,134	25,021	21,538	47,370	(96,022)	(79,679)

OTHER INFORMATION REGARDING THE COMPANY

Additional information regarding our business, properties, legal proceedings, equity compensation plans, changes in and disagreements with the accountants on accounting and financial disclosure, quantitative and qualitative disclosures about market risk and our Management s Discussion and Analysis of Financial Condition and Results of Operations is incorporated in this prospectus by reference to our Annual Report on Form 10-K for the fiscal year ended December 31, 2008 and our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2009 and June 30, 2009.

There have been no material changes in our affairs that have occurred since December 31, 2008 that have not been described in a Form 10-Q or Form 8-K filed under the Exchange Act.

Additional information regarding our directors and executive officers, executive compensation, security ownership of certain beneficial owners and management and certain relationships and related transactions is incorporated in this prospectus by reference to our definitive proxy statement filed with the SEC on April 24, 2009.

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SELLING STOCKHOLDER

The table below sets forth information concerning the resale of the shares of common stock by the selling stockholder. The selling stockholder acquired our securities pursuant to private placements. We will not receive any proceeds from the resale of the common stock by the selling stockholder.

The following table also sets forth the name of each person who is offering the resale of shares of common stock by this prospectus, the number of shares of common stock beneficially owned by each such person, the number of shares of common stock that may be sold in this offering and the number of shares of common stock each such person will own after this offering, assuming they sell all of the shares offered. The selling stockholder has not held any position or office or had any other material relationship with us or any of our predecessors or affiliates within the past three years.

The following table and the accompanying footnotes are prepared based in part on information supplied to us by the selling stockholder as of August 13, 2009. The table and footnotes assume that the selling stockholder will sell all of such shares, including the shares issuable under the SEDA which have not at this time been issued. However, because the selling stockholder may sell all or some of its shares under this prospectus from time to time, or in another permitted manner, we cannot assure you as to the actual number of shares that will be sold by the selling stockholder or that will be held by the selling stockholder after completion of any sales. We do not know how long the selling stockholder will hold the shares before selling them.

	Shares Beneficially Owned Before the Offering		Shares Being Offered	Shares Beneficially Owned After the Offering	
	Number(1)	Percent(2)	Number	Number(3)	Percent(3)(4)
Selling Stockholder					
YA Global Master SPV Ltd.(4)	191,302	*	7,805,515		

* Less than 1%

(1) This number represents the shares currently held by the selling stockholder and does not include any additional shares which may be sold to the selling stockholder pursuant to the terms of the SEDA. On July 1, 2009, we issued 191,302 shares of common stock to YA Global in lieu of payment of a commitment fee.

(2) Applicable percentage ownership is based on 26,655,445 shares of our common stock outstanding as of August 13, 2009.

(3) Assumes the sale of all shares being offered in this prospectus.

(4) YA Global Master SPV Ltd. is the investor under the SEDA. All investment decisions of, and control of, YA Global are held by its investment manager, Yorkville Advisors, LLC. Mr. Mark Angelo, the portfolio manager of Yorkville Advisors, makes the investment decisions on behalf of and controls Yorkville Advisors. YA Global acquired, or will acquire, all shares being registered in this offering in financing transactions with us.

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PLAN OF DISTRIBUTION

The selling stockholder of the common stock, and any of its pledgees, assignees and successors-in-interest, which we collectively refer to herein as the selling stockholder, may, from time to time, sell any or all of their shares of common stock on the Nasdaq Global Market or any other stock exchange, market or trading facility on which the shares are traded or in private transactions. These sales may be at fixed or negotiated prices. A selling stockholder may use any one or more of the following methods when selling shares:

- ordinary brokerage transactions and transactions in which the broker dealer solicits purchasers;
- block trades in which the broker dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- broker-dealers may agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- a combination of any such methods of sale; or
- any other method permitted pursuant to applicable law.

The selling stockholders may also sell shares under Rule 144 under the Securities Act of 1933, as amended, or the Securities Act, if available, rather than under this prospectus.

Broker-dealers engaged by the selling stockholders may arrange for other broker dealer to participate in sales. Broker-dealers may receive commissions or discounts from the selling stockholders (or, if any broker-dealer acts as agent for the purchaser of shares, from the purchaser) in amounts to be negotiated, but, except as set forth in a supplement to this Prospectus, in the case of an agency transaction not in excess of a customary brokerage commission in compliance with NASDR Rule 2440; and in the case of a principal transaction a markup or markdown in compliance with NASDR IM-2440.

In connection with the sale of the common stock or interests therein, the selling stockholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the common stock in the course of hedging the positions they assume. The selling stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of shares offered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

YA Global is, and any other selling stockholder, broker-dealer or agent that are involved in selling the shares may be deemed to be, an underwriter within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such

broker-dealers or agents and any profit on the resale of the shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. Each selling stockholder has informed us that it does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the common stock. In no event shall any broker-dealer receive fees, commissions and markups which, in the aggregate, would exceed eight percent (8%).

We are required to pay certain fees and expenses incurred by us incident to the registration of the shares. We have agreed to indemnify the selling stockholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

Because YA Global is, and any other selling stockholder may be deemed to be, an underwriter within the meaning of the Securities Act, they will be subject to the prospectus delivery requirements of the Securities Act including Rule 172 thereunder. In addition, any securities covered by this prospectus which qualify for sale pursuant to Rule 144 under the Securities Act may be sold under Rule 144 rather than under this prospectus. There is no underwriter or coordinating broker acting in connection with the proposed sale of the resale shares by the selling stockholders.

We agreed to keep this prospectus effective until the earlier of (i) the date on which the shares may be resold by the selling stockholders without registration and without regard to any volume limitations by reason of Rule 144 under the Securities Act or any other rule of similar effect or (ii) all of the shares have been sold pursuant to this prospectus or Rule 144 under the Securities Act or any other rule of similar effect. The resale shares will be sold only through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states, the resale shares may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

Under applicable rules and regulations under the Exchange Act, any person engaged in the distribution of the resale shares may not simultaneously engage in market making activities with respect to the common stock for the applicable restricted period, as defined in Regulation M, prior to the commencement of the distribution. In addition, the selling stockholders will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of shares of the common stock by the selling stockholders or any other person. We will make copies of this prospectus available to the selling stockholders and have informed them of the need to deliver a copy of this prospectus to each purchaser at or prior to the time of the sale (including by compliance with Rule 172 under the Securities Act).

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DESCRIPTION OF CAPITAL STOCK

The following describes our common stock and provisions of our certificate of incorporation and bylaws. Copies of these documents are filed with the Securities and Exchange Commission as exhibits to our registration statement, of which this prospectus forms a part.

Our authorized capital stock consists of 100,000,000 shares of our common stock, par value $0.001 per share, and 5,000,000 shares of preferred stock, par value $0.01 per share.

Common Stock

As of August 13, 2009 there were 26,655,445 shares of our common stock outstanding and 72 holders of record.

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.

Warrants

As of August 13, 2009 there were issued and outstanding:

warrants to purchase an aggregate of 2,678,664 shares of common stock at a purchase price equal to $3.53 per share;

warrants to purchase an aggregate of 148,400 shares of common stock at a purchase price equal to $4.00 per share;

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warrants to purchase an aggregate of 42,735 shares of common stock at a purchase price equal to $4.68 per share; and

warrants to purchase an aggregate of 63,540 shares of common stock at a purchase price equal to $12.00 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 August 13, 2009, options to purchase an aggregate of 2,678,996 shares of common stock at a weighted average exercise of $4.31 per share were outstanding.

Registration Rights

The holders of 9,833,964 shares of common stock and the holders of warrants to purchase 192,461 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.

In addition, at any time, 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 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 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.

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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 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

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

NASDAQ Global Market

Our common stock is traded on the Nasdaq Global Market under the symbol ACHN.

LEGAL MATTERS

The validity of the issuance of the common stock offered by this prospectus will be passed upon for us by Wilmer Cutler Pickering Hale and Dorr LLP.

EXPERTS

The financial statements incorporated in this Prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2008 have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

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Fletcher Spaght, Inc. has consented to reference in this Registration Statement on Form S-1, and any further amendments or supplements thereto, filed by Achillion Pharmaceuticals, Inc, and to the incorporation by reference therein to Achillion Pharmaceutical Inc. s Annual Report on Form 10-K for the year ended December 31, 2008, as well as the references to and summary of our valuation report included therein.

DISCLOSURE OF COMMISSION POSITION OF

INDEMNIFICATION FOR SECURITIES ACT LIABILITIES

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers and controlling persons pursuant to the foregoing provisions, or otherwise, we have been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable.

WHERE YOU CAN FIND MORE INFORMATION

We file reports, proxy statements and other information with the SEC as required by the Exchange Act. You can find, copy and inspect information we file at the SEC s public reference room at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. You can call the SEC at 1-800-SEC-0330 for further information about the public reference room. You can review our electronically filed reports, proxy and information statements on the SEC s web site at http://www.sec.gov or on our web site at http://www.achillion.com. Information included on our web site is not a part of this prospectus or any prospectus supplement.

This prospectus is part of a registration statement that we filed with the SEC. The registration statement contains more information than this prospectus regarding us and the securities, including exhibits and schedules. You can obtain a copy of the registration statement from the SEC at any address listed above or from the SEC s web site.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

We are incorporating by reference certain documents we file with the SEC, which means that we can disclose important information to you by referring you to those documents. The information in the documents incorporated by reference is considered to be part of this prospectus. Statements contained in documents that we file with the SEC and that are incorporated by reference in this prospectus will automatically update and supersede information contained in this prospectus, including information in previously filed documents or reports that have been incorporated by reference in this prospectus, to the extent the new information differs from or is inconsistent with the old information. Except as set forth below, the SEC file number for the documents incorporated by reference in this prospectus is 001-33095.

We have filed the following documents with the SEC and they are incorporated herein by reference as of their respective dates of filing:

Our Annual Report on Form 10-K for the fiscal year ended December 31, 2008, as filed with the SEC on March 27, 2009;

Our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2009 and June 30, 2009, as filed with the SEC on May 15, 2009 and August 3, 2009;

Our definitive proxy statement, as filed with the SEC on April 24, 2009; and

Our Current Reports on Form 8-K, as filed with the SEC on January 8, 2009, February 9, 2009, March 26, 2009, July 6, 2009 and July 30, 2009.

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The description of our common stock contained in our Registration Statement on Form 8-A filed with the SEC on October 18, 2006. A statement contained in a document incorporated by reference into this prospectus shall be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus, any prospectus supplement or in any other subsequently filed document which is also incorporated in this prospectus modifies or replaces such statement. Any statements so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

You may request a copy of these documents, which will be provided to you at no cost, by writing or telephoning us using the following contact information:

300 George Street

New Haven, CT 06511-6624

Phone: (203) 624-7000

You should rely only on the information contained in this prospectus, including information incorporated by reference as described above, or any prospectus supplement or that we have specifically referred you to. We have not authorized anyone else to provide you with different information. You should not assume that the information in this prospectus or any prospectus supplement is accurate as of any date other than the date on the front of those documents or that any document incorporated by reference is accurate as of any date other than its filing date. You should not consider this prospectus to be an offer or solicitation relating to the securities in any jurisdiction in which such an offer or solicitation relating to the securities is not authorized. Furthermore, you should not consider this prospectus to be an offer or solicitation relating to the securities if the person making the offer or solicitation is not qualified to do so, or if it is unlawful for you to receive such an offer or solicitation.

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PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution

The following table sets forth the fees and expenses to be incurred in connection with the registration of the securities being registered hereby, all of which will be borne by us. Except for the SEC registration fee, all amounts are estimates.

Description	Amount
SEC registration fee	$ 867
Accounting fees and expenses	32,000
Legal fees and expenses	39,400
Miscellaneous expenses	25,000
Total expenses	$ 97,267

Item 14. Indemnification of Directors and Officers

Section 102 of the Delaware General Corporation Law allows a corporation to eliminate the personal liability of directors of a corporation to the corporation or its stockholders for monetary damages for a breach of fiduciary duty as a director, except where the director breached his duty of loyalty, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit. We have included such a provision in our Restated Certificate of Incorporation.

Section 145 of the Delaware General Corporation Law provides that a corporation has the power to indemnify a director, officer, employee or agent of the corporation and certain other persons serving at the request of the corporation in related capacities against amounts paid and expenses incurred in connection with an action or proceeding to which he is or is threatened to be made a party by reason of such position, if such person shall have acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal proceeding, if such person had no reasonable cause to believe his conduct was unlawful; provided that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to any matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the adjudicating court determines that such indemnification is proper under the circumstances.

Our Restated Certificate of Incorporation includes a provision that eliminates the personal liability of its directors for monetary damages for breach of fiduciary duty as a director, except for liability:

- for any breach of the director s duty of loyalty to Achillion or its stockholders;
- for acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law;
- under section 174 of the Delaware General Corporation Law regarding unlawful dividends and stock purchases; or
- for any transaction from which the director derived an improper personal benefit.

These provisions are permitted under Delaware law. Our Restated Certificate of Incorporation provides that:

we must indemnify our directors and officers to the fullest extent permitted by Delaware law;

we may, to the extent authorized from time to time by our Board of Directors, indemnify our other employees and agents to the same extent that we indemnified our officers and directors; and

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in the event we do not assume the defense in a legal proceeding, we must advance expenses, as incurred, to our directors and executive officers in connection with a legal proceeding to the fullest extent permitted by Delaware law.

The indemnification provisions contained in our Restated Certificate of Incorporation and Amended and Restated Bylaws are not exclusive of any other rights to which a person may be entitled by law, agreement, vote of stockholders or disinterested directors or otherwise. In addition, we maintain insurance on behalf of our directors and executive officers insuring them against any liability asserted against them in their capacities as directors or officers or arising out of such status.

Item 15. Recent Sales of Unregistered Securities

On July 1, 2009, Achillion and YA Global entered into the a Standby Equity Distribution Agreement , or SEDA, pursuant to which, for a two-year period, we have the right to sell shares of our common stock to YA Global for a total purchase price of up to $15 million. We paid $25,000 to YA Global as a structuring and due diligence fee.

On July 1, 2009, we issued 191,302 shares of our common stock to YA Global in lieu of payment of a $300,000 commitment fee.

In connection with the foregoing, we relied upon the exemption from securities registration afforded by Section 4(2) of the Securities Act in that the issuance of securities to the recipient did not involve a public offering. No advertising or general solicitation was employed in offering the securities.

Item 16. Exhibits and Financial Statement Schedules

(a) The following exhibits are included with this filing or incorporated by reference as listed herein:

EXHIBIT INDEX

Exhibit No.	Exhibit
3.1(1)	Amended and Restated Certificate of Incorporation of the Registrant.
3.2(1)	Amended and Restated Bylaws.
4.1(2)	Specimen Certificate evidencing shares of common stock.
5.1#	Legal Opinion of Wilmer Cutler Pickering Hale and Dorr LLP
10.1(3)	Standard Equity Distribution Agreement, dated July 1, 2009, by and between the Registrant and YA Global Master SPV Ltd.
10.2(2)	Research Collaboration and License Agreement, dated November 24, 2004, by and between the Registrant and Gilead, Inc.
10.3(1)	Amendment Number 1 to Research Collaboration and License Agreement, dated November 24, 2004 by and between the Registrant and Gilead, Inc., dated March 26, 2007.
10.4 (4)	Amendment Number 2 to Research Collaboration and License Agreement, dated November 24, 2004 by and between the Registrant and Gilead, Inc., dated January 15, 2009.
10.5(2)	License Agreement, dated February 3, 2000, by and between Vion Pharmaceuticals, Inc. and the Registrant, as amended on January 28, 2002.
10.6(2)	Letter Agreement, dated September 22, 2006, by and between the Registrant and Yale University.
10.7(2)	License Agreement, dated July 19, 2002 by and between the Registrant and Emory University.

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Exhibit No.	Exhibit
10.8*(2)	Employment Agreement between the Registrant and Michael Kishbauch, dated as of July 19, 2004.
10.9*(2)	Employment Agreement between the Registrant and Milind Desphande, dated as of September 10, 2003, as amended January 1, 2006.
10.10*(2)	Employment Agreement between the Registrant and Elizabeth Olek, dated as of November 6, 2007.
10.11*(2)	Employment Agreement between the Registrant and Mary Kay Fenton, dated as of September 10, 2003, as amended January 1, 2006.
10.12*(2)	Employment Agreement between the Registrant and Gautam Shah, dated as of May 26, 2004, as amended January 1, 2006.
10.13(2)	Third Amended and Restated Investor Rights Agreement, dated as of August 11, 2008, by and among the Registrant and the Holders named therein.
10.14(2)	Third Amended and Restated Stockholders Agreement, dated as of November 17, 2005, by and among the Registrant and the Stockholders named therein.
10.15(5)	Securities Purchase Agreement, dated as of August 5, 2008, by and among the Registrant and the Purchasers named therein.
10.16(5)	Form of Common Warrant pursuant to the Securities Purchase Agreement.
10.17(5)	Registration Rights Agreement, dated as of August 11, 2008, by and among the Registrant and the Purchasers named therein.
10.18(6)	Master Security Agreement and Promissory Notes by and between the Registrant and GE Capital Corporation and Oxford Finance Corporation, dated as of February 26, 2008.
10.19(6)	Form of Common Stock Warrant under Loan and Security Agreement of GE Capital Corporation and Oxford Finance Corporation
10.20(2)	Lease Agreement by and between the Registrant and WE George Street LLC for Suite 202, dated as of March 6, 2002.
10.21(2)	Lease Agreement by and between the Registrant and WE George Street LLC, dated as of May, 2000.
10.22(2)	Lease Agreements and subsequent Assignment and Assumption of Lease Agreements by and between the Registrant, Yale University and WE George Street LLC for Suites 802, 803, 804.
10.23*(2)	1998 Stock Option Plan, as amended, dated March 30, 2001.
10.24*(2)	2006 Stock Incentive Plan as amended.
10.25*(2)	Form of Incentive Stock Option Agreement under the 1998 Stock Option Plan.
10.26*(2)	Form of Incentive Stock Option Agreement for Non-Executives under the 1998 Stock Option Plan.
10.27*(2)	Form of Nonstatutory Stock Option Agreement under the 1998 Stock Option Plan.
10.28*(2)	Form of Incentive Stock Option Agreement under the 2006 Stock Incentive Plan.
10.29*(2)	Form of Nonstatutory Stock Option Agreement under the 2006 Stock Incentive Plan.
10.30*(2)	2006 Employee Stock Purchase Plan as amended.
10.31(2)	Form of Common Stock Warrant.

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Exhibit No.	Exhibit
10.32(2)	Form of Series C-2 Convertible Preferred Stock Warrant.
10.33(6)	Promissory Notes and Master Security Agreement by and between the Registrant and Webster Bank, dated as of May 15, 2003, as amended by the First, Second, Third, Fourth and Fifth Amendments to Master Security Agreement, dated May 15, 2003, October 29, 2004, March 24, 2005, August 7, 2006 and December 7, 2007, respectively.
10.34(2)	Loan Agreement by and between the Registrant and Connecticut Innovations, Incorporated, dated March 30, 2001.
10.35(2)	Common Stock Warrants issued to Connecticut Innovations, Inc. on March 29, 2001 and November 7, 2000.
23.1#	Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm.
23.2#	Consent of Fletcher Spaght, Inc.
23.3#	Consent of Wilmer Cutler Pickering Hale and Dorr LLP (included in Exhibit 5.1)
24.1	Power of Attorney (included on signature page)

* Management contracts or compensatory plans or arrangement
Indicates confidential treatment requested as to certain portions, which portions were omitted and filed separately with the Securities and Exchange Commission pursuant to a Confidential Treatment Request.
\# Filed herewith
(1) Incorporated herein by reference to our Annual Report on Form 10-K filed on March 29, 2007.
(2) Incorporated herein by reference to our Registration Statement on Form S-1 filed on March 31, 2006, as amended (File No. 333-132921).
(3) Incorporated herein by reference to our Current Report on Form 8-K filed on July 6, 2009.
(4) Incorporated herein by reference to our Quarterly Report on Form 10-Q filed on August 3, 2009.
(5) Incorporated herein by reference to our Registration Statement on Form S-3 filed on October 6, 2008 (File No. 333-153870).
(6) Incorporated herein by reference to our Annual Report on Form 10-K filed on March 5, 2008

Item 17. Undertakings

(a) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or any decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low end or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the Calculation of Registration Fee table in the effective registration statement;

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(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities to be offered therein, and the offering of such securities at that time shall be deemed to be an initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which shall remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act to any purchaser:

(A) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(B) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5) or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii) or (x) for the purpose of providing information required by section 10(a) of the Securities Act shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

That, for the purposes of determining any liability under the Securities Act of 1933, each filing of the Registrant s annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 that is incorporated by reference in this registration statement shall be deemed to be a new registration statement relating to the securities offered herein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of New Haven, State of Connecticut, on August 14, 2009.

ACHILLION PHARMACEUTICALS, INC.

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

SIGNATURES AND POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Michael D. Kishbauch and Mary Kay Fenton, and each of them, his or her true and lawful attorneys-in-fact and agents with full power of substitution and resubstitution, for him or her and in his or her name, place, and stead, in any and all capacities, to sign any and all (1) amendments (including post-effective amendments) and additions to this Registration Statement on Form S-1 and (2) Registration Statements, and any and all amendments thereto (including post-effective amendments), relating to the offering contemplated pursuant to Rule 462(b) under the Securities Act of 1933, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, and hereby grants to such attorneys-in-fact and agents full power and authority to do and perform each and every act and thing requisite and necessary to be done, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or his or her substitute or substitutes may lawfully do or cause to be done by virtue hereof. Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed below by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ MICHAEL D. KISHBAUCH **Michael D. Kishbauch**	President and Chief Executive Officer and Director (Principal executive officer)	August 14, 2009
/s/ MARY KAY FENTON **Mary Kay Fenton**	Vice President and Chief Financial Officer (Principal financial and accounting officer)	August 14, 2009
/s/ JASON FISHERMAN, M.D. **Jason Fisherman, M.D.**	Director	August 14, 2009
/s/ GARY E. FRASHIER **Gary E. Frashier**	Director	August 14, 2009
/s/ MICHAEL GREY **Michael Grey**	Director	August 14, 2009
/s/ DENNIS LIOTTA **Dennis Liotta**	Director	August 14, 2009

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Signature	Title	Date
/s/ DAVID SCHEER **David Scheer**	Director	August 14, 2009
/s/ NICHOLAS SIMON **Nicholas Simon**	Director	August 14, 2009
/s/ ROBERT VAN NOSTRAND **Robert Van Nostrand**	Director	August 14, 2009
/s/ DAVID WRIGHT **David Wright**	Director	August 14, 2009