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# UNITED STATES
# SECURITIES AND EXCHANGE COMMISSION
**Washington, D.C. 20549**

# FORM 10-Q

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

**For the quarterly period ended March 31, 2008**

**OR**

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

**For the transition period from _____ to _____**

**Commission File Number 000-33095**

# ACHILLION PHARMACEUTICALS, INC.
**(Exact name of registrant as specified in its charter)**

| **Delaware** | **52-2113479** |
|---|---|
| **(State or other jurisdiction of incorporation or organization)** | **(I.R.S. Employer Identification No.)** |
| **300 George Street, New Haven, CT** | **06511** |
| **(Address of principal executive offices)** | **(Zip Code)** |

**(203) 624-7000**
**(Registrant's telephone number, including area code)**

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, 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 ☐ | Smaller reporting company ☒ |
| (Do not check if smaller reporting company) | |

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

As of May 1, 2008, the registrant had 15,641,462 shares of Common Stock, $0.001 par value per share, outstanding.

## INDEX

## PART I. FINANCIAL INFORMATION

### ITEM 1. FINANCIAL STATEMENTS

**Achillion Pharmaceuticals, Inc.**
**Balance Sheets**
**(in thousands, except per share amounts)**
**(Unaudited)**

| | March 31, 2008 | December 31, 2007 |
|---|---|---|
| **Assets** | | |
| Current assets: | | |
| Cash and cash equivalents | $ 11,408 | $ 8,971 |
| Marketable securities | 17,691 | 22,138 |
| Accounts receivable | 174 | 136 |
| Prepaid expenses and other current assets | 1,413 | 1,671 |
| Total current assets | 30,686 | 32,916 |
| Fixed assets, net | 2,281 | 2,475 |
| Deferred financing costs | 128 | 36 |
| Restricted cash | 205 | 205 |
| Total assets | $ 33,300 | $ 35,632 |
| **Liabilities and Stockholders' Equity** | | |
| Current liabilities: | | |
| Accounts payable | $ 2,225 | $ 2,083 |
| Accrued expenses | 2,120 | 2,748 |
| Deferred revenue | 1,269 | 1,298 |
| Current portion of long-term debt | 10,422 | 6,563 |
| Total current liabilities | 16,036 | 12,692 |
| Accrued expenses, net of current portion | 123 | 130 |
| Deferred revenue | 848 | 1,272 |
| Total liabilities | 17,007 | 14,094 |
| Commitments | | |
| Stockholders' Equity: | | |
| Common Stock, $.001 par value; 100,000 shares authorized: 15,640 and 15,637 shares issued and outstanding, respectively | 16 | 16 |
| Additional paid-in capital | 174,028 | 173,301 |
| Accumulated deficit | (157,828) | (151,830) |
| Accumulated other comprehensive income | 77 | 51 |
| Total stockholders' equity | 16,293 | 21,538 |
| Total liabilities and stockholders' equity | $ 33,300 | $ 35,632 |

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

**Achillion Pharmaceuticals, Inc.**

**Statements of Operations**
**(in thousands, except per share amounts)**
**(Unaudited)**

| | For the Three Months Ended March 31, | |
|---|---|---|
| | 2008 | 2007 |
| Revenue | $ 627 | $ 1,550 |
| Operating expenses | | |
| Research and development | 4,998 | 8,367 |
| General and administrative | 1,689 | 1,548 |
| Total operating expenses | 6,687 | 9,915 |
| Loss from operations | (6,060) | (8,365) |
| Other income (expense) | | |
| Interest income | 291 | 759 |
| Interest expense | (251) | (265) |
| Net loss before tax benefits | (6,020) | (7,871) |
| Tax benefit | 22 | 201 |
| Net loss | (5,998) | (7,670) |
| Basic and diluted net loss per share (Note 3) | $ (.38) | $ (.49) |
| Weighted average shares used in computing basic and diluted net loss per share | 15,638 | 15,540 |

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

**Achillion Pharmaceuticals, Inc.**
**Statements of Cash Flows**
**(in thousands)**
**(Unaudited)**

| | Three Months Ended March 31, | |
|---|---|---|
| | 2008 | 2007 |
| **Cash flows from operating activities** | | |
| Net loss | $ (5,998) | $ (7,670) |
| Adjustments to reconcile net loss to net cash used in operating activities: | | |
| Depreciation and amortization | 208 | 194 |
| Noncash stock-based compensation | 566 | 410 |
| Noncash interest expense | 32 | 29 |
| Amortization of discount on securities | (173) | (527) |
| Changes in operating assets and liabilities: | | |
| Accounts receivable | (38) | (193) |
| Prepaid expenses and other current assets | 258 | 170 |
| Account payable | 142 | 173 |
| Accrued expenses | (635) | 743 |
| Deferred revenue | (453) | (526) |
| Net cash used in operating activities | (6,091) | (7,197) |
| **Cash flows from investing activities** | | |
| Purchase of property and equipment | (6) | (96) |
| Purchase of available for sale marketable securities | (11,118) | (15,764) |
| Maturities of marketable securities | 15,764 | 13,000 |
| Net cash provided by (used in) investing activities | 4,640 | (2,860) |
| **Cash flows from financing activities** | | |
| Proceeds from exercise of stock options | 6 | — |
| Proceeds from repayment of stock subscription receivable | — | 25 |
| Borrowings under notes payable | 5,000 | — |
| Repayments of notes payable | (1,018) | (876) |
| Payment of deferred financing costs | (100) | — |
| Net cash provided by (used in) financing activities | 3,888 | (851) |
| Net increase (decrease) in cash and cash equivalents | 2,437 | (10,908) |
| Cash and cash equivalents, beginning of period | 8,971 | 22,662 |
| Cash and cash equivalents, end of period | $ 11,408 | $ 11,754 |
| **Supplemental disclosure of cash flow information** | | |
| Cash paid for interest | $ 178 | $ 203 |
| Cash received from tax credits | $ 176 | $ — |
| **Supplemental disclosure of noncash financing activities** | | |
| Issuance of warrants in connection with debt financing | $ 155 | $ — |
| Cashless exercise of warrants | $ — | $ 282 |

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

**Achillion Pharmaceuticals, Inc.**

**Notes to Financial Statements**
**(in thousands, except per share amounts)**

**1. Nature of the Business**

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

The Company has incurred losses of $143,965 from inception through March 31, 2008 and had an accumulated deficit of $157,828 through March 31, 2008. The Company has funded its operations primarily through the sale of equity securities, borrowings from debt facilities, and the receipt of license fees, milestone and cost-sharing receipts from our collaboration partner, Gilead Sciences, Inc. ("Gilead").

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

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

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

**2. Basis of Presentation**

The accompanying unaudited condensed financial statements of the Company should be read in conjunction with the audited financial statements and notes as of and for the year ended December 31, 2007 included in the Company's Annual Report on Form 10-K filed with the SEC on March 5, 2008. The accompanying financial statements have been prepared in accordance with generally accepted accounting principles in the United States ("U.S. GAAP") for interim financial information, in accordance with the instructions to Form 10-Q and the guidance in Article 10 of Regulation S-X. Accordingly, since they are interim financial statements, the accompanying financial statements do not include all of the information and disclosures required by U.S. GAAP for complete financial statements. The accompanying financial statements reflect all adjustments, consisting of normal recurring adjustments, that are, in the opinion of management, necessary for a fair statement of the results of operations for the interim periods presented. Interim results are not necessarily indicative of results for a full year.

The preparation of financial statements in accordance with U.S. GAAP requires management to make estimates and assumptions that affect amounts reported in the financial statements and notes thereto. A discussion of the Company's critical accounting policies and management estimates is described in "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in Part I, Item II of this quarterly report on Form 10-Q.

**3. Earnings (Loss) Per Share ("EPS")**

Basic EPS is calculated in accordance with Statement of Financial Accounting Standards ("SFAS") No. 128, *Earnings per Share*, or SFAS No. 128, by dividing net income or loss attributable to common stockholders by the weighted average common stock outstanding. Diluted EPS is calculated in accordance with SFAS No. 128 by adjusting weighted average common shares outstanding for the dilutive effect of common stock options, warrants, convertible preferred stock and accrued but unpaid convertible preferred stock dividends. In periods where a net loss is recorded, no effect is given to potentially dilutive securities, since the effect would be antidilutive. Total securities that could potentially dilute basic EPS in the future that were not included in the computation of diluted EPS because to do so would have been antidilutive for the three months ended March 31, 2008 and 2007 were as follows (prior to consideration of the treasury stock method):

| | Three Months Ended March 31, | |
|---|---|---|
| | 2008 | 2007 |
| Options | 1,847 | 1,212 |
| Warrants | 354 | 312 |
| Total potentially dilutive securities outstanding | 2,201 | 1,524 |

**4. Collaboration Arrangement**

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

Under the Gilead Arrangement, the Company and Gilead are working together to develop one or more compounds for use in treating hepatitis C infection until proof-of-concept in one compound, as defined, is achieved (the "Research Period"). Subsequent to the achievement of proof-of-concept, the Company has no further obligation to continue providing services to Gilead but, at Gilead's request, the Company may elect to extend the Research Period for up to an additional two years after proof-of-concept is established, based upon good faith negotiations at that point in time. Further, if it is agreed that potential back-up compounds should continue to be researched, good faith negotiations would also be conducted to determine the specifics of any arrangement to continue to research backup compounds.

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

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

Under the Gilead Arrangement through March 31, 2007, agreed upon research or development expenses, including internal full-time equivalent ("FTE") costs and external costs, incurred by both companies during the period up to proof-of-concept were borne equally by both parties. Prior to March 31, 2007, the Company was incurring the majority of those expenses and, therefore, was the net receiver of funds under this cost-sharing portion of the arrangement. Effective April 1, 2007, internal full-time equivalent costs are no longer subject to this cost-sharing arrangement. Instead, each party bears its

own internal costs, including FTE costs. External costs continue to be shared equally by both parties. In March 2007, the Company and Gilead also revised their joint research program to focus on next-generation NS4A antagonists, after discontinuing clinical trials for ACH-806, an NS4A antagonist the Company was previously evaluating. In the most recently updated project plan, the Company's remaining obligations under the plan continue through mid 2009.

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

During the three months ended March 31, 2008 and 2007, the Company recognized revenue of $627 and $1,515, under this collaboration agreement, respectively, of which $282 and $753, respectively, related to the recognition of the non-refundable upfront fee and a pre-proof-of-concept milestone under the proportionate performance model. The remaining $345 and $762 recognized during the three months ended March 31, 2008 and 2007, relate to FTE reimbursements recognized under the proportionate performance model and external costs billed under the Gilead Arrangement, net of payments made to Gilead of $26 and $250 for the three months ended March 31, 2008 and 2007, respectively. Payments to Gilead under this collaboration are recognized as a reduction in revenue.

Included in the accompanying balance sheets as of March 31, 2008 and December 31, 2007 are $174 and $989 respectively, of accounts receivable resulting from this collaboration agreement and $2,117 and $2,570, respectively, of deferred revenue resulting from the up-front fee, a milestone payment, and FTE costs. In addition to Gilead's rights to unilaterally terminate this agreement, each party has the right to terminate for material breach; however, the Company may terminate for Gilead's breach only on a market-by-market basis, and, if applicable, a product-by-product basis.

**5. Marketable Securities**

The Company adopted SFAS No. 157, *Fair Value Measurements,* or SFAS No. 157, effective January 1, 2008 for financial assets and liabilities measured on a recurring basis. There was no impact to the Company's financial statements upon the adoption of SFAS No. 157. SFAS No. 157 requires disclosure that establishes a framework for measuring fair value and expands disclosures in the financial statements. The statement requires that fair value measurements be classified and disclosed in one of the three categories:

Level 1: Quoted prices in active markets for identical assets and liabilities that the reporting entity has the ability to access at the measurement date;

Level 2: Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly; or

Level 3: Unobservable inputs.

The fair value of the Company's securities of $17.7 as of March 31, 2008 is valued based on level 2 inputs as defined in SFAS No. 157. The Company classifies its entire investment portfolio as available for sale as defined in SFAS No. 115, *Accounting for Certain Investments in Debt and Equity Securities*. As of March 31, 2008 and December 31, 2007, the Company's investment portfolio consisted of U.S. government and agency securities and short term commercial paper held by a major banking institution. The maturities of all marketable securities held at March 31, 2008 and December 31, 2007, are less than one year. Securities are carried at fair value with the unrealized gains (losses) reported as a separate component of stockholders' equity.

The unrealized gain from marketable securities was $77 and $51 at March 31, 2008 and December 31, 2007, respectively.

As of March 31, 2008 and December 31, 2007, none of the Company's investments were determined to be other than temporarily impaired.

**6. Accrued Expenses**

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

| | March 31, 2008 | December 31, 2007 |
|---|---|---|
| Accrued compensation | $ 582 | $ 720 |
| Accrued research and development expenses | 998 | 1,618 |
| Accrued professional | 333 | 294 |
| Other accrued expenses | 330 | 246 |
| Total | $ 2,243 | $ 2,878 |

Accrued research and development expenses are comprised of amounts owed to third-party contract research organizations or "CROs", clinical investigators, laboratories and data managers for research and development work performed on behalf of the Company.

**7. Debt**

Debt consists of the following:

| | March 31, 2008 | December 31, 2007 |
|---|---|---|
| CII Term Loan, payable in monthly installments of $13 through September 2010 with a final balloon payment of $686, with interest at 7.5% per annum | $ 911 | $ 933 |
| 2003 Credit Facility, payable in monthly installments as the individual notes mature through May 2008, with interest ranging from 7.75% to 9.06% per annum | 599 | 675 |
| 2005 Credit Facility, payable in monthly installments as notes mature through December 2009, with interest of 10.92% to 11.58% per annum | — | 4,955 |
| 2008 Credit Facility, payable in monthly installments as notes mature through March 2011, with interest of 9.97% to 11.58% per annum | 8,912 | — |
| Total long-term debt | 10,422 | 6,563 |
| Less: current portion | (10,422) | (6,563) |
| Total long-term debt, net of current portion | $ — | $ — |

In February 2008, the Company entered into a credit facility with GE Capital Corporation and Oxford Finance Corporation. The new facility has substantially the same terms as the 2005 Credit Facility. At the same time, the Company combined the amounts outstanding under the 2005 Credit Facility with the newly issued notes (collectively, the "2008 Credit Facility"). The 2008 Credit Facility provides $5,000 to fund the Company's working capital needs, and is secured by substantially all of the Company's tangible assets. In connection with the 2008 Credit Facility, the Company issued warrants to purchase 43 shares of common stock at an exercise price of $4.68 per share. The fair value of the warrants at the date of issuance was estimated to be $155, utilizing the Black Scholes method and was recorded as a debt discount. This amount will be amortized as interest expense over the term of the loan.

All of the Company's debt agreements contain certain subjective acceleration clauses, such that upon the occurrence of a material adverse change in the financial condition, business or operations of the Company in the view of the lenders ("Material Adverse Change"), amounts due under the agreement may become immediately due and payable. As stated in Note 1, the Company will need additional financing to fund operations which the Company will seek to raise through public or private equity or debt financings, collaborative or other arrangements with third parties or through other sources of financing. There can be no assurance that such funding will be available on terms favorable to the Company, if at all. As such funding cannot be assured, the Company's debt balances have been classified as short term as of March 31, 2008. The Company has no indication that it is in default of any Material Adverse Change clauses, and none of the Company's lenders have to date accelerated scheduled loan payments as a result of these provisions.

**8. Stock-Based Compensation**

The Company's 2006 Stock Incentive Plan, or the 2006 Plan, is administered by the Company's Board of Directors and provides for the grant of incentive stock options, nonstatutory stock options, restricted stock, restricted stock units, stock appreciation rights and other stock-based awards. The Company's officers, employees, consultants, advisors and directors are

eligible to receive awards under the 2006 Plan; however, incentive stock options may only be granted to employees. Options granted are exercisable for a period determined by the Company, but in no event longer than ten years from the date of the grant. Options generally vest ratably over four years. There were 784 shares available to be granted under the 2006 Plan as of March 31, 2008.

A summary of the status of the Company's stock option activity for the three months ended March 31, 2008 is presented in the table and narrative below:

| | Options | Weighted Average Exercise Price |
|---|---|---|
| Outstanding at January 1, 2008 | 1,857 | $ 5.97 |
| Granted | 15 | 4.43 |
| Exercised | (3) | 2.00 |
| Cancelled/Forfeited | (23) | 6.30 |
| Outstanding at March 31, 2008 | 1,846 | $ 5.96 |
| Options exercisable at March 31, 2008 | 897 | $ 4.43 |
| Weighted-average fair value of options granted during the period | | $ 2.82 |

The Company utilizes the Black-Scholes option pricing model for determining the estimated fair value for stock-based awards. The Black-Scholes model requires the use of assumptions which determine the fair value of the stock-based awards. The assumptions used to value options granted are as follows:

| | For the Three Months Ended | |
|---|---|---|
| | March 31, 2008 | March 31, 2007 |
| Expected term of option | 6.1 years | 6.1 years |
| Expected volatility | 64% | 70% |
| Risk free interest rate | 2.67% | 4.51% |
| Expected dividend yield | 0% | 0% |

Total compensation expense recorded in the accompanying statements of operations associated with option grants made to employees for the three months ended March 31, 2008 and 2007 was $533 and $372, respectively. The Company recorded no tax benefit related to these options since the Company currently maintains a full valuation allowance.

As of March 31, 2008, the intrinsic value of the options outstanding was $1,499, of which $1,325 related to vested options and $174 related to unvested options. The intrinsic value of stock options is calculated based on the difference between the exercise prices of the underlying awards and the quoted stock price of the Company's common stock as of the reporting date.

As of March 31, 2008, the total compensation cost related to unvested options not yet recognized in the financial statements is approximately $4,756, net of estimated forfeitures, and the weighted average period over which this amount is expected to be recognized is 1.55 years.

The Company also occasionally grants stock option awards to consultants. Such grants are accounted for pursuant to Emerging Issue Task Force ("EITF") No. 96-18, *Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services*, and, accordingly, the Company recognizes compensation expense equal to the fair value of such awards and amortizes such expense over the performance period. Total expense for the three months ended March 31, 2008 and 2007 was $9 and $3, respectively.

*2006 Employee Stock Purchase Plan*

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

The Company measures the fair value of issuances under the employee stock purchase plan using the Black-Scholes option pricing model at the end of each reporting period. The compensation cost for the 2006 ESPP consists of the 15% of the grant date stock price discount and the fair value of the option. The Black-Scholes model requires the use of assumptions that determine the fair value of the stock-based awards. The assumptions used to value issuances under the 2006 ESPP are as follows:

| | For the Three Months Ended March 31, 2008 |
|---|---|
| Expected term of option | 6 months |
| Expected volatility | 99% |
| Risk free interest rate | 1.36% |
| Expected dividend yield | 0% |

For the three months ended March 31, 2008 and 2007, the Company did not issue shares associated with the 2006 ESPP. For the three months ended March 31, 2008 and 2007, the Company recorded compensation expense of $24 and $36, respectively. As of March 31, 2008, 215 shares remained available for future issuance under the 2006 ESPP.

**9. Income Taxes**

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

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

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

The Company did not have any unrecognized tax benefits as of the date of adoption of FIN 48 or on March 31, 2008.

At December 31, 2007, the Company's federal and state net operating loss carryforwards, or NOLs, were approximately $130,186 and $131,774, respectively, and the Company had gross deferred income tax assets of approximately $62,044, which resulted primarily from the federal and state NOL and tax credit carryforwards. In accordance with SFAS No. 109, *Accounting for Income Taxes,* the Company maintains a full valuation allowance against its deferred tax assets and liabilities.

Utilization of the NOL and research and development credit carryforwards may be subject to a substantial annual limitation under Section 382 of the Internal Revenue Code of 1986, or Section 382, due to changes in ownership of the Company that have occurred previously or that could occur in the future. These ownership changes may limit the amount of NOL and research and development credit carryforwards that can be utilized annually to offset future taxable income and tax. In general, an ownership change, as defined by Section 382, results from transactions increasing the ownership of certain shareholders or public groups in the stock of a corporation by more than 50 percentage points over a three-year period. Since the Company's formation, the Company has raised capital through the issuance of capital stock on several occasions which, combined with the purchasing shareholders' subsequent disposition of those shares, may have resulted in a change of control,

as defined by Section 382. Due to the significant complexity and cost associated with a change in control study, and because there could be additional changes in control in the future, the Company has not assessed whether there has been one or more changes in control since the Company's formation. If the Company has experienced a change of control at any time since Company formation, utilization of its NOL or research and development credit carryforwards would be subject to an annual limitation under Section 382. Any limitation may result in expiration of a portion of the NOL or research and development credit carryforwards before utilization which would reduce the Company's gross deferred tax assets.

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

**10. Comprehensive Income (Loss)**

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

Details relating to unrealized gains and losses and other comprehensive loss are as follows:

| | For the Three Months Ended | |
|---|---|---|
| | March 31, 2008 | March 31, 2007 |
| Net loss | $ (5,998) | $ (7,670) |
| Change in unrealized gain (loss) on marketable securities | 26 | (7) |
| Total comprehensive loss | $ (5,972) | $ (7,677) |

**11. Recently Issued Accounting Pronouncements**

In September 2006, the FASB issued SFAS No. 157, *Fair Value Measurements*, or SFAS No. 157. SFAS No. 157 defines fair value, establishes a framework for measuring fair value in generally accepted accounting principles, and expands disclosures about fair value measurements. The standard is effective for financial statements issued for fiscal years beginning after November 15, 2007 and interim periods within those fiscal years. The Company adopted SFAS No. 157 for financial assets and liabilities effective January 1, 2008. There was no impact to the Company's financial statements upon adoption. On February 12, 2008, the FASB issued FASB Staff Position (FSP) FAS No. 157-2. This FSP permits a delay in the effective date of SFAS No. 157 to fiscal years beginning after November 15, 2008 for nonfinancial assets and nonfinancial liabilities, except for items that are recognized or disclosed at fair value in the financial statements on a recurring basis, at least annually. The Company does not believe that its adoption will have a material impact on the Company's financial statements.

In February 2007, the FASB issued SFAS No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities*, or SFAS No. 159. SFAS No. 159 permits an entity to elect to report many financial assets and liabilities at fair value. Entities electing the fair value option would be required to recognize changes in fair value in earnings and are required to distinguish, on the face of the statement of financial position, the fair value of assets and liabilities for which the fair value option has been elected and similar assets and liabilities measured using another measurement attribute. The initial adjustment to reflect the difference between the fair value and the carrying amount would be accounted for as a cumulative-effect adjustment to retained earnings as of the date of initial adoption. SFAS No. 159 is effective as of the beginning of an entity's first fiscal year beginning after November 15, 2007. The Company did not elect to adopt the fair value option.

In June 2007, the Emerging Issues Task Force, or EITF, reached a consensus on EITF Issue No. 07-03, *Accounting for Nonrefundable Advance Payments for Goods or Services to Be Used in Future Research and Development Activities*, or EITF No. 07-03. EITF No. 07-03 concludes that non-refundable advance payments for future research and development activities should be deferred and capitalized until the goods have been delivered or the related services have been performed. If an entity does not expect the goods to be delivered or services to be rendered, the capitalized advance payment should be charged to expense. This consensus is effective for fiscal years beginning after December 15, 2007. The Company's adoption of EITF No. 07-03 on January 1, 2008 did not have an impact on its financial statements.

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

In December 2007, the FASB issued SFAS No. 141R, *Business Combinations*, or SFAS No. 141R, which changes the accounting for business acquisitions. SFAS No. 141R requires the acquiring entity in a business combination to recognize all the assets acquired and liabilities assumed in the transaction and establishes the acquisition-date fair value as the measurement objective for all assets acquired and liabilities assumed in a business combination. Certain provisions of this standard will, among other things, impact the determination of acquisition-date fair value of consideration paid in a business combination, including contingent consideration; exclude transaction costs from acquisition accounting; and change accounting practices for acquired contingencies, acquisition-related restructuring costs, in-process research and development, indemnification assets, and tax benefits. SFAS No. 141R is effective for business combinations and adjustments to an acquired entity's deferred tax asset and liability balances occurring after December 31, 2008. Adoption of SFAS No. 141R will have a material impact on the Company's financial position and results of operations in the event that the Company enters into a business combination that falls within the scope of this pronouncement.

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

**12. Subsequent Event**

On April 4, 2008, the Company entered into a license and research agreement with FOB Synthesis, Inc. ("FOB") granting the Company an exclusive worldwide license for the research, development and commercialization of certain FOB compounds for the treatment of serious bacterial infections.

Under the terms of the agreement, the Company will pay to FOB a $500 upfront license payment. FOB could also receive an additional $500 license payment and earn milestone payments of up to $9,500 per product candidate based upon the achievement of certain specified development and regulatory goals. The Company will provide FOB with funding at specified levels to collaborate with the Company on the further characterization and development of the compounds for at least the next year. The Company has the option to extend the research term for an additional one year period with 30 days written notice to FOB prior to the end of the first year of the research term. The Company will pay FOB a royalty on net sales of certain future products arising from the collaboration.

The agreement may be terminated by either party based upon material uncured breaches by the other party, or, subject to continued payment by the Company of collaboration funding for the remainder of the current research term, by the Company at any time after providing sixty (60) days advance written notice of termination.

## ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

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

### Overview

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

We have devoted and are continuing to devote substantially all of our efforts toward product research and development. We have incurred losses of $144 million from inception through March 31, 2008 and had an accumulated deficit of $158 million through March 31, 2008. Our net losses were $6.0 million and $7.7 million for the three months ended March 31, 2008 and 2007, respectively. We have funded our operations primarily through:

- proceeds of $161.2 million from the sale of equity securities, including our initial public offering in October 2006;
- borrowings of $22.1 million from debt facilities; and
- receipts of $10.0 million from up-front and milestone payments, as well as $8.6 million in cost-sharing receipts, from our collaboration partner, Gilead Sciences.

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

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

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

**Financial Operations Overview**

***Revenue***

To date, we have not generated revenue from the sale of any drugs. The majority of our revenue recognized to date has been derived from our collaboration with Gilead Sciences to develop compounds for use in treating chronic hepatitis C infection. During the three months ended March 31, 2008 and 2007, we recognized $627,000 and $1.5 million, respectively, under this collaboration arrangement.

Upon initiating our collaboration with Gilead Sciences, we received a payment of $10.0 million, which included an equity investment by Gilead Sciences determined to be worth approximately $2.0 million. The remaining $8.0 million is being accounted for as a nonrefundable up-front fee recognized under the proportionate performance model. Revenue under the proportionate performance model is recognized as our effort under the collaboration is incurred. When our performance obligation is complete, we will recognize milestone payments, if any, when the corresponding milestone is achieved. We will recognize royalty payments, if any, upon product sales.

Effective April 1, 2007, each party provides for the costs of their own full-time equivalents. We expect that the relative full-time equivalent efforts of each of Achillion and Gilead Sciences will remain approximately one-half of total efforts. We share equally external research costs with Gilead Sciences. Through March 31, 2007, research and development expenses under our collaboration with Gilead Sciences, including internal full-time equivalent costs and external research costs, incurred by both companies prior to proof-of-concept, were borne equally by both parties. As we were providing the majority of those services and were incurring the majority of those expenses, we were the net recipient of funds under this cost-sharing portion of the arrangement and therefore recognized the reimbursed costs as revenue rather than research expense. Payments made by us to Gilead Sciences in connection with this collaboration are being recognized as a reduction of revenue.

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

***Research and Development***

Our research and development expenses reflect costs incurred for our proprietary research and development projects as well as costs for research and development projects conducted as part of collaborative arrangements. These costs consist primarily of salaries and benefits for our research and development personnel, costs of services by clinical research organizations, other outsourced research, materials used during research and development activities, facility-related costs such as rent and utilities associated with our laboratory and clinical development space, and operating supplies. We expect that our research and development expenses will remain substantially unchanged for the remainder of the year.

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

- **Elvucitabine for HIV Infection.** Elvucitabine is an antiviral we are developing for the treatment of HIV infection. We are currently evaluating elvucitabine in phase II clinical trials to further explore its safety and efficacy in HIV-infected patients. We currently retain full development and marketing rights to elvucitabine. However, we are currently in discussions with potential collaboration partners for elvucitabine and we intend to enter into a collaboration arrangement in 2008 to continue clinical development.
- **ACH-1095, an NS4A Antagonist for Chronic Hepatitis C Infection.** We are evaluating ACH-1095 for the treatment of chronic hepatitis C in collaboration with Gilead Sciences. ACH-1095 is currently in late-stage pre-clinical studies, and we anticipate filing an investigational new drug application, or IND, for this compound during 2008.
- **Protease Inhibitor for Chronic Hepatitis C Infection.** In a proprietary research program targeting HCV protease, we are also developing certain compounds discovered by our internal research team. These compounds have demonstrated strong in vitro potency and a satisfactory early safety profile. If our continued preclinical studies are positive, we expect to begin human clinical trials with one candidate from this series in 2009.

- **ACH-702 for Serious Hospital-Based Bacterial Infections.** ACH-702 is a preclinical candidate with potency against a broad spectrum of bacterial pathogens including methicillin-resistant staphylococcus aureus, or MRSA, which we are developing for the treatment of serious hospital-based bacterial infections. We are currently assessing additional therapeutic applications for ACH-702, and intend to request a pre-IND development meeting with the FDA during the second quarter to hold discussions on the most appropriate clinical strategy. We intend to follow with submission of an IND to the FDA, if appropriate, based upon the outcome of those discussions.

All costs associated with internal research and development, and research and development services for which we have externally contracted, are expensed as incurred. The costs of obtaining patents for our candidates are expensed as incurred as general and administrative expenses and are not included in the summary of research and development expenses outlined in the table below.

| | Three Months Ended March 31, | |
|---|---|---|
| | 2008 | 2007 |
| Direct external costs: | | |
| Elvucitabine | $ 1,022 | $ 2,655 |
| NS4A antagonists (including ACH-806 and ACH-1095) | 157 | 966 |
| Protease inhibitor | 362 | — |
| ACH-702 | 92 | 1,620 |
| | 1,633 | 5,241 |
| Direct internal personnel costs | 2,038 | 1,934 |
| Sub-total direct costs | 3,671 | 7,175 |
| Indirect costs and overhead | 1,327 | 1,192 |
| Total research and development | $ 4,998 | $ 8,367 |

Currently, we are completing the open-label extension phases of two phase II clinical trials for elvucitabine, conducting preclinical studies for ACH-1095, and performing late discovery-stage toxicology assessments of our HCV protease inhibitors. From the inception of each respective program through March 31, 2008, we incurred approximately $45.9 million in total costs for elvucitabine, approximately $26.9 million in total costs for our NS4A antagonist program, including both ACH-1095 and ACH-806, approximately $4.4 million for our protease inhibitor and approximately $15.9 million in total costs for ACH-702. These figures include our internal research and development personnel costs and related facilities overhead. We currently estimate that the clinical trial costs for two phase III clinical trials of elvucitabine in different HIV populations will be approximately $50.0 million, exclusive of the internal personnel costs associated with conducting these trials. We currently plan to enter a collaboration arrangement in order to offset a significant portion of these costs. We estimate that the costs associated with completing phase I clinical trials with ACH-702 will be approximately $3.0 million, exclusive of the internal personnel costs associated with conducting these studies and trials. We anticipate that the costs associated with preclinical and early clinical development through proof-of-concept of ACH-1095, our next generation NS4A antagonist, will be approximately $3.4 million, exclusive of internal personnel costs. This amount for NS4A represents one-half of the external costs associated with those activities, as we share such external costs with Gilead Sciences. We estimate that the costs associated with preclinical and early clinical development of one of our HCV protease inhibitors to be approximately $3.1 million.

***General and Administrative***

Our general and administrative expenses consist primarily of salaries and benefits for management and administrative personnel, professional fees for legal, accounting and other services, travel costs and facility-related costs such as rent, utilities and other general office expenses. We expect that general and administrative expenses will remain substantially unchanged over the next twelve months.

**Critical Accounting Policies and Estimates**

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

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

***Revenue Recognition***

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

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

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

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

Reimbursement of costs is recognized as revenue provided the provisions of EITF Issue No. 99-19, *Reporting Revenue Gross as Principal versus Net as an Agent*, are met, the amounts are determinable and collection of the related receivable is reasonably assured.

***Stock-Based Compensation – Employee Stock-Based Awards***

We apply the Statement of Financial Accounting Standards No. 123 as revised in 2004, *Share Based Payment*, or SFAS No. 123R, which requires measurement and recognition of compensation expense for all stock-based awards made to employees and directors, including employee stock options and employee stock purchases under our 2006 ESPP Plan based on estimated fair values. In December 2007, the SEC issued Staff Accounting Bulletin No. 110, or SAB 110 which extends the use of the simplified method in developing an estimate of expected term of "plain vanilla" share options beyond December 31, 2007. We utilize the provisions of SAB 110 in our application of SFAS No. 123R.

We primarily grant qualified stock options for a fixed number of shares to employees with an exercise price equal to the market value of the shares at the date of grant. To the extent that the amount of the aggregate fair market value of qualified stock options that become exercisable for an individual exceeds $100,000 during any tax year, those stock options are treated as non qualified stock options. Under the fair value recognition provisions of SFAS No. 123R, stock-based compensation cost is based on the value of the portion of stock-based awards that is ultimately expected to vest during the period. Stock-based compensation expense recognized during the three months ended March 31, 2008 and 2007 includes compensation expense for stock-based awards granted prior to, but not yet vested as of December 31, 2005, based on the fair value on the grant date estimated in accordance with the pro forma provisions of SFAS No. 123. Compensation expense also includes amounts related to the stock-based awards granted subsequent to December 31, 2005, based on the fair value on the grant date, estimated in accordance with the provisions of SFAS No. 123R.

We utilize the Black-Scholes option pricing model for determining the estimated fair value for stock-based awards. The Black-Scholes model requires the use of assumptions which determine the fair value of the stock-based awards. Determining the fair value of stock-based awards at the grant date requires judgment, including estimating the expected term of stock options, the expected volatility of our stock and expected dividends. In addition, we previously accounted for forfeitures as they occurred. In accordance with SFAS No. 123R, we are required to estimate forfeitures at the grant date and recognize compensation costs for only those awards that are expected to vest. Judgment is required in estimating the amount of stock-based awards that are expected to be forfeited.

If factors change and we employ different assumptions in the application of SFAS No. 123R in future periods, the compensation expense that we record under SFAS No. 123R may differ significantly from what we have recorded in the current period. Therefore, we believe it is important for investors to be aware of the degree of subjectivity involved when using option pricing models to estimate share-based compensation under SFAS No. 123R. There is risk that our estimates of the fair values of our share-based compensation awards on the grant dates may differ from the actual values realized upon the exercise, expiration, early termination or forfeiture of those share-based payments in the future. Certain share-based payments, such as employee stock options, may expire worthless or otherwise result in zero intrinsic value as compared to the fair values originally estimated on the grant date and reported in our financial statements. Alternatively, value may be realized from these instruments that is significantly in excess of the fair values originally estimated on the grant date and reported in our financial statements. Although the fair value of employee share-based awards is determined in accordance with SFAS No. 123R and SAB 110 using an option pricing model, that value may not be indicative of the fair value observed in a willing buyer/willing seller market transaction.

***Accrued Expenses***

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

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

***Income Taxes***

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

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

We do not have any unrecognized tax benefits as of the date of adoption or March 31, 2008. We review all tax positions to ensure the tax treatment selected is sustainable based on its technical merits and that the position would be sustained if challenged.

**Results of Operations**

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

***Comparison of Three Months Ended March 31, 2008 and 2007***

*Revenue*. Revenue was $627,000 and $1.6 million for the three months ended March 31, 2008 and 2007, respectively. The decrease in revenue in 2008 is primarily due to the extended period over which we recognize amounts received under the Gilead arrangement. Our efforts under the collaboration, which were previously estimated to be complete in 2008, will extend through mid 2009. Additionally, efforts under our Small Business Innovation Research, or SBIR, grant were completed in the first quarter of 2007, and therefore no additional grant revenue related to this grant will be recognized. Revenue consisted of the following:

| | Three Months Ended March 31, | | |
|---|---|---|---|
| | 2008 | 2007 | Change |
| | (in thousands) | | |
| Gilead collaboration revenue | $ 627 | $ 1,515 | $(888) |
| Grant revenue | — | 35 | (35) |
| Total revenue | $ 627 | $ 1,550 | $(923) |

Through the completion of our performance obligations in 2009, we expect to recognize additional revenue of approximately $2.1 million, offset by any payments we are obligated to make to Gilead Sciences in satisfaction of external costs paid by Gilead Sciences under our external cost-sharing arrangement. It is possible that we will recognize negative revenue in future quarters based upon the timing of our performance under the collaboration, and on the timing and magnitude of external costs borne by Gilead Sciences.

*Research and development expenses*. Research and development expenses were $5.0 million and $8.4 million for the three months ended March 31, 2008 and 2007, respectively. The decrease from 2007 to 2008 was primarily due to lower outsourced research costs related to phase II trials for elvucitabine, and the completion of preclinical testing of ACH-702 in 2007, offset somewhat by increased scientific consulting fees. We expect that research and development expenses during the remainder of 2008 will remain substantially unchanged from the first quarter of 2008. Research and development expenses for the three months ended March 31, 2008 and 2007 are comprised as follows:

| | Three Months Ended March 31, | | |
|---|---|---|---|
| | 2008 | 2007 | Change |
| | (in thousands) | | |
| Personnel costs | $ 1,749 | $ 1,779 | $ (30) |
| Stock based compensation | 298 | 158 | 140 |
| Outsourced research and supplies | 1,633 | 5,334 | (3,701) |
| Professional and consulting fees | 542 | 325 | 217 |
| Facilities costs | 723 | 677 | 46 |
| Travel and other costs | 53 | 94 | (41) |
| Total | $ 4,998 | $ 8,367 | $(3,369) |

*General and administrative expenses*. General and administrative expenses were $1.7 million and $1.5 million for the three months ended March 31, 2008 and 2007, respectively. The increase from 2007 to 2008 was primarily due to increased accounting and auditing fees and increased insurance premiums. We expect that general and administrative expenses will remain substantially unchanged over the next twelve months. General and administrative expenses for the three months ended March 31, 2008 and 2007 are comprised as follows:

| | Three Months Ended March 31, | | |
|---|---|---|---|
| | 2008 | 2007 | Change |
| | (in thousands) | | |
| Personnel costs | $ 537 | $ 528 | $ 9 |
| Stock based compensation | 268 | 253 | 15 |
| Professional and consulting fees | 431 | 336 | 95 |
| Facilities costs | 294 | 265 | 29 |
| Travel and other costs | 159 | 166 | (7) |
| Total | $ 1,689 | $ 1,548 | $ 141 |

*Interest income (expense)*. Interest income was $291,000 and $759,000 for the three months ended March 31, 2008 and 2007, respectively. The decrease from 2007 to 2008 was primarily due to decreased average cash balances combined with lower interest rates. Interest expense was $251,000 and $265,000 for the three months ended March 31, 2008 and 2007, respectively. Interest expense is expected to increase in 2008 due to the receipt of $5.0 million under our 2008 Credit Facility in February 2008.

*Tax benefit*. The State of Connecticut provides companies with the opportunity to forego certain research and development tax credit carryforwards in exchange for cash. The program provides for such exchange of the research and development credits at a rate of 65% of the annual incremental and non-incremental research and development credits, as defined. The amount of tax benefit we recognized in connection with this exchange program was $22,000 and $209,000 for the three months ended March 31, 2008 and 2007, respectively. The $187,000 decrease from 2007 to 2008 was due to the decrease in eligible research and development costs, resulting primarily from near completion of elvucitabine phase II trials and reduced preclinical costs associated with ACH-702.

**Liquidity and Capital Resources**

Since our inception in August 1998, we have financed our operations primarily through our initial public offering, the issuance of our convertible preferred stock, borrowings under debt facilities, as well as through receipts from our collaboration with Gilead Sciences. Through March 31, 2008, we had received approximately $161.2 million in aggregate net proceeds from stock issuances, including convertible preferred stock and our initial public offering, $18.6 million from Gilead Sciences under our collaboration agreement with them and approximately $22.1 million under the following debt facilities:

| Lender | Date | Interest Rate (per annum) | Principal Amount | Maturity Date |
|---|---|---|---|---|
| Connecticut Innovations, Inc. | November 2000 | 7.5% | $ 1,400,000 | September 2010 |
| Connecticut Innovations, Inc. | May 2002 | 7.5% | $ 278,000 | October 2007 |
| General Electric Capital Corporation | March 2002 | 8.01% - 10.17% | $ 3,264,182 | March 2005-May 2007 |
| Webster Bank | May 2003 | 6.72% - 9.27% | $ 972,185 | June 2006-Dec 2009 |
| Oxford Finance Corporation | December 2005 | 10.92% | $ 2,500,000 | November 2008 |
| General Electric Capital Corporation | December 2005 | 10.92% | $ 2,500,000 | November 2008 |
| Oxford Finance Corporation | May 2006 | 11.56% | $ 2,500,000 | April 2009 |
| General Electric Capital Corporation | May 2006 | 11.56% | $ 2,500,000 | April 2009 |
| Oxford Finance Corporation | June 2007 | 11.58% | $ 400,000 | June 2010 |
| General Electric Capital Corporation | June 2007 | 11.58% | $ 400,000 | June 2010 |
| Webster Bank | December 2007 | 7.46% | $ 414,623 | December 2010 |
| Oxford Finance Corporation | February 2008 | 9.97% | $ 2,500,000 | March 2011 |
| General Electric Capital Corporation | February 2008 | 9.97% | $ 2,500,000 | March 2011 |

The amounts reflected above represent original maturities under our debt agreements. As of March 31, 2008, our debt balance due to borrowings is $10,422 million with a weighted average interest rate of 10.45%.

In February 2008, we entered into a credit facility with GE Capital Corporation and Oxford Finance Corporation. The new facility has substantially the same terms as the 2005 Credit Facility. At the same time, we combined the amounts outstanding under the 2005 Credit Facility with the newly issued notes. The 2008 Credit Facility provides $5,000 to fund our working capital needs, and is secured by substantially all of our tangible assets. In connection with the 2008 Credit Facility, the Company issued warrants to purchase 43 shares of common stock at an exercise price of $4.68 per share.

We had $29.1 million and $31.1 million in cash, cash equivalents and marketable securities as of March 31, 2008 and December 31, 2007, respectively.

Cash used in operating activities was $6.1 million for the three months ended March 31, 2008 and was primarily attributable to our $6.0 million net loss and decreases in deferred revenue and accrued expenses primarily offset by a decrease in working capital and non-cash charges related to depreciation, amortization and non-cash stock based compensation. Cash used in operating activities was $7.2 million for the three months ended March 31, 2007 and was primarily attributable to our $7.7 million net loss, primarily offset by an increase in working capital and non-cash charges related to depreciation, amortization and non-cash stock based compensation.

Cash provided by investing activities was $4.6 million for the three months ended March 31, 2008 and was primarily attributable to the maturities of marketable securities offset by purchases of marketable securities. Cash used in investing activities was $2.9 million for the three months ended March 31, 2007 and was primarily attributable to the purchase of marketable securities offset by maturities of marketable securities.

Cash provided by financing activities was $3.9 million for the three months ended March 31, 2008 and was primarily attributable to $5.0 million in borrowing under our 2008 credit facility, offset by repayments of debt. Cash used in financing activities was $851,000 for the three months ended March 31, 2007 and was primarily attributable to $876,000 used for repayments of debt.

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

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

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

We believe that our existing cash and cash equivalents will be sufficient to meet our projected operating requirements for at least the next twelve months. However, our funding resources and requirements may change and will depend upon numerous factors, including but not limited to:

- the progress of our research and development programs;
- the cost, timing and results of preclinical testing and clinical studies;
- the receipt and timing of regulatory approvals, if any;
- determinations as to the commercial potential of our proposed products;
- the status of competitive products;
- our ability to establish and maintain collaborative arrangements with others for the purpose of funding certain research and development programs;
- the acquisition of technologies or drug candidates; and
- our participation in the manufacture, sale and marketing of any approved drugs.

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

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

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

**Off-Balance Sheet Arrangements**

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

**Recently Issued Accounting Pronouncements**

In September 2006, the FASB issued SFAS No. 157, *Fair Value Measurements.* SFAS No. 157 defines fair value, establishes a framework for measuring fair value in generally accepted accounting principles, and expands disclosures about fair value measurements. The standard is effective for financial statements issued for fiscal years beginning after November 15, 2007 and interim periods within those fiscal years. We adopted SFAS No. 157 for financial assets and liabilities effective January 1, 2008. There was no impact to our financial statements upon adoption. On February 12, 2008, the FASB issued FASB Staff Position (FSP) FAS No. 157-2. This FSP permits a delay in the effective date of SFAS No. 157 to fiscal years beginning after November 15, 2008, for nonfinancial assets and nonfinancial liabilities, except for items that are recognized or disclosed at fair value in the financial statements on a recurring basis, at least annually. We do not believe that its adoption will have a material impact on our financial statements.

In February 2007, the FASB issued SFAS No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities*, or SFAS No. 159. SFAS No. 159 permits an entity to elect to report many financial assets and liabilities at fair value. Entities electing the fair value option would be required to recognize changes in fair value in earnings and are required to distinguish, on the face of the statement of financial position, the fair value of assets and liabilities for which the fair value option has been elected and similar assets and liabilities measured using another measurement attribute. The initial adjustment to reflect the difference between the fair value and the carrying amount would be accounted for as a cumulative-effect adjustment to retained earnings as of the date of initial adoption. SFAS No. 159 is effective as of the beginning of an entity's first fiscal year beginning after November 15, 2007. We did not elect to adopt the fair value option.

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

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

In December 2007, the FASB issued SFAS No. 141R, *Business Combinations*, which changes the accounting for business acquisitions. SFAS No. 141R requires the acquiring entity in a business combination to recognize all the assets acquired and liabilities assumed in the transaction and establishes the acquisition-date fair value as the measurement objective for all assets acquired and liabilities assumed in a business combination. Certain provisions of this standard will, among other things, impact the determination of acquisition-date fair value of consideration paid in a business combination, including contingent consideration; exclude transaction costs from acquisition accounting; and change accounting practices for acquired contingencies, acquisition-related restructuring costs, in-process research and development, indemnification assets, and tax benefits. SFAS No. 141R is effective for business combinations and adjustments to an acquired entity's deferred tax asset and liability balances occurring after December 31, 2008. Adoption of SFAS No. 141R will likely have a material impact on the Company's financial position and results of operations in the event that the Company enters into a business combination that falls within the scope of this pronouncement.

In December 2007, the FASB issued SFAS No. 160, *Noncontrolling Interests in Consolidated Financial Statements*, an amendment of ARB No. 51, which establishes new standards governing the accounting for and reporting of noncontrolling interests, or NCIs, in partially owned consolidated subsidiaries and the loss of control of subsidiaries. Certain provisions of this standard indicate, among other things, that NCIs be treated as a separate component of equity, not as a liability; that increases and decrease in the parent's ownership interest that leave control intact be treated as equity transactions, rather than as step

acquisitions or dilution gains or losses; and that losses of a partially owned consolidated subsidiary be allocated to the NCI even when such allocation might result in a deficit balance. This standard also requires changes to certain presentation and disclosure requirements. SFAS No. 160 is effective for fiscal years beginning after December 31, 2008. We do not believe that our adoption of SFAS No. 160 will have a material impact on our financial statements.

## ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

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

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

## ITEM 4. CONTROLS AND PROCEDURES

Our management, with the participation of our chief executive officer and chief financial officer, evaluated the effectiveness of our disclosure controls and procedures as of March 31, 2008. The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, or the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of March 31, 2008, our chief executive officer and chief financial officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

No change in our internal control over financial reporting (as defined in Rules 13a–15(d) and 15d–15(d) under the Exchange Act) occurred during the fiscal quarter ended March 31, 2008 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

# PART II. OTHER INFORMATION

## ITEM 1A. RISK FACTORS

*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. At March 31, 2008, our accumulated deficit was approximately $158 million. We have not generated any revenue from the sale of drug candidates to date. We expect that our annual operating losses will increase substantially over the next several years as we expand our research, development and commercialization efforts, including:

- completing the open label extension periods for phase II clinical trials for elvucitabine and, if we are successful in forming a licensing arrangement with a potential collaboration partner, moving into pivotal phase III clinical trials;

- advancing ACH-1095 through preclinical testing and completion of proof-of-concept; and
- advancing our HCV protease inhibitor series into preclinical testing and completion of proof-of-concept; and
- completing our assessment of ACH-702 preclinical data and completion of proof-of-concept;
- advancing our carbapenem compounds to identify a clinical lead candidate; and
- continuing to advance our other research and discovery programs in HIV and HCV, and identifying other infectious disease drug candidates.

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

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

We believe that our existing cash and cash equivalents will be sufficient to support our current operating plan through at least the next twelve months. However, we anticipate that we will augment our cash balance in 2008 through financing transactions, including the issuance of debt or equity securities, and further corporate alliances. No arrangements have been entered into for any future financing, and there can be no assurance that we will be able to obtain adequate levels of additional funding or favorable terms, if at all. In addition, our operating plan may change as a result of many factors, including:

- the costs involved in the preclinical and clinical development, manufacturing and formulation of elvucitabine, our HCV protease inhibitors and ACH-702;
- the costs involved in the preclinical and clinical development of ACH-1095 and other NS4A antagonists, certain portions of which we share with Gilead Sciences;
- our ability to enter into corporate collaborations and the terms and success of these collaborations;
- the costs involved in obtaining regulatory approvals for our drug candidates;
- the scope, prioritization and number of programs we pursue;
- the costs involved in preparing, filing, prosecuting, maintaining, enforcing and defending patent and other intellectual property claims;
- our ability to enter into corporate collaborations and the terms and success of these collaborations;
- our ability to raise incremental debt or equity capital new technologies and drug candidates; and
- our acquisition and development of new technologies and drug candidates; and
- competing technological and market developments currently unknown to us.

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

- terminate or delay preclinical studies, clinical trials or other development activities for one or more of our drug candidates; or

- delay our establishment of sales and marketing capabilities or other activities that may be necessary to commercialize our drug candidates, if approved for sale.

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

**We may grow through additional acquisitions, which could dilute our existing shareholders and could involve substantial integration risks.**

As part of our business strategy, we may acquire other businesses and/or technologies in the future. We may issue equity securities as consideration for future acquisitions that would dilute our existing stockholders, perhaps significantly depending on the terms of the acquisition. We may also incur additional debt in connection with future acquisitions, which, if available at all, may place additional restrictions on our ability to operate our business. Acquisitions may involve a number of risks, including:

- difficulty in transitioning and integrating the operations and personnel of the acquired businesses, including different and complex accounting and financial reporting systems;
- potential disruption of our ongoing business and distraction of management;
- potential difficulty in successfully implementing, upgrading and deploying in a timely and effective manner new operational information systems and upgrades of our finance, accounting and product distribution systems;
- difficulty in incorporating acquired technology and rights into our products and technology;
- unanticipated expenses and delays in completing acquired development projects and technology integration;
- management of geographically remote units both in the United States and internationally;
- impairment of relationships with partners;
- entering markets or types of businesses in which we have limited experience;
- potential loss of key employees of the acquired company; and
- inaccurate assumptions of acquired company's product quality and/or product reliability.

As a result of these and other risks, we may not realize anticipated benefits from our acquisitions. Any failure to achieve these benefits or failure to successfully integrate acquired businesses and technologies could seriously harm our business.

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

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

- our ability to enter into a corporate collaboration for the further development of elvucitabine and the terms and success of this collaboration;

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

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

We plan to enter into an alliance for the phase III development and commercialization of elvucitabine, our drug candidate for treatment of HIV. Given the limited number of global pharmaceutical companies which currently develop and market drugs for the treatment of HIV, and the strategic need for elvucitabine to be suitable for co-formulation with drugs already marketed or under development by a potential partner, we may not be successful in forming such an alliance. If we are not successful in forming an alliance that provides for up-front or near-term milestone fees, we may be required to raise additional capital through the issuance of equity or debt securities.

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

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

- *Elvucitabine*. If approved, elvucitabine would compete with the NRTIs currently marketed for treatment of HIV infection, including: Epivir (lamivudine), Retrovir (AZT), Ziagen (abacavir), Combivir (lamivudine + AZT), Trizivir (lamivudine + AZT + abacavir) and Epzicom (lamivudine + abacavir) from GlaxoSmithKline, Hivid (ddC) from Hoffman-La Roche, Emtriva (FTC), Viread (tenofovir) and Truvada (FTC + tenofovir) from Gilead Sciences and Videx EC, Videx (ddI) and Zerit (d4T) from Bristol-Myers Squibb. In addition, elvucitabine may compete with other NRTIs currently under development for HIV by companies such as Avexa, Medivir, Pharmasset and Koronis. Other drugs in other classes recently approved for treatment of HIV infection include Selzentry (miraviroc, an entry inhibitor) from Pfizer and Isentress (raltegravir, an integrase inhibitor) from Merck. In addition, there are other classes of drugs under development for the treatment of HIV infection by companies such as Abbott, Boehringer Ingelheim, Johnson & Johnson, Panacos, Roche, Schering-Plough, and Trimeris.
- *NS4A Antagonist and Protease Inhibitor*. If approved, our NS4A antagonists would compete with drugs currently approved for the treatment of hepatitis C, the interferon-alpha based products from Roche (Pegasys and Roferon-A) or Schering-Plough (Intron-A or Peg-Intron) and the ribavirin based products from Schering-Plough (Rebetrol), Roche (Copegus) or generic versions sold by various companies. In addition, our HCV compounds may compete with the interferon and ribavirin based drugs currently in development such as Valeant's ribavirin analog (Viramidine) and Human Genome Sciences' Albuferon. Other products are also under development for the treatment of hepatitis C by companies such as Abbott, Anadys, Boehringer Ingelheim, Bristol-Myers Squibb, Gilead Sciences, GlaxoSmithKline, Human Genome Sciences, Intermune, Johnson & Johnson, Medivir, Merck, Novartis, 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. We may also compete with the following companies that have a strategic interest in the discovery, development and marketing of drugs for the treatment of bacterial infections: Abbott, Aventis, Bristol-Myers Squibb, Cubist, GlaxoSmithKline, Merck, Novartis, Replidyne, Roche and Wyeth.

Many of our competitors have:

- significantly greater financial, technical and human resources than we have and may be better equipped to discover, develop, manufacture and commercialize drug candidates;
- more extensive experience in preclinical testing and clinical trials, obtaining regulatory approvals and manufacturing and marketing pharmaceutical products;
- drug candidates that have been approved or are in late-stage clinical development; and/or
- collaborative arrangements in our target markets with leading companies and research institutions.

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

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

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

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

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

to pay legal and other expenses to defend the claim, as well as uncovered damages awards resulting from a claim brought successfully against us. Furthermore, whether or not we are ultimately successful in defending any such claims, we might be required to direct significant financial and managerial resources to such defense, and adverse publicity is likely to result.

**Risks Related to the Development of Our Drug Candidates**

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

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

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

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

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

We, and a number of other companies in the pharmaceutical and biotechnology industries, have suffered significant setbacks in later stage clinical trials even after achieving promising results in early-stage development. For example, in February 2007, we announced that we 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. Accordingly, there can be no assurance that this, or another type of toxicity, will not arise in future clinical trials. Additionally, the results from the completed preclinical studies and clinical trials and ongoing clinical trials for elvucitabine, ACH-702 and our other drug candidates may not be predictive of the results we may obtain in later stage trials. In addition, we have not yet made a final determination regarding the most appropriate therapeutic application or clinical plan for ACH-702, and we may not be successful in developing a clinical plan that is acceptable to the FDA or that ultimately demonstrates ACH-702 to be safe, tolerable and efficacious. We do not expect any of our drug candidates to be commercially available for at least several years.

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

Our drug candidates are subject to extensive governmental regulations relating to among other things, research, testing, development, manufacturing, safety, efficacy, record keeping, labeling, marketing and distribution of drugs. Rigorous preclinical testing and clinical trials and an extensive regulatory approval process are required in the United States and in many foreign jurisdictions prior to the commercial sale of our drug candidates. Satisfaction of these and other regulatory requirements is costly, time consuming, uncertain and subject to unanticipated delays. It is possible that none of the drug candidates we are developing will obtain marketing approval. In connection with the clinical trials for elvucitabine, ACH-1095, ACH-702 and any other drug candidate we may seek to develop in the future, we face risks that:

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

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

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

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

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

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

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

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

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

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

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

Even if we receive regulatory approval of any drugs we are developing or may develop, we will be subject to continuing regulatory review, including the review of clinical results which are reported after our drug candidates become

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

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

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

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

**Risks Related to Commercialization of Our Drug Candidates**

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

We have no commercial products, and we do not currently have an organization for the sales and marketing of pharmaceutical products. In order to successfully commercialize any drugs that may be approved in the future by the FDA or comparable foreign regulatory authorities, we must build our sales and marketing capabilities or make arrangements with third parties to perform these services. For certain drug candidates in selected indications where we believe that an approved product could be commercialized by a specialty sales force in North America that calls on a limited but focused group of physicians, we intend to commercialize these products ourselves. However, in therapeutic indications that require a large sales force selling to a large and diverse prescribing population and for markets outside of North America, we plan to enter into arrangements with other companies for commercialization. For example, we have entered into an agreement with Gilead Sciences for the development and commercialization of certain of our HCV candidates involving NS4A antagonism. If we are unable to establish adequate sales, marketing and distribution capabilities, whether independently or with third parties, we may not be able to generate product revenue and may not become profitable.

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

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

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

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

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

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

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

Obtaining reimbursement approval for a product from each third-party and government payor is a time-consuming and costly process that could require us to provide supporting scientific, clinical and cost-effectiveness data for the use of any approved drugs to each payor. We may not be able to provide data sufficient to gain acceptance with respect to reimbursement. There also exists substantial uncertainty concerning third-party reimbursement for the use of any drug candidate incorporating new technology, and even if determined eligible, coverage may be more limited than the purposes for which the drug is approved by the FDA. Moreover, eligibility for coverage does not imply that any drug will be reimbursed in all cases or at a rate that allows us to make a profit or even cover our costs. Interim payments for new products, if applicable, may also not be sufficient to cover our costs and may not be made permanent. Reimbursement rates may vary according to the use of the drug and the clinical setting in which it is used, may be based on payments allowed for lower-cost products that are already reimbursed, may be incorporated into existing payments for other products or services, and may reflect budgetary constraints and/or imperfections in Medicare or Medicaid data used to calculate these rates. Net prices for products may be reduced by mandatory discounts or rebates required by government health care programs or by any future relaxation of laws that restrict imports of certain medical products from countries where they may be sold at lower prices than in the United States.

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

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

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

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

**Risks Related to Our Dependence on Third Parties**

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

We have entered into a collaboration arrangement with Gilead Sciences for the development and commercialization of certain of our HCV compounds involving NS4A antagonism, and we may enter into additional collaborative arrangements in the future. For example, we plan to enter into an alliance for the phase III development and commercialization of elvucitabine, our drug candidate for treatment of HIV. Given the limited number of global pharmaceutical companies which currently develop and market drugs for the treatment of HIV, and the strategic need for elvucitabine to be suitable for co-formulation with drugs already marketed or under development by a potential partner, we may not be successful in forming such an alliance. We also may enter into alliances with major biotechnology or pharmaceutical companies to jointly develop other specific drug candidates and to jointly commercialize them if they are approved. In such alliances, we would expect our biotechnology or pharmaceutical collaborators to provide substantial funding, as well as significant capabilities in clinical development, regulatory affairs, marketing and sales. We may not be successful in entering into any such alliances on favorable terms, if at all. Even if we do succeed in securing such alliances, we may not be able to maintain them if, for example, development or approval of a drug candidate is delayed or sales of an approved drug are disappointing. Furthermore, any delay in entering into collaboration agreements could delay the development and commercialization of our drug candidates and reduce their competitiveness even if they reach the market. Any such delay related to our collaborations could adversely affect our business.

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

If Gilead Sciences or another, future collaborative partner does not devote sufficient time and resources to collaboration arrangements with us, we may not realize the potential commercial benefits of the arrangement, and our results of operations may be adversely affected. In addition, if any existing or future collaboration partner were to breach or terminate its arrangements with us, the development and commercialization of the affected drug candidate could be delayed,

curtailed or terminated because we may not have sufficient financial resources or capabilities to continue development and commercialization of the drug candidate on our own. Under our collaboration agreement with Gilead Sciences, Gilead Sciences may terminate the collaboration for any reason at any time upon 120 days notice. If Gilead Sciences were to exercise this right, the development and commercialization of our HCV compounds would be adversely affected.

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

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

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

**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 there are a number of potential replacements as our manufacturing processes are not manufacturer specific, we may incur added costs and delays in identifying and qualifying any such replacements. Furthermore, although we generally do not begin a clinical trial unless we believe we have a sufficient supply of a drug candidate to complete the trial, any significant delay in the supply of a drug candidate for an ongoing trial due to the need to replace a third-party manufacturer could delay completion of the trial.

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

**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 March 31, 2008, our patent portfolio included a total of 305 patents and patent applications worldwide. We own or hold exclusive licenses to a total of 11 U.S. issued patents and 23 U.S. pending patent applications, as well as 233 pending PCT applications and foreign counterparts to many of these patents and patent applications. Our success depends in part on our ability to obtain patent protection both in the United States and in other countries for our drug candidates. Our ability to protect our drug candidates from unauthorized or infringing use by third parties depends in substantial part on our ability to obtain and maintain valid and enforceable patents. Due to evolving legal standards relating to the patentability, validity and enforceability of patents covering pharmaceutical inventions and the scope of claims made under these patents, our ability to maintain, obtain and enforce patents is uncertain and involves complex legal and factual questions. Accordingly, rights under any issued patents may not provide us with sufficient protection for our drug candidates or provide sufficient protection to afford us a commercial advantage against competitive products or processes. In addition, we cannot guarantee that any patents will issue from any pending or future patent applications owned by or licensed to us. Even if patents have issued or will issue, we cannot guarantee that the claims of these patents are or will be valid or enforceable or will provide us with any significant protection against competitive products or otherwise be commercially valuable to us. Patent applications in the United States are maintained in confidence for up to 18 months after their filing. In some cases, however, patent applications remain confidential in the U.S. Patent and Trademark Office, which we refer to as the U.S. Patent Office, for the entire time prior to issuance as a U.S. patent. Similarly, publication of discoveries in the scientific or patent literature often lag behind actual discoveries. Consequently, we cannot be certain that we or our licensors or co-owners were the first to invent, or the first to file patent applications on, our drug candidates or their use as anti-infective drugs. In the event that a third party has also filed a U.S. patent application relating to our drug candidates or a similar invention, we may have to participate in interference proceedings declared by the U.S. Patent Office to determine priority of invention in the United States. The costs of these proceedings could be substantial and it is possible that our efforts would be unsuccessful, resulting in a loss of our U.S. patent position. Furthermore, we may not have identified all U.S. and foreign patents or published applications that affect our business either by blocking our ability to commercialize our drugs or by covering similar technologies that affect our drug market.

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

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

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

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

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

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

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

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

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

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

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

**Risks Relating to Our Common Stock**

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

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

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

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

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

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

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

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

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

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

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

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

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

## ITEM 6. EXHIBITS

| | |
|---|---|
| 10.1† | Research and License Agreement, dated as of April 4, 2008 by and between Achillion Pharmaceuticals, Inc. and FOB Synthesis, Inc. |
| 31.1 | Certification of President and Chief Executive Officer of Achillion Pharmaceuticals, Inc. pursuant to Rule 13a-14(a) promulgated under the Securities Exchange Act of 1934, as amended. |

31.2 Certification of Chief Financial Officer of Achillion Pharmaceuticals, Inc. pursuant to Rule 13a-14(a) promulgated under the Securities Exchange Act of 1934, as amended.

32.1 Certification of President and Chief Executive Officer of Achillion Pharmaceuticals, Inc. pursuant to Rule 13a-14(b) promulgated under the Securities Exchange Act of 1934, as amended, and Section 1350 of Chapter 63 of Title 18 of the United States Code.

32.2 Certification of Chief Financial Officer of Achillion Pharmaceuticals, Inc. pursuant to Rule 13a-14(b) promulgated under the Securities Exchange Act of 1934, as amended, and Section 1350 of Chapter 63 of Title 18 of the United States Code.

† 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.

**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this Report to be signed on its behalf by the undersigned, thereunto duly authorized.

ACHILLION PHARMACEUTICALS, INC.

Date: May 7, 2008

/s/ Michael D. Kishbauch
President and Chief Executive Officer
(Principal Executive Officer)

Date: May 7, 2008

/s/ Mary Kay Fenton
Chief Financial Officer
(Principal Financial and Accounting Officer)

## EXHIBIT INDEX

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Exhibit 10.1

**Execution Copy**

Confidential Materials omitted and filed separately with the Securities and Exchange Commission. Asterisks denote omissions.

**RESEARCH & LICENSE AGREEMENT**

**by and between**

**ACHILLION PHARMACEUTICALS, INC.**

**and**

**FOB SYNTHESIS, INC.**

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**RESEARCH & LICENSE AGREEMENT**

This agreement (the "Agreement"), dated the 4th day of April, 2008 (the "Effective Date"), is by and between Achillion Pharmaceuticals, Inc., a Delaware corporation ("Achillion"), and FOB Synthesis, Inc., a Georgia corporation ("FOB").

**INTRODUCTION**

1. FOB owns the Licensed Patent Rights and has identified certain Licensed Compounds that are Covered by the Licensed Patent Rights.

2. Achillion is in the business of developing and marketing pharmaceutical products.

3. FOB and Achillion wish to establish a relationship whereby Achillion shall fund certain research activities by, and obtain supplies of certain Licensed Compounds from, FOB and FOB shall grant Achillion certain rights and an exclusive license under the Licensed Patent Rights to Develop and Commercialize Licensed Compounds.

NOW, THEREFORE, Achillion and FOB agree as follows:

**Article I**
**Definitions; Construction**

1.1 Defined Terms. When used in this Agreement, each of the following terms shall have the meanings set forth in this Section 1.1:

1.1.1 "Achillion Technology". Achillion Technology means Technology Controlled by Achillion that is useful for the Development of Licensed Compounds, including Program Technology owned jointly or solely by Achillion.

1.1.2 "Affiliate". Affiliate means, with respect to a Party, any Person that controls, is controlled by, or is under common control with such Party. For purposes of this Section 1.1.2, "control" shall refer to (a) in the case of a Person that is a corporate entity, direct or indirect ownership of fifty percent (50%) or more of the stock or shares having the right to vote for the election of directors of such Person and (b) in the case of a Person that is not a corporate entity, the possession, directly or indirectly, of the power to direct, or cause the direction of, the management or policies of such Person, whether through the ownership of voting securities, by contract or otherwise.

1.1.3 "Bankruptcy Code". Bankruptcy Code means 11 U.S.C. §§ 101-1330, as amended.

1.1.4 "Clinical Candidate". Clinical Candidate means each Licensed Compound, together with all Compound Modifications relating thereto, that (a) Achillion intends to use Commercially Reasonable Efforts to Develop or Commercialize, or (b) Achillion reasonably intends to Develop as a backup to another Clinical Candidate even if Achillion does not intend to Commercialize such Licensed Compound other than as necessary to provide a backup to such Clinical Candidate, in each case ((a) and (b)) upon notice of such intent to FOB.

1.1.5 "Commercialization" or "Commercialize". Commercialization or Commercialize means activities specifically directed to producing, manufacturing, marketing, promoting, distributing, importing or selling a product.

1.1.6 "Commercially Reasonable Efforts". Commercially Reasonable Efforts means the efforts, expertise and resources customarily used by a Party to develop, manufacture and commercialize a product or compound owned by it or to which it has rights, which is of similar market potential and at a similar stage in its development or product life, taking into account issues of safety, and efficacy, product profile, difficulty in developing the product or compound, competitiveness of the marketplace for resulting products, the proprietary position of the compound or product, the regulatory structure involved, the potential total profitability of the applicable product(s) marketed or to be marketed, the potential for commercializing alternative competing technologies and other relevant factors affecting the cost, risk and timing of development and the total potential reward to be obtained if a product is commercialized.

1.1.7 "Compound Modifications". Compound Modifications mean derivatives or analogues of Licensed Compounds, including salts, esters, amides, complexes, chelates, solvates, stereoisomers, crystalline or amorphous forms, polymorphs, prodrugs, fragments, racemates, tautomers, metabolites or metabolic precursors of a Licensed Compound, that result from work conducted by FOB in the course of the Research Program or that are created or Developed by Achillion.

1.1.8 "Confidential Information". Confidential Information means all confidential or proprietary information, materials or data (including Technology and Patent Rights), whether provided in written, oral, graphic, video, computer, or other form, provided or transmitted by or on behalf of the disclosing Party to the other Party, including information relating to the disclosing Party's existing or proposed research, development efforts, Patent Rights, Technology, business, finances (including all financial information subject to review under or prepared by accountants pursuant to Section 3.7 or 6.5(b) or provided pursuant to Section 6.5(a)) or products (including the Research Plan and information provided pursuant to Section 5.1, 5.2 or 5.3), and the existence of and terms of this Agreement.

1.1.9 "Controlled". Controlled means the legal authority or right of a Party, whether direct or through Affiliates controlled by such Party, to grant a license or sublicense of intellectual property rights to the other Party, or to provide compounds or biological material to or otherwise disclose proprietary or trade secret information to such other Party, without breaching the terms of any agreement with a Third Party.

1.1.10 "Cover", "Covering" or "Covered". Cover, Covering or Covered means, with respect to a product, that, but for a license granted to a Party under a Valid Claim, the Development or Commercialization of such product would infringe such Valid Claim.

1.1.11 "Development" or "Develop". Development or Develop means research, discovery and preclinical and clinical drug development activities, including test method

development and stability testing, toxicology, formulation, quality assurance/quality control development, statistical analysis, clinical studies, regulatory affairs, product approval and registration.

1.1.12 "Field". Field means the prevention, treatment or control of any disease or condition in humans or animals.

1.1.13 "FOB Technology". FOB Technology means Technology Controlled by FOB that relates to the Development or Commercialization of Licensed Compounds and Licensed Products, including Program Technology owned jointly or solely by FOB.

1.1.14 "FTE". FTE means the efforts of one or more employees of FOB or its Affiliates equivalent to the annual efforts (consisting of a total of 1840 hours) of one full-time employee.

1.1.15 "IND". IND means an Investigational New Drug application filed with the United States Food and Drug Administration.

1.1.16 "Licensed Compound". Licensed Compound means any chemical compound that is Covered by the Licensed Patent Rights or is a Compound Modification.

1.1.17 "Licensed Patent Rights". Licensed Patent Rights means (a) the Patent Rights set forth on Exhibit A, which may be amended from time to time by mutual agreement of the Parties, (b) any Program Patent Rights jointly or solely owned by FOB, and (c) all Patent Rights claiming priority from or otherwise based on the Patent Rights or Program Patent Rights described in the foregoing clauses (a) and (b), or counterparts thereto, in any country of the Territory.

1.1.18 "Licensed Product". Licensed Product means a pharmaceutical product that contains a Clinical Candidate.

1.1.19 "Net Sales". Net Sales means, with respect to a Licensed Product in the Field, the gross amounts received by Achillion, its Affiliates or sublicensees in respect of sales of such Licensed Product by Achillion and its Affiliates or sublicensees to unrelated Third Parties, in each case less the following deductions:

(a) Trade, cash or quantity discounts actually allowed and taken with respect to such sales;

(b) Tariffs, duties, excises, sales taxes or other taxes imposed upon and paid with respect to the production, sale, delivery or use of the Licensed Product (excluding national, state or local taxes based on income);

(c) Amounts repaid or credited by reason of rejections, defects, recalls or returns or because of chargebacks, refunds, rebates or retroactive price reductions and allowances for wastage replacement and bad debts;

(d) Freight, insurance and other transportation charges incurred in shipping a Licensed Product to Third Parties; and

(e) Gross amounts received in respect of sales for test marketing, sampling or promotional use, clinical trial purposes or compassionate or similar use.

Such amounts shall be determined from the books and records of Achillion, its Affiliates or sublicensees, maintained in accordance with generally accepted accounting principles, consistently applied.

In the event the Licensed Product is sold as part of a Combination Product (as defined below), the Net Sales from the Combination Product, for the purposes of determining royalty payments, shall be determined by multiplying the Net Sales (as determined above) of the Combination Product, during the applicable royalty reporting period, by the fraction, A/A+B, where A is the average sale price of the Licensed Product when sold separately in finished form and B is the average sale price of the other active ingredient(s) included in the Combination Product when sold separately in finished form, in each case during the applicable royalty reporting period or, if sales of both the Licensed Product and the other active ingredient(s) did not occur in such period, then in the most recent royalty reporting period in which sales of both occurred. In the event that such average sale price cannot be determined for both the Licensed Product and all other active ingredient(s) included in such Combination Product, Net Sales for the purposes of determining royalty payments shall be calculated by multiplying the Net Sales of the Combination Product by the fraction of C/C+D where C is the fair market value of the Licensed Product and D is the fair market value of all other active ingredient(s) included in the Combination Product. In such event, Achillion shall in good faith make a determination of the respective fair market values of the Licensed Product and all other active ingredient(s) included in the Combination Product, and shall notify FOB of such determination and provide FOB with data to support such determination. FOB shall have the right to review such determination of fair market values and, if FOB disagrees with such determination, to notify Achillion of such disagreement within sixty (60) days after Achillion notifies FOB of such determination. If FOB notifies Achillion that FOB disagrees with such determination within such sixty (60) day period and if thereafter the Parties are unable to agree in good faith as to such respective fair market values, then such matter shall be resolved as provided in Article XI. If FOB does not notify Achillion that FOB disagrees with such determination within such sixty (60) day period, such determination shall be conclusive and binding on the Parties.

As used above, the term “Combination Product” means any pharmaceutical product that includes both (i) a Licensed Product and (ii) other active ingredient(s).

1.1.20 “Party”. Party means Achillion or FOB; “Parties” means Achillion and FOB.

1.1.21 “Patent Rights”. Patent Rights means United States and foreign patents and patent applications (including provisional applications) and all substitutions, divisionals, continuations, continuations-in-part, reissuances, reexaminations, registrations, renewals, confirmations, supplementary protection certificates and extensions thereof.

1.1.22 "Person". Person means any natural person or any corporation, company, partnership, joint venture, firm or other entity, including a Party.

1.1.23 "Phase I Clinical Study". Phase I Clinical Study means a human clinical study designed to determine initial tolerance, toxicity, safety or pharmacokinetic information of a Licensed Product.

1.1.24 "Phase IIB Clinical Study". Phase IIB Clinical Study means a human clinical study designed to evaluate further any preliminary efficacy observed for, and the safety of, a Licensed Product in the target population or to provide data that may be useful in the design of subsequent studies of the Licensed Product such as Phase III Clinical Studies.

1.1.25 "Phase III Clinical Study". Phase III Clinical Study means a human clinical study designed to confirm with statistical significance the efficacy and safety of a Licensed Product performed to obtain Regulatory Approval for the Licensed Product.

1.1.26 "Program Technology". Program Technology means any of the following created or conceived in the course of the Research Program: (a) Compound Modifications, (b) other Technology, and (c) improvements to any of the foregoing.

1.1.27 "Program Patent Rights". Program Patent Rights means any Patent Rights that Cover any Program Technology.

1.1.28 "Regulatory Approval". Regulatory Approval means the approvals (including any applicable governmental price and reimbursement approvals), licenses, registrations or authorizations of Regulatory Authorities necessary for the Commercialization of a product in a country or territory.

1.1.29 "Regulatory Authority". Regulatory Authority means a federal, national, multinational, state, provincial or local regulatory agency, department, bureau or other governmental entity with authority over the testing, manufacture, use, storage, import, promotion, marketing or sale of a product in a country.

1.1.30 "Research Plan". Research Plan means the written plan describing the activities to be performed by the Parties in the Research Program, which plan may be revised from time to time in accordance with Section 3.3.

1.1.31 "Research Program". Research Program means the collaborative research program conducted pursuant to this Agreement by the Parties.

1.1.32 "Royalty Term". Royalty Term means, with respect to each Licensed Product in each country of the Territory, on a Licensed Product-by-Licensed Product and country-by-country basis, the period of time during which the Development or Commercialization of such Licensed Product in the Field in such country is Covered by a Valid Claim of Licensed Patent Rights.

1.1.33 "Technology". Technology means and includes all materials, compounds, technology, technical information, intellectual property (other than Patent Rights), know-how, expertise and trade secrets.

1.1.34 "Territory". Territory means all countries of the world.

1.1.35 "Third Party". Third Party means any Person other than a Party or any of its Affiliates.

1.1.36 "Valid Claim". Valid Claim means (a) a claim of any issued, unexpired patent, which shall not have been donated to the public, disclaimed, nor held invalid or unenforceable by a court of competent jurisdiction in an unappealed or unappealable decision, or (b) a claim of any published patent application filed by a Party in good faith that has not been cancelled, withdrawn or abandoned, nor been pending for more than seven (7) years from the filing date of the earliest patent application from which such patent application claims priority.

1.2 Other Terms. The definition for each of the following terms is set forth in the section of this Agreement indicated below:

| Term | Section |
|---|---|
| Achillion | Preamble |
| Agreement | Preamble |
| Breaching Party | 10.2 |
| Combination Product | 1.1.19 |
| Effective Date | Preamble |
| FOB | Preamble |
| Indemnified Party | 12.1(c) |
| Indemnifying Party | 12.1(c) |
| Initial Party | 7.2(a) |
| Invalidity Claim | 7.5 |
| Quarterly Amount | 6.2 |
| Rejected Compound | 5.5 |
| Research Term | 3.2 |
| Severed Clause | 12.10 |
| Step-In Party | 7.2(a) |

1.3 Captions; Certain Conventions; Construction. All captions herein are for convenience only and shall not be interpreted as having any substantive meaning. The Exhibits to this Agreement are incorporated herein by reference and shall be deemed a part of this Agreement. Unless otherwise expressly provided herein or the context of this Agreement otherwise requires, (a) words of any gender include all other genders, (b) words such as "herein", "hereof", and "hereunder" refer to this Agreement as a whole and not merely to the particular provision in which such words appear, (c) words using the singular shall include the plural, and vice versa, (d) the words "include", "includes" and "including" shall be deemed to be followed by the phrase "but not limited to", "without limitation", "inter alia" or words of similar import,

(e) all dollar ($) amounts specified in this Agreement are United States dollar amounts, (f) the word "or" shall be deemed equivalent to the inclusive "and/or", and (g) references to "Article", "Section", "subsection", "paragraph", "clause" or other subdivision, or to an Exhibit, without reference to a document are to the specified provision or Exhibit of this Agreement. In the event of any conflict between the operative terms of this Agreement and any Exhibit, the operative terms of this Agreement shall prevail. This Agreement shall be construed as if the Parties drafted it jointly.

## Article II
## Grant of License; Exclusivity

2.1 License Grants. Subject to the terms and conditions of this Agreement:

(a) FOB hereby grants to Achillion an exclusive (even as to FOB), royalty-bearing right and license under the Licensed Patent Rights and FOB Technology, with the right to grant sublicenses, to Develop and Commercialize Licensed Compounds and Licensed Products in the Field in the Territory. For the avoidance of doubt, and subject to Section 2.2 below, the foregoing exclusive grant shall not restrict FOB from using FOB Technology to Develop and Commercialize chemical compounds other than Licensed Compounds and Licensed Products.

(b) Achillion hereby grants to FOB a non-exclusive, non-royalty-bearing right and license under Achillion Technology and its grant pursuant to subsection (a) above (i) to conduct Development activities under the Research Program in accordance with the Research Plan and (ii) to make Licensed Compounds and Licensed Products in accordance with Article IV and any related supply agreements. FOB may sublicense its right and license under this Section 2.1(b) only with Achillion's prior written consent, which consent shall not be unreasonably withheld.

2.2 Exclusivity. During the Research Term and for one (1) year thereafter, except with respect to activities provided for in the Research Program, FOB shall not, directly or indirectly (including through its Affiliates), Develop or Commercialize, or grant any rights or options or provide assistance to any Third Party to Develop or Commercialize, any chemical compounds (a) Covered by the Licensed Patent Rights, (b) Developed in the course of the Research Program, or (c) that are carbapenems which show activities predominantly against gram positive bacteria.

2.3 Technology Transfer. Upon Achillion's reasonable request, FOB shall effect a transfer to Achillion (or its designee(s)) of FOB Technology to the extent reasonably necessary for the exercise of Achillion's rights granted under Section 2.1(a), including to enable any Third Party to manufacture Licensed Compounds and Licensed Products in accordance with Article IV, and shall make available to Achillion (or its designee) technical personnel to answer any questions or provide instruction as reasonably requested by Achillion relating to the Licensed Patent Rights and FOB Technology; provided that such request does not impose a financial burden on FOB or require dedicated technical personnel.

2.4 Section 365(n) of the Bankruptcy Code. All rights and licenses granted under or pursuant to this Agreement are, and shall otherwise be, deemed to be, for purposes of Section 365(n) of the Bankruptcy Code, licenses of rights to "intellectual property" as defined under Section 101(35A) of the Bankruptcy Code. Each Party shall retain and may fully exercise all of its rights and elections under the Bankruptcy Code or equivalent legislation in any jurisdiction other than the United States. Upon the bankruptcy of either Party and the occurrence of the events described in 11 U.S.C. §§ 365(n)(3) or 365(n)(4), the other Party shall further be entitled to a complete duplicate of, or complete access to, as appropriate, any such intellectual property, and such intellectual property, if not already in its possession, shall be promptly delivered to such other Party, unless the Party in bankruptcy elects to continue, and continues, to perform all of its obligations under this Agreement.

## Article III
## Research Program

3.1 Research Program. During the Research Term, the Parties will conduct the Research Program, the objective of which is to Develop Licensed Compounds for possible selection as Clinical Candidates for further Development or Commercialization by Achillion.

3.2 Research Term. Unless otherwise agreed by the Parties, the term of the Research Program (the "Research Term") will begin on the date set forth in the Research Program objectives attached as Exhibit B and, unless sooner terminated or extended, end one (1) year after the commencement of the Research Program. The Research Term may be extended by Achillion for an additional one (1) year period by written notice to FOB at least thirty (30) days before the end of the first year of the Research Term.

3.3 Research Plan; Decision Making. The objectives for the Research Program are set forth on Exhibit B. As soon as practicable following the Effective Date, the Parties shall agree on a written Research Plan for meeting these objectives. Three (3) months before the end of the first year of the Research Term, the Parties will update the Research Plan, which will apply for the next year if Achillion elects to extend the Research Term in accordance with Section 3.2. The Research Plan shall describe: (a) goals for the Research Program for the relevant year, (b) activities to be conducted by each Party during such year, (c) estimated timeframes for each activity, and (d) expected level of FTE support for each activity. The Parties shall work cooperatively to seek consensus with respect to all decisions relating to the Research Program and the contents of the Research Plan; provided, however, that if, despite good faith efforts, the Parties are unable to reach consensus on any such decision within ten (10) business days after discussions commence, Achillion shall have final decision-making authority with respect to such decision; provided, further, that FOB shall not be required to perform any work under the Research Plan in excess of the work for which Achillion is providing funding under Section 3.6.

3.4 Research Materials. During the Research Term, FOB will supply to Achillion samples of biochemical, biological or synthetic materials, including Licensed Compounds, as required by the Research Plan or upon Achillion's reasonable request.

3.5 Laboratory Facility and Personnel. FOB will provide suitable laboratory facilities, equipment and personnel for the work to be done by it in the Research Program.

3.6 Research Funding. Subject to Sections 5.4(b) and 10.2, during the Research Term Achillion will fund [**] FTEs [**] at FOB's site in Georgia to perform the work to be conducted by FOB in the Research Program in accordance with the Research Plan. Payment of such funding shall be determined and made in accordance with Section 6.2.

3.7 Audits by Achillion. FOB shall keep, and shall cause its Affiliates to keep, during and for at least three (3) years following the Research Term, complete and accurate records, in accordance with its standard practices as of the Effective Date, relating to work performed by FTEs on the Research Program. For the sole purpose of verifying amounts payable by Achillion, Achillion shall have the right no more than once each calendar year, at Achillion's expense, to review, together with Achillion's accountants, such records in the location(s) where such records are maintained by FOB and its Affiliates upon reasonable notice and during regular business hours. Prior to any review conducted pursuant to this Section 3.7, Achillion's accountants shall have entered into a written agreement with FOB limiting the use of such records to verification of the accuracy of payments due under this Agreement and prohibiting the disclosure of any information contained in such records to a Third Party and to Achillion for a purpose other than as set forth in this Section 3.7. Results of such review shall be made available to FOB. If the review reflects an overpayment to FOB, such overpayment shall be promptly remitted to Achillion, together with interest calculated in the manner provided in Section 6.7. If the overpayment is greater than five percent (5%) of the amount that was otherwise due, Achillion shall be entitled to have FOB pay all of the costs of such review and such review shall not count as one of the reviews Achillion is entitled to conduct hereunder.

## Article IV
## Manufacturing and Supply

4.1 Pre-Clinical Supply.

(a) No later than thirty (30) days after the Effective Date, FOB shall ship to Achillion a supply of [**] grams of the Licensed Compound designated by FOB as [**], for which there shall be no cost to Achillion. FOB warrants that such supply of [**] shall meet the specifications set forth on Exhibit C. If Achillion reasonably determines that such supply fails to meet such specifications, it shall provide written notice thereof to FOB within thirty (30) days of receipt of such supply, and FOB shall as soon as reasonably practicable thereafter replace such supply at FOB's cost with a supply that meets such specifications.

(b) FOB shall supply Achillion with [**] grams of the Licensed Compound designated by FOB as [**], or another Licensed Compound as reasonably agreed by the Parties, by the date that is four (4) months after the identity of such Licensed Compound is agreed, or such other date as reasonably agreed by the Parties, for which Achillion shall make an initial payment to FOB in the amount of $[**] as soon as practicable after the identity of such Licensed Compound is agreed. FOB warrants that such supply shall meet the specifications set forth on Exhibit D. If Achillion reasonably determines that such supply fails to meet such specifications, it shall provide written notice thereof to FOB within thirty (30) days of receipt of such supply,

and FOB shall as soon as reasonably practicable thereafter replace such supply at FOB's cost with a supply that meets such specifications. Achillion shall make a final payment to FOB for such supply in the amount of $[**], which shall be due thirty (30) days after Achillion's receipt of the conforming supply.

(c) FOB shall have the right to supply Achillion with further pre-clinical supply of quantities of Licensed Compound(s) pursuant to a separate supply agreement regarding such supply, provided that FOB agrees to provide such supply at prices and according to delivery schedules reasonably acceptable to Achillion.

4.2 Clinical Supply. If FOB has provided pre-clinical supply of a Clinical Candidate under Section 4.1 and performed its obligations under any applicable supply agreement to Achillion's reasonable satisfaction, FOB shall have a first right of negotiation as described in Section 4.4 with respect to clinical supply of such Clinical Candidate.

4.3 Commercial Supply. If FOB has provided clinical supply of a Clinical Candidate under Section 4.2 and performed its obligations under the applicable supply agreement to Achillion's reasonable satisfaction, FOB shall have a first right of negotiation as described in Section 4.4 with respect to commercial supply of such Clinical Candidate.

4.4 Rights of First Negotiation. Pursuant to FOB's rights of first negotiation under Sections 4.2 and 4.3, as applicable, the Parties will in good faith discuss and negotiate a supply agreement for the clinical or commercial supply, as applicable, of each Clinical Candidate. If the Parties cannot reasonably agree on the terms and conditions of any such supply agreement within sixty (60) days after commencing such negotiations, then Achillion may negotiate the terms and conditions of a supply agreement covering the applicable supply of such Clinical Candidate with a Third Party. For the avoidance of doubt, if Achillion enters into a supply agreement with FOB under this Section 4.4, Achillion shall be free to engage Third Parties as additional suppliers on terms and conditions that in the aggregate are no more favorable to such suppliers than those offered to FOB.

## Article V
## Reports and Diligence

5.1 Research Reports. Within thirty (30) days after the end of each calendar quarter during the Research Term, FOB will submit to Achillion a written report summarizing its activities under the Research Plan, including status against the Research Plan, activities undertaken under the Research Plan within such calendar quarter, planned activities during the then current calendar quarter, and any data that would be useful to Achillion in Developing and Commercializing Licensed Compounds or Licensed Products hereunder.

5.2 Development Reports. Within thirty (30) days after June 30 and December 31 of each calendar year ending prior to the first commercial launch of a Licensed Product by Achillion, an Achillion Affiliate or an Achillion sublicensee, Achillion shall provide to FOB a written report (a) summarizing the activities undertaken by Achillion, its Affiliates and sublicensees during the immediately preceding six (6) months in connection with the Development of Licensed Products, (b) identifying all Licensed Products being Developed by

Achillion, its Affiliates and sublicensees, and (c) describing the activities planned to be undertaken by Achillion, its Affiliates and sublicensees during the subsequent six (6) month period.

5.3 Commercialization Reports. After the first commercial launch of a Licensed Product by Achillion, an Achillion Affiliate or an Achillion sublicensee, Achillion shall provide to FOB the reports set forth in Section 6.5(a).

5.4 Commercially Reasonable Efforts.

(a) Achillion shall use Commercially Reasonable Efforts to Develop and Commercialize at least [**] and to Develop as a backup at least [**].

(b) FOB shall use Commercially Reasonable Efforts in the conduct of the Research Program to achieve its objectives as set forth in the Research Plan. In addition to any other remedy it may have under this Agreement, Achillion may terminate funding of the Research Program for any breach by FOB of such obligation to exercise Commercially Reasonable Efforts.

5.5 Rejected Compounds. If, within one (1) year following Achillion's notice to FOB of the designation of a Clinical Candidate, Achillion has not used Commercially Reasonable Efforts to Develop or Commercialize such Clinical Candidate or is not continuing to do so (each such compound, a "Rejected Compound"), the license grants under Section 2.1 shall terminate with respect to such Rejected Compound and Achillion shall thereafter have no further rights with respect to such Rejected Compound. Notwithstanding the preceding sentence, Achillion shall retain its rights hereunder with respect to all Licensed Compounds other than Rejected Compounds, including any Compound Modification relating to a Rejected Compound that is also a Compound Modification of a Licensed Compound.

## Article VI
## Financial Provisions

6.1 License Payment. Within thirty (30) days after the Effective Date, Achillion shall make an initial license payment to FOB of $500,000. Within thirty (30) days after the first (1st) anniversary of the Effective Date, Achillion shall make a final license payment to FOB of $500,000, subject to Section 10.3.

6.2 Research Payments. Achillion will provide funding for the FTEs described in Section 3.6 during the Research Term by paying FOB at a rate of $[**] per calendar quarter per FTE (which shall be pro rated for any period less than a calendar quarter) during the Research Term (the "Quarterly Amount"). Achillion shall make such payment to FOB for the first calendar quarter of the Research Term (or portion thereof) within thirty (30) days after the start of the Research Term. FOB shall invoice Achillion for the FTEs for each subsequent calendar quarter of the Research Term no earlier than thirty (30) days prior to the start of such calendar quarter and such invoices shall be payable within thirty (30) days of invoice receipt. FOB shall provide to Achillion, along with its invoice of pending quarterly FTEs, a report in a form acceptable to Achillion outlining and supporting the work of the FTEs incurred in the previous calendar quarter. Notwithstanding the right of Achillion to terminate this Agreement pursuant to Section 10.3, Achillion shall pay to FOB, on the effective date of such termination, the aggregate amount of all unpaid Quarterly Amounts for the remainder of the Research Term.

6.3 Milestone Payments. Achillion shall pay FOB the amount set forth below for each Clinical Candidate (or Licensed Product containing such Clinical Candidate) that achieves the corresponding milestone within thirty (30) days after such milestone is achieved:

| MILESTONE | PAYMENT |
|---|---|
| Acceptable outcome from GLP toxicology studies in two species | $ [**] |
| Filing of IND | $ [**] |
| Completion of successful Phase I Clinical Trial | $ [**] |
| Completion of successful Phase IIB Clinical Trial | $ [**] |
| Regulatory Approval in the United States | $ [**] |

For the avoidance of doubt, each of the milestones above shall be paid only once for each Clinical Candidate regardless of the number of Licensed Products that contain such Clinical Candidate.

6.4 Royalties.

(a) Royalties on Net Sales of Licensed Products. During the Royalty Term applicable to each Licensed Product, and subject to adjustment as set forth in Section 6.4(c), Achillion shall to FOB royalties on a Licensed Product-by-Licensed Product basis, with the amount of such royalties calculated as a percentage of Net Sales in a calendar year for such Licensed Product as set forth below:

| ANNUAL NET SALES (IN MILLIONS) | ROYALTY (AS A PERCENTAGE OF NET SALES) |
|---|---|
| Up to and including $[**] | [**]% |
| Above $[**] and up to and including $[**] | [**]% |
| Above $[**] | [**]% |

By way of example, if Net Sales of a Licensed Product during its Royalty Term in all countries is $[**], the royalty calculated according to the table above is $[**] of which represents [**]% of the first $[**] of Net Sales and the remaining $[**] of which represents [**]% of the remaining $[**] of Net Sales.

(b) Royalties Payable Only Once. The obligation to pay royalties is imposed only once with respect to Net Sales of the same unit of a Licensed Product.

(c) Royalty Reductions for Third Party Payments. If in Achillion's reasonable business judgment it is necessary or reasonable to seek a license or immunity from suit from any Third Party in order for Achillion, its Affiliates, or a sublicensee to exercise or use the rights granted to Achillion herein, or Achillion, its Affiliates, or a sublicensee otherwise reasonably pays any Third Party any up-front fee, milestone, royalty or other payment in connection with the Development or Commercialization of a Licensed Product, Achillion shall have the right to set off [**] percent ([**]%) of any amounts paid to such Third Party against amounts payable to FOB under Section 6.4(a); provided that the royalties payable to FOB shall not be reduced as a result of such offset below [**] percent ([**]%) of the royalties otherwise payable to FOB under Section 6.4(a).

(d) Duration of Payments. The amounts payable under Section 6.4(a) shall be paid on a Licensed Product-by-Licensed Product and country-by-country basis until the expiration of the Royalty Term applicable to each Licensed Product in each country.

6.5 Royalty Reports and Accounting.

(a) Reports; Payments. Achillion shall deliver to FOB, within sixty (60) days after the end of each calendar quarter, reasonably detailed written accountings of Net Sales of the Licensed Products that are subject to payment obligations to FOB for such calendar quarter. Such quarterly reports shall indicate (i) gross sales and Net Sales on a Licensed Product-by-Licensed Product and country-by-country basis, and (ii) the calculation of payment amounts owed to FOB from such gross sales and Net Sales, including the basis for any reduction made under Section 6.4(c). When Achillion delivers such accounting to FOB, Achillion shall also deliver all amounts due under Section 6.4 to FOB for such calendar quarter.

(b) Audits by FOB. Achillion shall keep, and shall require its Affiliates and sublicensees to keep, records of the latest three (3) years relating to gross sales, Net Sales and all information relevant under Sections 6.4(c), 6.6 and 6.7. For the sole purpose of verifying amounts payable to FOB, FOB shall have the right no more than once each calendar year, at FOB's expense, to review, together with FOB's accountants, such records in the location(s) where such records are maintained by Achillion and its Affiliates and sublicensees upon reasonable notice and during regular business hours. Prior to any review conducted pursuant to this Section 6.5(b), FOB's accountants shall have entered into a written agreement with Achillion limiting the use of such records to verification of the accuracy of payments due under this Agreement and prohibiting the disclosure of any information contained in such records to a Third Party and to FOB for a purpose other than as set forth in this Section 6.5(b). Results of such review shall be made available to Achillion. If the review reflects an underpayment to FOB, such underpayment shall be promptly remitted to FOB, together with interest calculated in the manner provided in Section 6.7. If the underpayment is greater than five percent (5%) of the amount that was otherwise due, FOB shall be entitled to have Achillion pay all of the costs of such review and such review shall not count as one of the reviews FOB is entitled to conduct hereunder.

6.6 Currency and Method of Payments. All payments under this Agreement shall be made in United States dollars by transfer to such bank account as FOB may designate from time to time. Any royalties due hereunder with respect to amounts in currencies other than United

States dollars shall be payable in their United States dollar equivalents, calculated using the average applicable interbank transfer rate determined by reference to the currency trading rates published by The Wall Street Journal (Eastern U.S. edition) over all business days of the calendar quarter to which the report under Section 6.5(a) relates.

6.7 Late Payments. Achillion shall pay interest to FOB on the aggregate amount of any payment that is not paid on or before the date such payment is due under this Agreement at a rate per annum equal to the prime rate of interest of Citibank, NA as announced on the date such payment is due plus two percent (2%), for the period during which such payment remains overdue.

6.8 Blocked Payments. In the event that, by reason of applicable laws or regulations in any country, it becomes impossible or illegal for Achillion or its Affiliates to transfer, or have transferred on its behalf, royalties or other payments to FOB, such royalties or other payments shall be deposited in local currency in the relevant country to the credit of FOB in a recognized banking institution designated by FOB or, if none is designated by FOB within a period of thirty (30) days, in a recognized banking institution selected by Achillion or its Affiliates.

## Article VII
## Intellectual Property Protection and Related Matters

7.1 Program Technology and Program Patent Rights.

(a) During the Research Term, FOB shall promptly inform Achillion about all inventions made by its officers, employees (including FTEs), agents or consultants that comprise Program Technology or Program Patent Rights.

(b) Each Party shall solely own any item of Program Technology or Program Patent Rights conceived or created solely by its officers, employees, agents or consultants or those of its Affiliates.

(c) The Parties shall jointly own any item of Program Technology or Program Patent Rights conceived or created jointly on the one hand by Achillion's officers, employees, agents or consultants or those of Achillion's Affiliates, and on the other hand by FOB's officers, employees, agents or consultants or those of FOB's Affiliates.

7.2 Prosecution and Maintenance of Licensed Patent Rights.

(a) Right to Prosecute and Maintain. Achillion shall have the first right and option to file and prosecute any patent applications and to maintain any patents included in the Licensed Patent Rights; provided, however, that, until the first (1st) anniversary of the Effective Date, FOB shall have the first right and option (i) to prosecute U.S. Patent Application [**], (ii) to file and prosecute any counterpart applications thereof outside the United States, and (iii) to maintain any patents issued pursuant to the applications set forth in clauses (i) and (ii). If the Party with the first right and option to file and prosecute any such patent applications or maintain any such patents (the "Initial Party") declines the option to do so, it shall give the other Party (the "Step-In Party") reasonable notice to this effect sufficiently in advance to permit the Step-In Party to undertake such filing, prosecution or maintenance without a loss of rights, and, upon written notice to the Initial Party, the Step-In Party may thereafter file and prosecute such patent applications and maintain such patents in the name of the Step-In Party.

(b) Cooperation. Each Party agrees to cooperate with the other with respect to the filing, prosecution and maintenance of patents and patent applications pursuant to this Section 7.2, including by:

(i) executing all such documents and instruments and the performance of such acts as may be reasonably necessary in order to permit the other Party to file, prosecute or maintain patents and patent applications as provided for in Section 7.2(a);

(ii) making its employees, agents and consultants reasonably available to the other Party (or to the other Party's authorized attorneys, agents or representatives), to the extent reasonably necessary to enable the prosecuting Party to file, prosecute or maintain patents and patent applications as provided for in Section 7.2(a);

(iii) providing the non-prosecuting Party with copies of, and giving reasonable consideration to written comments from the other Party regarding, all material correspondence with the United States Patent and Trademark Office or its foreign counterparts pertaining to the filing, prosecution or maintenance of patents and patent applications as provided for in Section 7.2(a); and

(iv) not taking any action to limit the scope of or invalidate any FOB Technology or Licensed Patent Rights without the other Party's prior consent, not to be unreasonably withheld, conditioned or delayed.

(c) Costs. Achillion shall bear its own costs and expenses, and all reasonable costs and expenses incurred by FOB after the Effective Date, in preparing, filing, prosecuting and maintaining Licensed Patent Rights; provided, however, that FOB shall bear its own such costs and expenses with respect to any Licensed Patent Rights (or specific claims therein) for which FOB is the Step-In Party under Section 7.2(a).

7.3 Third Party Infringement.

(a) Notifications of Infringement. Each Party agrees to notify the other Party when it becomes aware of the reasonable probability of infringement of the Licensed Patent Rights arising from or relating to the making, using, offering for sale, sale or importation of any product.

(b) Infringement Action. Within ninety (90) days of becoming aware of any such infringement, Achillion shall decide whether to institute an infringement suit or take other appropriate action that it believes is reasonably required to protect the Licensed Patent Rights from such infringement, regardless of whether such infringement occurred before or after the Effective Date. If Achillion fails to institute such suit or take such action within such ninety (90) day period, then FOB shall have the right at its sole discretion to institute such suit or take other appropriate action in the name of either or both Parties.

(c) Costs. Each Party shall assume and pay all of its own out-of-pocket costs incurred in connection with any litigation or proceedings described in this Section 7.3, including the fees and expenses of that Party's counsel.

(d) Recoveries. Any recovery obtained by any Party as a result of any proceeding described in this Section 7.3 or from any counterclaim or similar claim asserted in a proceeding described in Section 7.4, by settlement or otherwise, shall be applied in the following order of priority:

(i) first, to reimburse each Party for all litigation costs in connection with such proceeding paid by that Party and not otherwise recovered (on a pro rata basis based on each Party's respective litigation costs, to the extent the recovery was less than all such litigation costs); and

(ii) second, (A) if Achillion is the Party instituting such proceeding, the remainder of the recovery shall be retained by Achillion and deemed to be Net Sales for purposes of calculating royalties owed by Achillion to FOB pursuant to Section 6.4(a) or (B) if FOB is the Party instituting such proceeding, the remainder of the recovery shall be paid seventy-five percent (75%) to FOB and twenty-five percent (25%) to Achillion.

(e) Cooperation. In the event that either Achillion or FOB takes action pursuant to subsection (b) above, the other Party shall cooperate with the Party so acting to the extent reasonably possible, including joining the suit if necessary or desirable.

7.4 Claimed Infringement. In the event that a Party becomes aware of any claim that the Development or Commercialization of Licensed Products infringes Patent Rights of any Third Party, such Party shall promptly notify the other Party. In any such instance, Achillion shall have the exclusive right to settle such claim, provided that no such settlement shall impose a financial obligation upon FOB (other than under Section 6.4(c)), or limit the scope of or invalidate any FOB Technology or Licensed Patent Rights, unless Achillion has obtained FOB's prior written consent (such consent not to be unreasonably withheld, conditioned or delayed).

7.5 Patent Invalidity Claim. If a Third Party at any time asserts a claim that any Licensed Patent Right is invalid or otherwise unenforceable (an "Invalidity Claim"), whether as a defense in an infringement action brought by Achillion or FOB pursuant to Section 7.3 or in an action brought against Achillion or FOB referred to in Section 7.4, the Parties shall cooperate with each other in preparing and formulating a response to such Invalidity Claim. Neither Party shall settle or compromise any Invalidity Claim without the consent of the other Party, which consent shall not be unreasonably withheld, conditioned or delayed.

7.6 Patent Marking. Achillion agrees to comply with the patent marking statutes in each country in which Licensed Products are sold by Achillion or its Affiliates.

## Article VIII
## Confidentiality

8.1 Confidential Information. All Confidential Information disclosed by a Party to the other Party during the term of this Agreement shall not be used by the receiving Party except

in connection with the activities contemplated by this Agreement, shall be maintained in confidence by the receiving Party (except to the extent reasonably necessary for Regulatory Approval of Licensed Products, for the filing, prosecution and maintenance of Patent Rights or to Develop and Commercialize Licensed Products in accordance with this Agreement), and shall not otherwise be disclosed by the receiving Party to any other person, firm, or agency, governmental or private (except consultants, advisors and Affiliates in accordance with Section 8.2), without the prior written consent of the disclosing Party, except to the extent that the Confidential Information:

(a) was known or used by the receiving Party prior to its date of disclosure to the receiving Party; or

(b) either before or after the date of the disclosure to the receiving Party is lawfully disclosed to the receiving Party by a Third Party rightfully in possession of the Confidential Information; or

(c) either before or after the date of the disclosure to the receiving Party becomes published or generally known to the public through no fault or omission on the part of the receiving Party; or

(d) is independently developed by or for the receiving Party without reference to or reliance upon the Confidential Information; or

(e) is required to be disclosed by the receiving Party to comply with applicable laws or regulations, to defend or prosecute litigation or to comply with legal process, provided that the receiving Party provides prior written notice of such disclosure to the disclosing Party and only discloses Confidential Information of the other Party to the extent necessary for such legal compliance or litigation purpose.

8.2 Employee, Consultant and Advisor Obligations. Achillion and FOB each agrees that it and its Affiliates shall provide Confidential Information received from the other Party only to the receiving Party's respective employees, consultants and advisors, and to the employees, consultants and advisors of the receiving Party's Affiliates, who have a need to know such Confidential Information to assist the receiving Party in fulfilling its obligations under this Agreement; provided that Achillion and FOB shall each remain responsible for any failure by its and its Affiliates' respective employees, consultants and advisors to treat such Confidential Information as required under Section 8.1.

8.3 Term. All obligations of confidentiality imposed under this Article VIII shall expire five (5) years following termination or expiration of this Agreement.

## Article IX
## Representations and Warranties

9.1 Representations of Authority. Achillion and FOB each represents and warrants to the other that as of the Effective Date it has full right, power and authority to enter into this Agreement and to perform its respective obligations under this Agreement.

9.2 Consents. Achillion and FOB each represents and warrants that as of the Effective Date all necessary consents, approvals and authorizations of all government authorities and other persons required to be obtained by such Party in connection with execution, delivery and performance of this Agreement have been obtained.

9.3 No Conflict. Achillion and FOB each represents and warrants that, as of the Effective Date, the execution and delivery of this Agreement and the performance of such Party's obligations hereunder (a) do not conflict with or violate any requirement of applicable laws or regulations and (b) do not conflict with, violate or breach or constitute a default of, or require any consent under, any contractual obligations of such Party, except such consents as have been obtained as of the Effective Date.

9.4 Employee, Consultant and Advisor Obligations. Achillion and FOB each represents and warrants that, as of the Effective Date, each of its and its Affiliates' employees, consultants and advisors has executed an agreement or has an existing obligation under law obligating such employee, consultant or advisor to maintain the confidentiality of Confidential Information to the extent required under Article VIII.

9.5 Intellectual Property. FOB represents and warrants to Achillion that:

(a) FOB owns the entire right, title and interest in and to the Licensed Patent Rights free and clear of any liens, charges, claims and encumbrances, and no other Person, corporate or other private entity, or governmental or university entity or subdivision thereof has any claim of ownership or right to obtain compensation with respect to such Licensed Patent Rights;

(b) FOB has the right to grant to Achillion the rights and licenses under the Licensed Patent Rights and FOB Technology granted in this Agreement;

(c) none of the Licensed Patent Rights was fraudulently procured from the relevant governmental patent granting authority;

(d) to FOB's actual knowledge as of the Effective Date, and except for communications with the United States Patent and Trademark Office, copies of which FOB has previously provided to Achillion, there is no claim or demand of any Person pertaining to, or any proceeding which is pending or threatened, that asserts the invalidity, misuse or unenforceability of the Licensed Patent Rights or challenges FOB's ownership of the Licensed Patent Rights or makes any adverse claim with respect thereto and there is no basis for any such claim, demand or proceeding;

(e) to FOB's actual knowledge as of the Effective Date, the practice of the Licensed Patent Rights as contemplated hereunder (including with respect to Licensed Compounds) does not infringe the Patent Rights or other intellectual property of any Third Party; and

(f) to FOB's actual knowledge as of the Effective Date, the Licensed Patent Rights are not being infringed by any Third Party.

9.6 No Warranties. EXCEPT AS OTHERWISE EXPRESSLY SET FORTH HEREIN, THE PARTIES MAKE NO REPRESENTATIONS AND EXTEND NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NONINFRINGEMENT.

## Article X
## Term and Termination

10.1 Term. This Agreement shall become effective as of the Effective Date, may be terminated as set forth in this Article X, and otherwise remains in effect until the expiration of all of the obligations to pay royalties set forth in Section 6.4(a).

10.2 Termination for Material Breach. Upon any material breach of this Agreement by either Party (in such capacity, the "Breaching Party"), the other Party may terminate this Agreement by providing thirty (30) days written notice to the Breaching Party, specifying the material breach. The termination shall become effective at the end of the thirty (30) day period unless the Breaching Party cures such breach during such thirty (30) day period.

10.3 Termination for Convenience. Achillion may terminate this Agreement with or without cause upon sixty (60) days written notice to FOB; provided, however, that Achillion shall be obligated to make the payment required by Section 6.2 and shall not be obligated to make any payment required by Section 6.1 that becomes payable after the date of termination. In the event of termination pursuant to this Section 10.3, Achillion shall:

(a) as soon as reasonably practicable, deliver to FOB a copy of any of the following in Achillion's Control relating to Licensed Compounds and Licensed Products: (i) preclinical study reports and *in vivo* animal study data referenced in such reports, (ii) clinical human experience databases, and (iii) any regulatory submissions and correspondence with the FDA (and its foreign equivalents);

(b) grant, and hereby does grant, to FOB, its Affiliates and sublicensees the right to use all of the foregoing in connection with the Development and Commercialization of Licensed Compounds and Licensed Products in the Field in the Territory;

(c) grant, and hereby does grant, to FOB an exclusive (even as to Achillion), royalty-free right and license under Achillion Technology and any Patent Rights Controlled by Achillion, with the right to grant sublicenses, to Develop and Commercialize Licensed Compounds and Licensed Products in the Field in the Territory; provided that such right and license is limited to such Patent Rights Covering the Development and Commercialization of, and to Achillion Technology embodied in, Licensed Compounds or Licensed Products in active Development at the time of termination, and Achillion shall retain all other rights under Achillion Technology and Patent Rights Controlled by Achillion, including the right to Develop and Commercialize compounds and products other than Licensed Compounds and Licensed Products; and

(d) deliver to FOB any supply of Licensed Compounds or Licensed Products Controlled by Achillion on terms to be agreed in good faith by the Parties.

10.4 Survival. Upon expiration or termination of this Agreement for any reason, nothing in this Agreement shall be construed to release either Party from any obligations that matured prior to the effective date of expiration or termination; and the following provisions shall expressly survive any such expiration or termination: Sections 7.3, 7.4 and 7.6, Article VIII, Article X, Article XI and Article XII. In addition, any sublicense granted by Achillion to any Third Party under the license granted by FOB to Achillion in Section 2.1(a) shall survive expiration or termination of this Agreement for any reason; provided that such Third Party continues to comply in all material respects with the terms and conditions of such sublicense.

## Article XI
## Dispute Resolution

11.1 Arbitration. Any dispute arising out of or relating to this Agreement not otherwise resolved between the Parties shall be resolved through binding arbitration as follows:

(a) A Party may submit such dispute to arbitration by notifying the other Party, in writing, of such dispute. Within thirty (30) days after receipt of such notice, the Parties shall designate in writing a single arbitrator to resolve the dispute; provided, however, that if the Parties cannot agree on an arbitrator within such 30-day period, the arbitrator shall be selected by the New York, New York office of the American Arbitration Association (the "AAA"). The arbitrator shall be a lawyer with biotechnology or pharmaceutical industry legal experience, and shall not be an Affiliate, employee, consultant, officer, director or stockholder of any Party.

(b) Within thirty (30) days after the designation of the arbitrator, the arbitrator and the Parties shall meet, at which time the Parties shall be required to set forth in writing all disputed issues and a proposed ruling on the merits of each such issue.

(c) The arbitrator shall set a date for a hearing, which shall be no later than forty-five (45) days after the submission of written proposals pursuant to Section 11.1(b), to discuss each of the issues identified by the Parties. The Parties shall have the right to be represented by counsel. Except as provided herein, the arbitration shall be governed by the Commercial Arbitration Rules of the AAA; provided, however, that the Federal Rules of Evidence shall apply with regard to the admissibility of evidence and the arbitration shall be conducted by a single arbitrator.

(d) The arbitrator shall use his or her best efforts to rule on each disputed issue within thirty (30) days after the completion of the hearings described in Section 11.1(c). The determination of the arbitrator as to the resolution of any dispute shall be binding and conclusive upon all Parties. All rulings of the arbitrator shall be in writing and shall be delivered to the Parties.

(e) The (i) attorneys' fees of the Parties in any arbitration, (ii) fees of the arbitrator and (iii) costs and expenses of the arbitration shall be borne by the Parties as determined by the arbitrator.

(f) Any arbitration pursuant to this Section 11.1 shall be conducted in New York, New York. Any arbitration award may be entered in and enforced by any court of competent jurisdiction.

11.2 No Limitation. Nothing in Section 11.1 shall be construed as limiting in any way the right of a Party to seek an injunction or other equitable relief with respect to any actual or threatened breach of this Agreement or to bring an action in aid of arbitration. Should any Party seek an injunction or other equitable relief, or bring an action in aid of arbitration, then for purposes of determining whether to grant such injunction or other equitable relief, or whether to issue any order in aid of arbitration, the dispute underlying the request for such injunction or other equitable relief, or action in aid of arbitration, may be heard by the court in which such action or proceeding is brought.

## Article XII
## Miscellaneous Provisions

12.1 Indemnification.

(a) Achillion. Achillion agrees to defend FOB, its Affiliates and their respective directors, officers, employees and agents at Achillion's cost and expense, and shall indemnify and hold harmless FOB and its Affiliates and their respective directors, officers, employees and agents from and against any liabilities, losses, costs, damages, fees or expenses arising out of any Third Party claim relating to (i) any material breach by Achillion of any of its representations, warranties or obligations pursuant to this Agreement or (ii) personal injury, property damage or other damage resulting from the Development or Commercialization of any Licensed Compound or Licensed Product by Achillion or its Affiliates or sublicensees.

(b) FOB. FOB agrees to defend Achillion, its Affiliates and their respective directors, officers, employees and agents at FOB's cost and expense, and shall indemnify and hold harmless Achillion and its Affiliates and their respective directors, officers, employees and agents from and against any liabilities, losses, costs, damages, fees or expenses arising out of any Third Party claim relating to (i) any material breach by FOB of any of its representations, warranties or obligations pursuant to this Agreement or (ii) personal injury, property damage or other damage resulting from (A) the conduct of Research Program activities or the manufacturing of any Licensed Compound or Licensed Product or (B) the Development or Commercialization of any Licensed Compound or Licensed Product pursuant to Section 10.3, in each case ((A) and (B)) by FOB, its Affiliates or sublicensees.

(c) Claims for Indemnification. A Person entitled to indemnification under this Section 12.1 (an "Indemnified Party") shall give prompt written notification to the Party from whom indemnification is sought (the "Indemnifying Party") of the commencement of any action, suit or proceeding relating to a Third Party claim for which indemnification may be sought or, if earlier, upon the assertion of any such claim by a Third Party (it being understood and agreed, however, that the failure by an Indemnified Party to give notice of a Third Party claim as provided in this Section 12.1(c) shall not relieve the Indemnifying Party of its indemnification obligation under this Agreement except and only to the extent that such Indemnifying Party is actually damaged as a result of such failure to give notice). Within thirty (30) days after delivery of such notification, the Indemnifying Party may, upon written notice thereof to the Indemnified Party, assume control of the defense of such action, suit, proceeding or claim with counsel reasonably satisfactory to the Indemnified Party. If the Indemnifying Party does not assume control of such defense, the Indemnified Party shall control such defense.

The Party not controlling such defense may participate therein at its own expense; provided that, if the Indemnifying Party assumes control of such defense and the Indemnified Party reasonably concludes, based on advice from counsel, that the Indemnifying Party and the Indemnified Party have conflicting interests with respect to such action, suit, proceeding or claim, the Indemnifying Party shall be responsible for the reasonable fees and expenses of counsel to the Indemnified Party solely in connection therewith; provided, however, that in no event shall the Indemnifying Party be responsible for the fees and expenses of more than one counsel for all Indemnified Parties. The Party controlling such defense shall keep the other Party advised of the status of such action, suit, proceeding or claim and the defense thereof and shall consider recommendations made by the other Party with respect thereto. The Indemnified Party shall not agree to any settlement of such action, suit, proceeding or claim without the prior written consent of the Indemnifying Party, which shall not be unreasonably withheld, delayed or conditioned. The Indemnifying Party shall not agree to any settlement of such action, suit, proceeding or claim or consent to any judgment in respect thereof that does not include a complete and unconditional release of the Indemnified Party from all liability with respect thereto or that imposes any liability or obligation on the Indemnified Party without the prior written consent of the Indemnified Party.

12.2 Governing Law. This Agreement shall be construed and the respective rights of the Parties determined (including the validity and applicability of the arbitration provision set forth in Section 11.1, and the conduct of any arbitration, enforcement of any arbitral award and any other questions of arbitration law or procedure arising thereunder) according to the substantive laws of the State of New York, notwithstanding the provisions governing conflict of laws under such New York law to the contrary.

12.3 Assignment. Neither FOB nor Achillion may assign this Agreement in whole or in part without the consent of the other, except if such assignment occurs in connection with the sale or transfer of all or substantially all of the business and assets of FOB, on the one hand, or Achillion, on the other, to which the subject matter of this Agreement pertains. Notwithstanding the foregoing, any Party may assign its rights (but not its obligations) pursuant to this Agreement in whole or in part to an Affiliate of such Party.

12.4 Entire Agreement; Amendments. This Agreement constitutes the entire agreement between the Parties with respect to the subject matter hereof, and supersedes all previous arrangements with respect to the subject matter hereof, whether written or oral. Any amendment or modification to this Agreement shall be made in writing signed by both Parties.

12.5 Notices.

Notices to FOB shall be addressed to:

FOB Synthesis, Inc.
3400 Cobb International Blvd.
Kennesaw, GA 30152
Attention: Dr. W. B. Choi
Facsimile No.: (404) 601-1411

with a copy to:

King & Spalding
1180 Peachtree Street
Atlanta, GA 30309
Attention: Lynn S. Scott, Esq.
Facsimile No.: (404) 572-5100

Notices to Achillion shall be addressed to:

Achillion Pharmaceuticals, Inc.
300 George Street
New Haven, CT 06511
Attention: President and Chief Executive Officer
Facsimile No.: (203) 624-7003

with a copy to:

Wilmer Cutler Pickering Hale and Dorr LLP
60 State Street
Boston, Massachusetts 02109
Attention: Steven D. Singer, Esq.
Facsimile No.: (617) 526-5000

Any Party may change its address by giving notice to the other Party in the manner herein provided. Any notice required or provided for by the terms of this Agreement shall be in writing and shall be (a) sent by registered or certified mail, return receipt requested, postage prepaid, (b) sent via a reputable overnight courier service, (c) sent by facsimile transmission, or (d) personally delivered, in each case properly addressed in accordance with the paragraph above. The effective date of notice shall be the actual date of receipt by the Party receiving the same.

12.6 Force Majeure. No failure or omission by the Parties hereto in the performance of any obligation of this Agreement shall be deemed a breach of this Agreement or create any liability if the same shall arise from any cause or causes beyond the control of the Parties, including the following: acts of God; acts or omissions of any government; any rules, regulations or orders issued by any governmental authority or by any officer, department, agency or instrumentality thereof; fire; storm; flood; earthquake; accident; war; rebellion; insurrection; riot; and invasion. The Party claiming force majeure shall provide the other Party with notice of the force majeure event as soon as practicable, but no later than ten (10) business days after its occurrence, which notice shall reasonably identify such obligations under this Agreement and the extent to which performance thereof will be affected.

12.7 Publicity. As soon as practicable following execution of this Agreement, the Parties shall jointly issue a press release, in form and substance to be mutually agreed by the Parties, announcing the execution of this Agreement. During the term of this Agreement, the content of any press release or public announcement relating to this Agreement, the Research Program, Licensed Compounds or Licensed Products shall be mutually agreed by the Parties, which agreement shall not be unreasonably withheld, delayed or conditioned, except that a Party

may, without the other Party's consent, (a) issue such press release or public announcement if the contents of such press release or public announcement have previously been made public other than through a breach of this Agreement by the issuing Party or its Affiliates, or (b) issue such press release or public announcement if such Party reasonably determines, based on advice from its counsel, that it is required to issue such a press release or public announcement by applicable law, regulation or legal process, including by the rules or regulations of the Securities and Exchange Commission or similar regulatory agency in a country other than the United States or of any stock exchange, in which event such Party shall provide prior notice of such intended press release or public announcement to the other Party unless the disclosing Party is prevented by law, regulation or legal process for providing such advance notice and shall include in such press release or public announcement only such information relating to this Agreement, Licensed Compounds or Licensed Products as it reasonably determines is required by such applicable law, regulation or legal process. The Party subject to the requirement to issue such press release or public announcement shall, if reasonably practicable under the circumstances, consider in good faith all comments provided by the other Party prior to such press release or public announcement.

12.8 Independent Contractors. It is understood and agreed that the relationship between the Parties hereunder is that of independent contractors and that nothing in this Agreement shall be construed as authorization for either FOB or Achillion to act as agent for the other.

12.9 No Implied Waivers; Rights Cumulative. No failure on the part of FOB or Achillion to exercise, and no delay in exercising, any right, power, remedy or privilege under this Agreement, or provided by statute or at law or in equity or otherwise, shall impair, prejudice or constitute a waiver of any such right, power, remedy or privilege or be construed as a waiver of any breach of this Agreement or as an acquiescence thereto, nor shall any single or partial exercise of any such right, power, remedy or privilege preclude any further or other exercise thereof or the exercise of any other right, power, remedy or privilege.

12.10 Severability. If, under applicable law or regulation, any provision of this Agreement is invalid or unenforceable, or otherwise directly or indirectly affects the validity of any other material provision of this Agreement (such invalid or unenforceable provision, a "Severed Clause"), this Agreement shall endure except for the Severed Clause. The Parties shall consult one another and use reasonable efforts to agree upon a valid and enforceable provision that is a reasonable substitute for the Severed Clause in view of the intent of this Agreement.

12.11 Execution in Counterparts. This Agreement may be executed in counterparts, each of which, when so executed and delivered, shall be deemed to be an original, and all of which, taken together, shall constitute one and the same instrument.

12.12 No Third Party Beneficiaries. No Person other than FOB, Achillion, their respective Affiliates and permitted assignees hereunder, and the Indemnified Parties as set forth in Section 12.1 shall be deemed an intended beneficiary hereunder or have any right to enforce any obligation of this Agreement.

12.13 No Consequential Damages. NEITHER PARTY HERETO WILL BE LIABLE FOR INDIRECT, INCIDENTAL, CONSEQUENTIAL, SPECIAL, EXEMPLARY OR PUNITIVE DAMAGES ARISING OUT OF THIS AGREEMENT OR THE EXERCISE OF ITS RIGHTS HEREUNDER, OR FOR LOST PROFITS ARISING FROM OR RELATING TO ANY BREACH OF THIS AGREEMENT, REGARDLESS OF ANY NOTICE OF SUCH DAMAGES. NOTHING IN THIS SECTION 12.13 IS INTENDED TO LIMIT OR RESTRICT (A) THE INDEMNIFICATION RIGHTS OR OBLIGATIONS OF EITHER PARTY WITH RESPECT TO THIRD PARTY CLAIMS OR (B) ANY LIABILITY ARISING FROM THE BREACH OF A PARTY'S OBLIGATIONS WITH RESPECT TO THE OTHER PARTY'S CONFIDENTIAL INFORMATION.

***[Signature page follows]***

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the date first set forth above.

ACHILLION PHARMACEUTICALS, INC.

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

FOB SYNTHESIS, INC.

By: /s/ Woo-Baeg Choi
Title: Chief Executive Officer

**Exhibit A**

**Licensed Patent Rights**

[**]

**Exhibit B**
**Objectives of the Research Program**

**Commencement of Research Term:** April 4, 2008

**First Year Goals - Chemistry:**

[**]

**Second Year Goals - Chemistry:**

[**]

**First and Second Year Goals - Biology:**

[**]

**Exhibit C**
**Specifications for the Preclinical Supply of [**]**

[**]

**Exhibit D**
**Specifications for the Preclinical Supply of [**] or Other Second Licensed Compound**

[**]

**EXHIBIT 31.1**

**Certification of Chief Executive Officer pursuant to Exchange Act Rules 13a-14 and 15d-14, as adopted pursuant to Section 302 of Sarbanes-Oxley Act of 2002**

I, Michael D. Kishbauch, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Achillion Pharmaceuticals, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15(d)-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any changes in the registrant's internal control over financial reporting that occurred during the registrant's fourth fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control and financial reporting.

/s/ MICHAEL D. KISHBAUCH
Michael D. Kishbauch
Chief Executive Officer

Dated: May 7, 2008

**EXHIBIT 31.2**

**Certification of Chief Financial Officer pursuant to Exchange Act Rules 13a-14 and 15d-14, as adopted pursuant to Section 302 of Sarbanes-Oxley Act of 2002**

I, Mary Kay Fenton certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Achillion Pharmaceuticals, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15(d)-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any changes in the registrant's internal control over financial reporting that occurred during the registrant's fourth fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control and financial reporting.

/s/ MARY KAY FENTON
Mary Kay Fenton
Chief Financial Officer

Date: May 7, 2008

**EXHIBIT 32.1**

**CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report on Form 10-Q of Achillion Pharmaceuticals, Inc. (the "Company") for the quarter ended March 31, 2008 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, Michael D. Kishbauch, President and Chief Executive Officer of the Company, hereby certifies, pursuant to Section 1350 of Chapter 63 of Title 18, United States Code, that:

(1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: May 7, 2008

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

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

**EXHIBIT 32.2**

**CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report on Form 10-Q of Achillion Pharmaceuticals, Inc. (the "Company") for the quarter ended March 31, 2008 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, Mary Kay Fenton, Chief Financial Officer of the Company, hereby certifies, pursuant to Section 1350 of Chapter 63 of Title 18, United States Code, that:

(1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: May 7, 2008

/s/ Mary Kay Fenton
Mary Kay Fenton
Chief Financial Officer

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.