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 June 30, 2007,

or

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

For transition period from _________.

Commission File Number: 001-31918

IDERA PHARMACEUTICALS, INC.
(Exact name of registrant as specified in its charter)

Delaware	**04-3072298**
(State or other jurisdiction of incorporation or organization)	*(I.R.S. Employer Identification No.)*

167 Sidney Street
Cambridge, Massachusetts 02139
(Address of principal executive offices)

(617) 679-5500
(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, or a non-accelerated filer. See definition of "accelerated filer and large accelerated filer" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ☐ Accelerated filer ☐ Non-accelerated filer ☑

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

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

Common Stock, par value $.001 per share	**21,335,404**
Class	Outstanding as of July 25, 2007

IDERA PHARMACEUTICALS, INC.

FORM 10-Q

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IMO™ and Idera™ are our trademarks. All other trademarks and service marks appearing in this quarterly report are the property of their respective owners.

FORWARD-LOOKING STATEMENTS

This quarterly report contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. All statements, other than statements of historical fact, included or incorporated in this report regarding our strategy, future operations, collaborations, intellectual property, financial position, future revenues, projected costs, prospects, plans, and objectives of management are forward-looking statements. The words "believes," "anticipates," "estimates," "plans," "expects," "intends," "may," "could," "should," "potential," "likely," "projects," "will," and "would" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. We cannot guarantee that we actually will achieve the plans, intentions or expectations disclosed in our forward-looking statements and you should not place undue reliance on our forward-looking statements. There are a number of important factors that could cause our actual results to differ materially from those indicated or implied by forward-looking statements. These important factors include those set forth below under Part II, Item 1A "Risk Factors." These factors and the other cautionary statements made in this quarterly report should be read as being applicable to all related forward-looking statements whenever they appear in this quarterly report. In addition, any forward-looking statements represent our estimates only as of the date that this quarterly report is filed with the SEC and should not be relied upon as representing our estimates as of any subsequent date. We do not assume any obligation to update any forward-looking statements. We disclaim any intention or obligation to update or revise any forward-looking statement, whether as a result of new information, future events or otherwise.

PART I — FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

IDERA PHARMACEUTICALS, INC.

BALANCE SHEETS

(in thousands, except per share amounts)	June 30, 2007 (unaudited)	December 31, 2006
ASSETS		
Current assets:		
Cash and cash equivalents	$ 6,286	$ 24,596
Short-term investments	25,730	13,591
Receivables	410	398
Prepaid expenses and other current assets	754	417
Total current assets	33,180	39,002
Property and equipment, net	1,991	622
Deferred financing costs	—	298
Non-current portion of prepaid expenses	104	—
Restricted cash	619	619
Total assets	$ 35,894	$ 40,541
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 796	$ 1,155
Accrued expenses	2,121	864
Current portion of capital lease	23	7
Current portion of note payable	276	—
Current portion of deferred revenue	6,497	5,992
Total current liabilities	9,713	8,018
Long term 4% convertible notes payable	—	5,033
Other long term liabilities	11	—
Capital lease obligation, excluding current portion	55	3
Note payable, net of current portion	1,002	—
Deferred revenue, net of current portion	12,395	15,250
Total liabilities	23,176	28,304
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, $0.01 par value, Authorized — 5,000 shares		
Series A convertible preferred stock, Designated — 1,500 shares, Issued and outstanding — 1 share	—	—
Common stock, $0.001 par value, Authorized — 40,000 shares		
Issued and outstanding —21,333 and 20,458 shares at June 30, 2007 and December 31, 2006, respectively	21	20
Additional paid-in capital	347,779	341,743
Accumulated deficit	(335,061)	(329,526)
Accumulated other comprehensive loss	(21)	—
Total stockholders' equity	12,718	12,237
Total liabilities and stockholders' equity	$ 35,894	$ 40,541

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

IDERA PHARMACEUTICALS, INC.

STATEMENTS OF OPERATIONS

(UNAUDITED)

(in thousands, except per share amounts)	Three Months Ended June 30, 2007	Three Months Ended June 30, 2006	Six Months Ended June 30, 2007	Six Months Ended June 30, 2006
Alliance revenue	$ 1,949	$ 622	$ 3,778	$ 1,258
Operating expenses:				
Research and development	2,990	3,665	5,809	6,651
General and administrative	2,383	1,312	4,336	2,579
Total operating expenses	5,373	4,977	10,145	9,230
Loss from operations	(3,424)	(4,355)	(6,367)	(7,972)
Other income (expense):				
Investment income, net	429	134	906	207
Interest expense	(13)	(106)	(74)	(212)
Net loss	$ (3,008)	$ (4,327)	$ (5,535)	$ (7,977)
Basic and diluted net loss per share (Note 4)	$ (0.14)	$ (0.26)	$ (0.26)	$ (0.52)
Shares used in computing basic and diluted loss per common share	21,254	16,718	21,023	15,443

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

IDERA PHARMACEUTICALS, INC.

STATEMENTS OF CASH FLOWS

(UNAUDITED)

(in thousands)	Six Months Ended June 30, 2007	2006
Cash Flows From Operating Activities:		
Net loss	$ (5,535)	$ (7,977)
Adjustments to reconcile net loss to net cash used in operating activities — Gain on disposal of property and equipment	—	—
Stock-based compensation	918	484
Depreciation and amortization	142	197
Issuance of common stock for services rendered	24	10
Non-cash interest expense	—	34
Changes in operating assets and liabilities — Accounts receivable	(12)	29
Prepaid expenses and other current assets	9	71
Accounts payable and accrued expenses	220	500
Deferred revenue	(2,350)	(1,101)
Net cash used in operating activities	(6,584)	(7,753)
Cash Flows From Investing Activities:		
Purchase of available-for-sale securities	(39,257)	(13,256)
Proceeds from sale of available-for-sale securities	18,435	3,445
Proceeds from maturity of available-for-sale securities	8,680	10,525
Purchase of property and equipment	(1,185)	(25)
Net cash (used in) provided by investing activities	(13,327)	689
Cash Flow From Financing Activities:		
Sale of common stock and warrants, net of issuance costs	—	8,048
Net proceeds from issuance of note payable	1,278	—
Proceeds from exercise of common stock options and warrants and employee stock purchases	328	79
Payments on capital lease	(5)	(3)
Net cash provided by financing activities	1,601	8,124
Net (decrease) increase in cash and cash equivalents	(18,310)	1,060
Cash and cash equivalents, beginning of period	24,596	985
Cash and cash equivalents, end of period	$ 6,286	$ 2,045
Supplemental disclosure of non-cash financing and investing activities:		
Issuance of common stock for services rendered	$ 24	$ 10
Cash paid for interest	$ 74	$ 92
Automatic conversion of 4% convertible subordinated notes into common stock	$ 5,033	$ —

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

IDERA PHARMACEUTICALS, INC.

NOTES TO FINANCIAL STATEMENTS

JUNE 30, 2007

(UNAUDITED)

(1) (a) Organization

Idera Pharmaceuticals, Inc., or the Company, is a biotechnology company engaged in the discovery and development of synthetic DNA- and RNA-based compounds for the treatment of cancer, infectious diseases, autoimmune diseases and asthma and allergies, and for use as vaccine adjuvants. The Company has designed proprietary product candidates to modulate immune responses through Toll-like Receptors, or TLRs. TLRs are specific receptors present in immune system cells that direct the immune system to respond to potential disease threats. Relying on its expertise in DNA and RNA chemistry, the Company identifies product candidates targeted to TLRs 7, 8 or 9 for its internal development programs and for collaborative alliances. It is developing both agonists and antagonists of TLRs 7, 8 and 9. The Company has three internal programs, in oncology, infectious diseases, and autoimmune diseases, and two collaborative alliances relating to the development of treatments for asthma and allergies and the development of adjuvants for vaccines.

The Company's most advanced product candidate, IMO-2055, is an agonist of TLR9. The Company recently closed enrollment of a Phase 2 trial of IMO-2055 in oncology and a Phase 1/2 trial of IMO-2055 in combination with chemotherapy in oncology. The Company plans to initiate additional studies with IMO-2055 in combination with approved, targeted anti-cancer agents. The Company has selected a second TLR9 agonist, IMO-2125, as a lead product candidate for treating infectious diseases and recently submitted an Investigational New Drug application, or IND, to the U.S. Food and Drug Administration, or FDA, for this product candidate. The Company received a " safe to proceed" acknowledgement from the FDA on June 15, 2007 and is planning to initiate a Phase 1 clinical trial of IMO-2125 in patients with hepatitis C virus infection in the third quarter of 2007. In its autoimmune disease program, which is in earlier stages of research, the Company is evaluating TLR antagonists in preclinical models. The Company is collaborating with Novartis International Pharmaceutical, Ltd., or Novartis, for the discovery, development, and commercialization of its TLR9 agonists for the treatment of asthma and allergy indications and with Merck & Co., Inc., or Merck, for the use of its TLR7, 8 and 9 agonists in combination with Merck's therapeutic and prophylactic vaccines in the areas of oncology, infectious diseases and Alzheimer's disease.

The Company has incurred operating losses in all fiscal years except 2002 and had an accumulated deficit of $335.1 million at June 30, 2007. The Company expects to incur substantial operating losses in the future and does not expect to generate significant funds internally until it successfully completes development and obtains marketing approval for products, either alone or in collaborations with third parties, which the Company expects will take a number of years. In order to commercialize its therapeutic products, the Company needs to address a number of technological challenges and to comply with comprehensive regulatory requirements.

(b) Recently Adopted Accounting Pronouncement

The Company adopted the Financial Accounting Standards Board's Interpretation No. 48, "Accounting for Uncertainty in Income Taxes, an interpretation of FASB Statement No. 109" ("FIN 48"), effective January 1, 2007. FIN 48 clarifies the accounting for uncertainty in income taxes recognized in financial statements and requires the impact of a tax position to be recognized in the financial statements if that position is more likely than not of being sustained by the taxing authority. The adoption of FIN 48 did not have a material effect on the Company's financial position or results of operations.

The Company files income tax returns in the U.S. federal and Massachusetts jurisdictions. The Company is no longer subject to tax examinations for years before 2003, except to the extent that it utilizes net operating losses or tax credit carryforwards that originated before 2003. The Company does not believe there will be any material changes in its unrecognized tax positions over the next 12 months. The Company has not incurred any interest or penalties. In the event that the Company is assessed interest or penalties at some point in the future, they will be classified in the financial statements as general and administrative expense.

(2) Unaudited Interim Financial Statements

The accompanying unaudited financial statements included herein have been prepared by the Company in accordance with generally accepted accounting principles for interim financial information and pursuant to the rules and regulations of the Securities and Exchange Commission. Accordingly, certain information and footnote disclosures normally included in financial statements prepared in accordance with generally accepted accounting principles have been condensed or omitted pursuant to such rules and regulations. In the opinion of management, all adjustments, consisting of normal recurring adjustments, considered necessary for a fair presentation of interim period results have been included. The Company believes that its disclosures are adequate to make the information presented not misleading. Interim results for the three-month and six-month periods ended June 30, 2007 are not necessarily indicative of results that may be expected for the year ended December 31, 2007. The unaudited interim financial statements should be read in conjunction with the financial statements and footnotes thereto included in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2006.

(3) Reclassification and Additional Disclosures

Prior to the third quarter of 2006, the Company classified patent costs as research and development expense. The Company now includes these costs in general and administrative expense. The prior period financial statements have been reclassified in order to conform with the current presentation.

(4) Net Loss per Common Share

Basic and diluted net loss per common share is computed using the weighted average number of shares of common stock outstanding during the period. For the three and six months ended June 30, 2007 and 2006, diluted net loss per share of common stock is the same as basic net loss per share of common stock, as the effects of the Company's potential common stock equivalents are antidilutive. Total antidilutive securities were 7,407,978 and 8,028,963 at June 30, 2007 and 2006, respectively, and consist of stock options, warrants and convertible preferred stock. Antidilutive securities at June 30, 2006 also includes convertible debt instruments on an as-converted basis. Net loss applicable to common stockholders is the same as net loss for the three and six months ended June 30, 2007 and 2006.

(5) Cash Equivalents and Investments

The Company considers all highly liquid investments with maturities of 90 days or less when purchased to be cash equivalents. Cash and cash equivalents at June 30, 2007 and December 31, 2006 consisted of cash and money market funds. On June 30, 2007, certain certificates of deposit that had maturity dates of less than 90 days at the time of purchase were included as cash equivalents. On December 31, 2006, certain corporate bonds that had maturity dates of less than 90 days at the time of purchase were included as cash equivalents.

The Company accounts for investments in accordance with Statement of Financial Accounting Standards (SFAS) No. 115, "*Accounting for Certain Investments in Debt and Equity Securities*" ("SFAS No. 115"). Management determines the appropriate classification of marketable securities at the time of purchase. In accordance with SFAS No. 115, investments that the Company does not have the intent to hold to maturity are classified as "available-for-sale" and reported at fair market value. Unrealized gains and losses associated with available-for-sale investments are recorded in "Accumulated other comprehensive loss" on the accompanying balance sheets. The amortization of premiums and accretion of discounts, and any realized gains and losses and declines in value judged to be other than temporary, and interest and dividends for all available-for-sale securities are included in "Investment income, net" on the accompanying statements of operations. The Company had no "held-to-maturity" investments, as defined by SFAS No. 115, at June 30, 2007 and December 31, 2006. The cost of securities sold is based on the specific identification method.

The Company had no realized gains or losses for the three or six months ended June 30, 2007 and 2006. There were no losses or permanent declines in value included in "investment income" for any securities in the three or six months ended June 30, 2007 and 2006.

The Company had no long-term investments as of June 30, 2007 and December 31, 2006. Available-for-sale securities are classified as short-term regardless of their maturity date as the Company considers them available for use to fund operations within one year of the balance sheet date. Auction securities are highly liquid securities that have floating interest or dividend rates that reset periodically through an auctioning process that sets rates based on bids. Issuers include municipalities, closed-end bond funds and corporations. The Company's short-term available-for-sale investments at market value consisted of the following at June 30, 2007 and December 31, 2006:

(in thousands)	June 30, 2007	December 31, 2006
Certificates of deposit	$ 4,599	$ 300
Corporate bonds due in one year or less	1,663	301
Government bonds due in one year or less	10,063	1,595
Auction securities	9,405	11,395
Total	$ 25,730	$ 13,591

(6) Property and Equipment

At June 30, 2007 and December 31, 2006, net property and equipment at cost consists of the following:

(in thousands)	June 30, 2007	December 31, 2006
Leasehold improvements	$ 411	$ 444
Laboratory equipment and other	2,684	2,175
Total property and equipment, at cost	3,095	2,619
Less: accumulated depreciation and amortization	1,104	1,997
Property and equipment, net	$ 1,991	$ 622

As of June 30, 2007 and December 31, 2006, laboratory equipment and other included approximately $92,000 and $20,000, respectively, of laboratory and office equipment financed under capital leases with total accumulated amortization of approximately $8,000 and $6,000, respectively. Depreciation expense, which includes amortization of assets recorded under capital leases, was approximately $61,000 and $53,000 for the three months ended June 30, 2007 and 2006, respectively, and $127,000 and $104,000 for the six months ended June 30, 2007 and 2006, respectively. In the second quarter of 2007, the Company vacated its previous facility resulting in the writeoff of fully amortized leasehold improvements that had a cost of approximately $445,000. In the six months ended June 30, 2007, the Company also wrote off unused furniture, and obsolete software, computers and other equipment that had an aggregate cost of approximately $580,000 resulting in a loss of $300. During the second quarter of 2007, the Company changed its method of computing depreciation expense to depreciate assets based on the actual periods held rather than the half year convention that was previously used for additions and disposals. This change in method of accounting for depreciation did not have a material impact on depreciation expense or the net loss per share for the six month period ended June 30, 2007, compared to the previous method.

(7) Restricted Cash

As part of the new operating lease described in Note 15, which commenced in the second quarter of 2007, the Company was required to restrict approximately $619,000 of cash for a security deposit. These funds are held in certificates of deposit securing a line of credit for the lessor. The restricted cash amount is expected to be reduced by approximately $103,000 upon each of the second, third and fourth anniversaries of the lease commencement date, subject to certain conditions.

(8) Stock-Based Compensation

The Company adopted SFAS No. 123R, *"Share-Based Payment*," ("SFAS No. 123R") on January 1, 2006. SFAS No. 123R requires the Company to recognize all share-based payments to employees in the financial statements based on their fair values. Under SFAS No. 123R, the Company is required to record compensation expense over an award's vesting period based on the award's fair value on the date of grant. The Company's policy is to charge the fair value of stock options as an expense on a straight-line basis over the vesting period. The

Company incurred charges in its statements of operations of $409,000 and $237,000 for the three months ended June 30, 2007 and 2006, respectively, and $754,000 and $484,000 for the six months ended June 30, 2007 and 2006, respectively, representing the stock compensation expense computed in accordance with SFAS No. 123R.

The Company's stock compensation plans include the 1995 Stock Option Plan, the 1995 Director Stock Option Plan, the 1995 Employee Stock Purchase Plan, the 1997 Stock Incentive Plan and the 2005 Stock Incentive Plan, all of which have been approved by the Company's stockholders. No additional options are being granted under the 1995 Stock Option Plan and the 1997 Stock Incentive Plan. The Company has also granted options to purchase shares of Common Stock pursuant to agreements that were not approved by stockholders.

The fair value of each option award is estimated on the date of grant using the Black-Scholes option-pricing model and expensed over the requisite vesting period on a straight-line basis. The following assumptions apply to the options granted for the six months ended June 30, 2007 and 2006:

	Six Months Ended June 30,	
	2007	2006
Average risk free interest rate	4.8%	4.4%
Expected dividend yield	—	—
Expected lives	6 years	6 years
Expected volatility	70.5%	89.7%
Weighted average grant date fair value of options granted during the period (per share)	$ 4.87	$ 3.65

(9) Related Party Transactions

During the six months ended June 30, 2006 and in connection with the purchase commitment described in Note (11), the Company paid $487,000 in commissions to one of the Company's directors, which represented 5% of the amount available to the Company under the purchase commitment. In the three and six months ended June 30, 2006, the Company paid another director of the Company $5,000 and $10,000, respectively, for consulting services.

(10) Comprehensive Income (Loss)

The following table includes the components of comprehensive income (loss) for the three and six months ended June 30, 2007 and 2006.

	Three months ended June 30,		Six months ended June 30,	
(in thousands)	2007	2006	2007	2006
Net loss	$ (3,008)	$ (4,327)	$ (5,535)	$ (7,977)
Other comprehensive (loss) income	(13)	(3)	(21)	7
Total comprehensive loss	$ (3,021)	$ (4,330)	$ (5,556)	$ (7,970)

Other comprehensive (loss) income represents the net unrealized gains on available-for-sale investments.

(11) Equity Offerings

In March 2006, the Company raised approximately $9.8 million in gross proceeds from a private placement to institutional investors. In the private placement, the Company sold for a purchase price of $3.52 per share 2,769,886 shares of common stock and warrants to purchase 2,077,414 shares of common stock. The warrants to purchase common stock have an exercise price of $5.20 per share, are fully exercisable, and will expire if not exercised on or prior to September 24, 2011. The warrants may be exercised by cash payment only. After March 24, 2010, the Company may redeem the warrants for $0.08 per warrant share following notice to the warrant holders if the volume weighted average of the closing sales price of the common stock exceeds 300% of the warrant exercise price for the 15-day period preceding the notice. The Company may exercise its right to redeem the warrants by providing 20 days' prior written notice to the holders of the warrants. The net proceeds to the Company from the offering, excluding the proceeds of any future exercise of the warrants, were approximately $8.9 million. The agent fees and other costs directly related to securing the commitment amounted to approximately $0.9 million.

In March 2006, the Company secured a purchase commitment from an investor to purchase from the Company up to $9.8 million of the Company's common stock during the period from June 24, 2006 through December 31, 2006 in up to three drawdowns made by the Company at the Company's discretion. Prior to December 31, 2006, the Company drew down the full $9.8 million through the sale of 1,904,296 shares of common stock at a price of $5.12 per share resulting in net proceeds to the Company, excluding the proceeds of any future exercise of the warrants, described below, of approximately $8.9 million. The agent fees and other costs directly related to securing the commitment amounted to approximately $0.9 million. As part of the arrangement, the Company issued warrants to the investor to purchase 761,718 shares of common stock at an exercise price of $5.92 per share. The warrants are exercisable by cash payment only. The warrants are exercisable at any time on or prior to September 24, 2011. On or after March 24, 2010, the Company may redeem the warrants for $0.08 per warrant share following notice to the warrant holders if the closing sales price of the common stock exceeds 250% of the warrant exercise price for 15 consecutive trading days prior to the notice. The Company may exercise its right to redeem the warrants by providing at least 30 days' prior written notice to the holders of the warrants.

(12) 4% Convertible Notes Payable

In 2005, the Company sold approximately $5,033,000 in aggregate principal amount of 4% convertible subordinated notes due April 30, 2008 (the "4% Notes"). In February 2007, the Company elected to automatically convert these 4% Notes into 706,844 shares of the Company's common stock effective on February 20, 2007. In accordance with the terms of the 4% Notes and an agreement dated May 20, 2005, among the Company and the holders of the 4% Notes, the Company was entitled to exercise this right of automatic conversion because the volume-weighted average of the closing prices of the Company's common stock for a period of ten consecutive trading days ending February 8, 2007 exceeded $8.90 per share, which represented 125% of the conversion price of the 4% Notes. As of February 20, 2007, the 4% Notes were no longer considered outstanding and interest ceased to accrue. Holders of the 4% Notes were paid cash in lieu of any fractional shares and were paid approximately $61,000, which represented accrued interest through February 19, 2007.

The Company capitalized its financing costs associated with the sale of the 4% Notes and amortized them as interest expense through February 19, 2007. The unamortized balance of the deferred financing costs was reclassified to additional paid-in-capital in connection with the automatic conversion of the 4% Notes.

(13) Note Payable

On June 12, 2007, the Company executed a promissory note in the aggregate principal amount of $1.3 million (the "Note") in favor of General Electric Capital Corporation ("GE"). The Note is secured by agreed upon laboratory, manufacturing, office and computer equipment and is subject to the terms of a master security agreement dated April 23, 2007 by and between the Company and GE. The Note bears interest at a fixed rate of 11% per annum, and is payable in 48 consecutive monthly installments of principal and accrued interest, with the first installment having been paid out of the proceeds of the borrowing on June 12, 2007.

The obligations of the Company under the Note and the master security agreement may be accelerated upon the occurrence of an event of default, which includes customary events of default, including without limitation payment defaults, defaults in the performance of covenants and obligations, the inaccuracy of representations or warranties and bankruptcy and insolvency related defaults.

(14) Collaboration and License Agreement with Novartis International Pharmaceutical, Ltd.

In May 2005, the Company entered into a research collaboration and option agreement and a separate license, development and commercialization agreement with Novartis to discover, develop and potentially commercialize TLR9 agonists that are identified as potential treatments for asthma and allergies. The Company and Novartis agreed that the term of the research and collaboration phase would be two years commencing in May 2005. The Company initially was recognizing the $4.0 million upfront payment as revenue over the two-year term of the research collaboration. In February 2007, Novartis elected to extend the research collaboration by an additional year. As a result of such extension, Novartis paid the Company an additional $1.0 million in May 2007. In connection with this extension, the Company extended the time period over which it is amortizing the upfront payment.

(15) Lease Commitment.

In June, 2007, the Company relocated its operations to a newly leased facility located at 167 Sidney Street, Cambridge, Massachusetts. The Company entered into a lease arrangement on October 31, 2006 and the term of the lease commenced on June 1, 2007 and will terminate on May 31, 2014, with one five-year renewal option exercisable by the Company. As part of the lease, the Company was required to restrict approximately $620,000 of cash for a security deposit. The security deposit is scheduled to decrease over the term of the lease, subject to certain specified conditions.

(16) Reverse Stock Split

At the close of business on June 29, 2006, the Company effected a one-for-eight reverse stock split of its issued and outstanding common stock and fixed the number of authorized shares of its common stock at 40,000,000. As a result of the reverse stock split, each share of common stock outstanding at the close of business on June 29, 2006 automatically converted into one-eighth of one share of common stock. All share and per share information herein reflects this reverse stock split. The reverse stock split did not alter the par value of the common stock, which is $0.001 per share, or modify any voting rights or other terms of the common stock.

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

GENERAL

We are engaged in the discovery and development of synthetic DNA- and RNA-based compounds for the treatment of cancer, infectious diseases, autoimmune diseases and asthma and allergies, and for use as vaccine adjuvants. We have designed proprietary product candidates to modulate immune responses through Toll-like Receptors, or TLRs. TLRs are specific receptors present in immune system cells that direct the immune system to respond to potential disease threats. Relying on our expertise in DNA and RNA chemistry, we are identifying product candidates targeted to TLRs 7, 8 or 9 for our internal development programs and for collaborative alliances. We are developing both agonists and antagonists of TLRs 7, 8 and 9. We have three internal programs, in oncology, infectious diseases, and autoimmune diseases, and two collaborative alliances relating to the development of treatments for asthma and allergies and the development of adjuvants for vaccines, respectively.

Our most advanced product candidate, IMO-2055, is an agonist of TLR9. We recently closed enrollment of a Phase 2 trial of IMO-2055 in oncology and a Phase 1/2 trial of IMO-2055 in combination with chemotherapy in oncology. We plan to initiate additional studies with IMO-2055 in combination with approved, targeted anti-cancer agents. We have selected a second TLR9 agonist, IMO-2125, as a lead product candidate for treating infectious diseases and recently submitted an Investigational New Drug application, or IND, to the U.S. Food and Drug Administration, or FDA, for this product candidate. We received a "safe to proceed" acknowledgement from the FDA on June 15, 2007 and are planning to initiate a Phase 1 clinical trial of IMO-2125 in patients with hepatitis C virus infection in the third quarter of 2007. In our autoimmune disease program, which is in earlier stages of research, we are evaluating TLR antagonists in preclinical models. We are collaborating with Novartis International Pharmaceutical, Ltd. for the discovery, development, and commercialization of our TLR9 agonists for the treatment of asthma and allergy indications. We also are collaborating with Merck & Co., Inc. for the use of our TLR7, 8 and 9 agonists in combination with Merck's therapeutic and prophylactic vaccines in the areas of oncology, infectious diseases, and Alzheimer's disease.

As of June 30, 2007, we had an accumulated deficit of $335.1 million. We expect to incur substantial operating losses in the future and do not expect to generate significant funds internally until we successfully complete development and obtain marketing approval for products, either alone or in collaborations with third parties, which we expect will take a number of years. In order to commercialize our therapeutic products, we need to address a number of technological challenges and to comply with comprehensive regulatory requirements. We expect that our research and development expenses in 2007 will be higher than our research and development expenses in 2006 due to new clinical trials of IMO-2055 and the first clinical trials of IMO-2125, which we plan to commence in the second half of 2007.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

This management's discussion and analysis of financial condition and results of operations is based on our financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. On an ongoing basis, management evaluates its estimates and judgments, including those related to revenue recognition. Management bases its estimates and judgments on historical experience and on various other factors that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

We regard an accounting estimate or assumption underlying our financial statements as a "critical accounting estimate" where (i) the nature of the estimate or assumption is material due to the level of subjectivity and judgment necessary to account for highly uncertain matters or the susceptibility of such matters to change; and (ii) the impact of the estimates and assumptions on financial condition or operating performance is material.

Our significant accounting policies are described in Note 2 of the Notes to Financial Statements in our Annual Report on Form 10-K for the year ended December 31, 2006. Not all of these significant accounting policies, however, fit the definition of "critical accounting estimates." We believe that our accounting policies relating to revenue recognition and stock-based compensation, as described under the caption "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations — Critical Accounting Policies" in our Annual Report on Form 10-K for the year ended December 31, 2006, fit the definition of "critical accounting estimates and judgments."

RESULTS OF OPERATIONS

Three and Six Months Ended June 30, 2007 and 2006

Revenue

Total alliance revenue increased by $1.3 million or 213%, from $0.6 million for the three months ended June 30, 2006 to $1.9 million for the three months ended June 30, 2007 and increased by $2.5 million, or 200%, from $1.3 million for the six months ended June 30, 2006 to $3.8 million for the six months ended June 30, 2007. These increases were primarily due to license fees we recognized under our collaboration agreement with Merck, which we entered into in December 2006, offset, in part, by lower license fees recognized under our collaboration agreement with Novartis. We are recognizing the $20.0 million upfront payment we received from Merck in December 2006 over the expected research term under the collaboration agreement. As a result, we recognized $1.3 million of the upfront payment from Merck as revenue in the second quarter of 2007 and $2.5 million as revenue in the first half of 2007. In February 2007, Novartis elected to extend our research collaboration with them by an additional year. As a result of such extension, Novartis paid us an additional $1.0 million in May 2007. In connection with this extension, we extended the time period over which we are amortizing the $4.0 million upfront payment received from Novartis in 2005. Under our Novartis research collaboration, we recognized $0.4 million as revenue in the three months ended June 30, 2007 as compared to $0.5 million for the same period in 2006 and we recognized $0.7 million as revenue in the six months ended June 30, 2007 as compared to $1.0 million for the same period in 2006.

Our revenues for both periods were comprised of revenue earned under various collaboration and licensing agreements for research and development, including reimbursement of internal and third-party expenses, and license fees, sublicense fees, and royalty payments.

Research and Development Expenses

Research and development expenses decreased by $675,000, or 18%, from $3,665,000 for the three months ended June 30, 2006 to $2,990,000 for the three months ended June 30, 2007 and decreased by $842,000 or 13%, from $6,651,000 for the six months ended June 30, 2006 to $5,809,000 for the six months ended June 30, 2007. The decrease in the three and six months ended June 30, 2007 is primarily due to the completion in 2006 of IND-enabling safety studies for IMO-2125, lower manufacturing costs for IMO-2125 in the 2007 periods, both of which are reflected in "Other Drug Development Expense," and a decrease in clinical and non-clinical costs associated with IMO-2055. These decreases were offset, in part, by start-up costs related to the clinical trials of IMO-2125, higher payroll costs associated with the hiring of additional employees and increased stock-based compensation.

	Three Months Ended June 30, (In thousands)		Percentage Increase (Decrease)	Six Months Ended June 30, (In thousands)		Percentage Increase (Decrease)
	2007	2006		2007	2006	
IMO-2055 External Development Expense	$ 385	$ 793	(51%)	$ 760	$ 1,786	(57%)
IMO-2125 External Development Expense	235	—	—	235	—	—
Other Drug Development Expense	906	1,757	(48%)	2,089	2,722	(23%)
Basic Discovery Expense	1,464	1,115	31%	2,725	2,143	27%
Total Research and Development Expense	$ 2,990	$ 3,665	(18%)	$ 5,809	$ 6,651	(13%)

In 2006, we included patent related costs in research and development expenses but have reclassified them to general and administrative expenses for all periods displayed above. In the preceding table, research and development expense is set forth in the following four categories:

IMO-2055 External Development Expenses. These expenses include external expenses that we have incurred in connection with IMO-2055, our lead compound that we are developing for oncology applications. These external expenses reflect payments to independent contractors and vendors for drug development trials and studies conducted after the initiation of IMO-2055 clinical trials and drug manufacturing and related costs but exclude internal costs such as payroll and overhead. Since 2003, when we commenced clinical development of IMO-2055, we have incurred approximately $11.4 million in external expenses in connection with IMO-2055. The decrease in IMO-2055 development expenses in the second quarter of 2007 compared to the second quarter of 2006 and the first half of 2007 compared to the first half of 2006 was primarily attributable to lower Phase 2 trial expenses as we experienced slower enrollment due to the recent approval of two new therapies developed by other companies for treatment of the same patient populations and to a decrease in non-clinical studies of IMO-2055. These decreases were partially offset by an increase in expenses associated with the Phase 1/2 clinical trial initiated in October 2005.

In October 2004, we commenced patient recruitment for an open label, multi-center Phase 2 clinical trial of IMO-2055 as a monotherapy in patients with metastatic or recurrent clear cell renal cancer. The trial is a two-stage, multi-center, open label study of IMO-2055. Under the protocol for the trial, we were seeking to enroll a total of up to 92 patients in the first stage of the trial, 46 who have failed one prior therapy and 46 who are treatment-naïve. We closed enrollment in this trial on June 29, 2007. As of that date, we had completed enrollment of the target 46 treatment-naïve patients and enrolled 45 patients out of the target of 46 patients who have failed one prior therapy. We expect that when final data are available, we will report the results at an appropriate scientific meeting and will decide on the next steps for evaluation of IMO-2055 in metastatic or recurrent clear cell renal cancer. We will not be able to obtain a complete set of data from the trial until such time as all patients have ceased to receive treatment in the trial. We expect that initial data from this trial will be available in the fourth quarter of 2007 or the first quarter of 2008.

In October 2005, we initiated a Phase 1/2 clinical trial of IMO-2055 in combination with the chemotherapy agents gemcitabine and carboplatin. The purpose of the Phase 1 portion of the trial is to evaluate the safety of the combination. Three doses of IMO-2055 and three treatment schedules of IMO-2055 were investigated in this trial. We enrolled twenty-two patients in this trial and closed enrollment in July 2007. We anticipate reporting initial results from this trial at an appropriate scientific meeting by the end of 2007.

We plan to initiate additional studies with IMO-2055 in combination with approved, targeted anti-cancer agents. We intend to initiate clinical trials to investigate IMO-2055 in combination with Tarceva®, a small molecule designed to inhibit the activity of the tyrosine kinase epidermal growth factor receptor (EGFR), and in triple combination with Tarceva® and Avastin®, a recombinant, humanized antibody to vascular endothelial growth factor, in patients with non-small cell lung cancer who have failed one prior therapy. We expect to initiate a Phase 1b trial to assess the safety of the combinations with multiple doses of IMO-2055 in the third quarter of 2007. Following an analysis of the results of the Phase 1b trial, we plan to conduct a four-arm randomized, placebo controlled Phase 2 trial of the combinations.

We also plan to initiate clinical trials to investigate IMO-2055 in combination with Erbitux®, a recombinant, humanized antibody to EGFR, and Camptosar®, a cytotoxic, chemotherapeutic agent that inhibits topoisomerase I function, in patients with colorectal cancer. We expect to initiate a Phase 1b trial to assess the safety of this combination with multiple doses of IMO-2055 in the fourth quarter of 2007. Following an analysis of the results of the Phase 1b trial, we plan to conduct a randomized, placebo controlled Phase 2 trial of the combination.

IMO-2125 External Development Expenses. These expenses include external expenses that we have incurred in connection with IMO-2125, our lead compound that we are developing for infectious disease applications, since we submitted our IND application for IMO-2125. These external expenses include payments to independent contractors and vendors for drug development trials and studies, drug manufacturing and related costs but exclude internal costs such as payroll and overhead. We incurred $235,000 of external development expenses associated with the preparation of our planned Phase 1 clinical trial of IMO-2125 during the three and six months ended June 30, 2007

In May 2007, we submitted an IND to the FDA for a dose escalating Phase 1 clinical trial of IMO-2125 in patients infected with hepatitis C virus. We received a "safe to proceed" acknowledgment from the FDA on June 15, 2007. We are planning to initiate the Phase 1 clinical trial of IMO-2125 in patients with hepatitis C in the third quarter of 2007.

The Phase 1 trial will be conducted in patients with hepatitis C virus infection who have failed to respond to combination therapy with ribavirin and pegylated IFN-α, the current standard of care. We expect to enroll up to 40 patients in this trial with ten patients per cohort. Of the ten patients per cohort, 8 will be randomized to receive IMO-2125 treatment and two will be randomized to receive placebo treatment. Four doses of IMO-2125 will be investigated with treatment to continue for four weeks. The trial is designed to assess safety and tolerability of IMO-2125 at each dose level as well as to determine the effect of IMO-2125 on hepatitis C virus RNA levels and parameters of immune system activation. The trial will be conducted at five or more sites.

Other Drug Development Expenses. These expenses include internal and external expenses associated with preclinical development of identified compounds in anticipation of advancing these compounds into clinical development in addition to internal costs associated with products in clinical development.

The internal and external expenses associated with preclinical compounds include payments to contract vendors for manufacturing and the related stability studies, preclinical studies including animal toxicology and pharmacology studies and professional fees, as well as payroll and overhead. Expenses associated with products in clinical development include costs associated with our Oncology Clinical Advisory Board and our Hepatitis C Clinical Advisory Board, payroll and overhead.

Other drug development expenses decreased by $851,000, or 48%, from $1,757,000 for the three months ended June 30, 2006 to $906,000 for the three months ended June 30, 2007 and decreased by $633,000 or 23%, from $2,722,000 for the six months ended June 30, 2006 to $2,089,000 for the six months ended June 30, 2007.

The $851,000 and $633,000 decreases in other drug development expenses for the three and six months ended June 30, 2007, as compared to the corresponding 2006 periods, are primarily attributable to decreases in pre-IND direct external expenses related to IMO-2125. The pre-IND direct external expenses related to IMO-2125 were approximately $86,000 and $1,113,000 for the three months ended June 30, 2007 and 2006, respectively, and $352,000 and $1,368,000 for the six months ended June 30, 2007 and 2006, respectively. The preceding 2007 amounts only include costs incurred through April 2007 with respect to IMO-2125 since costs incurred after the May 2007 submission of the IMO-2125 IND have been shown separately in the above table. The decreases in these pre-IND IMO-2125 expenses are primarily attributable to decreases in IND-enabling safety study costs and lower manufacturing costs in the three and six months ended June 30, 2007.

The decrease in other drug development expenses in both periods was partially offset by an increase in compensation costs as a result of hiring additional employees and higher stock based compensation expense and costs associated with the move to our new facility during the second quarter of 2007.

Basic Discovery Expenses. These expenses include our internal and external expenses relating to the continuing discovery and development of our TLR-targeted programs, including agonists and antagonists of TLRs 7, 8 and 9. These expenses reflect payments for laboratory supplies, external research, and professional fees, as well as payroll and overhead. The increase in these expenses in the three and six months ending June 30, 2007 compared to the three and six months ending June 30, 2006 is primarily attributable to an increase in payroll expenses relating to work under our Merck collaboration, an increase in expenses for laboratory supplies and costs associated with the move to our new facility during the second quarter of 2007.

We do not know if we will be successful in developing IMO-2055, IMO-2125 or any of our other product candidates. At this time, given the current status of our clinical trials of IMO-2055 and IMO-2125, we cannot reasonably estimate or know the nature, timing and costs of the efforts that will be necessary to complete the remainder of the development of, or the period, if any, in which material net cash inflows may commence from, IMO-2055 or IMO-2125. Moreover, the clinical development of IMO-2055 and IMO-2125 or any of our other product candidates is subject to numerous risks and uncertainties associated with the duration and cost of clinical trials, which vary significantly over the life of a project as a result of unanticipated events arising during clinical development, including with respect to:

- the number of clinical sites included in the trials;
- the length of time required to enroll suitable subjects;
- the number of subjects that ultimately participate in the trials; and
- the efficacy and safety results of our clinical trials and the number of additional required clinical trials.

General and Administrative Expenses

General and administrative expenses increased by $1,071,000, or 82%, from $1,312,000 in the three months ended June 30, 2006 to $2,383,000 in the three months ended June 30, 2007 and increased by $1,757,000, or 68%, from $2,579,000 in the six months ended June 30, 2006 to $4,336,000 in the six months ended June 30, 2007. General and administrative expenses consisted primarily of salary expense, stock compensation expense, consulting fees and professional legal fees associated with our patent applications and maintenance, our regulatory filing requirements, and our business development initiatives.

The increases in general and administrative expenses for both periods reflect increased payroll expenses associated with a higher number of non-research employees, higher compensation expense related to employee and consultant stock options, Sarbanes-Oxley compliance expenses, costs associated with the move to our new facility and costs accrued in anticipation of payments to be made to our Chief Financial Officer under the transition agreement we entered into with him in May 2007. The increase during the six months ended June 30, 2007 also reflects higher professional fees associated with marketing research and legal services. These increased expenses were offset, in part, by lower patent and trademark preparation and maintenance costs.

Investment Income, net

Investment income increased by $295,000, or 220%, from $134,000 in the three months ended June 30, 2006 to $429,000 in the three months ended June 30, 2007 and increased by $699,000, or 338%, from $207,000 in the six months ended June 30, 2006 to $906,000 in the six months ended June 30, 2007. These increases resulted from higher cash and investment balances in 2007.

Interest Expense

Interest expense decreased by $93,000, or 88%, from $106,000 in the three months ended June 30, 2006 to $13,000 in the three months ended June 30, 2007 and decreased by $138,000, or 65%, from $212,000 in the six months ended June 30, 2006 to $74,000 in the six months ended June 30, 2007. These decreases resulted from the conversion of our 4% notes in the aggregate principal amount of approximately $5,033,000 into 706,844 shares of common stock on February 20, 2007. The three and six months ended June 30, 2006 included full periods of interest and amortization of deferred financing costs associated with our 4% notes.

Net Loss

As a result of the factors discussed above, our net loss was $3,008,000 for the three months ended June 30, 2007 compared to $4,327,000 for the three months ended June 30, 2006 and $5,535,000 for the six months ended June 30, 2007 compared to $7,977,000 for the six months ended June 30, 2006. We have incurred losses of $74.9 million since January 1, 2001. We also incurred net losses of $260.2 million prior to December 31, 2000 during which time we were involved in the development of antisense technology. Since our inception, we have accumulated a deficit of $335.1 million through June 30, 2007. We expect to continue to incur substantial operating losses in the future.

LIQUIDITY AND CAPITAL RESOURCES

Sources of Liquidity

We require cash to fund our operating expenses, to make capital expenditures and to pay debt service. Historically, we have funded our cash requirements primarily through the following:

- equity and debt financing;
- license fees and research funding under collaborative and license agreements;
- interest income; and
- lease financings.

In May 2005, we issued approximately $5.0 million in principal amount of 4% convertible subordinated notes due April 30, 2008 to overseas investors. Interest on the 4% convertible subordinated notes was payable in arrears semi-annually on April 30 and October 30 and at maturity or upon conversion. We had the option to pay interest on the 4% convertible subordinated notes in cash or in shares of common stock at the then current market value of the common stock. In February 2007, we elected to automatically convert the 4% convertible subordinated notes in the aggregate principal amount of $5.0 million into 706,844 shares of our common stock effective on February 20, 2007. We were entitled to exercise the right of automatic conversion because the volume-weighted average of the closing prices of our common stock for the ten consecutive trading days ending February 8, 2007 exceeded $8.90 per share, which represented 125% of the conversion price of the notes.

In May 2005, we entered into a research collaboration and option agreement and a license, development and commercialization agreement with Novartis to discover, develop and potentially commercialize immune modulatory oligonucleotides that are TLR9 agonists and that are identified as potential treatments for asthma and allergies. Under the terms of the agreements, Novartis paid us a $4.0 million license fee in July 2005. In February 2007, Novartis elected to extend the research phase of the collaboration by one year until May 2008 and, in connection with the extension, paid us $1.0 million in May 2007.

In March 2006, we raised approximately $9.8 million in gross proceeds from a private placement to institutional investors. In the private placement, we sold for a purchase price of $3.52 per share 2,769,886 shares of common stock and warrants to purchase 2,077,414 shares of common stock. The warrants have an exercise price of $5.20 per share, are fully exercisable and will expire if not exercised on or prior to September 24, 2011. The warrants may be exercised by cash payment only. After March 24, 2010, we may redeem the warrants for $0.08 per warrant share following notice to the warrant holders if the volume weighted average of the closing sales price of the common stock exceeds 300% of the warrant exercise price for the 15-day period preceding the notice. We may exercise our right to redeem the warrants by providing 20 days' prior written notice to the holders of the warrants. The net proceeds to us from the offering, excluding the proceeds of any future exercise of the warrants, totaled approximately $8.9 million.

In March 2006, we secured a purchase commitment from an investor to purchase from us up to $9.8 million of our common stock during the period from June 24, 2006 through December 31, 2006 in up to three drawdowns made by us at our discretion. Prior to December 31, 2006, we drew down the full $9.8 million through the sale of 1,904,296 shares of common stock at a price of $5.12 per share resulting in net proceeds to us, excluding the proceeds of any future exercise of the warrants, described below, of approximately $8.9 million. The agent fees and other costs directly related to securing the commitment amounted to approximately $0.9 million. As part of the arrangement, we issued warrants to the investor to purchase 761,718 shares of common stock at an exercise price of $5.92 per share. The warrants are exercisable by cash payment only. The warrants are exercisable at any time on or prior to September 24, 2011. On or after March 24, 2010, we may redeem the warrants for $0.08 per warrant share following notice to the warrant holders if the closing sales price of the common stock exceeds 250% of the warrant exercise price for 15 consecutive trading days prior to the notice. We may exercise our right to redeem the warrants by providing at least 30 days prior written notice to the holders of the warrants.

In December 2006, we entered into an exclusive license and research collaboration agreement with Merck to research, develop, and commercialize vaccine products containing our TLR7, 8 and 9 agonists in the fields of oncology, infectious diseases and Alzheimer's disease. Under the terms of the agreement, Merck paid us a $20.0 million license fee in December 2006. In addition, in connection with the execution of the license and collaboration agreement, we issued and sold to Merck 1,818,182 shares of our common stock for a price of $5.50 per share resulting in an aggregate purchase price of $10.0 million.

Cash Flows

As of June 30, 2007, we had approximately $32 million in cash and cash equivalents and investments, a net decrease of approximately $6.2 million from December 31, 2006. We used $6.6 million of cash for operating activities during the first half of 2007. The $6.6 million primarily reflects our $5.5 million net loss for the period, as adjusted for non-cash revenue and expenses, including stock-based compensation, depreciation and amortization, and changes in deferred revenue associated with payments under our collaborative arrangements and our accounts payable.

The net cash used in investing activities during the six months ended June 30, 2007 of $13.3 million reflects our purchase of approximately $39.3 million in securities offset by our sale of $18.4 million of securities and the proceeds of approximately $8.7 million from securities that matured in the six months ended June 30, 2007. The net cash used in investing activities also reflects our purchase of laboratory, office and computer equipment in the first half of 2007.

The net cash provided by financing activities during the first half of 2007 of $1.6 million reflects the net proceeds from the issuance of a $1.3 million promissory note and the proceeds received from the exercise of stock options and warrants during the first half of 2007.

Funding Requirements

We have incurred operating losses in all fiscal years except 2002 and had an accumulated deficit of $335.1 million at June 30, 2007. We expect to continue to incur substantial operating losses in future periods. These losses, among other things, have had and will continue to have an adverse effect on our stockholders' equity, total assets and working capital. We had cash, cash equivalents and short-term investments of $32.0 million at June 30, 2007. We believe that our existing cash, cash equivalents and short-term investments will be sufficient to fund our operations at least through December 31, 2008. We will need to raise additional funds to operate our business beyond such time, including completing any Phase 2 trials involving IMO-2055.

We have received no revenues from the sale of products. To date, almost all of our revenues have been from collaborative and license agreements. We have devoted substantially all of our efforts to research and development, including clinical trials, and we have not completed development of any drugs. Because of the numerous risks and uncertainties associated with developing drugs, we are unable to predict the extent of any future losses, whether or when any of our products will become commercially available, or when we will become profitable, if at all.

We do not expect to generate significant additional funds internally until we successfully complete development and obtain marketing approval for products, either alone or in collaboration with third parties, which we expect will take a number of years. In addition, we have no committed external sources of funds. Should we be unable to raise sufficient funds in the future, we may be required to significantly curtail our operating plans and possibly relinquish rights to portions of our technology or products. In addition, increases in expenses or delays in clinical development may adversely impact our cash position and require further cost reductions. No assurance can be given that we will be able to operate profitably on a consistent basis, or at all, in the future.

We believe that the key factors that will affect our internal and external sources of cash are:

- the success of our clinical and preclinical development programs;
- the success of our existing strategic collaborations with Novartis and Merck;
- the cost, timing and outcome of regulatory reviews;
- the receptivity of the capital markets to financings by biotechnology companies; and
- our ability to enter into new strategic collaborations with biotechnology and pharmaceutical companies and the success of such collaborations.

Additional financing may not be available to us when we need it or may not be available to us on favorable terms. We could be required to seek funds through arrangements with collaborators or others that may require us to relinquish rights to some of our technologies, product candidates or drugs that we would otherwise pursue on our own. In addition, if we raise additional funds by issuing equity securities, our then existing stockholders will experience dilution. 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, and are likely to include rights that are senior to the holders of our common stock. Any additional debt financing or equity that we raise may contain terms, such as liquidation and other preferences, or liens or other restrictions on our assets, which are not favorable to us or our stockholders. The terms of any financing may adversely affect the holdings or the rights of existing stockholders. If we are unable to obtain adequate funding on a timely basis or at all, we may be required to significantly curtail one or more of our discovery or development programs. For example, we significantly curtailed expenditures on our research and development programs during 1999 and 2000 because we did not have sufficient funds available to advance these programs at planned levels.

Contractual Obligations

We have contractual obligations in the form of operating and capital leases. In June 2007, we borrowed $1.3 million from GE Capital Corporation pursuant to a promissory note in the amount of $1.3 million in order to finance the purchase of new laboratory, office, and computer equipment to be used in our new office and laboratory facility in Cambridge, Massachusetts. The note is secured by specific laboratory, manufacturing, office and computer equipment and is subject to the terms of a master security agreement dated April 23, 2007 by and between us and GE. The note bears interest at a fixed rate of 11% per annum, and is payable in 48 consecutive monthly installments of principal and accrued interest, with the first installment having been paid out of the proceeds of the borrowing on June 12, 2007.

Our obligations under the note and the master security agreement may be accelerated upon the occurrence of an event of default, which includes customary events of default, including without limitation payment defaults, defaults in the performance of covenants and obligations, the inaccuracy of representations or warranties and bankruptcy and insolvency related defaults.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

As of June 30, 2007, we had no assets and liabilities related to non-dollar-denominated currencies.

We maintain investments in accordance with our investment policy. The primary objectives of our investment activities are to preserve principal, maintain proper liquidity to meet operating needs and maximize yields. Although our investments are subject to credit risk, our investment policy specifies credit quality standards for our investments and limits the amount of credit exposure from any single issue, issuer or type of investments. We do not own derivative financial investment instruments in our investment portfolio. Based on a hypothetical ten percent adverse movement in interest rates, the potential losses in future earnings, fair value of risk sensitive financial instruments, and cash flows are immaterial, although the actual effects may differ materially from the hypothetical analysis.

ITEM 4T. CONTROLS AND PROCEDURES

(a) *Evaluation of Disclosure Controls and Procedures.* Our management, with the participation of our Chief Executive Officer and our Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of June 30, 2007. The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of June 30, 2007, 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.

(b) *Changes in Internal Controls*. No change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act) occurred during the fiscal quarter ended June 30, 2007 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

IDERA PHARMACEUTICALS, INC.

PART II — OTHER INFORMATION

ITEM 1A. RISK FACTORS.

Investing in our common stock involves a high degree of risk. You should carefully consider the risks and uncertainties described below in addition to the other information included or incorporated by reference in this quarterly report on Form 10-Q before purchasing our common stock. If any of the following risks actually occurs, our business, financial condition or results of operations would likely suffer, possibly materially. In that case, the trading price of our common stock could fall, and you may lose all or part of the money you paid to buy our common stock.

Risks Relating to Our Financial Results and Need for Financing

We have incurred substantial losses and expect to continue to incur losses. We will not be successful unless we reverse this trend.

We have incurred losses in every year since our inception, except for 2002 when our recognition of revenues under a license and collaboration agreement resulted in us reporting net income for that year. As of June 30, 2007, we had an accumulated deficit of $335.1 million. We expect to continue to incur substantial operating losses in future periods. These losses, among other things, have had and will continue to have an adverse effect on our stockholders' equity, total assets and working capital.

We have never had any products of our own available for commercial sale and have received no revenues from the sale of drugs. To date, almost all of our revenues have been from collaborative and license agreements. We have devoted substantially all of our efforts to research and development, including clinical trials, and we have not completed development of any drugs. Because of the numerous risks and uncertainties associated with developing drugs, we are unable to predict the extent of any future losses, whether or when any of our products will become commercially available, or when we will become profitable, if at all. We expect to continue to incur significant and increasing operating losses for at least the next several years. We anticipate that our expenses will increase as we continue the clinical development of IMO-2055 and commence the clinical development of IMO-2125.

We will need additional financing, which may be difficult to obtain. Our failure to obtain necessary financing or doing so on unattractive terms could adversely affect our research and development programs and other operations.

We will require substantial funds to conduct research and development, including preclinical testing and clinical trials of our product candidates. We will also require substantial funds to conduct regulatory activities and to establish commercial manufacturing, marketing and sales capabilities. We believe that, based on our current operating plan, our existing cash, cash equivalents and short-term investments, will be sufficient to fund our operations at least through December 31, 2008.

We will need to raise additional funds to operate our business beyond such time, including completing any Phase 2 trials involving IMO-2055. We believe that the key factors that will affect our ability to obtain additional funding are:

- the success of our clinical and preclinical development programs;
- the success of our existing strategic collaborations with Novartis and Merck;
- the cost, timing and outcome of regulatory reviews;
- the receptivity of the capital markets to financings by biotechnology companies; and
- our ability to enter into additional strategic collaborations with biotechnology and pharmaceutical companies and the success of such collaborations.

If we cannot obtain adequate funds, we may terminate, modify or delay preclinical or clinical trials of one or more of our product candidates, fail to establish or delay the establishment of manufacturing, sale or marketing capabilities, or curtail research and development programs for new product candidates.

Additional financing may not be available to us when we need it or may not be available to us on favorable terms. We could be required to seek funds through arrangements with collaborators or others that may require us to relinquish rights to some of our technologies, product candidates or drugs that we would otherwise pursue on our own. In addition, if we raise additional funds by issuing equity securities, our then existing stockholders will experience dilution. The terms of any financing may adversely affect the holdings or the rights of existing stockholders. 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, and are likely to include rights that are senior to the holders of our common stock. Any additional debt financing or equity that we raise may contain terms, such as liquidation and other preferences, or liens or other restrictions on our assets, which are not favorable to us or our stockholders. If we are unable to obtain adequate funding on a timely basis or at all, we may be required to significantly curtail one or more of our discovery or development programs. For example, we significantly curtailed expenditures on our research and development programs during 1999 and 2000 because we did not have sufficient funds available to advance these programs at planned levels.

Risks Relating to Our Business, Strategy and Industry

We are depending heavily on the success of our lead product candidate, IMO-2055, which is in clinical development. If we are unable to successfully develop and commercialize this product, or experience significant delays in doing so, our business will be materially harmed.

We are investing a significant portion of our time and financial resources in the development of our lead product candidate, IMO-2055. We anticipate that our ability to generate product revenues will depend heavily on the successful development and commercialization of this product. The commercial success of this product will depend on several factors, including the following:

- acceptable safety profile during clinical trials;
- demonstration of statistically recognized efficacy in clinical trials;
- receipt of marketing approvals from the FDA and equivalent foreign regulatory authorities;
- establishment of commercial manufacturing arrangements with third-party manufacturers;
- the successful commercial launch of the product, whether alone or in collaboration with others;
- acceptance of the product by the medical community and third-party payors;
- competition from other companies and their therapies;
- successful protection of our intellectual property rights from competing products in the United States and abroad; and
- a continued acceptable safety and efficacy profile of our product candidates following approval.

Our efforts to commercialize this product are at an early stage, as we are currently conducting a Phase 2 clinical trial in patients with metastatic or recurrent clear cell renal cancer and a Phase 1/2 clinical trial in patients with refractory solid tumors. If we are not successful in commercializing this product, or are significantly delayed in doing so, our business will be materially harmed. Enrollment in these trials is closed.

If our clinical trials are unsuccessful, or if they are delayed or terminated, we may not be able to develop and commercialize our products.

In order to obtain regulatory approvals for the commercial sale of our products, we are required to complete extensive clinical trials in humans to demonstrate the safety and efficacy of our product candidates. Clinical trials are lengthy, complex and expensive processes with uncertain results. We may not be able to complete any clinical trial of a potential product within any specified time period. Moreover, clinical trials may not show our potential products to be both safe and efficacious. The FDA and other regulatory authorities may not approve any of our potential products for any indication. We may not be able to obtain authority from the FDA or other equivalent foreign regulatory agencies to complete these trials or commence and complete any other clinical trials.

The results from preclinical testing of a product candidate that is under development may not be predictive of results that will be obtained in human clinical trials. In addition, the results of early human clinical trials may not be predictive of results that will be obtained in larger scale, advanced stage clinical trials. Furthermore, interim results of a clinical trial do not necessarily predict final results and failure of any of our clinical trials can occur at any stage of testing. Companies in the biotechnology and pharmaceutical industries, including companies with greater experience in preclinical testing and clinical trials than we have, have suffered significant setbacks in clinical trials, even after demonstrating promising results in earlier trials. For example in June 2007, Coley Pharmaceutical Group, Inc. announced that its partner, Pfizer Inc., had discontinued four clinical trials in lung cancer for PF-3512676, its investigational TLR9 agonist compound, in combination with cytotoxic chemotherapy. This discontinuation included two Phase 3 clinical trials and two Phase 2 clinical trials. In addition, in January 2007, Coley Pharmaceuticals Group, Inc. announced that it had suspended its development of a TLR9 agonist, Actilon®, for hepatitis C. In addition, in July 2007, Anadys Pharmaceuticals, Inc. and its partner Novartis announced that they had decided to discontinue the development of ANA975, the investigational TLR7 agonist compound that was previously evaluated in a Phase 1b trial for the treatment of hepatitis C virus (HCV) infection. The parties determined that the results of preclinical toxicology studies do not support further clinical evaluation of chronic daily dosing of ANA975 in hepatitis C patients.

There is to date little data on the long-term clinical safety of our lead compounds under conditions of prolonged use in humans, or on any long-term consequences subsequent to human use. Effects seen in preclinical studies, even if not observed in clinical trials, may result in limitations or restrictions on our clinical trials. We may experience numerous unforeseen events during, or as a result of, preclinical testing, nonclinical testing, or the clinical trial process that could delay or inhibit our ability to receive regulatory approval or to commercialize our products, including:

- regulators or institutional review boards may not authorize us to commence a clinical trial or conduct a clinical trial at a prospective trial site;
- preclinical or clinical data may not be readily interpreted, which may lead to delays and/or misinterpretation;
- our preclinical tests, including toxicology studies, or clinical trials may produce negative or inconclusive results, and we may decide, or regulators may require us, to conduct additional preclinical testing or clinical trials or we may abandon projects that we expect may not be promising;
- the rate of enrollment or retention of patients in our clinical trials may be less than expected;
- we might have to suspend or terminate our clinical trials if the participating patients experience serious adverse events or undesirable side effects or are exposed to unacceptable health risks;
- regulators or institutional review boards may require that we hold, suspend or terminate clinical research for various reasons, including noncompliance with regulatory requirements, including any issues identified through inspections of manufacturing or clinical trial operations or clinical trial sites;
- regulators may hold or suspend our clinical trials while collecting supplemental information on, or clarification of, our clinical trials or other clinical trials, including trials conducted in other countries or trials conducted by other companies;

- we, along with our collaborators and subcontractors, may not employ, in any capacity, persons who have been debarred under the FDA's Application Integrity Policy. Employment of such debarred persons, even if inadvertently, may result in delays in the FDA's review or approval of our products, or the rejection of data developed with the involvement of such person(s);
- the cost of our clinical trials may be greater than we currently anticipate; and
- our products may not cause the desired effects or may cause undesirable side effects or our products may have other unexpected characteristics.

As an example, in 1997, after reviewing the results from the clinical trial of GEM91, a first generation antisense compound and our lead product candidate at the time, we determined not to continue the development of GEM91 and suspended clinical trials of this product candidate.

The rate of completion of clinical trials is dependent in part upon the rate of enrollment of patients. For example, in the first stage of our Phase 2 trial of IMO-2055 in renal cell cancer, enrollment was slower than projected due to the recent approval of two new therapies developed by other companies, Sutent® and Nexavar®, for treatment of the same patient populations and as a result we closed enrollment of the trial in June, 2007. Patient accrual is a function of many factors, including:

- the size of the patient population,
- the proximity of patients to clinical sites,
- the eligibility criteria for the study,
- the nature of the study,
- the existence of competitive clinical trials, and
- the availability of alternative treatments.

We do not know whether clinical trials will begin as planned, will need to be restructured or will be completed on schedule, if at all. Significant clinical trial delays also could allow our competitors to bring products to market before we do and impair our ability to commercialize our products.

Delays in commencing clinical trials of potential products could increase our costs, delay any potential revenues and reduce the probability that a potential product will receive regulatory approval.

Our product candidates and our collaborators' product candidates will require preclinical and other nonclinical testing and extensive clinical trials prior to submission of any regulatory application for commercial sales. We recently closed enrollment in two clinical trials with IMO-2055 in oncology and plan to commence clinical trials of IMO-2125 for hepatitis C in the third quarter of 2007. In conducting clinical trials, we cannot be certain that any planned clinical trial will begin on time, if at all. Delays in commencing clinical trials of potential products could increase our product development costs, delay any potential revenues and reduce the probability that a potential product will receive regulatory approval.

Commencing clinical trials may be delayed for a number of reasons, including delays in:

- manufacturing sufficient quantities of product candidate that satisfy the required quality standards for use in clinical trials;
- demonstrating sufficient safety to obtain regulatory approval for conducting a clinical trial;
- reaching an agreement with any collaborators on all aspects of the clinical trial;

- reaching agreement with contract research organizations, if any, and clinical trial sites on all aspects of the clinical trial;
- resolving any objections from the FDA or any regulatory authority on an IND application or proposed clinical trial design;
- obtaining institutional review board approval for conducting a clinical trial at a prospective site; and
- enrolling patients in order to commence the clinical trial.

The technologies on which we rely are unproven and may not result in any approved and marketable products.

The product candidates that we are developing are based upon technologies or therapeutic approaches that are relatively new and unproven. We have focused our efforts on the research and development of RNA- and DNA-based compounds targeted to TLRs. Neither we nor any other company have obtained regulatory approval to market such compounds as therapeutic drugs, and no such products currently are being marketed. It is unknown whether the results of preclinical studies with TLR-targeted compounds will be indicative of results that may be obtained in clinical trials, and results we have obtained in the initial small-scale clinical trials we have conducted to date may not be predictive of results in subsequent large-scale trials. Further, the chemical and pharmacological properties of RNA- and DNA-based compounds targeted to TLRs may not be fully recognized in preclinical and small-scale clinical trials, and such compounds may interact with human biological systems in unforeseen, ineffective, or harmful ways that we have not yet identified. As a result of these factors, we may never succeed in obtaining a regulatory approval to market any product. Furthermore, the commercial success of any of our products for which we may obtain marketing approval from the FDA or other regulatory authorities will depend upon their acceptance by the medical community and third party payors as clinically useful, cost-effective and safe. In addition, if products based upon TLR technology being developed by our competitors have negative clinical trial results or otherwise are viewed negatively, the perception of our TLR technology and market acceptance of our products could be impacted negatively. For example, we are pursuing an indication for treatment of hepatitis C virus for IMO-2125 and are planning to initiate a Phase 1 clinical trial of IMO-2125 in patients with hepatitis C in the third quarter of 2007. Coley Pharmaceutical Group, or Coley, and Anadys Pharmaceuticals, Inc., have performed early clinical trials of immune stimulatory compounds for the treatment of hepatitis C, and both programs have been discontinued. We cannot be certain whether such actions will negatively impact the perception of our TLR technology.

Our efforts to educate the medical community on these potentially unique approaches may require greater resources than would be typically required for products based on conventional technologies or therapeutic approaches. The safety, efficacy, convenience and cost-effectiveness of our products as compared to competitive products will also affect market acceptance.

We face substantial competition, which may result in others discovering, developing or commercializing drugs before or more successfully than us.

The biotechnology industry is highly competitive and characterized by rapid and significant technological change. We face, and will continue to face, intense competition from pharmaceutical and biotechnology companies, as well as academic and research institutions and government agencies. Some of these organizations are pursuing products based on technologies similar to our technologies. Other of these organizations have developed and are marketing products, or are pursuing other technological approaches designed to produce products, that are competitive with our product candidates in the therapeutic effect these competitive products have on diseases targeted by our product candidates. Our competitors may discover, develop or commercialize products or other novel technologies that are more effective, safer or less costly than any that we are developing. Our competitors may also obtain FDA or other regulatory approval for their products more rapidly than we may obtain approval for ours. As examples, the FDA recently approved drugs developed by other companies, Sutent® and Nexavar®, for use in renal cell cancer, which is the indication for which we are evaluating IMO-2055 monotherapy in our Phase 2 trial. Pfizer Inc., in collaboration with Coley has two clinical trials on-going with a TLR9 agonist for treating cancer. In addition, Dynavax has announced initiation of a clinical trial for its TLR9 agonist for cancer.

Many of our competitors are substantially larger than we are and have greater capital resources, research and development staffs and facilities than we have. In addition, many of our competitors are more experienced than we are in drug discovery, development and commercialization, obtaining regulatory approvals and drug manufacturing and marketing.

We anticipate that the competition with our products and technologies will be based on a number of factors including product efficacy, safety, availability and price. The timing of market introduction of our products and competitive products will also affect competition among products. We expect the relative speed with which we can develop products, complete the clinical trials and approval processes and supply commercial quantities of the products to the market to be important competitive factors. Our competitive position will also depend upon our ability to attract and retain qualified personnel, to obtain patent protection or otherwise develop proprietary products or processes and protect our intellectual property, and to secure sufficient capital resources for the period between technological conception and commercial sales.

Competition for technical and management personnel is intense in our industry, and we may not be able to sustain our operations or grow if we are unable to attract and retain key personnel.

Our success is highly dependent on the retention of principal members of our technical and management staff, including Dr. Sudhir Agrawal and Dr. Robert Karr. Dr. Agrawal serves as our Chief Executive Officer and Chief Scientific Officer. Dr. Karr serves as our President. Dr. Agrawal has made significant contributions to the field of antisense technology, and has led the development of our compounds targeted to TLRs. He is named as an inventor on 384 patents and patent applications worldwide. Dr. Karr has extensive experience in the pharmaceutical industry. Drs. Agrawal and Karr provide us leadership for management, research and development activities. The loss of either Dr. Agrawal's or Dr. Karr's services would be detrimental to our ongoing scientific progress and the execution of our business plan.

We are a party to an employment agreement with Dr. Agrawal that expires on October 19, 2009, but may be renewed for additional one-year terms. This agreement may be terminated by us or Dr. Agrawal for any reason or no reason at any time upon notice to the other party. We do not carry key man life insurance for Dr. Agrawal.

We are a party to an employment agreement with Dr. Karr that has an initial term ending on December 5, 2007, and that may be renewed for additional one-year terms. This agreement may be terminated by us or Dr. Karr for any reason or no reason at any time upon notice to the other party. We do not carry key man life insurance for Dr. Karr.

Furthermore, our future growth will require hiring a significant number of qualified technical and management personnel. Accordingly, recruiting and retaining such personnel in the future will be critical to our success. There is intense competition from other companies and research and academic institutions for qualified personnel in the areas of our activities. If we are not able to continue to attract and retain, on acceptable terms, the qualified personnel necessary for the continued development of our business, we may not be able to sustain our operations or grow.

Regulatory Risks

We may not be able to obtain marketing approval for products resulting from our development efforts.

All of the products that we are developing or may develop in the future will require additional research and development, extensive preclinical studies and clinical trials and regulatory approval prior to any commercial sales. This process is lengthy, often taking a number of years, is uncertain and is expensive. Since our inception, we have conducted clinical trials of a number of compounds. Currently, we are conducting clinical trials of IMO-2055.

We may need to address a number of technological challenges in order to complete development of our products. Moreover, these products may not be effective in treating any disease or may prove to have undesirable or unintended side effects, unintended alteration of the immune system over time, toxicities or other characteristics that may preclude our obtaining regulatory approval or prevent or limit commercial use.

We are subject to comprehensive regulatory requirements, which are costly and time consuming to comply with; if we fail to comply with these requirements, we could be subject to adverse consequences and penalties.

The testing, manufacturing, labeling, advertising, promotion, export and marketing of our products are subject to extensive regulation by governmental authorities in Europe, the United States and elsewhere throughout the world.

In general, submission of materials requesting permission to conduct clinical trials may not result in authorization by the FDA or any equivalent foreign regulatory agency to commence clinical trials. Further, permission to continue ongoing trials may be withdrawn by the FDA or other regulatory agency at any time after initiation, based on new information available after the initial authorization to commence clinical trials. In addition, submission of an application for marketing approval to the relevant regulatory agency following completion of clinical trials may not result in the regulatory agency approving the application if applicable regulatory criteria are not satisfied, and may result in the regulatory agency requiring additional testing or information.

Any regulatory approval of a product may contain limitations on the indicated uses for which the product may be marketed or requirements for costly post-marketing testing and surveillance to monitor the safety or efficacy of the product. Any product for which we obtain marketing approval, along with the facilities at which the product is manufactured, any post-approval clinical data and any advertising and promotional activities for the product will be subject to continual review and periodic inspections by the FDA and other regulatory agencies.

Both before and after approval is obtained, violations of regulatory requirements may result in:

- the regulatory agency's delay in approving, or refusal to approve, an application for approval of a product;
- restrictions on our products or the manufacturing of our products;
- withdrawal of our products from the market;
- warning letters;
- voluntary or mandatory recall;
- fines;
- suspension or withdrawal of regulatory approvals;
- product seizure;
- refusal to permit the import or export of our products;
- injunctions or the imposition of civil penalties; and
- criminal penalties.

We have only limited experience in regulatory affairs and our products are based on new technologies; these factors may affect our ability or the time we require to obtain necessary regulatory approvals.

We have only limited experience in filing the applications necessary to gain regulatory approvals. Moreover, the products that result from our research and development programs will likely be based on new technologies and new therapeutic approaches that have not been extensively tested in humans. The regulatory requirements governing these types of products may be more rigorous than for conventional drugs. As a result, we may experience a longer regulatory process in connection with obtaining regulatory approvals of any product that we develop.

Risks Relating to Collaborators

We need to establish additional collaborative relationships in order to succeed.

If we do not reach agreements with additional collaborators in the future, we may fail to meet our business objectives. We believe collaborations can provide us with expertise and resources. If we cannot enter into additional collaboration agreements, we may not be able to obtain the expertise and resources necessary to achieve our business objectives. We face, and will continue to face, significant competition in seeking appropriate collaborators. Moreover, collaboration arrangements are complex and time consuming to negotiate, document and implement. We may not be successful in our efforts to establish and implement collaborations or other alternative arrangements. The terms of any collaborations or other arrangements that we establish, if any, may not be favorable to us.

The failure of these collaborative relationships could delay our drug development or impair commercialization of our products and could materially harm our business and might accelerate our need for additional capital.

Any collaboration that we enter into may not be successful. The success of our collaboration arrangements, if any, will depend heavily on the efforts and activities of our collaborators. Possible future collaborations have risks, including the following:

- disputes may arise in the future with respect to the ownership of rights to technology developed with future collaborators;
- disagreements with future collaborators could delay or terminate the research, development or commercialization of products, or result in litigation or arbitration;
- future collaboration agreements are likely to be for fixed terms and subject to termination by our collaborators in the event of a material breach or lack of scientific progress by us;
- future collaborators are likely to have the first right to maintain or defend our intellectual property rights and, although we would likely have the right to assume the maintenance and defense of our intellectual property rights if our collaborators do not, our ability to do so may be compromised by our collaborators' acts or omissions;
- future collaborators may utilize our intellectual property rights in such a way as to invite litigation that could jeopardize or invalidate our intellectual property rights or expose us to potential liability;
- future collaborators may change the focus of their development and commercialization efforts. Pharmaceutical and biotechnology companies historically have re-evaluated their priorities following mergers and consolidations, which have been common in recent years in these industries. The ability of our products to reach their potential could be limited if future collaborators decrease or fail to increase spending relating to such products;
- future collaborators may underfund or not commit sufficient resources to the testing, marketing, distribution or development of our products; and
- future collaborators may develop alternative products either on their own or in collaboration with others, or encounter conflicts of interest or changes in business strategy or other business issues, which could adversely affect their willingness or ability to fulfill their obligations to us.

Given these risks, it is possible that any collaborative arrangements into which we enter may not be successful.

Our existing collaborations and any collaborations we enter into in the future may not be successful.

An important element of our business strategy includes entering into strategic collaborations with corporate collaborators, primarily large pharmaceutical companies, for the development, commercialization, marketing and distribution of some of our product candidates. In May 2005, we entered into a collaborative arrangement with Novartis involving our TLR9 agonists for application in asthma and allergies. In December 2006, we entered into a collaborative agreement with Merck involving our TLR7, 8 and 9 agonists for application in vaccine products for oncology, infectious diseases and Alzheimer's disease. The failure of these collaborative relationships or any others we enter into in the future could delay our drug development or impair commercialization of our products and could materially harm our business and might accelerate our need for additional capital.

The success of our collaboration arrangements, if any, will depend heavily on the efforts and activities of our collaborators. Our existing collaborations have risks, including the following:

- disputes may arise in the future with respect to the ownership of rights to technology developed with our collaborators;
- disagreements with our collaborators could delay or terminate the research, development or commercialization of products, or result in litigation or arbitration;
- we may have difficulty enforcing the contracts if one of our collaborators fails to perform;
- our collaborators may terminate their collaborations with us, which could make it difficult for us to attract new collaborators or adversely affect the perception of us in the business or financial communities;
- our collaboration agreements are likely to be for fixed terms and subject to termination by our collaborators in the event of a material breach or lack of scientific progress by us;
- our collaborators are likely to have the first right to maintain or defend our intellectual property rights and, although we would likely have the right to assume the maintenance and defense of our intellectual property rights if our collaborators do not, our ability to do so may be compromised by our collaborators' acts or omissions;
- our collaborators may utilize our intellectual property rights in such a way as to invite litigation that could jeopardize or invalidate our intellectual property rights or expose us to potential liability;
- our collaborators may change the focus of their development and commercialization efforts. Pharmaceutical and biotechnology companies historically have re-evaluated their priorities following mergers and consolidations, which have been common in recent years in these industries. The ability of our products to reach their potential could be limited if our collaborators decrease or fail to increase spending relating to such products;
- our collaborators may underfund or not commit sufficient resources to the testing, marketing, distribution or development of our products; and
- our collaborators may develop alternative products either on their own or in collaboration with others, or encounter conflicts of interest or changes in business strategy or other business issues, which could adversely affect their willingness or ability to fulfill their obligations to us.

Collaborations with pharmaceutical companies and other third parties often are terminated or allowed to expire by the other party. Such terminations or expirations may adversely affect us financially and could harm our business reputation in the event we elect to pursue collaborations that ultimately expire or are terminated in such a manner.

Risks Relating to Intellectual Property

If we are unable to obtain patent protection for our discoveries, the value of our technology and products will be adversely affected.

Our patent positions, and those of other drug discovery companies, are generally uncertain and involve complex legal, scientific and factual questions. Our ability to develop and commercialize drugs depends in significant part on our ability to:

- obtain patents;
- obtain licenses to the proprietary rights of others on commercially reasonable terms;
- operate without infringing upon the proprietary rights of others;
- prevent others from infringing on our proprietary rights; and
- protect trade secrets.

We do not know whether any of our patent applications or those patent applications that we license will result in the issuance of any patents. Our issued patents and those that may be issued in the future, or those licensed to us, may be challenged, invalidated or circumvented, and the rights granted thereunder may not provide us proprietary protection or competitive advantages against competitors with similar technology. Furthermore, our competitors may independently develop similar technologies or duplicate any technology developed by us. Because of the extensive time required for development, testing and regulatory review of a potential product, it is possible that, before any of our products can be commercialized, any related patent may expire or remain in force for only a short period following commercialization, thus reducing any advantage of the patent.

Because patent applications in the United States and many foreign jurisdictions are typically not published until 18 months after filing, or in some cases not at all, and because publications of discoveries in the scientific literature often lag behind actual discoveries, neither we nor our licensors can be certain that we or they were the first to make the inventions claimed in issued patents or pending patent applications, or that we or they were the first to file for protection of the inventions set forth in these patent applications.

Third parties may own or control patents or patent applications and require us to seek licenses, which could increase our development and commercialization costs, or prevent us from developing or marketing products.

We may not have rights under some patents or patent applications related to our products. Third parties may own or control these patents and patent applications in the United States and abroad. Therefore, in some cases, to develop, manufacture, sell or import some of our products, we or our collaborators may choose to seek, or be required to seek, licenses under third party patents issued in the United States and abroad or under patents that might issue from United States and foreign patent applications. In such an event, we would be required to pay license fees or royalties or both to the licensor. If licenses are not available to us on acceptable terms, we or our collaborators may not be able to develop, manufacture, sell or import these products.

We may lose our rights to patents, patent applications or technologies of third parties if our licenses from these third parties are terminated. In such an event, we might not be able to develop or commercialize products covered by the licenses.

We are party to five royalty-bearing license agreements in the field of antisense technology under which we have acquired rights to patents, patent applications and technology of third parties. Under these licenses we are obligated to pay royalties on net sales by us of products or processes covered by a valid claim of a patent or patent application licensed to us. We also are required in some cases to pay a specified percentage of any sublicense income that we may receive. These licenses impose various commercialization, sublicensing, insurance and other obligations on us.

Our failure to comply with these requirements could result in termination of the licenses. These licenses generally will otherwise remain in effect until the expiration of all valid claims of the patents covered by such licenses or upon earlier termination by the parties. The issued patents covered by these licenses expire at various dates ranging from 2010 to 2022. If one or more of these licenses is terminated, we may be delayed in our efforts, or be unable, to develop and market the products that are covered by the applicable license or licenses.

We may become involved in expensive patent litigation or other proceedings, which could result in our incurring substantial costs and expenses or substantial liability for damages or require us to stop our development and commercialization efforts.

There has been substantial litigation and other proceedings regarding patent and other intellectual property rights in the biotechnology industry. We may become a party to various types of patent litigation or other proceedings regarding intellectual property rights from time to time even under circumstances where we are not practicing and do not intend to practice any of the intellectual property involved in the proceedings. For instance, in 2002, 2003, and 2005, we became involved in interference proceedings declared by the United States Patent and Trademark Office, or USPTO, for certain of our antisense and ribozyme patents. All of these interferences have since been resolved. We are neither practicing nor intending to practice the intellectual property that is associated with any of these interference proceedings.

The cost to us of any patent litigation or other proceeding, including the interferences referred to above, even if resolved in our favor, could be substantial. Some of our competitors may be able to sustain the cost of such litigation or proceedings more effectively than we can because of their substantially greater financial resources. If any patent litigation or other proceeding is resolved against us, we or our collaborators may be enjoined from developing, manufacturing, selling or importing our drugs without a license from the other party and we may be held liable for significant damages. We may not be able to obtain any required license on commercially acceptable terms or at all.

Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could have a material adverse effect on our ability to compete in the marketplace. Patent litigation and other proceedings may also absorb significant management time.

Risks Relating to Product Manufacturing, Marketing and Sales and Reliance on Third Parties

Because we have limited manufacturing experience, facilities or infrastructure, we are dependent on third-party manufacturers to manufacture products for us. If we cannot rely on third-party manufacturers, we will be required to incur significant costs and devote significant efforts to establish our own manufacturing facilities and capabilities.

We have limited manufacturing experience, no manufacturing facilities, infrastructure or clinical or commercial scale manufacturing capabilities. In order to continue to develop our products, apply for regulatory approvals and ultimately commercialize products, we need to develop, contract for or otherwise arrange for the necessary manufacturing capabilities.

We currently rely upon third parties to produce material for preclinical and clinical testing purposes and expect to continue to do so in the future. We also expect to rely upon third parties to produce materials that may be required for the commercial production of our products. Our current and anticipated future dependence upon others for the manufacture of our product candidates may adversely affect our future profit margins and our ability to develop product candidates and commercialize any product candidates on a timely and competitive basis. We currently do not have any long term supply contracts and rely on only one contract manufacturer.

There are a limited number of manufacturers that operate under the FDA's current good manufacturing practices, or cGMP, regulations capable of manufacturing our products. As a result, we may have difficulty finding manufacturers for our products with adequate capacity for our needs. If we are unable to arrange for third party manufacturing of our products on a timely basis, or to do so on commercially reasonable terms, we may not be able to complete development of our products or market them.

Reliance on third party manufacturers entails risks to which we would not be subject if we manufactured products 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;
- 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 inconvenient for us;
- the potential that third party manufacturers will develop know-how owned by such third party in connection with the production of our products that is necessary for the manufacture of our products; and
- reliance upon third party manufacturers to assist us in preventing inadvertent disclosure or theft of our proprietary knowledge.

Additionally, contract manufacturers may not be able to manufacture our TLR product candidates at a cost or in quantities necessary to make them commercially viable. To date, our third-party manufacturers have met our manufacturing requirements, but we cannot assure you that they will continue to do so. Furthermore, changes in the manufacturing process or procedure, including a change in the location where the drug is manufactured or a change of a third-party manufacturer, may require prior FDA review and approval in accordance with the FDA's current cGMPs. There are comparable foreign requirements. This review may be costly and time-consuming and could delay or prevent the launch of a product. The FDA or similar foreign regulatory agencies at any time may also implement new standards, or change their interpretation and enforcement of existing standards for manufacture, packaging or testing of products. If we or our contract manufacturers are unable to comply, we or they may be subject to regulatory action, civil actions or penalties.

We have no experience selling, marketing or distributing products and no internal capability to do so.

If we receive regulatory approval to commence commercial sales of any of our products, we will face competition with respect to commercial sales, marketing and distribution. These are areas in which we have no experience. To market any of our products directly, we would need to develop a marketing and sales force with technical expertise and with supporting distribution capability. In particular, we would need to recruit a large number of experienced marketing and sales personnel. Alternatively, we could engage a pharmaceutical or other healthcare company with an existing distribution system and direct sales force to assist us. However, to the extent we entered into such arrangements, we would be dependent on the efforts of third parties. If we are unable to establish sales and distribution capabilities, whether internally or in reliance on third parties, our business would suffer materially.

If third parties on whom we rely for clinical trials do not perform as contractually required or as we expect, we may not be able to obtain regulatory approval for or commercialize our products and our business may suffer.

We do not have the ability to independently conduct the clinical trials required to obtain regulatory approval for our products. We depend on independent clinical investigators, contract research organizations and other third party service providers in the conduct of the clinical trials of our products and expect to continue to do so. For example, we have contracted with a contract research organization to manage our Phase 2 clinical trial of IMO-2055 in renal cell cancer. We rely heavily on these parties for successful execution of our clinical trials, but do not control many aspects of their activities. We are responsible for ensuring that each of our clinical trials is conducted in accordance with the general investigational plan and protocols for the trial. Moreover, the FDA requires us to comply with standards, commonly referred to as good clinical practices, for conducting, recording and reporting clinical trials to assure that data and reported results are credible and accurate and that the rights, integrity and confidentiality of trial participants are protected. Our reliance on third parties that we do not control does not relieve us of these responsibilities and requirements. Third parties may not complete activities on schedule or may not conduct our clinical trials in accordance with regulatory requirements or our stated protocols. The failure of these third parties to carry out their obligations could delay or prevent the development, approval and commercialization of our products. If we seek to conduct any of these activities ourselves in the future, we will need to recruit appropriately trained personnel and add to our infrastructure.

The commercial success of any product candidates that we may develop will depend upon the degree of market acceptance by physicians, patients, third party payors and others in the medical community.

Any products that we ultimately bring to the market, if they receive marketing approval, may not gain market acceptance by physicians, patients, third party payors and others in the medical community. If these products do not achieve an adequate level of acceptance, we may not generate significant product revenue and we may not become profitable. The degree of market acceptance of our product candidates, if approved for commercial sale, will depend on a number of factors, including:

- the prevalence and severity of any side effects, including any limitations or warnings contained in the product's approved labeling;
- the efficacy and potential advantages over alternative treatments;
- the ability to offer our product candidates for sale at competitive prices;
- relative convenience and ease of administration;
- the willingness of the target patient population to try new therapies and of physicians to prescribe these therapies;
- the strength of marketing and distribution support and the timing of market introduction of competitive products; and
- publicity concerning our products or competing products and treatments.

Even if a potential product displays a favorable efficacy and safety profile, market acceptance of the product will not be known until after it is launched. Our efforts to educate the medical community and third party payors on the benefits of our product candidates may require significant resources and may never be successful. Such efforts to educate the marketplace may require more resources than are required by conventional technologies marketed by our competitors.

If we are unable to obtain adequate reimbursement from third party payors for any products that we may develop or acceptable prices for those products, our revenues and prospects for profitability will suffer.

Most patients rely on Medicare and Medicaid, private health insurers and other third party payors to pay for their medical needs, including any drugs we may market. If third party payors do not provide adequate coverage or reimbursement for any products that we may develop, our revenues and prospects for profitability will suffer. Congress enacted a limited prescription drug benefit for Medicare recipients in the Medicare Prescription Drug and Modernization Act of 2003. While the program established by this statute may increase demand for our products, if we participate in this program, our prices will be negotiated with drug procurement organizations for Medicare beneficiaries and are likely to be lower than we might otherwise obtain. Non-Medicare third party drug procurement organizations may also base the price they are willing to pay on the rate paid by drug procurement organizations for Medicare beneficiaries.

A primary trend in the United States healthcare industry is toward cost containment. In addition, in some foreign countries, particularly the countries of the European Union, the pricing of prescription pharmaceuticals is subject to governmental control. In these countries, pricing negotiations with governmental authorities can take six months or longer after the receipt of regulatory marketing approval for a product. To obtain reimbursement or pricing approval in some countries, we may be required to conduct a clinical trial that compares the cost effectiveness of our product candidates or products to other available therapies. The conduct of such a clinical trial could be expensive and result in delays in commercialization of our products. These further clinical trials would require additional time, resources and expenses. If reimbursement of our products is unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, our prospects for generating revenue, if any, could be adversely affected and our business may suffer.

Third party payors are challenging the prices charged for medical products and services, and many third party payors limit reimbursement for newly-approved healthcare products. In particular, third party payors may limit the indications for which they will reimburse patients who use any products that we may develop. Cost control initiatives could decrease the price we might establish for products that we may develop, which would result in lower product revenues to us.

We face a risk of product liability claims and may not be able to obtain insurance.

Our business exposes us to the risk of product liability claims that is inherent in the manufacturing, testing and marketing of human therapeutic drugs. We face an inherent risk of product liability exposure related to the testing of our product candidates in human clinical trials and will face an even greater risk if we commercially sell any products. Regardless of merit or eventual outcome, liability claims and product recalls may result in:

- decreased demand for our product candidates and products;
- damage to our reputation;
- regulatory investigations that could require costly recalls or product modifications;
- withdrawal of clinical trial participants;
- costs to defend related litigation;
- substantial monetary awards to trial participants or patients, including awards that substantially exceed our product liability insurance, which we would then have to pay using other sources, if available, and would damage our ability to obtain liability insurance at reasonable costs, or at all, in the future;
- loss of revenue;
- the diversion of management's attention away from managing our business; and
- the inability to commercialize any products that we may develop.

Although we have product liability and clinical trial liability insurance that we believe is adequate, this insurance is subject to deductibles and coverage limitations. We may not be able to obtain or maintain adequate protection against potential liabilities. If we are unable to obtain insurance at acceptable cost or otherwise protect against potential product liability claims, we will be exposed to significant liabilities, which may materially and adversely affect our business and financial position. These liabilities could prevent or interfere with our commercialization efforts.

Risks Relating to an Investment in Our Common Stock

Our corporate governance structure, including provisions in our certificate of incorporation and by-laws, our stockholder rights plan and Delaware law, may prevent a change in control or management that stockholders may consider desirable.

Section 203 of the Delaware General Corporation Law and our certificate of incorporation, by-laws and stockholder rights plan contain provisions that might enable our management to resist a takeover of our company or discourage a third party from attempting to take over our company. These provisions include:

- a classified board of directors,
- limitations on the removal of directors,
- limitations on stockholder proposals at meetings of stockholders,

- the inability of stockholders to act by written consent or to call special meetings, and
- the ability of our board of directors to designate the terms of and issue new series of preferred stock without stockholder approval.

In addition, Section 203 of the Delaware General Corporation Law imposes restrictions on our ability to engage in business combinations and other specified transactions with significant stockholders. These provisions could have the effect of delaying, deferring, or preventing a change in control of us or a change in our management that stockholders may consider favorable or beneficial. These provisions could also discourage proxy contests and make it more difficult for you and other stockholders to elect directors and take other corporate actions. These provisions could also limit the price that investors might be willing to pay in the future for shares of our common stock.

Our stock price has been and may in the future be extremely volatile. In addition, because an active trading market for our common stock has not developed, our investors' ability to trade our common stock may be limited. As a result, investors may lose all or a significant portion of their investment.

Our stock price has been volatile. During the period from January 1, 2006 to June 30, 2007, the closing sales price of our common stock, as adjusted to reflect the one-for-eight reverse split of our common stock effected on June 29, 2006, ranged from a high of $9.45 per share to a low of $2.36 per share. The stock market has also experienced significant price and volume fluctuations, and the market prices of biotechnology companies in particular have been highly volatile, often for reasons that have been unrelated to the operating performance of particular companies. The market price for our common stock may be influenced by many factors, including:

- results of clinical trials of our product candidates or those of our competitors;
- the regulatory status of our product candidates;
- failure of any of our product candidates, if approved, to achieve commercial success;
- the success of competitive products or technologies;
- regulatory developments in the United States and foreign countries;
- our success in entering into collaborative agreements;
- developments or disputes concerning patents or other proprietary rights;
- the departure of key personnel;
- variations in our financial results or those of companies that are perceived to be similar to us;
- our cash resources;
- the terms of any financing conducted by us;
- changes in the structure of healthcare payment systems;
- market conditions in the pharmaceutical and biotechnology sectors and issuance of new or changed securities analysts' reports or recommendations; and
- general economic, industry and market conditions.

In addition, our common stock has historically been traded at low volume levels and may continue to trade at low volume levels. As a result, any large purchase or sale of our common stock could have a significant impact on the price of our common stock and it may be difficult for investors to sell our common stock in the market without depressing the market price for the common stock or at all.

As a result of the foregoing, investors may not be able to resell their shares at or above the price they paid for such shares. Investors in our common stock must be willing to bear the risk of fluctuations in the price of our common stock and the risk that the value of their investment in our stock could decline.

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

On June 13, 2007, the proposals listed below were voted on and approved at the annual meeting of stockholders.

Proposal	For	Against/Withheld	Abstain
To elect Dr. Sudhir Agrawal to serve as a Class III Director until the 2010 annual meeting of stockholders	20,366,584	244,933	—
To elect Youssef El Zein to serve as a Class III Director until the 2010 annual meeting of stockholders	19,780,307	831,210	—
To elect Dr. Alison Taunton-Rigby to serve as a Class III Director until the 2010 annual meeting of stockholders	20,366,589	244,928	—
To approve an amendment to the Company's 2005 Stock Incentive Plan increasing the number of shares of the Company's Common Stock authorized for issuance thereunder from 1,125,000 to 2,625,000 shares	12,338,630	400,861	685,761

ITEM 6. EXHIBITS.

The list of Exhibits filed as part of this Quarterly Report on Form 10-Q are set forth on the Exhibit Index immediately preceding such Exhibits, and is incorporated herein by this reference.

SIGNATURES

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

IDERA PHARMACEUTICALS, INC

Date: July 31, 2007

/s/ Sudhir Agrawal
Sudhir Agrawal
Chief Executive Officer, Chief Scientific Officer and Director
(Principal Executive Officer)

Date: July 31, 2007

/s/ Robert G. Andersen
Robert G. Andersen
Chief Financial Officer and Vice President of Operations (Principal Financial and Accounting Officer)

Exhibit Index

Exhibit No.	
10.1	Letter Agreement dated May 17, 2007 by and between Idera Pharmaceuticals, Inc. and Robert G. Andersen.
10.2	Promissory Note payable to General Electric Capital Corporation dated June 12, 2007.
10.3	Master Security Agreement dated April 23, 2007 between Idera Pharmaceuticals, Inc. and General Electric Capital Corporation
10.4	Form of Restricted Stock Agreement Under 2005 Stock Incentive Plan
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.
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.
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

Exhibit 10.1

[IDERA LETTERHEAD]

May 17, 2007

Mr. Robert G. Andersen
c/o Idera Pharmaceuticals, Inc.
345 Vassar Street
Cambridge, MA 02139

Dear Bob:

This letter agreement shall confirm our understanding with respect to your separation from Idera Pharmaceuticals, Inc. (the "Company"). You have agreed to remain as an employee of the Company until July 31, 2007 or such later date as is mutually agreed upon by you and the Company (such date being referred to as the "Effective Date of Termination" and the period from the date hereof to the Effective Date of Termination being referred to as the "Transition Period") on the terms and conditions set forth herein. Except as expressly provided herein, your employment will continue to be subject to the terms of your Employment Agreement with the Company dated April 13, 2006 (the "Employment Agreement").

1. TRANSITION PERIOD. During the Transition Period, you agree to continue to satisfactorily perform your employment duties as required by your Employment Agreement, perform any other task reasonably requested by the Company and be available to assist the Company in transitioning your duties as and to the extent requested by the Company, including the transition of your employment functions to a new Chief Financial Officer, and the Company agrees to pay you your salary and provide you with benefits in accordance with Section 5 of your Employment Agreement. If you terminate your employment, for any reason, prior to the Effective Date of Termination you will not be entitled to any severance or other benefits under this letter agreement or Section 6 of the Employment Agreement. If your employment is terminated prior to the Effective Date of Termination as a result of your death or disability or by the Company for any reason, including without limitation under Section 6(d) of the Employment Agreement in connection with a Change of Control (as defined in the Employment Agreement), the terms and conditions of the Employment Agreement shall govern such termination. This letter agreement will be deemed to amend the "Employment Period" in the Employment Agreement such that the current Employment Period provided for therein shall terminate coincident with the Effective Date of Termination.

2. SEVERANCE BENEFITS. Subject to Section 4 of this letter agreement, you will receive the severance benefits described in the "Description of Severance Benefits" attached as Attachment A (the "severance benefits") (and not the severance benefits provided for in the Employment Agreement) if you satisfactorily complete the Transition Period and your employment terminates on the Effective Date of Termination. In no event shall the Company be obligated to pay severance benefits under both this letter agreement and under the Employment Agreement. Any compensation derived by you from any subsequent employment or self-employment shall not be offset against or reduce any amounts to which you are entitled under this letter agreement, except as expressly provided herein.

3. TRANSITION BONUS. During the Transition Period, in addition to performing your employment duties and transitioning them in accordance with paragraph 1 above, you will undertake to meet certain performance objectives as set forth on Attachment C hereto. If you remain employed through the Transition Period and such objectives are satisfactorily achieved during the Transition Period, which determination shall be made by the Board of Directors (or a committee thereof) in its sole discretion, then, subject to Section 4 of this letter agreement, the Company will pay you a bonus equal to between 20% and 50% of your annual base salary on the date hereof (the "transition bonus"), as determined by the Board of Directors or a committee thereof, in its sole discretion, in addition to any severance benefits hereunder. The transition bonus shall be payable within 30 days after the Effective Date of Termination in a lump sum subject to applicable taxes and

withholding.

4. DELIVERY OF RELEASE OF CLAIMS UPON TERMINATION. The Company shall not provide you with any severance benefits or pay the transition bonus to you under Sections 2 or 3 hereof unless you sign and return the release of claims attached hereto as Attachment B (the "Release") on, but not before, the Effective Date of Termination and do not revoke it. You understand that you may revoke the Release for a period of seven (7) days after you sign it, and it shall not be effective or enforceable (and no payments hereunder shall be paid to you) until the expiration of the seven (7) day revocation period. YOU UNDERSTAND AND AGREE THAT BY SIGNING THE RELEASE YOU WILL BE WAIVING ANY AND ALL RIGHTS OR CLAIMS YOU MIGHT HAVE UNDER THE AGE DISCRIMINATION IN EMPLOYMENT ACT, AS AMENDED BY THE OLDER WORKERS BENEFIT PROTECTION ACT, AND ACKNOWLEDGING THAT YOU HAVE RECEIVED CONSIDERATION BEYOND THAT TO WHICH YOU WERE PREVIOUSLY ENTITLED.

5. UNPAID OBLIGATIONS. The Company will on the Effective Date of Termination or promptly thereafter (i) pay you any salary earned but unpaid through such date, (ii) reimburse you for any reimbursable expense incurred by you through the Effective Date of Termination in accordance with the Company's expense reimbursement policy and (iii) pay you for your unused vacation time in accordance with Company policy.

6. CONFIDENTIALITY, NON-COMPETITION AND NON-SOLICITATION OBLIGATIONS. You acknowledge and reaffirm your obligations regarding confidentiality, non-competition, non-solicitation and assignment of inventions, as set forth in paragraphs 7, 8 and 9 of the Employment Agreement, each of which are incorporated herein by reference and shall remain in full force and effect.

7. RETURN OF COMPANY PROPERTY. You will be entitled to keep the Dell laptop, the docking station and the PDA issued to you by the Company. Except for the foregoing, you confirm that, by the Effective Date of Termination, you will have returned to the Company all keys, files, records (and copies thereof), equipment (including, but not limited to, computer hardware, software and printers, wireless handheld devices, cellular

phones, pagers, etc.), Company identification, Company vehicles and any other Company-owned property in your possession or control, and will leave intact all electronic Company documents, including, but not limited to, those which you developed or helped develop during your employment. You further confirm that you will have cancelled all accounts for your benefit, if any, in the Company's name, including, but not limited to, credit cards, telephone charge cards, cellular phone and/or pager accounts and computer accounts.

8. AMENDMENT. This letter agreement shall be binding upon the parties and may not be modified in any manner, except by an instrument in writing of concurrent or subsequent date signed by duly authorized representatives of the parties hereto. This letter agreement is binding upon and shall inure to the benefit of the parties and their respective agents, assigns, heirs, executors, successors and administrators.

9. NO WAIVER. No delay or omission by the Company in exercising any right under this letter agreement shall operate as a waiver of that or any other right. A waiver or consent given by the Company on any one occasion shall be effective only in that instance and shall not be construed as a bar or waiver of any right on any other occasion.

10. VALIDITY. Should any provision of this letter agreement be declared or be determined by any court of competent jurisdiction to be illegal or invalid, the validity of the remaining parts, terms or provisions shall not be affected thereby and said illegal and/or invalid part, term or provision shall be deemed not to be a part of this letter agreement.

11. NATURE OF AGREEMENT. You understand and agree that this letter agreement is a severance agreement and does not constitute an admission of liability or wrongdoing on the part of the Company.

12. ACKNOWLEDGMENTS. You acknowledge that you have been given at least

twenty-one (21) days to consider this letter agreement and its Attachments A, B and C, and that the Company advised you to consult with an attorney of your own choosing prior to signing this letter agreement and prior to signing the Release.

13. TAX PROVISION. In connection with the severance benefits or transition bonus provided to you pursuant to this letter agreement and Attachments A, B and C, the Company shall withhold and remit to the tax authorities the amounts required under applicable law, and you shall be responsible for all applicable taxes with respect to such severance benefits or transition bonus under applicable law. You acknowledge that you are not relying upon advice or representation of the Company with respect to the tax treatment, including without limitation under Internal Revenue Code Section 409A, of the transition bonus and any of the severance benefits set forth in Attachment A.

14. VOLUNTARY ASSENT; EXPENSES. You affirm that no other promises or agreements of any kind have been made to or with you by any person or entity whatsoever to cause you to sign this letter agreement or the Release, and that you fully understand the meaning and intent of this letter agreement and the Release. You state and represent that you have had

an opportunity to fully discuss and review the terms of this letter agreement and the Release with an attorney. You further state and represent that you have carefully read this letter agreement, including Attachments A, B and C hereto, understand the contents therein, freely and voluntarily assent to all of the terms and conditions hereof, and sign your name of your own free act. The Company shall reimburse you for the reasonable fees and expenses of your attorney, not to exceed $3,000 in the aggregate, in connection with the negotiation of this letter agreement and all related matters.

15. NON-DISPARAGEMENT. You understand and agree that as a condition for payment to you of the consideration herein, you shall not make any false, disparaging or derogatory statements in public or private to any person or media outlet regarding the Company or any of its directors, officers, employees, agents, or representatives or the Company's business affairs and financial condition. The Company agrees to direct its officers and directors not to make any false, disparaging or derogatory statements in public or private to any person or media outlet regarding you.

16. APPLICABLE LAW. This Agreement shall be governed by the laws of the Commonwealth of Massachusetts without giving effect to any conflict of law rules that would require the application of the laws of any jurisdiction other than the internal laws of the Commonwealth of Massachusetts to the rights and duties of the parties, except to the extent the laws of the Commonwealth of Massachusetts are preempted by federal law.

17. ENTIRE AGREEMENT; EFFECT ON EMPLOYMENT AGREEMENT. The Employment Agreement and this letter agreement, including Attachments A, B and C, contains and constitutes the entire understanding and agreement between the parties hereto with respect to the Transition Period, your severance benefits following the Effective Date of Termination and transition bonus and the settlement of claims against the Company and cancels all previous oral and written negotiations, agreements, commitments and writings in connection therewith.

Very truly yours,

IDERA PHARMACEUTICALS, INC.

By: /s/ Sudhir Agrawal

Name: Dr. Sudhir Agrawal
Title: Chief Executive Officer

I hereby agree to the terms and conditions set forth in the letter agreement above and in Attachments A, B and C thereto. I have been given at least twenty-one (21) days to consider this letter agreement and Attachments A, B and C thereto, and I have chosen to execute this letter agreement on the date below. I understand that provision to me of the severance benefits described in Attachment A and payment to me of the transition bonus is conditioned upon my timely execution, return, and non-revocation of the Release and I agree to sign the Release on, but not before, the Effective Date of Termination.

/s/ Robert G. Andersen   Date May 17, 2007

Employee Name: Robert G. Andersen

To be returned to the Company's Chief Executive Officer by May 17, 2007.

ATTACHMENT A

DESCRIPTION OF SEVERANCE BENEFITS

1. The Company shall pay you (i) on the date six months and one day after the Effective Date of Termination a lump sum payment in cash equal to six months of your base salary in effect immediately prior to the Effective Date of Termination and (ii) in accordance with the Company's payroll practices applicable to salaried executives, your base salary as in effect immediately prior to the Effective Date of Termination for a period commencing on the date six months and one day after the Effective Date of Termination and ending on the first anniversary of the Effective Date of Termination.

2. Any stock options or other equity incentive awards previously granted to you by the Company and held by you on the Effective Date of Termination shall vest as of such date to the extent such options or equity incentive awards, as applicable, would have vested had you continued to be an employee of the Company for a period ending on the first anniversary of the Effective Date of Termination. You shall be permitted to exercise such stock options until the first anniversary of the Effective Date of Termination; provided that such provision shall not affect and shall be subject to (x) the provisions of the applicable stock option agreement and/or equity incentive plan relating to the termination of such stock options in connection with an Acquisition Event, a Change of Control (as such terms are defined in your Employment Agreement) or a similar transaction involving the Company or (y) the maximum term of any such stock option. Notwithstanding the foregoing, the stock options to purchase 4,737 shares of common stock of the Company granted to Mr. Andersen on 1 March 1999 shall not be subject to the provisions of this item 2 and instead shall be subject to the terms of the Company's PE97 Plan under which such options were granted and the option agreement entered into with the Company evidencing such options.

3. Effective as of the Effective Date of Termination, you shall be considered to have elected to continue receiving group medical and dental insurance pursuant to the federal "COBRA" law, 29 U.S.C. Section 1161 et seq., which insurance shall be substantially similar to the insurance you were receiving immediately prior to the Effective Date of Termination. The Company shall, for the period ending on the first anniversary of the Effective Date of Termination, and at its sole cost and expense, continue to pay the share of the premium for such coverage you and your eligible dependents (if any) that is paid by the Company for active and similarly-situated employees who receive the same type of coverage. The remaining balance of any premium costs, and all premium costs after such period, shall be paid by you on a monthly basis for as long as, and to the extent that, you remain eligible for COBRA continuation and you elect to continue your coverage. You should consult the COBRA materials to be provided by the Company for details regarding these benefits. Notwithstanding the foregoing, the Company shall not be required to pay any COBRA premiums under this item 3 to the extent you receive medical insurance or dental insurance benefits, as the case may be, from a new employer.

4. The Company shall provide for the period ending on the first anniversary of the Effective Date of Termination, and at its sole cost and expense, you and your eligible dependents (if any) with disability and life insurance benefits

substantially similar to this benefits you and your

dependents (if any) were receiving immediately prior to the Effective Date of Termination; provided, however, that the Company shall not be required to provide coverage to the extent you receive comparable death and disability benefits from a new employer; and provided, further however, that the Company shall pay the cost of supplemental coverage if the new employer provides less than comparable coverage, to allow you to purchase coverage to make total coverage comparable.

All other benefits will cease upon the Effective Date of Termination.

ATTACHMENT B

RELEASE OF CLAIMS

In consideration of the benefits provided for in the letter agreement dated May ___, 2007, which I acknowledge I would not otherwise be entitled to receive, I hereby fully, forever, irrevocably and unconditionally release, remise and discharge the Company, its officers, directors, stockholders, corporate affiliates, subsidiaries, parent companies, agents and employees (each in their individual and corporate capacities) (hereinafter, the "Released Parties") from any and all claims, charges, complaints, demands, actions, causes of action, suits, rights, debts, sums of money, costs, accounts, reckonings, covenants, contracts, agreements, promises, doings, omissions, damages, executions, obligations, liabilities, and expenses (including attorneys' fees and costs), of every kind and nature which you ever had or now have against the Released Parties, including, but not limited to, any claims arising out of my employment with and/or separation from the Company, including, but not limited to, all employment discrimination claims under Title VII of the Civil Rights Act of 1964, 42 U.S.C. Section 2000e et seq., the Age Discrimination in Employment Act, 29 U.S.C. Section 621 et seq., the Americans With Disabilities Act of 1990, 42 U.S.C. Section 12101 et seq., the Family and Medical Leave Act, 29 U.S.C. Section 2601 et seq., the Worker Adjustment and Retraining Notification Act ("WARN"), 29 U.S.C. Section 2101 et seq., and the Rehabilitation Act of 1973, 29 U.S.C. Section 701 et seq., all as amended; all claims arising out of the Fair Credit Reporting Act, 15 U.S.C. Section 1681 et seq., the Employee Retirement Income Security Act of 1974 ("ERISA"), 29 U.S.C. Section 1001 et seq., the Massachusetts Fair Employment Practices Act., M.G.L. c. 151B, Section 1 et seq., the Massachusetts Civil Rights Act, M.G.L. c. 12, Sections 11H and 11I, the Massachusetts Equal Rights Act, M.G.L. c. 93, Section 102 and M.G.L. c. 214, Section 1C, the Massachusetts Labor and Industries Act, M.G.L. c. 149, Section 1 et seq., the Massachusetts Privacy Act, M.G.L. c. 214, Section 1B, and the Massachusetts Maternity Leave Act, M.G.L. c. 149, Section 105(d), all as amended; all common law claims including, but not limited to, actions in tort, defamation and breach of contract (including without limitation any claims arising out of my Employment Agreement with the Company dated April 13, 2006); all claims to any non-vested ownership interest in the Company, contractual or otherwise, including, but not limited to, claims to stock or stock options (except for those share/stock option rights and interests set forth in the letter agreement); and any claim or damage arising out of my employment with or separation from the Company (including a claim for retaliation) under any common law theory or any federal, state or local statute or ordinance not expressly referenced above; provided, however, that nothing in the letter agreement prevents me from filing, cooperating with, or participating in any proceeding before the EEOC or a state Fair Employment Practices Agency (except that I acknowledge that I may not be able to recover any monetary benefits in connection with any such claim, charge or proceeding). Nothing herein shall bar actions to enforce the terms of the letter agreement. Moreover, nothing herein shall be construed so as to limit or restrict any right of indemnification or insurance available to me in my capacity as an officer and employee of the Company.

I hereby provide this release of claims as of the current date and acknowledge that the execution of this Release is in further consideration of the severance benefits and transition bonus described in Sections 2 and 3 of the letter agreement, to which I acknowledge I would not be entitled if I did not sign this release of claims. I acknowledge that I have been given at least twenty-one (21) days to consider this Release and that I was advised to consult with legal

counsel of my own choosing prior to signing this Release. I understand that I may revoke this Release for a period of seven (7) days after signing and that it shall not be effective or enforceable until the expiration of such seven (7) day period. I understand and agree that I am waiving any and all rights or claims I might have under the Age Discrimination and Employment Act, as amended, by the Older Workers Benefit Protection Act.

This release shall be interpreted and construed by the laws of the Commonwealth of Massachusetts, without regard to conflict of laws provisions. I hereby irrevocably submit to and acknowledge and recognize the jurisdiction of the courts of the Commonwealth of Massachusetts, or if appropriate, a federal court located in Massachusetts (which courts, for purposes of this letter agreement, are the only courts of competent jurisdiction), over any suit, action or other proceeding arising out of, under or in connection with this letter agreement or the subject matter hereof.

R. Andersen   Date   31 July 2007

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Employee Name: Robert G. Andersen

TO BE SIGNED AND RETURNED TO THE COMPANY'S CHIEF EXECUTIVE OFFICER ON, BUT NOT BEFORE, THE EFFECTIVE DATE OF TERMINATION.

ATTACHMENT C

PERFORMANCE OBJECTIVES

- Finance
    - File Proxy for 2007
    - Q1 2007 Closing and file Form 10-Q
    - File Forms 8-K (as required)
    - Prepare 2007 - 2008 Budget
    - Q2 2007 Closing and prepare Form 10-Q (as required)
    - Assist with any financing of the Company (as required)
    - Engage consulting firm to assist with SOX 404 compliance
- Relocation
    - Complete build-out of 167 Sidney St.
    - Acquire and lease furniture and equipment.
    - Acquire necessary permits
    - Install new systems (water treatment, security, bldg. controls)
    - Move the Company to 167 Sidney St. (target June 2007)
- Close-Out of Existing Facility (target July 2007)
    - Clean-up of 345 Vassar Street

- Decommission facility
- Gain MIT sign-off

- Information Technology
    - Develop Information Technology System Upgrades
    - Manage Internet/Telecom/Network installations for 167 Sidney St.
    - Develop audio-video systems for new board room
    - Bring new systems on-line

Exhibit 10.2

PROMISSORY NOTE

June 12, 2007

FOR VALUE RECEIVED, **Idera Pharmaceuticals, Inc.**, a Delaware corporation located at the address stated below ("**Maker**") promises, jointly and severally if more than one, to pay to the order of **General Electric Capital Corporation** or any subsequent holder hereof (each, a "**Payee**") at its office located at **83 Wooster Heights Road, Danbury, CT 06810** or at such other place as Payee may designate, the principal sum of **One Million Three Hundred Twelve Thousand Five Hundred Thirty and 89/00 Dollars ($1,312,530.89)**, with interest on the unpaid principal balance, from the date hereof through and including the dates of payment, at a fixed interest rate of Ten and Ninety Four Hundredths percent (10.94%) per annum (the "**Contract Rate**") in Forty-Eight (48) consecutive monthly installments of principal and interest as follows:

Periodic Installment	Amount
47	$33,578.69

(each, a "**Periodic Installment**") and a final installment which shall be in the amount of the total outstanding and unpaid principal, accrued interest and any and all amounts due hereunder and under the other Debt Documents (as defined below). The first Periodic Installment shall be due and payable on **July 1, 2007** and the following Periodic Installments and the final installment shall be due and payable on the same day of each succeeding period (each, a "**Payment Date**"). Such installments have been calculated on the basis of a 360 day year of twelve 30-day months. Each payment may, at the option of Payee, be calculated and applied on an assumption that such payment would be made on its due date.

All payments shall be applied: first, to interest due and unpaid hereunder and under the other Debt Documents; second, to all other amounts due and unpaid hereunder and under the other Debt Documents, and then to principal due hereunder and under the other Debt Documents. The acceptance by Payee of any payment which is less than payment in full of all amounts due and owing at such time shall not constitute a waiver of Payee's right to receive payment in full at such time or at any prior or subsequent time. The payment of any Periodic Installment prior to its due date shall result in a corresponding increase in the portion of the Periodic Installment credited to the remaining unpaid principal balance.

All amounts due hereunder and under the other Debt Documents are payable in the lawful currency of the United States of America. Maker hereby expressly authorizes Payee to insert the date value is actually given in the blank space on the face hereof and on all related documents pertaining hereto.

This Note may be secured by a security agreement, chattel mortgage, pledge agreement or like instrument (each of which is hereinafter called a "**Security Agreement**", and collectively with any other document or agreement related thereto or to this Note, the "**Debt Documents**").

Time is of the essence hereof. If Payee does not receive from Maker payment in full of any Periodic Installment or any other sum due under this Note or any other Debt Document is not received within ten (10) days after its due date, Maker agrees to pay a late fee equal to five percent (5%) on such late Periodic Installment or other sum, but not exceeding any lawful maximum. Such late fee shall be invoiced to Maker and will be immediately due and payable, and is in addition to any other costs, fees and expenses that Maker may owe as a result of such late payment. Additionally, if (i) Maker fails to make payment of any amount due hereunder within fifteen (15) days after the same becomes due and payable; or (ii) Maker is in default under, or fails to perform under any term or condition contained in any Debt Document, then the entire principal sum remaining unpaid, together with all accrued interest thereon and any other sum payable under this Note or any other Debt Document, at the election of Payee, shall immediately become due and payable, with interest thereon at the lesser of eighteen percent (18%) per annum or the highest rate not prohibited by applicable law from the date of such accelerated maturity until paid (both before and after any judgment). The application of such 18% interest rate shall not be interpreted or deemed to extend any cure period set forth in this Note or any other Debt Document, cure any default or otherwise limit Payee's right or remedies hereunder or under any Debt Document.

The Maker may prepay the indebtedness owed to Payee hereunder in full, but not in part; provided that (i) no such payment shall be allowed prior to the first anniversary of the date hereof; and (ii) anytime after the first anniversary of the date hereof and prior to the date the last Periodic Installment is due, upon such payment, Maker shall be obligated to pay an additional sum as a premium in an amount equal to eight percent (8%) of the remaining principal balance under the Note, plus all other sums due hereunder and under any other Debt Document.

It is the intention of the parties hereto to comply with the applicable usury laws; accordingly, it is agreed that, notwithstanding any provision to the contrary in this Note or any other Debt Document, in no event shall this Note or any other Debt Document require the payment or permit the collection of interest in excess of the maximum amount permitted by applicable law. If any such excess interest is contracted for, charged or received under this Note or any other Debt Document, or if all of the principal balance shall be prepaid, so that under any of such circumstances the amount of interest contracted for, charged or received under this Note or any other Debt Document on the principal balance shall exceed the maximum amount of interest permitted by applicable law, then in such event: (a) the provisions of this paragraph shall govern and control, (b) neither Maker nor any other person or entity now or hereafter liable for the payment hereof shall be obligated to pay the amount of such interest to the extent that it is in excess of the maximum amount of interest permitted by applicable law, (c) any such excess which may have been collected shall be either applied as a credit against the then unpaid principal balance or refunded to Maker, at the option of Payee, and (d) the effective rate of interest shall be automatically reduced to the maximum lawful contract rate allowed under applicable law as now or hereafter construed by the courts having jurisdiction thereof. It is further agreed that without limitation of the foregoing, all calculations of the rate of interest contracted for, charged or received under this Note or any Debt Document which are made for the purpose of determining whether such rate exceeds the maximum lawful contract rate, shall be made, to the extent permitted by applicable law, by amortizing, prorating, allocating and spreading in equal parts during the period of the full stated term of the indebtedness evidenced hereby, all interest at any time contracted for, charged or received from Maker or otherwise by Payee in connection with such indebtedness; provided, however, that if any applicable state law is amended or the law of the United States of America preempts any applicable state law, so that it becomes lawful for Payee to receive a greater interest per annum rate than is presently allowed, Maker agrees that, on the effective date of such amendment or preemption, as the case may be, the lawful maximum hereunder shall be increased to the maximum interest per annum rate allowed by the amended state law or the law of the United States of America.

Maker hereby consents to any and all extensions of time, renewals, waivers or modifications of, and all substitutions or releases of, security or of any party primarily or secondarily liable on this Note or any other Debt Document or any term and provision of either, which may be made, granted or consented to by Payee, and agrees that suit may be brought and maintained against Maker and/or any and all sureties, endorsers, guarantors or any others who may at any time become liable for payments and performance under this Note and any other Debt Documents (each such person, other than Maker, an "**Obligor**"), at the election of Payee without joinder of any other as a party thereto, and that Payee shall not be required first to foreclose, proceed against, or exhaust any security hereof in order to enforce payment of this Note. Maker hereby waives presentment, demand for payment, notice of nonpayment, protest, notice of protest, notice of dishonor, and all other notices in connection herewith, as well as filing of suit (if permitted by law) and diligence in collecting this Note or enforcing any of the security hereof, and agrees to pay (if permitted by law) all expenses incurred in collection, including Payee's actual attorneys' fees.

THIS NOTE SHALL BE CONSTRUED IN ACCORDANCE WITH AND GOVERNED BY THE LAWS OF THE STATE OF DELAWARE.

EACH OF MAKER AND PAYEE IRREVOCABLY SUBMITS TO THE EXCLUSIVE JURISDICTION OF THE STATE AND FEDERAL COURTS LOCATED IN THE STATE OF DELAWARE TO HEAR AND DETERMINE ANY SUIT, ACTION OR PROCEEDING AND TO SETTLE ANY DISPUTES, WHICH MAY ARISE OUT OF OR IN CONNECTION HEREWITH AND WITH THE DEBT DOCUMENTS (COLLECTIVELY, THE "PROCEEDINGS"), AND EACH OF MAKER AND PAYEE FURTHER IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE TO REMOVE ANY SUCH PROCEEDINGS FROM ANY SUCH COURT (EVEN IF REMOVAL IS SOUGHT TO ANOTHER OF THE ABOVE-NAMED COURTS). EACH OF MAKER AND PAYEE IRREVOCABLY WAIVES ANY OBJECTION WHICH IT MIGHT NOW OR HEREAFTER HAVE TO THE ABOVE-NAMED COURTS BEING NOMINATED AS THE EXCLUSIVE FORUM TO HEAR AND DETERMINE ANY SUCH PROCEEDINGS AND AGREES NOT TO CLAIM THAT IT IS NOT PERSONALLY SUBJECT TO THE JURISDICTION OF THE ABOVE-NAMED COURTS FOR ANY REASON WHATSOEVER, THAT IT OR ITS PROPERTY IS IMMUNE FROM LEGAL PROCESS FOR ANY REASON WHATSOEVER, THAT ANY SUCH COURT IS NOT A CONVENIENT OR APPROPRIATE FORUM IN EACH CASE WHETHER ON THE GROUNDS OF VENUE OR FORUM NON-CONVENIENS OR OTHERWISE. EACH OF MAKER AND PAYEE ACKNOWLEDGES THAT BRINGING ANY SUCH SUIT, ACTION OR PROCEEDING IN ANY COURT OTHER THAN THE COURTS SET FORTH ABOVE WILL CAUSE IRREPARABLE HARM TO THE OTHER PARTY WHICH COULD NOT ADEQUATELY BE COMPENSATED BY MONETARY DAMAGES, AND, AS SUCH, EACH OF MAKER AND PAYEE AGREES THAT, IN ADDITION TO ANY OF THE REMEDIES TO WHICH THE OTHER PARTY MAY BE ENTITLED AT LAW OR IN EQUITY, SUCH PARTY WILL BE ENTITLED TO AN INJUNCTION OR INJUNCTIONS (WITHOUT THE POSTING OF ANY BOND AND WITHOUT PROOF OF ACTUAL DAMAGES) TO ENJOIN THE PROSECUTION OF ANY SUCH PROCEEDINGS IN ANY OTHER COURT. Notwithstanding the foregoing, each of Maker and Payee shall have the right to apply to a court of competent jurisdiction in the United States of America or abroad for equitable relief as is necessary to preserve, protect and enforce its respective rights under this Note and any other Debt Document, including, but not limited to orders of attachment or injunction necessary to maintain the status quo pending litigation or to enforce judgments against Maker, any Obligor or the collateral pledged to Payee pursuant to any Debt Document or to gain possession of such collateral. **EACH OF MAKER AND PAYEE HEREBY UNCONDITIONALLY WAIVES ITS RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF, DIRECTLY OR INDIRECTLY, THIS NOTE, ANY DEBT DOCUMENTS, ANY DEALINGS BETWEEN MAKER AND PAYEE RELATING TO THE SUBJECT MATTER OF THIS TRANSACTION OR ANY RELATED TRANSACTIONS, AND/OR THE RELATIONSHIP THAT IS BEING ESTABLISHED BETWEEN MAKER AND PAYEE. THE SCOPE OF THIS WAIVER IS INTENDED TO BE ALL ENCOMPASSING OF ANY AND ALL DISPUTES THAT MAY BE FILED IN ANY COURT (INCLUDING, WITHOUT LIMITATION, CONTRACT CLAIMS, TORT CLAIMS, BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW AND STATUTORY CLAIMS.) THIS WAIVER IS IRREVOCABLE MEANING THAT IT MAY NOT BE MODIFIED EITHER ORALLY OR IN WRITING, AND THE WAIVER SHALL APPLY TO ANY SUBSEQUENT AMENDMENTS, RENEWALS, SUPPLEMENTS OR MODIFICATIONS TO THIS NOTE, ANY DEBT DOCUMENTS, OR TO ANY OTHER DOCUMENTS OR AGREEMENTS RELATING TO THIS TRANSACTION OR ANY RELATED TRANSACTION. IN THE EVENT OF LITIGATION, THIS NOTE MAY BE FILED AS A WRITTEN CONSENT TO A TRIAL BY THE COURT.**

This Note and the other Debt Documents constitute the entire agreement of Maker and Payee with respect to the subject matter hereof and supersede all prior understandings, agreements and representations, express or implied.

No variation or modification of this Note, or any waiver of any of its provisions or conditions, shall be valid unless in writing and signed by an authorized representative of Maker and Payee. Any such waiver, consent, modification or change shall be effective only in the specific instance and for the specific purpose given.

Payment Authorization

Payee is hereby directed and authorized by Maker to advance and/or apply the proceeds of the loan as evidenced by this Note to the following parties in the stipulated amounts as set forth below:

Company Name	Address	Amount
IDERA PHARMACEUTICALS, INC.	**345 VASSAR STREET, CAMBRIDGE, MA**	**$1,277,936.44**
GENERAL ELECTRIC (INTERIM RENT)	**83 WOOSTER HEIGHTS RD, DANBURY,CT**	**$7,578.41**
GENERAL ELECTRIC (ADVANCE RENT)	**83 WOOSTER HEIGHTS RD, DANBURY, CT**	**$27,016.04***

***APPLED $6,562.65 TO ADVANCE RENT FROM GOOD FAITH DEPOSIT**

Any provision in this Note or any of the other Debt Documents which is in conflict with any statute, law or applicable rule shall be deemed omitted, modified or altered to conform thereto.

Idera Pharmaceuticals, Inc.

By: /S/ ROBERT G. ANDERSEN

Name: Robert G. Andersen

Title: CFO, VP Operations

Federal Tax ID #: 04-3072298

Address: 345 Vassar Street, Cambridge, MA 02139

Exhibit 10.3

MASTER SECURITY AGREEMENT
dated as of April 23, 2007 ("Agreement")

THIS AGREEMENT is between General Electric Capital Corporation (together with its successors and assigns, if any, "Secured Party") and Idera Pharmaceuticals, Inc. ("Debtor"). Secured Party has an office at 83 Wooster Heights Road, Danbury, CT 06810. Debtor is a corporation organized and existing under the laws of the state of Delaware ("the State"). Debtor's mailing address and chief place of business is 345 Vassar St, Cambridge, MA 02139.

1. CREATION OF SECURITY INTEREST.

Debtor grants to Secured Party, its successors and assigns, a security interest in and against all property listed on any collateral schedule now or in the future annexed to or made a part of this Agreement ("Collateral Schedule"), and in and against all additions, attachments, accessories and accessions to such property, all substitutions, replacements or exchanges therefor, and all insurance and/or other proceeds thereof (all such property is individually and collectively called the "Collateral"). This security interest is given to secure the payment and performance of all debts, obligations and liabilities of any kind whatsoever of Debtor to Secured Party, now existing or arising in the future, including but not limited to the payment and performance of certain Promissory Notes from time to time identified on any Collateral Schedule (collectively "Notes" and each a "Note"), and any renewals, extensions and modifications of such debts, obligations and liabilities (such Notes, debts, obligations and liabilities are called the "Indebtedness").

2. REPRESENTATIONS, WARRANTIES AND COVENANTS OF DEBTOR.

Debtor represents, warrants and covenants as of the date of this Agreement and as of the date of each Collateral Schedule that:

(a) Debtor's exact legal name is as set forth in the preamble of this Agreement and Debtor is, and will remain, duly organized, existing and in good standing under the laws of the State set forth in the preamble of this Agreement, has its chief executive offices at the location specified in the preamble, and is, and will remain, duly qualified and licensed in every jurisdiction wherever necessary to carry on its business and operations;

(b) Debtor has adequate power and capacity to enter into, and to perform its obligations under this Agreement, each Note and any other documents evidencing, or given in connection with, any of the Indebtedness (all of the foregoing are called the "Debt Documents");

(c) This Agreement and the other Debt Documents have been duly authorized, executed and delivered by Debtor and constitute legal, valid and binding agreements enforceable in accordance with their terms, except to the extent that the enforcement of remedies may be limited under applicable bankruptcy and insolvency laws;

(d) No approval, consent or withholding of objections is required from any governmental authority or instrumentality with respect to the entry into, or performance by Debtor of any of the Debt Documents, except any already obtained;

(e) The entry into, and performance by, Debtor of the Debt Documents will not (i) violate any of the organizational documents of Debtor or any judgment, order, law or regulation applicable to Debtor, or (ii) result in any breach of or constitute a default under any contract to which Debtor is a party, or result in the creation of any lien, claim or encumbrance on any of Debtor's property (except for liens in favor of Secured Party) pursuant to any indenture, mortgage, deed of trust, bank loan, credit agreement, or other agreement or instrument to which Debtor is a party;

(f) There are no suits or proceedings pending in court or before any commission, board or other administrative agency against or affecting Debtor which could, in the aggregate, have a material adverse effect on Debtor, its business or operations, or its ability to perform its obligations under the Debt Documents, nor does Debtor have reason to believe that any such suits or proceedings are threatened;

(g) All financial statements delivered to Secured Party in connection with the Indebtedness have been prepared in accordance with generally accepted accounting principles, and since the date of the most recent financial statement, there has been no material adverse change in Debtors financial condition;

(h) The Collateral is not, and will not be, used by Debtor for personal, family or household purposes;

(i) The Collateral is, and will remain, in good condition and repair (normal wear and tear excepted) and Debtor will not be negligent in its care and use;

(j) Debtor is, and will remain, the sole and lawful owner, and in possession of, the Collateral, and has the sole right and lawful authority to grant the security interest described in this Agreement;

(k) The Collateral is, and will remain, free and clear of all liens, claims and encumbrances of any kind whatsoever, except for (i) liens in favor of Secured Party, (ii) liens for taxes not yet due or for taxes being contested in good faith and which do not involve, in the judgment of Secured Party, any risk of the sale, forfeiture or loss of any of the Collateral and with respect to which adequate reserves have been set aside for the payment thereof in accordance with GAAP, and (iii) inchoate materialmen's, mechanic's, repairmen's and similar liens arising by operation of law in the normal course of business for amounts which are not delinquent (all of such liens are called "Permitted Liens"); and

(l) Debtor is and will remain in full compliance with all laws and regulations applicable to it including, without limitation, (i) ensuring that no person who owns a controlling interest in or otherwise controls Debtor is or shall be (Y) listed on the Specially Designated Nationals and Blocked Person List maintained by the Office of Foreign Assets Control ("OFAC"), Department of the Treasury, and/or any other similar lists maintained by OFAC pursuant to any authorizing statute, Executive Order or regulation or (Z) a person designated under Section 1(b), (c) or (d) of Executive Order No. 13224 (September 23, 2001), any related enabling legislation or any other similar Executive Orders, and (ii) compliance with all applicable Bank Secrecy Act ("BSA") laws, regulations and government guidance on BSA compliance and on the prevention and detection of money laundering violations.

3. COLLATERAL.

(a) Until the declaration of any default, Debtor shall remain in possession of the Collateral; except that Secured Party shall have the right to possess (i) any chattel paper or instrument that constitutes a part of the Collateral, and (ii) any other Collateral in which Secured Party's security interest may be perfected only by possession. Secured Party may inspect any of the Collateral during normal business hours after giving Debtor reasonable prior notice. If Secured Party asks, Debtor will promptly notify Secured Party in writing of the location of any Collateral.

(b) Debtor shall (i) use the Collateral only in its trade or business, (ii) maintain all of the Collateral in good operating order and repair, normal wear and tear excepted, (iii) use and maintain the Collateral only in compliance with manufacturers recommendations and all applicable laws, and (iv) keep all of the Collateral free and clear of all liens, claims and encumbrances (except for Permitted Liens).

(c) Secured Party does not authorize and Debtor agrees it shall not (i) part with possession of any of the Collateral (except to Secured Party or for maintenance and repair), (ii) remove any of the Collateral from the continental United States, or (iii) sell, rent, lease, mortgage, license, grant a security interest in or otherwise transfer or encumber (except for Permitted Liens) any of the Collateral.

(d) Debtor shall pay promptly when due all taxes, license fees, assessments and public and private charges levied or assessed on any of the Collateral, on its use, or on this Agreement or any of the other Debt Documents. At its option, Secured Party may discharge taxes, liens, security interests or other encumbrances that remain outstanding for more than sixty (60) days on the Collateral and may pay for the maintenance, insurance and preservation of the Collateral and effect compliance with the terms of this Agreement or any of the other Debt Documents. Debtor agrees to reimburse Secured Party, on demand, all costs and expenses incurred by Secured Party in connection with such payment or performance and agrees that such reimbursement obligation shall constitute Indebtedness.

(e) Debtor shall, at all times, keep accurate and complete records of the Collateral, and Secured Party shall have the right to inspect and make copies of all of Debtor's books and records relating to the Collateral during normal business hours, after giving Debtor reasonable prior notice.

(f) Debtor agrees and acknowledges that any third person who may at any time possess all or any portion of the Collateral shall be deemed to hold, and shall hold, the Collateral as the agent of, and as pledge holder for, Secured Party. Secured Party may at any time give notice to any third person, described in the preceding sentence, notifying Debtor, that such third person is holding the Collateral as the agent of, and as pledge holder for, the Secured Party.

4. INSURANCE.

(a) Debtor shall at all times bear the entire risk of any loss, theft, damage to, or destruction of, any of the Collateral from any cause whatsoever.

(b) Debtor shall maintain and keep in full force and effect, with financially sound and reputable insurance companies reasonably acceptable to the Secured Party, insurance in such amounts and covering such risks (including, without limitation, risk of fire, public liability, property damage, business interruption and workmen's compensation) as is usually carried by entities engaged in similar businesses and owning similar properties in the same general areas in which the debtor operates, all policies of insurance to be in form and substance reasonably satisfactory to the Secured Party. Such insurance shall include insurance covering the Collateral against risk of loss or damage by fire, theft, and such other casualties as the Lender may require. The insurance coverage shall be in an amount no less than the full replacement value of the Collateral, and deductible amounts, insurers and policies shall be acceptable to Secured Party, which acceptance shall not be unreasonable withheld. Debtor shall deliver to Secured Party policies or certificates of insurance evidencing such coverage. Each policy shall name Secured Party as additional insured and lender's loss payee, shall not be subject to co-insurance, and shall provide that coverage may not be canceled or altered by the insurer except upon thirty (30) days prior written notice to Secured Party. Debtor appoints Secured Party as its attorney-in-fact to make proof of loss, claim for insurance and adjustments with insurers, and to receive payment of and execute or endorse all documents, checks or drafts in connection with insurance payments for loss or damage to Collateral. Secured Party shall not have authority to act as Debtor's attorney-in-fact unless Debtor is in default. Proceeds of insurance shall be applied, at the option of Secured Party, to repair or replace the Collateral or to reduce any of the Indebtedness.

5. REPORTS.

(a) Debtor shall promptly notify Secured Party of (i) any change in the name of Debtor, (ii) any change in the state of its incorporation, organization or registration, (iii) any relocation of its chief executive offices, (iv) any relocation of any of the Collateral, (v) any of the Collateral being lost, stolen, missing, destroyed, materially damaged or worn out, or (vi) any lien, claim or encumbrance other than Permitted Liens attaching to or being made against any of the Collateral.

(b) Debtor will deliver to Secured Party financial statements as follows. If Debtor is a privately held company, then Debtor agrees to provide monthly financial statements, certified by Debtor's president or chief financial officer including a balance sheet, statement of operations and cash flow statement within 30 days of each month end and its complete audited annual financial statements, certified by a recognized firm of certified public accountants, within 120 days of fiscal year end or at such time as Debtor's Board of Directors receives the audit. If Debtor is a publicly held company, then Debtor agrees to provide quarterly unaudited statements and annual audited statements, certified by a recognized firm of certified public accountants, within 10 days after the statements are provided to the Securities and Exchange Commission ("SEC"); provided that such financial statements shall be deemed delivered upon the posting by Debtor of such statements to EDGAR or similar platform provided by the Securities Exchange Commission; provided further that if Secured Party shall not have access to such posting or for any other reason cannot access the statements, Debtor shall furnish the relevant financial statements to Secured Party immediately upon its request. All such statements are to be prepared using generally accepted accounting principles ("GAAP") and, if Debtor is a publicly held company, are to be in compliance with SEC requirements.

6. FURTHER ASSURANCES.

(a) Debtor shall, upon request of Secured Party, furnish to Secured Party such further information, execute and deliver to Secured Party such documents and instruments (including, without limitation, Uniform Commercial Code financing statements) and shall do such other acts and things as Secured Party may at any time reasonably request relating to the perfection or protection of the security interest created by this Agreement or for the purpose of carrying out the intent of this Agreement. Without limiting the foregoing, Debtor shall cooperate and do all acts deemed necessary for Secured Party to continue in Secured Party a perfected first security interest in the Collateral, and shall obtain and furnish to Secured Party any subordinations, releases, landlord waivers, lessor waivers, mortgagee waivers, or control agreements, and similar documents as may be from time to time requested by, and in form and substance reasonably satisfactory to, Secured Party.

(b) Debtor authorizes Secured Party to file a financing statement and amendments thereto describing the Collateral and containing any other information required by the applicable Uniform Commercial Code. During the term of this Agreement, Debtor irrevocably grants to Secured Party the power to sign Debtor's name and generally to act on behalf of Debtor to execute and file applications for title, transfers of title, financing statements, notices of lien and other documents pertaining to any or all of the Collateral; this power is coupled with Secured Party's interest in the Collateral. Debtor shall, if any certificate of title be required or permitted by law for any of the Collateral, obtain and promptly deliver to Secured Party such certificate showing the lien of this Agreement with respect to the Collateral. Debtor ratifies its prior authorization for Secured Party to file financing statements and amendments thereto describing the Collateral and containing any other information required by the Uniform Commercial Code if filed prior to the date hereof.

(c) Debtor shall indemnify and defend the Secured Party, its successors and assigns, and their respective directors, officers and employees, from and against all third party claims, actions and suits (including, without limitation, related attorneys' fees) of any kind whatsoever arising, directly or indirectly, in connection with any of the Collateral, this agreement, any other Debt Document, and the transactions contemplated hereby or thereby, except for claims, actions or suits arising from the gross negligence or willful misconduct of Secured Party or its successors or assigns and their respective directors, officers and employees as determined by final judgment of a court of competent jurisdiction.

7. DEFAULT AND REMEDIES.

(a) Debtor shall be in default under this Agreement and each of the other Debt Documents if:

(i) Debtor breaches its obligation to pay when due any installment or other amount due or coming due under any of the Debt Documents and fails to cure the breach within fifteen (15) business days;

(ii) Debtor, without the prior written consent of Secured Party, attempts to or does sell, rent, lease, license, mortgage, grant a security interest in, or otherwise transfer or encumber (except for Permitted Liens) any of the Collateral;

(iii) Debtor breaches any of its insurance obligations under Section 4;

(iv) Debtor breaches any of its other obligations under any of the Debt Documents and fails to cure that breach within thirty (30) days after written notice from Secured Party;

(v) Any warranty, representation or statement made by Debtor in any of the Debt Documents or otherwise in connection with any of the Indebtedness shall be false or intentionally misleading in any material respect;

(vi) Any of the Collateral is subjected to attachment, execution, levy, seizure or confiscation in any legal proceeding or otherwise, or if any legal or administrative proceeding is commenced against Debtor or any of the Collateral, which in the good faith judgment of Secured Party subjects any of the Collateral to a material risk of attachment, execution, levy, seizure or confiscation and no bond is posted or protective order obtained to negate such risk;

(vii) Debtor breaches or is in default under any other agreement between Debtor and Secured Party;

(viii) Debtor or any guarantor or other obligor for any of the Indebtedness (collectively "Guarantor") dissolves, terminates its existence, becomes insolvent or ceases to do business as a going concern;

(ix) If Debtor or any Guarantor is a natural person, Debtor or any such Guarantor dies or becomes incompetent;

(x) A receiver is appointed for all or of any part of the property of Debtor or any Guarantor, or Debtor or any Guarantor makes any assignment for the benefit of creditors;

(xi) Debtor or any Guarantor files a petition under any bankruptcy, insolvency or similar law, or any such petition is filed against Debtor or any Guarantor and is not dismissed within forty-five (45) days;

(xii) Debtor's improper filing of an amendment or termination statement relating to a filed financing statement describing the Collateral, which could result in a material impairment of Lender's security interest in such Collateral;

(xiii) There is a material adverse change in the Debtor's business, operations, financial condition and prospects, taken as a whole, as determined in the reasonable judgment of Secured Party;

(xiv) Any Guarantor revokes or attempts to revoke its guaranty of any of the Indebtedness or fails to observe or perform any covenant, condition or agreement to be performed under any guaranty or other related document to which it is a party;

(xv) A default or breach occurs under any other agreement, document or instrument to which Debtor is a party that is not cured within any applicable grace period therefor, and such default or breach (i) involves the failure to make any payment when due in respect of any indebtedness or guaranteed indebtedness (other than the obligations owed under the Debt Documents) of Debtor in excess of $10,000 in the aggregate;

(xvi) At any time during the term of this Agreement Debtor experiences a change of control such that any person or entity acquires either more than 50% of the voting stock of Debtor or all or substantially all of Debtor's assets, in either case, without Secured Party's prior written consent, which shall not be unreasonably or untimely withheld.

(b) If Debtor is in default, the Secured Party, at its option, may declare any or all of the Indebtedness to be immediately due and payable, without demand or notice to Debtor or any Guarantor. The accelerated obligations and liabilities shall bear interest (both before and after any judgment) until paid in full at the lower of eighteen percent (18%) per annum or the maximum rate not prohibited by applicable law.

(c) After default, Secured Party shall have all of the rights and remedies of a Secured Party under the Uniform Commercial Code, and under any other applicable law. Without limiting the foregoing, Secured Party shall have the right to (i) notify any account debtor of Debtor or any obligor on any instrument which constitutes part of the Collateral to make payment to the Secured Party, (ii) with or without legal process, enter any premises where the Collateral may be and take possession of and remove the Collateral from the premises or store it on the premises, (iii) sell the Collateral at public or private sale, in whole or in part, and have the right to bid and purchase at said sale, each in accordance with the relevant terms set forth in the Uniform Commercial Code or (iv) lease or otherwise dispose of all or part of the Collateral, applying proceeds from such disposition to the obligations then in default. If requested by Secured Party, Debtor shall promptly assemble the Collateral and make it available to Secured Party at a place to be designated by Secured Party, which is reasonably convenient to both parties. Any notice that Secured Party is required to give to Debtor under the Uniform Commercial Code of the time and place of any public sale or the time after which any private sale or other intended disposition of the Collateral is to be made shall be deemed to constitute reasonable notice if such notice is delivered by certified mail to the last known address of Debtor at least ten (10) days prior to such action.

(d) Proceeds from any sale or lease or other disposition shall be applied: first, to all documented costs of repossession, storage, and disposition including without limitation attorneys', appraisers', and auctioneers' fees; second, to discharge the obligations then in default; third, to discharge any other Indebtedness of Debtor to Secured Party, whether as obligor, endorser, guarantor, surety or indemnitor; fourth, to expenses incurred in paying or settling liens and claims against the Collateral; and lastly, to Debtor, if there exists any surplus. Debtor shall remain fully liable for any deficiency of Indebtedness.

(e) Debtor agrees to pay all reasonable attorneys' fees and other fees, costs and expenses incurred by Secured Party (including, without limitation, the allocated cost of in-house legal counsel) in connection with the enforcement, assertion, defense or preservation of Secured Party's rights and remedies under this Agreement, or if prohibited by law, such lesser sum as may be permitted. Debtor further agrees that such fees and costs shall constitute Indebtedness.

(f) Secured Party's rights and remedies under this Agreement or otherwise arising are cumulative and may be exercised singularly or concurrently. Neither the failure nor any delay on the part of the Secured Party to exercise any right, power or privilege under this Agreement shall operate as a waiver, nor shall any single or partial exercise of any right, power or privilege preclude any other or further exercise of that or any other right, power or privilege. SECURED PARTY SHALL NOT BE DEEMED TO HAVE WAIVED ANY OF ITS RIGHTS UNDER THIS AGREEMENT OR UNDER ANY OTHER AGREEMENT, INSTRUMENT OR PAPER SIGNED BY DEBTOR UNLESS SUCH WAIVER IS EXPRESSED IN WRITING AND SIGNED BY SECURED PARTY. A waiver on any one occasion shall not be construed as a bar to or waiver of any right or remedy on any future occasion.

(g) DEBTOR AND SECURED PARTY UNCONDITIONALLY WAIVE THEIR RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS AGREEMENT, ANY OF THE OTHER DEBT DOCUMENTS, ANY OF THE INDEBTEDNESS SECURED HEREBY, ANY DEALINGS BETWEEN DEBTOR AND SECURED PARTY RELATING TO THE SUBJECT MATTER OF THIS TRANSACTION OR ANY RELATED TRANSACTIONS, AND/OR THE RELATIONSHIP THAT IS BEING ESTABLISHED BETWEEN DEBTOR AND SECURED PARTY. THE SCOPE OF THIS WAIVER IS INTENDED TO BE ALL ENCOMPASSING OF ANY AND ALL DISPUTES THAT MAY BE FILED IN ANY COURT. THIS WAIVER IS IRREVOCABLE. THIS WAIVER MAY NOT BE MODIFIED EITHER ORALLY OR IN WRITING. THE WAIVER ALSO SHALL APPLY TO ANY SUBSEQUENT AMENDMENTS, RENEWALS, SUPPLEMENTS OR MODIFICATIONS TO THIS AGREEMENT, ANY OTHER DEBT DOCUMENTS, OR TO ANY OTHER DOCUMENTS OR AGREEMENTS RELATING TO THIS TRANSACTION OR ANY RELATED TRANSACTION. THIS AGREEMENT MAY BE FILED AS A WRITTEN CONSENT TO A TRIAL BY THE COURT.

8. MISCELLANEOUS.

(a) This Agreement, any Note and/or any of the other Debt Documents may be assigned, in whole or in part, by Secured Party without notice to Debtor, and Debtor agrees not to assert against any such assignee, or assignee's assigns, any defense, set-off, recoupment claim or counterclaim which Debtor has or may at any time have against Secured Party for any reason whatsoever; provided that this provision shall not affect any defense, set-off, recoupment claim or counterclaim which Debtor has or may at any time have directly against Secured Party. Debtor agrees that if Debtor receives written notice of an assignment from Secured Party, Debtor will pay all amounts payable under any assigned Debt Documents to such assignee or as instructed by Secured Party. Debtor also agrees to confirm in writing receipt of the notice of assignment as may be reasonably requested by Secured Party or assignee.

(b) All notices to be given in connection with this Agreement shall be in writing, shall be addressed to the parties at their respective addresses set forth in this Agreement (unless and until a different address may be specified in a written notice to the other party), and shall be deemed given (i) on the date of receipt if delivered in hand or by facsimile transmission, (ii) on the next business day after being sent by express mail, and (iii) on the fourth business day after being sent by regular, registered or certified mail. As used herein, the term "business day" shall mean and include any day other than Saturdays, Sundays, or other days on which commercial banks in New York, New York are required or authorized to be closed.

(c) Debtor agrees to pay all reasonable attorneys' fees and all other fees, costs and expenses incurred by Secured Party (including, without limitation, the allocated cost of in-house legal counsel) in connection with the preparation, negotiation and closing of the transactions contemplated in this Agreement and all related documents and schedules and in connection with the continued administration thereof, including, without limitation, any amendments, modifications, consents or waivers thereof and in connection with the protection, monitoring or preservation of the Collateral. Debtor further agrees that such fees and costs shall constitute Indebtedness.

(d) Secured Party may correct patent errors and fill in all blanks in this Agreement or in any Collateral Schedule consistent with the agreement of the parties.

(e) Time is of the essence of this Agreement. This Agreement shall be binding, jointly and severally, upon all parties described as the "Debtor" or "Secured Party" and their respective heirs, executors, representatives, successors and assigns, and shall inure to the benefit of their respective successors and assigns.

(f) This Agreement and its Collateral Schedules constitute the entire agreement between the parties with respect to the subject matter of this Agreement and supersede all prior understandings (whether written, verbal or implied) with respect to such subject matter. THIS AGREEMENT AND ITS COLLATERAL SCHEDULES SHALL NOT BE CHANGED OR TERMINATED ORALLY OR BY COURSE OF CONDUCT, BUT ONLY BY A WRITING SIGNED BY BOTH PARTIES. Section headings contained in this Agreement have been included for convenience only, and shall not affect the construction or interpretation of this Agreement.

(g) This Agreement shall continue in full force and effect until all of the Indebtedness has been indefeasibly paid in full to Secured Party or its assignee. The surrender, upon payment or otherwise, of any Note or any of the other documents evidencing any of the Indebtedness shall not affect the right of Secured Party to retain the Collateral for such other Indebtedness as may then exist. This Agreement shall automatically be reinstated if Secured Party is ever required to return or restore the payment of all or any portion of the Indebtedness (all as though such payment had never been made).

(h) [Intentionally omitted].

(i) THIS AGREEMENT AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES HEREUNDER SHALL IN ALL RESPECTS BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH, THE INTERNAL LAWS OF THE STATE OF DELAWARE (WITHOUT REGARD TO THE CONFLICT OF LAWS PRINCIPLES OF SUCH STATE), INCLUDING ALL MATTERS OF CONSTRUCTION, VALIDITY AND PERFORMANCE, REGARDLESS OF THE LOCATION OF THE COLLATERAL.

(j) In the event either party hereunder shall be delayed or hindered in or prevented from the performance of any act required hereunder by reasons of strike, lockouts, labor troubles, inability to procure materials, failure of power or restrictive government or judicial orders, or decrees, riots, insurrection, war, acts of God, inclement weather or other similar reason or cause beyond that party's control, then performance of such act shall be excused for the period of such delay; provided, however, that such excused performance shall not exceed fifteen (15) business days.

IN WITNESS WHEREOF, Debtor and Secured Party, intending to be legally bound hereby, have duly executed this Agreement in one or more counterparts, each of which shall be deemed to be an original, as of the day and year first aforesaid.

SECURED PARTY:

General Electric Capital Corporation

By: /S/ DANIJELA GJENERO
Name: Danijela Gjenero
Title: Duly Authorized Signatory

DEBTOR:

Idera Pharmaceuticals, Inc.

By: /S/ ROBERT ANDERSON
Name: Robert G. Anderson
Title: CFO, VP Operations

By: /S/ SUDHIR AGRAWAL
Name : Sudhir Agrawal
Title: CEO, CSO

Exhibit 10.4

IDERA PHARMACEUTICALS, INC.

Restricted Stock Agreement

Name of Recipient: ________________________________

Number of shares of restricted common stock awarded: ________________________________

Grant Date: ________________________________

Idera Pharmaceuticals, Inc. (the "Company") has selected you to receive the restricted stock award described above, which is subject to the provisions of the Company's 2005 Stock Incentive Plan (the "Plan") and the terms and conditions contained in this Restricted Stock Agreement. Please confirm your acceptance of this restricted stock award and of the terms and conditions of this Agreement by signing a copy of this Agreement where indicated below.

IDERA PHARMACEUTICALS, INC.

By: ________________________________
Name:
Title:

Accepted and Agreed:

____

[insert name of recipient]

IDERA PHARMACEUTICALS, INC.

Restricted Stock Agreement

The terms and conditions of the award of shares of restricted common stock of the Company (the "Restricted Shares") made to the Recipient, as set forth on the cover page of this Agreement, are as follows:

1. Issuance of Restricted Shares.

(a) The Restricted Shares are issued to the Recipient, effective as of the Grant Date (as set forth on the cover page of this Agreement), in consideration of employment services rendered and to be rendered by the Recipient to the Company.

(b) As promptly as practicable following the Grant Date, the Company shall issue one or more certificates in the name of the Recipient for the Restricted Shares. Such certificate(s) shall initially be held on behalf of the Recipient by the Secretary of the Company. Following the vesting of any Restricted Shares pursuant to Section 2 below, the Secretary shall, if requested by the Recipient, deliver to the Recipient a certificate representing the vested Restricted Shares. The Recipient agrees that the Restricted Shares shall be subject to the forfeiture provisions set forth in Section 3 of this Agreement and the restrictions on transfer set forth in Section 4 of this Agreement.

2. Vesting Schedule.

Unless otherwise provided in this Agreement or the Plan, the Restricted Shares shall vest in accordance with the following vesting schedule: ___% of the total number of Restricted Shares shall vest on the first anniversary of the Grant Date and ___% of the total number of Restricted Shares shall vest at the end of each successive ___-month period following the first anniversary of the Grant Date, through and including the ___anniversary of the Grant Date. Any fractional number of Restricted Shares resulting from the application of the foregoing percentages shall be rounded down to the nearest whole number of Restricted Shares.

3. Forfeiture of Unvested Restricted Shares Upon Employment Termination.

In the event that the Recipient ceases to be an Eligible Participant (as defined below) for any reason or no reason, with or without cause, all of the Restricted Shares that are unvested as of the time of such employment termination shall be forfeited immediately and automatically to the Company, without the payment of any consideration to the Recipient, effective as of such termination of employment. The Recipient hereby authorizes the Company to take any actions necessary or appropriate to cancel any certificate(s) representing forfeited Restricted Shares and transfer ownership of such forfeited Restricted Shares to the Company; and if the Company or its transfer agent requires an executed stock power or similar confirmatory instrument in connection with such cancellation and transfer, the Recipient shall promptly execute and deliver the same to the Company. The Recipient shall have no further rights with respect to any Restricted Shares that are so forfeited. If the Recipient is employed by a subsidiary of the Company, any references in this Agreement to employment with the Company shall instead be deemed to refer to employment with such subsidiary. For purposes hereof, an “Eligible Participant” means an employee, director or officer of, or a consultant or advisor to, the Company.

4. Restrictions on Transfer.

The Recipient shall not sell, assign, transfer, pledge, hypothecate or otherwise dispose of, by operation of law or otherwise (collectively “transfer”) any Restricted Shares, or any interest therein, until such Restricted Shares have vested, except that the Recipient may transfer such Restricted Shares: (a) to or for the benefit of any spouse, children, parents, uncles, aunts, siblings, grandchildren and any other relatives approved by the Compensation Committee (collectively, “Approved Relatives”) or to a trust established solely for the benefit of the Recipient and/or Approved Relatives, provided that such Restricted Shares shall remain subject to this Agreement (including without limitation the forfeiture provisions set forth in Section 3 and the restrictions on transfer set forth in this Section 4) and such permitted transferee shall, as a condition to such transfer, deliver to the Company a written instrument confirming that such transferee shall be bound by all of the terms and conditions of this Agreement; or (b) as part of the sale of all or substantially all of the shares of capital stock of the Company (including pursuant to a merger or consolidation). The Company shall not be required (i) to transfer on its books any of the Restricted Shares which have been transferred in violation of any of the provisions of this Agreement or (ii) to treat as owner of such Restricted Shares or to pay dividends to any transferee to whom such Restricted Shares have been transferred in violation of any of the provisions of this Agreement.

5. Restrictive Legends.

All certificates representing Restricted Shares shall have affixed thereto a legend in substantially the following form, in addition to any other legends that may be required under applicable law:

> “These shares of stock are subject to forfeiture provisions and restrictions on transfer set forth in a certain Restricted Stock Agreement between the corporation and the registered owner of these shares (or his or her predecessor in interest), and such Agreement is available for inspection without charge at the office of the Secretary of the corporation.”

6. Rights as a Shareholder.

Except as otherwise provided in this Agreement, for so long as the Recipient is the registered owner of the Restricted Shares, the Recipient shall have all rights as a shareholder with respect to the Restricted Shares, whether vested or unvested, including, without limitation, any rights to receive dividends and distributions with respect to the Restricted Shares and to vote the Restricted Shares and act in respect of the Restricted Shares at any meeting of shareholders. Recipient will be entitled to all ordinary cash dividends paid with respect to the Restricted Shares. If any dividends or distribution are paid in shares, or consist of a dividend or distribution to holders of Common Stock other than an ordinary cash dividend, the shares, cash or other property will be subject to the same restrictions on transferability and forefeitability as the shares of Restricted Stock with respect to which they were paid. Each dividend payment will be made no later than the end of the calendar year in which the dividends are paid to shareholders of that class of stock or, if later, the 15th day of the third month following the date the dividends are paid to shareholders of that class of stock.

7. Provisions of the Plan.

This Agreement is subject to the provisions of the Plan, a copy of which is furnished to the Recipient with this Agreement. As provided in the Plan, upon the occurrence of a Reorganization Event (as defined in the Plan), the rights of the Company hereunder (including the right to receive forfeited Restricted Shares) shall inure to the benefit of the Company's successor and, unless the Board determines otherwise, shall apply to the cash, securities or other property which the Restricted Shares were converted into or exchanged for pursuant to such Reorganization Event in the same manner and to the same extent as they applied to the Restricted Shares under this Agreement.

8. Tax Matters.

(a) Acknowledgments; Section 83(b) Election. The Recipient acknowledges that he or she is responsible for obtaining the advice of the Recipient's own tax advisors with respect to the acquisition of the Restricted Shares and the Recipient is relying solely on such advisors and not on any statements or representations of the Company or any of its agents with respect to the tax consequences relating to the Restricted Shares. The Recipient understands that the Recipient (and not the Company) shall be responsible for the Recipient's tax liability that may arise in connection with the acquisition, vesting and/or disposition of the Restricted Shares. The Recipient acknowledges that he or she has been informed of the availability of making an election under Section 83(b) of the Internal Revenue Code, as amended, with respect to the issuance of the Restricted Shares and that the Recipient has decided not to file a Section 83(b) election.

(b) Withholding. The Recipient acknowledges and agrees that the Company has the right to deduct from payments of any kind otherwise due to the Recipient any federal, state, local or other taxes of any kind required by law to be withheld with respect to the vesting of the Restricted Shares. On each date on which Restricted Shares vest, the Company shall deliver written notice to the Recipient of the amount of withholding taxes due with respect to the vesting of the Restricted Shares that vest on such date; provided, however, that the total tax withholding cannot exceed the Company's minimum statutory withholding obligations (based on minimum statutory withholding rates for federal and state tax purposes, including payroll taxes, that are applicable to such supplemental taxable income). The Recipient shall satisfy such tax withholding obligations by making a cash payment to the Company on the date of vesting of the Restricted Shares, in the amount of the Company's withholding obligation in connection with the vesting of such Restricted Shares. The Recipient may, at the option of the Recipient, satisfy such tax withholding obligations by transferring to the Company, on each date on which Restricted Shares vest under this Agreement, such number of Restricted Shares that vest on such date as have a fair market value (calculated using the last reported sale price of the common stock of the Company on the American Stock Exchange on the trading date immediately prior to such vesting date) equal to the amount of the Company's tax withholding obligation in connection with the vesting of such Restricted Shares. To effect such delivery of Restricted Shares, the Recipient hereby authorizes the Company to take any actions necessary or appropriate to cancel any certificate(s) representing such Restricted Shares and transfer ownership of such Restricted Shares to the Company; and if the Company or its transfer agent requires an executed stock power or similar confirmatory instrument in connection with such cancellation and transfer, the Recipient shall promptly execute and deliver the same to the Company.

9. Miscellaneous.

(a) No Right to Continued Employment. The Recipient acknowledges and agrees that, notwithstanding the fact that the vesting of the Restricted Shares is contingent upon his or her continued employment by the Company, this Agreement does not constitute an express or implied promise of continued employment or confer upon the Recipient any rights with respect to continued employment by the Company.

(b) Governing Law. This Agreement shall be construed, interpreted and enforced in accordance with the internal laws of the Commonwealth of Massachusetts without regard to any applicable conflicts of laws provisions.

(c) Recipient's Acknowledgments. The Recipient acknowledges that he or she has read this Agreement, has received and read the Plan, and understands the terms and conditions of this Agreement and the Plan.

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, Sudhir Agrawal, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Idera 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)) 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 report is being prepared;

b) [Not Applicable]

c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this 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 change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) 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 the 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 over financial reporting.

/s/ SUDHIR AGRAWAL
Sudhir Agrawal
Chief Executive Officer

Dated: July 31, 2007

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, Robert G. Andersen certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Idera 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)) 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 report is being prepared;

b) [Not Applicable]

c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this 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 change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) 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 the 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 over financial reporting.

/s/ ROBERT G. ANDERSEN
Robert G. Andersen
Chief Financial Officer

Dated: July 31, 2007

EXHIBIT 32.1

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

In connection with the Quarterly Report on Form 10-Q of Idera Pharmaceuticals, Inc. (the "Company") for the period ended June 30, 2007 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, Sudhir Agrawal, Chief Executive Officer of the Company, hereby certifies, pursuant to 18 U.S.C. Section 1350, 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.

A signed original of this written statement has been provided to Idera Pharmaceuticals, Inc. and will be retained by Idera Pharmaceuticals, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

/s/ SUDHIR AGRAWAL
Sudhir Agrawal
Chief Executive Officer

Date: July 31, 2007

EXHIBIT 32.2

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

In connection with the Quarterly Report on Form 10-Q of Idera Pharmaceuticals, Inc. (the "Company") for the period ended June 30, 2007 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, Robert G. Andersen, Chief Financial Officer of the Company, hereby certifies, pursuant to 18 U.S.C. Section 1350, 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.

A signed original of this written statement has been provided to Idera Pharmaceuticals, Inc. and will be retained by Idera Pharmaceuticals, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

/s/ ROBERT G. ANDERSEN
Robert G. Andersen
Chief Financial Officer

Date: July 31, 2007