UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 8-K

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

Date of Report (Date of earliest event reported): February 27, 2008

Idera Pharmaceuticals, Inc.

(Exact name of Registrant as Specified in its Charter)

Delaware	001-31918	04-3072298
(State or Other Jurisdiction of Incorporation)	(Commission File Number)	(IRS Employer Identification No.)
167 Sidney Street, Cambridge, Massachusetts		02139
(Address of Principal Executive Offices)		Zip Code)

Registrant's telephone number, including area code: (617) 679-5500

(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (*see* General Instruction A.2. below):

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 2.02. Results of Operations and Financial Condition.

On March 4, 2008, Idera Pharmaceuticals, Inc. ("Idera") announced its financial results for the quarter and year ended December 31, 2007. The full text of the press release issued in connection with the announcement is filed as Exhibit 99.1 to this Current Report on Form 8-K and is incorporated herein by reference.

The information in Item 2.02 of this Form 8-K (including Exhibit 99.1) is being furnished and shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934 (the "Exchange Act") or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as expressly set forth by specific reference in such a filing.

Item 3.02 Unregistered Sales of Equity Securities.

On February 27, 2008, Idera issued 108,129 shares of its common stock to the holder of common stock purchase warrants upon the exercise of those common stock purchase warrants for an exercise price of $5.36 per share. As a result of the foregoing warrant exercises, Idera issued more than 1% of its outstanding shares of common stock in unregistered transactions upon exercises of warrants since the last periodic report that it filed with the Securities and Exchange Commission.

Including the issuance of the 108,129 shares referred to above, since November 13, 2007, Idera has issued a total of 320,210 shares of its common stock in unregistered sales of its equity securities, all of which were issued to holders of warrants in connection with the exercise by such warrant holders of outstanding Idera common stock purchase warrants. Idera issued the 320,210 shares for the following consideration:

- 106,534 shares were issued upon payment of a warrant exercise price of $5.20 per share;
- 108,129 shares were issued upon the payment of a warrant exercise price of $5.36 per share;
- 28,786 shares were issued upon the payment of a warrant exercise price of $5.84 per share;
- 67,762 shares were issued upon the payment of a warrant exercise price of $8.00 per share; and
- 8,999 shares were issued pursuant to the cashless exercise provisions of the warrants through the surrender of the right to purchase 15,540 shares.

Idera received approximately $1.8 million of cash proceeds in aggregate upon the exercise of the foregoing warrants.

The issuances of shares of Idera's common stock upon exercise of outstanding warrants described above were exempt from registration under the Securities Act of 1933 pursuant to an exemption from registration under Section 4(2) of the Securities Act of 1933, as amended, Rule 506 of Regulation D promulgated thereunder, and/or Regulation S promulgated thereunder as not involving a public offering. The shares of common stock issued by Idera upon these warrant exercises have been registered for resale by the holders under Idera's Registration Statements on Form S-3, File Nos. 333-133455, 333-119943 and 333-109630.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits

99.1*	Press release issued by Idera Pharmaceuticals, Inc. on March 4, 2008.

* Exhibit 99.1 relating to Item 2.02 shall be deemed to be furnished, and not filed.

SIGNATURE

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 hereunto duly authorized.

IDERA PHARMACEUTICALS, INC.

Date: March 4, 2008

By: /s/ Louis J. Arcudi, III
Louis J. Arcudi, III
Chief Financial Officer

Exhibit 99.1

FOR IMMEDIATE RELEASE

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Idera Pharmaceuticals Reports Financial Results for Fourth Quarter and Full Year Ended December 31, 2007

Cambridge, MA, March 4, 2008 — Idera Pharmaceuticals, Inc. (Nasdaq: IDRA) today reported financial results for the fourth quarter and full year ended December 31, 2007.

"During 2007 we made substantial progress in advancing our drug candidate pipeline and expanding the potential applications of our TLR-targeted compounds. We initiated a phase 1 clinical trial of our lead candidate for infectious diseases, IMO-2125, in patients with chronic hepatitis C virus infection. We entered into a collaboration with Merck KGaA for the use of our TLR9 agonists, including IMO-2055, for cancer treatment. Under our collaboration with Novartis for asthma and allergies, Novartis identified QAX935, a novel agonist of TLR9, as a lead compound for clinical evaluation. In addition, we advanced studies of our TLR antagonist candidates in preclinical models of autoimmune diseases including lupus and rheumatoid arthritis," said Sudhir Agrawal, D. Phil., Chief Executive Officer and Chief Scientific Officer. "Based on our accomplishments to date, we continue to make progress in achieving our long-term goal of realizing the broad potential of TLR-targeted candidates through our proprietary programs and partnered programs."

"With the receipt of $40.0 million in gross upfront payments in February 2008 under our agreement with Merck KGaA and the $23.7 million of cash and investments held at the end of 2007, we are in a strong financial position to advance our business objectives," said Lou Arcudi, Chief Financial Officer.

Fourth Quarter and Full Year Results

Fourth Quarter Results

The Company reported a net loss of $4.5 million or $0.21 per share for the three months ended December 31, 2007, compared to a net loss of $4.7 million, or $0.26 per share for the same period in 2006.

Total revenues for the three months ended December 31, 2007 were $2.2 million compared to $0.6 million for the same period in 2006. The increase in revenue primarily reflects a full quarter of license fee revenue and research reimbursements recognized under the Company's 2006 collaboration agreement with Merck & Co., Inc.

Research and development expenses for the three months ended December 31, 2007 totaled $3.9 million compared to $3.0 million for the same period in 2006. The increase in research and development expenses was primarily due to costs associated with the initiation of the IMO-2125 clinical trial, increased costs of the Company's non-clinical studies associated with IMO-2125, increased compensation costs to support the Merck & Co. collaboration, which costs are reimbursed by Merck & Co., and compensation costs associated with hiring additional personnel to support the Company's drug development efforts. The increase was offset, in part, by a decrease in IMO-2125 manufacturing costs.

General and administrative expenses for the three months ended December 31, 2007 were $3.1 million compared to $2.3 million for the same period in 2006. The increased expenses primarily reflect increased costs of professional and legal services and expenses associated with entering into the collaboration with Merck KGaA.

Full Year Results

For the year ended December 31, 2007, the Company's net loss was $13.2 million or $0.62 per share, compared to a net loss of $16.5 million, or $0.99 per share for 2006.

For the year ended December 31, 2007, revenues totaled $8.0 million compared to $2.4 million for 2006. The increase in revenue in 2007 primarily reflects a full year of license fee revenue and research reimbursements recognized under the 2006 collaboration agreement with Merck & Co.. The increase was partially offset by a decrease in license fee revenue recognized under the Company's collaboration agreement with Novartis that was signed in May 2005.

For the year ended December 31, 2007, research and development expenses totaled $13.2 million compared to $12.7 million for 2006. The increase in research and development expenses was primarily due to increased costs

associated with the Company's IMO-2125 clinical trial and non-clinical studies, increased compensation costs to support the Merck & Co. collaboration, which are reimbursed by Merck & Co., costs associated with hiring contract personnel to support the Company's drug development efforts and stock-based compensation. The 2007 increase was offset, in part, by lower external expenses associated with Investigational New Drug (IND) enabling studies related to IMO-2125 and a decrease in external expenses associated with IMO-2055 development.

For the year ended December 31, 2007, general and administrative expenses totaled $9.5 million compared to $6.3 million for 2006. The increased expenses primarily reflect an increase in the number of employees, higher stock-based compensation expense, higher professional fees associated with marketing research and legal services, costs associated with implementation of Sarbanes-Oxley Section 404 requirements, costs associated with moving to a new facility, costs accrued for payments to be made under the transition agreement with the Company's former Chief Financial Officer and expenses associated with entering into a collaboration with Merck KGaA. The Company expects costs relating to moving to the new facility, the transition agreement, certain of the costs associated with Sarbanes-Oxley compliance and costs associated with entering into the Merck KGaA collaboration to be non-recurring.

As of December 31, 2007, cash, cash equivalents and short-term investments totaled approximately $23.7 million compared to $38.2 million at December 31, 2006. The Company expects that based upon its current business plan, its current capital resources, together with the $40.0 million gross upfront payment received from Merck KGaA in February 2008, will be sufficient to fund operations through at least December 31, 2009.

2007 and Recent Highlights

Idera's Programs

Infectious diseases: IMO-2125 in Chronic Hepatitis C Virus Infection

In September 2007, the Company initiated a phase 1 trial evaluating IMO-2125, a TLR9 agonist, for the treatment of patients with chronic hepatitis C virus (HCV) infection who have failed to respond to previous combination therapy with ribavirin and pegylated interferon-alpha. The trial is designed to assess the safety and tolerability of IMO-2125 at four different dose levels as well as to determine the effect of IMO-2125 on HCV RNA levels and parameters of immune system activation. The trial is being conducted at five U.S. sites. The lead investigator of this trial is John McHutchison, M.D., of Duke University School of Medicine. The Company expects to have interim data from this ongoing phase 1 trial during the first half of 2009.

In September 2007, the Company made two presentations on preclinical data of TLR9 agonists that induce high levels of interferon-alpha during the 47th Interscience Conference on Antimicrobial Agents and Chemotherapy.

Autoimmune diseases: TLR antagonists

Using its chemistry-based drug discovery platform, the Company has designed and created novel DNA-based compounds to act as antagonists of TLR7 and TLR9. In 2007, the Company presented results from evaluation of its TLR antagonist candidates in preclinical models of autoimmune diseases, including lupus and rheumatoid arthritis. In February 2007, the Company made a presentation entitled "Novel Class of DNA-Based Compounds Act as Antagonists for TLR7 and 9: *In Vitro* and *In Vivo* Studies in MRL-lpr and NZBW/F1 Mouse Models", at the Keystone Symposia's Biology of B Cells in Health and Disease. In July 2007, the Company made a presentation entitled "A Novel Class of DNA-Based TLR Antagonists Ameliorates Collagen-Induced Arthritis in Mice", during the FASEB Summer Research Conference on Autoimmunity. The Company is conducting further studies to explore the potential of these compounds in preclinical models of multiple sclerosis and psoriasis.

The Company in 2008 expects to form a scientific advisory board with leading clinicians and researchers in the field of autoimmune diseases. With the assistance of this scientific advisory board, the Company expects to establish a clinical development strategy for its TLR antagonists in autoimmune diseases. In addition, the Company anticipates selecting a lead antagonist compound for initiation of IND-enabling studies in 2008.

Oncology: TLR7 and TLR8 agonists

Using its chemistry-based drug discovery platform, the Company has designed and created RNA-based compounds that act as agonists of TLR7 and TLR8. In August 2007, the Company published a paper entitled "Stabilized immune modulatory RNA compounds as agonists of Toll-like receptors 7 and 8" in the *Proceedings of National Academy of Sciences, U.S.A.* (Vol. 104: 13750-13755, 2007). During 2008 the Company intends to continue its evaluation of these compounds in preclinical models of cancer and expects to present data at upcoming scientific conferences.

Business Highlights

Collaboration with Merck KGaA: Application of TLR9 Agonists, Including IMO-2055, for Cancer Treatment

In December 2007, the Company entered into a worldwide licensing and collaboration agreement with Merck KGaA of Darmstadt, Germany, for the research, development, and commercialization of Idera's TLR9 agonists for the

treatment of cancer. Under this agreement, the Company agreed to exclusively license the therapeutic cancer applications, excluding cancer vaccines, of its lead TLR9 agonists, IMO-2055 and IMO-2125. Additionally, the two companies agreed to engage in a research collaboration using Idera's chemistry-based approach to design and create a specified number of novel follow-on TLR9 agonists for which Merck KGaA will have the exclusive right to use in oncology applications other than cancer vaccines.

In February 2008, the agreement with Merck KGaA received Hart-Scott-Rodino clearance, and Merck KGaA paid the Company an upfront license fee of $40.0 million. In addition, the Company is eligible to receive milestone payments of up to EUR 264 million ($381 million as of the date the agreement was signed) under the agreement, depending on the success in achieving clinical development and commercialization milestones, as well as royalties on sales of any products developed and commercialized by Merck KGaA using IMO-2055, IMO-2125 or the follow-on TLR9 agonists.

Prior to entering into the collaboration with Merck KGaA in December 2007, the Company initiated a phase 1b clinical trial evaluating IMO-2055 in combination with Tarceva® and Avastin® in patients with non-small cell lung cancer as second-line therapy. In addition, the Company has completed, or has on-going, the following clinical trials evaluating IMO-2055:

- An on-going phase 2, stage A, trial in patients with renal cell carcinoma. At present, one patient continues to receive treatment in this phase 2 trial. The Company expects that final data from this trial will be available in the second or third quarter of 2008.
- A completed phase 1/2 trial with IMO-2055 in combination with the chemotherapy agents Gemzar® and carboplatin in patients with refractory solid tumors. Initial results from this trial were reported at the 12th World Conference on Lung Cancer in September 2007.
- Two completed phase 1 trials, one in healthy subjects and one in patients with solid tumors.

Partnered Programs

Vaccine Adjuvants: In collaboration with Merck & Co.

In December 2006, the Company and Merck & Co. entered into an exclusive license and research collaboration agreement to research, develop and commercialize vaccine products containing the Company's agonist compounds targeting TLRs 7, 8, and 9 in the fields of oncology, infectious diseases and Alzheimer's disease. Under this agreement, the Company and Merck & Co. engaged in a two-year research and development collaboration to generate novel agonists targeting TLR7 and 8. In November 2007, the Company presented preclinical data in a poster entitled "TLR9 agonists enhance the efficacy of cancer

vaccines" at the 22nd Annual Meeting of the International Society for Biological Therapy of Cancer.

Asthma and Allergies: In collaboration with Novartis

In June 2005, the Company and Novartis entered into research collaboration and license agreements involving the application of TLR9 agonists to treating asthma and allergies. In February 2007, Novartis extended the term of the research phase of the collaboration by one year. Under this collaboration, in early 2008, Novartis identified QAX935, a novel agonist of TLR9, as a lead compound for clinical evaluation.

Intellectual Property

The Company's U.S. and foreign patents and patent applications covering novel TLR-targeted compounds have increased by approximately 40 during 2007 and now total over 210. The U.S. Patent and Trademark Office issued to the Company three patents in 2007:

- US 7,276,489 claiming novel oligonucleotide compositions in which two oligonucleotides are attached together through their 3' ends and contain various synthetic immune stimulatory motifs;
- US 7,262,286 for novel immunostimulatory oligonucleotide compositions. The claims of this patent cover oligonucleotide compounds comprising a synthetic immunostimulatory dinucleotide motif. The claimed dinucleotide motifs contain certain analogs of cytosine together with guanosine or certain analogs of guanosine; and
- US 7,176,296 claiming compounds comprising a synthetic immunostimulatory motif and an immunomodulatory moiety.

2007 and Recent Organizational Highlights

- Hans Mueller, Ph.D., was elected to the Company's Board of Directors.
- Alice Bexon, MBChB, joined the Company as Vice President of Clinical Development.
- Louis J. Arcudi III joined the Company as Chief Financial Officer.
- Steven J. Ritter, Ph.D., J.D., was promoted to Vice President of Intellectual Property and Contracts.
- Ekambar R. Kandimalla, Ph.D., was promoted to Vice President of Discovery.
- Seven employees who hold an M.D. or Ph.D. joined the Company to advance TLR-targeted programs.
- The Company relocated its headquarters to 167 Sidney Street in Cambridge, MA.

About Idera Pharmaceuticals, Inc.
Idera Pharmaceuticals is a drug discovery and development company that is developing drug candidates to treat infectious diseases, autoimmune diseases, cancer, and respiratory diseases, and for use as vaccine adjuvants. Our proprietary drug candidates are designed to modulate specific TLRs, which are a family of immune system receptors present in immune system cells that direct the immune system to respond to potential disease threats. Our pioneering DNA chemistry expertise enables us to identify drug candidates for internal development and creates opportunities for multiple collaborative alliances. Our lead TLR9 agonist, IMO-2125, is currently in a Phase 1 trial for the treatment of chronic hepatitis C virus infection. We have also created novel DNA-based compounds that have been shown to act as antagonists to TLRs 7 and 9 in preclinical studies. We are collaborating with Merck KGaA for the research, development and commercialization of IMO-2055, as well as IMO-2125 and other TLR9 agonists for the treatment of cancer. We are also collaborating with Merck & Co., Inc. for the use of our TLR7, 8 and 9 agonists in combination with Merck & Co.'s therapeutic and prophylactic vaccines in the areas of oncology, infectious diseases, and Alzheimer's disease. In addition, we are collaborating with Novartis International Pharmaceutical, Ltd. for the discovery, development, and commercialization of TLR9 agonists for the treatment of asthma and allergy indications. Merck & Co. is not related to Merck KGaA. For more information, please visit www.iderapharma.com.

Idera Forward Looking Statements
This press release contains forward-looking statements concerning Idera Pharmaceuticals, Inc. that involve a number of risks and uncertainties. For this purpose, any statements contained herein that are not statements of historical fact may be deemed to be forward-looking statements. Without limiting the foregoing, the words "believes," "anticipates," "plans," "expects," "estimates," "intends," "should," "could," "will," "may," and similar expressions are intended to identify forward-looking statements. There are a number of important factors that could cause Idera's actual results to differ materially from those indicated by such forward-looking statements, including whether products based on Idera's technology will advance into or through the clinical trial process on a timely basis or at all and receive approval from the United States Food and Drug Administration or equivalent foreign regulatory agencies; whether, if the Company's products receive approval, they will be successfully distributed and marketed; whether the Company's collaborations with Novartis, Merck & Co., and Merck KGaA will be successful; whether the patents and patent applications owned or licensed by the Company will protect the Company's technology and prevent others from infringing it; whether Idera's cash resources will be sufficient to fund the Company's operations; and such other important factors as are set forth under the caption "Risk Factors" in Idera's Quarterly Report on Form 10-Q filed on November 13, 2007, which important factors are incorporated herein by reference. Idera disclaims any intention or obligation to update any forward-looking statements.

Tarceva is a registered trademark of OSI Pharmaceuticals, Inc. Avastin is a registered trademark of Genentech, Inc. Gemzar is a registered trademark of Eli Lilly and Company.

Idera Pharmaceuticals, Inc.
Consolidated Condensed Statements of Operations
(In thousands, except per share data)

	Three Months Ended December 31,		Years Ended December 31,	
	2007	2006	2007	2006
	(unaudited)	(unaudited)	(unaudited)	
Revenues	$ 2,233	$ 592	$ 7,981	$ 2,421
Operating Expenses				
Research & Development	3,907	3,046	13,195	12,705
General & Administrative	3,144	2,302	9,513	6,276
Total Operating Expenses	7,051	5,348	22,708	18,981
Loss from Operations	(4,818)	(4,756)	(14,727)	(16,560)
Other, net	312	72	1,519	80
Loss before Income Taxes	(4,506)	(4,684)	(13,208)	(16,480)
Income Tax Provision	—	(45)	—	(45)
Net Loss	$ (4,506)	$ (4,729)	$ (13,208)	$(16,525)
Basic and Diluted Net (Loss) Per Common Share	$ (0.21)	$ (0.26)	$ (0.62)	$ (0.99)
Shares Used In Computing Basic and Diluted Net (Loss) Per Common Share	21,485	18,352	21,221	16,625

Idera Pharmaceuticals, Inc.
Consolidated Condensed Balance Sheet Data
(In thousands)

	At December 31,	
	2007	2006
	(unaudited)	
Cash, Cash Equivalents And Investments	$ 23,743	$ 38,187
Other Assets	3,971	2,354
Total Assets	$ 27,714	$ 40,541
Accounts Payable and Accrued Liabilities	$ 3,067	$ 2,029
Notes Payable	1,143	5,033
Deferred Revenue	15,785	21,242
Stockholders' Equity	7,719	12,237
Total Liabilities & Stockholders' Equity	$ 27,714	$ 40,541

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