UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, DC 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): January 6, 2014

Idera Pharmaceuticals, Inc.

(Exact Name of Registrant as Specified in Charter)

Delaware (State or Other Jurisdiction of Incorporation) 001-31918 (Commission File Number) 04-3072298 (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 5.02. Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

On January 9, 2014, Idera Pharmaceuticals, Inc. (the "Company") issued a press release announcing the appointment of Louis Brenner, M.D. as Senior Vice President and Chief Medical Officer and the election of Mark Goldberg, M.D. to the Board of Directors of the Company (the "Board").

Appointment of Chief Medical Officer

Dr. Brenner, age 43, commenced employment with the Company on January 6, 2014. Prior to joining the Company, Dr. Brenner served as Senior Vice President and Chief Medical Officer of Radius Health, Inc., a biopharmaceutical company, from November 2011 to January 2014. From September 2006 to December 2010, Dr. Brenner was Senior Vice President at AMAG Pharmaceuticals, a biotechnology company. From June 2002 to September 2006, Dr. Brenner served in progressively senior roles at Genzyme Corporation, a biotechnology company. Dr. Brenner holds a B.S. in Biology from Yale University, an M.D. from Duke University and an M.B.A. from Harvard Business School.

In connection with his joining the Company, Dr. Brenner and the Company entered into an employment letter dated January 3, 2014. Under the terms of the employment letter, Dr. Brenner is entitled to receive:

- an annual base salary of \$350,000 per year;
- an annual bonus of up to 35% of Dr. Brenner's annual base salary based on the achievement of both individual and Company performance objectives as developed and determined by the Company and subject to the approval of the Board. The Company has agreed that for the year ending December 31, 2014, Dr. Brenner's annual bonus will be at least \$122,500 if he remains employed with the Company through December 31, 2014;
- a signing bonus of \$30,000 payable on March 1, 2014 subject to his continued employment with the Company; and
- a stock option to purchase 600,000 shares of the Company's Common Stock under the Company's 2013 Stock Incentive Plan, which option was
 granted to him on January 6, 2014 with an exercise price per share equal to \$5.04 (the "Option"). The Option vests over four years with the first
 installment vesting on the first anniversary of the date of grant and the balance of the shares vesting quarterly over the remaining three years.

Under the employment letter, if the Company terminates Dr. Brenner's employment without cause, Dr. Brenner will be entitled to twelve months severance and benefits continuation and to receive any bonus that Dr. Brenner earned and that the Board approved prior to the termination to the extent not then paid. In addition, if Dr. Brenner terminates his employment with the Company for good reason upon or within twelve months after a change in control of the Company, (i) he will be entitled to twelve months severance and benefits continuation and to receive any bonus that Dr. Brenner earned and that the Board approved prior to the termination to the extent not then paid and (ii) the Option will vest in full and become immediately exercisable. The Company's obligation to make severance payments and provide benefits to Dr. Brenner in accordance with his employment letter are subject to Dr. Brenner's entering into a separation and release agreement with the Company.

- 2 -

Election of a Director

Effective as of January 7, 2014, the Board elected Mark Goldberg, M.D. to the Board as a Class III director. Dr. Goldberg's term as a Class III director will expire at the Company's 2016 Annual Meeting of Stockholders.

In accordance with the Company's director compensation program, Dr. Goldberg will receive an annual cash retainer of \$35,000 for service on the Board, which is payable quarterly in arrears. The Company's director compensation program includes a stock-for-fees policy, under which Dr. Goldberg has the right to elect, on a quarterly basis, to receive Common Stock of the Company in lieu of the cash fees. Dr. Goldberg has not elected to receive the Company's Common Stock for fees at this time.

In addition, Dr. Goldberg was granted an option to purchase 30,000 shares of the Company's Common Stock, which is granted to directors upon their initial election to the Board under the Company's director compensation program. All options granted to non-employee directors, including the grant to Dr. Goldberg, vest in equal quarterly installments over three years. This option, which was granted on January 7, 2014 with an exercise price per share equal to \$5.30, automatically becomes exercisable in full upon the occurrence of a change in control of the Company.

Dr. Goldberg will be subject to the Company's director retirement policy, which provides for acceleration of vesting of options and an extension of the exercise period upon the retirement of a non-employee director, as more fully described in the Company's Proxy Statement filed on June 10, 2013 with the Securities and Exchange Commission.

Dr. Goldberg has not been elected to any committees of the Board. There was no arrangement or understanding between Dr. Goldberg and any other persons pursuant to which Dr. Goldberg was elected as a director and there are no related party transactions between Dr. Goldberg and the Company.

The Company's press release dated January 9, 2014 announcing the appointment of Dr. Brenner as Senior Vice President and Chief Medical Officer and the election of Dr. Goldberg to the Board is filed as Exhibit 99.1 to this Current Report on Form 8-K and is incorporated herein by reference.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

See Exhibit Index attached hereto.

- 3 -

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: January 9, 2014

/s/ Louis J. Arcudi, III Louis J. Arcudi, III Senior Vice President of Operations, Chief Financial Officer, Treasurer and Secretary

- 4 -

By:

EXHIBIT INDEX

Exhibit No.	Description
99.1	Press release issued by Idera Pharmaceuticals, Inc. on January 9, 2014

- 5 -



Idera Expands Leadership Team and Strengthens Clinical Development Expertise in Oncology and Orphan Diseases

Chief Medical Officer Lou Brenner, MD, and New Board Member Mark Goldberg, MD, to help guide clinical development strategy and execution

CAMBRIDGE, Mass.—(BUSINESS WIRE)—Jan. 9, 2014— Idera Pharmaceuticals, Inc. (Nasdaq: IDRA), a clinical stage biopharmaceutical company developing a novel therapeutic approach for the treatment of autoimmune diseases and genetically defined forms of B-cell lymphoma, today announced that it has strengthened its clinical development expertise through the addition of two industry veterans with track records of success in bringing novel therapeutic products to market.

Lou Brenner, MD, has joined the company as Senior Vice President and Chief Medical Officer, building on more than a decade of leadership experience that has encompassed clinical development strategy, regulatory affairs, medical affairs, and product commercialization. Dr. Brenner joins Idera from Radius Health, where he served as Senior Vice President and Chief Medical Officer. He had earlier served in key roles at AMAG Pharmaceuticals and Genzyme.

Dr. Brenner has designed, planned, and directed successful clinical trials at all stages and in multiple indications, including managing the late stage development and regulatory submission for Feraheme[®], an FDA-approved product for the treatment of iron deficiency anemia in adult patients with chronic kidney disease. At Radius, he led the conduct of a large, ongoing Phase 3 trial of a novel candidate for the treatment of osteoporosis. Previously at Genzyme, he led global commercial planning for the launch of Renvela[®], a next-generation phosphate binder for patients with chronic kidney disease, and also led the business development efforts for the Renal and Transplant Business Units. Dr. Brenner holds an MD from Duke University and an MBA from Harvard Business School, and completed his residency in Internal Medicine at Brigham and Women's Hospital, as well as a Fellowship in Nephrology at Brigham and Women's Hospital and Massachusetts General Hospital. Dr. Brenner holds a clinical appointment at Brigham and Women's Hospital.

"We are pleased to welcome Lou to the Idera team, further strengthening our management depth at a time when we are advancing multiple clinical stage programs," said Sudhir Agrawal, D. Phil., Chief Executive Officer of Idera Pharmaceuticals. "Lou's breadth of experience in clinical design and development, regulatory strategy and commercial preparedness will be a strong asset for us as we work to advance clinical development of our candidates in genetically defined forms of B-cell lymphomas and orphan autoimmune diseases." Newly-appointed Board Member Mark Goldberg, MD, has served as Senior Vice President for Medical and Regulatory Affairs at Synageva BioPharma since September 2011. Before joining Synageva, he served in management capacities of increasing responsibility at Genzyme from 1996 to 2011, including most recently as Senior Vice President for Clinical Development and Global Therapeutic Group Head for Oncology and Personalized Genetic Health. While at Genzyme, Dr. Goldberg played a key role in the development and approval of four successful orphan therapies: Fabrazyme[®], Aldurazyme[®], Myozyme[®] and Lumizyme[®].

Prior to joining Genzyme, he was a full-time staff physician at Brigham and Women's Hospital and the Dana-Farber Cancer Institute, where he still holds appointments. Dr. Goldberg is a board-certified medical oncologist and hematologist and has published more than 50 papers.

In welcoming Dr. Goldberg to the Idera Board of Directors, Chairman Jim Geraghty said, "Mark is a recognized industry leader in the development of novel therapies for oncology and orphan diseases, and has been a driving force behind multiple clinically and commercially important products. His appointment brings new depth to the Idera Board, and will help guide both the execution of our ongoing programs and the strategic prioritization of the many additional clinical opportunities currently before us."

The strengthening of Idera's senior management team comes at a time of strong progress and momentum for the company, which recently announced the initiation of clinical development of its Toll-like receptor (TLR) antagonist IMO-8400 in Waldenström's macroglobulinemia. The Company's program is targeted to patients with the L265P oncogenic mutation of the MYD88 gene, which is highly characteristic of Waldenström's macroglobulinemia and is reportedly influenced by TLR activation. IMO-8400 blocks the activation of the TLR signaling pathway and represents a novel approach to the treatment of these patients.

In addition to its clinical development in Waldenström's macroglobulinemia, Idera plans to submit a protocol to the FDA this quarter to conduct a Phase 1/2 trial in patients with diffuse large B-cell lymphoma (DLBCL). The L265P mutation of the MYD88 gene has been identified in approximately 30% of patients with the activated B-cell-like (ABC) type of DLBCL.

In its autoimmune disease program, the Company is conducting a randomized, double-blind, placebo-controlled Phase 2 trial of IMO-8400 in patients with moderate-to-severe plaque psoriasis. The Company expects to report data from this trial in the first half of 2014. In addition, Idera has begun a strategic review of orphan autoimmune indications with unmet needs that it believes are suited to Toll-like receptor (TLR) antagonist therapy, and expects to identify priority indications in early 2014.

About Idera Pharmaceuticals, Inc.

Idera's technology platform involves creating novel synthetic RNA- and DNA-based compounds to modulate immune responses. Idera has applied this platform to develop proprietary Toll-like receptor (TLR) antagonists as immunomodulatory drug candidates. Toll-like receptor antagonists block the overactivation of immune factors which can cause a range of pathological effects. Idera is conducting clinical development of TLR antagonists in autoimmune and inflammatory diseases, and in certain genetically defined forms of B-cell lymphoma. More information on Idera is available at www.iderapharma.com.

Forward Looking Statements

This press release includes statements concerning Idera Pharmaceuticals, Inc. and its future expectations, plans and prospects that constitute forward-looking statements within the meaning of The Private Securities Litigation Reform Act of 1995 and 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 results obtained in early research, preclinical studies and clinical trials will be indicative of the results that will be generated in future preclinical and clinical studies; whether regulatory submissions will be made when anticipated; 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 FDA or equivalent foreign regulatory agencies; whether, if the Company's products receive approval, they will be successfully distributed and marketed; and such other important factors are set forth under the caption "Risk Factors" in Idera's Quarterly Report on Form 10-Q for the period ended September 30, 2013, which important factors are incorporated herein by reference. Idera disclaims any intention or obligation to update any forward-looking statements.

Source: Idera Pharmaceuticals, Inc.

Idera Pharmaceuticals, Inc. Lou Arcudi, 617-679-5517 larcudi@iderapharma.com