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Contacts:

Idera Pharmaceuticals, Inc. 617-679-5500, x5530 Robert W. Karr, M.D.

E-mail: rkarr@iderapharma.com

MacDougall Biomedical Communications 508-647-0209
Chris Erdman
E-mail: cerdman@macbiocom.com

Idera Pharmaceuticals Announces 2006 Financial Results for the Three and Six Months Ended June 30, 2006

-Recent Highlights Include Expanded TLR Programs and Additional Funding-

Cambridge MA, August 15, 2006 – Idera Pharmaceuticals Inc. (AMEX: IDP), a biopharmaceutical company focused on developing therapeutics targeting Toll-like Receptors (TLRs), today reported financial results for the three and six months ended June 30, 2006.

The Company reported a net loss of \$4.3 million or \$0.26 per share for the three months ended June 30, 2006, compared to a net loss of \$3.7 million, or \$0.26 per share for the same period in 2005. For the six months ended June 30, 2006, the Company's net loss was \$8.0 million, or \$0.52 per share, versus a net loss of \$6.9 million, or \$0.50 per share for the same period in 2005. These losses reflect the Company's ongoing investment in developing its lead drug candidates.

"We have made substantial progress in advancing our TLR-targeted immune therapy programs in recent months," commented Sudhir Agrawal, D. Phil, Chief Executive Officer of Idera. "To reinforce our oncology program as it progresses, we recently formed an Oncology Clinical Advisory Board to assist in optimizing our clinical development strategy in cancer."

Recent Accomplishments:

The receipt, in July 2006, of \$3.5 million of gross proceeds from the sale of 683,594 shares of common stock at a price of \$5.12 per share through a draw down under our March 2006 purchase commitment.

Idera may sell an additional \$6.25 million of our common stock under the March 2006 purchase commitment at a minimum price of \$5.12 per share

in up to two drawdowns, made at our discretion, through December 31, 2006, subject to the condition that a registration statement covering the additional shares that may be issued is declared effective.

- The formation, in July 2006, of an Oncology Clinical Advisory Board comprised of international leaders representing all areas of cancer drug research and development. Idera believes that this world-class group of leaders in oncology will provide valuable guidance for the continued development of its lead anti-cancer drug candidate.
- The granting of patents in Europe and Australia in the field of Immune Modulatory Oligonucleotides (IMOs) that target TLRs. These new patents form the foundation for a broad TLR-focused patent portfolio.
- The presentation, in June 2006, of preclinical data on Agonists of TLR9 in combination with other targeted therapies in lung cancer models at the American Society of Clinical Oncology. Idera believes that its IMOs may be used in combination with current targeted therapies for the treatment of various cancers.
- The presentation, in May 2006, of preclinical data on novel modulators of TLRs 7, 8 and 9 at the American Association of Immunologists Meeting. Idera's new programs on agonists of TLRs 7 and 8 and antagonists of TLR 9 give the Company the opportunity to develop a broad pipeline of TLR-targeted therapeutic drug candidates.
- The effecting, in June 2006, of a one-for-eight reverse stock split of the Company's issued and outstanding common stock.

For the three months ended June 30, 2006, Idera reported revenue of \$0.6 million. This compares to revenue of \$0.3 million for the same period in 2005. For the six months ended June 30, 2006, revenues totaled \$1.3 million compared to \$0.5 million for the same period in 2005. The increase in 2006 revenue in both periods is primarily attributable to revenue recognized under the Company's collaboration with Novartis.

Research and development expenses totaled \$4.0 million in the second quarter of 2006 compared to \$3.0 million in the second quarter of 2005. For the sixmonth period, R&D expenses totaled \$7.3 million compared to \$5.7 million for the same period in 2005. The increase in R&D expenses primarily reflects our effort to advance our lead anti-cancer drug candidate, IMO-2055, and preclinical studies of our lead infectious disease compound, IMO-2125, that we conducted in 2006.

General and administrative expenses were \$1.0 million in both the second quarter of 2006 and 2005. For the six months ended June 30, 2006, G&A

expenses totaled \$1.9 million compared to \$1.8 million for the same period in 2005.

About Idera Pharmaceuticals, Inc.

Idera Pharmaceuticals is a drug discovery and development company that is developing drug candidates to treat cancer, and infectious, respiratory, and autoimmune diseases. Idera's proprietary drug candidates are designed to modulate TLRs, the body's first line of immune defense. Idera's pioneering DNA chemistry expertise enables it to identify drug candidates for internal development and creates opportunities for multiple collaborative alliances. Idera's most advanced clinical candidate, IMO-2055, is an agonist of TLR9 and is currently in a Phase 2 trial in oncology and in a Phase 1/2 chemotherapy combination trial in oncology. Idera has selected a second TLR9 agonist, IMO-2125, as a lead candidate for treating infectious diseases. Idera also is collaborating with Novartis for the discovery, optimization, development, and commercialization of additional TLR9 agonist candidates for asthma and allergy. For more information, visit www.iderapharma.com.

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 results of preclinical studies will be indicative of results that may be obtained in clinical trials; whether the patents and patent applications owned or licensed by Idera will protect the Company's technology and prevent others from infringing it; whether Idera's cash resources will be sufficient to fund product development and clinical trials; 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 August 14, 2006, which important factors are incorporated herein by reference. Idera disclaims any intention or obligation to update any forwardlooking statements.