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Idera Pharmaceuticals to Present at BIO Business Forum and Participate in Toll-Like Receptor Panel at BIO 2007

Cambridge, MA, May 3, 2007 – Idera Pharmaceuticals, Inc. (AMEX: IDP) today announced its participation in two sessions at the 2007 BIO International Convention taking place May 6-9, 2007 at the Boston Convention and Exhibition Center in Boston, MA.

Robert Karr, M.D., President of Idera, will discuss the Company's drug discovery and development programs targeting Toll-like receptors and provide a general corporate overview during the company presentation track at the BIO Business Forum. The presentation will begin at 10:15 a.m. (ET) on Tuesday, May 8, 2007 in Room E of the Business Forum.

Sudhir Agrawal, D. Phil., Chief Executive Officer and Chief Scientific Officer of Idera, will participate in a panel entitled "Toll-like Receptor Modulation: Multiple Methods to Mine Diverse Therapeutic Potential", a session in the Drug Discovery & Development track. The panel will begin at 2:00 p.m. (ET) on Wednesday, May 9, 2007 in Room 259 AB.

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, and for use as vaccine adjuvants. 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 is collaborating with Novartis International Pharmaceutical, Ltd. for the discovery, development, and commercialization of TLR9 agonists for the treatment of asthma and allergy indications. Idera is also collaborating with Merck & Co., Inc.

for the use of Idera's 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. 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 the Company will complete enrollment of clinical trials or announce trial results in the time expected; 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 Company's collaborations with Novartis and Merck will be successful; 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 Annual Report on Form 10-K filed on March 30, 2007, which important factors are incorporated herein by reference. Idera disclaims any intention or obligation to update any forward-looking statements.

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