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**Idera Pharmaceuticals Appoints Dr. Alice Bexon,
Vice President of Clinical Development**

Cambridge MA, February 21, 2007 – Idera Pharmaceuticals, Inc. (AMEX: IDP), a biopharmaceutical company focused on developing therapeutics targeting Toll-like Receptors (TLR), announced today the appointment of Dr. Alice Bexon, as Vice President of Clinical Development. Dr. Bexon previously served as Clinical Science Leader for Roche Oncology and as Medical Director at Sanofi-Synthelabo, now sanofi-aventis.

"Dr. Bexon brings leadership experience gained in clinical drug development and working with significant commercialized drugs in oncology, one of Idera's key areas of interest," commented Robert Karr, M.D., President of Idera. "We welcome Alice to our team and anticipate her significant contributions as we work toward initiating new combination trials with our lead drug candidate, IMO-2055, in oncology, and a clinical program with our second novel TLR9 agonist candidate, IMO-2125, in Hepatitis C."

"Idera's TLR-targeting technology has generated candidates with potential application in oncology, infectious diseases and autoimmune disease," commented Dr. Bexon. "I am excited about joining Idera and look forward to participating in the development of novel TLR-targeted candidates."

Dr. Bexon served as International Medical Leader for Xeloda® within Roche Oncology. Most recently she served as Clinical Science Leader and as a member of the Research and Development team for early development products. Prior to her six years at Roche, Dr. Bexon was Medical Director for Eloxatin® and Ametycine® for Sanofi-Synthelabo, now sanofi-aventis. Prior to that, she worked at the New Drug Development Office for the European Organisation for Research and Treatment of Cancer in Amsterdam, and Parexel International in Paris. Dr. Bexon received her MBChB (MD equivalent) from Bristol University Medical School in the UK. She completed residency in oncology at the Institut Gustave Roussy in Villejuif/Savigny le Temple, France. She is a member of the American Society of Clinical Oncology and the European Society of Medical Oncology.

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 Merck & Co. 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. Idera is also collaborating with Novartis International Pharmaceuticals, Ltd. for the discovery, development, and commercialization of TLR9 agonists for the treatment of asthma and allergy indications. 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 in the time expected; whether, if the Company's products receive approval, they will be successfully distributed and marketed; whether the Company's collaborations will result in successful product development and if the Company receives payments thereafter; whether the results of preclinical studies such as the results referred to above 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 November 13, 2006, which important factors are incorporated herein by reference. Idera disclaims any intention or obligation to update any forward-looking statements.

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