



Idera Pharmaceuticals Announces Publication of Preclinical Data on Cancer Immunotherapy with its Dual Agonist of Toll-like Receptors 7 and 8

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CAMBRIDGE, Mass., Jun 04, 2010 (BUSINESS WIRE) --Idera Pharmaceuticals, Inc. (Nasdaq: IDRA) today announced the publication of data from studies of a dual agonist of Toll-like Receptor 7 (TLR7) and TLR8 in preclinical models of cancer. The Company created this first-in-class RNA-based dual agonist of TLR7 and TLR8 through its chemistry-based approach to identifying novel TLR-targeted drug candidates. The paper entitled "Antitumor Activity and Immune Response Induction of a Dual Agonist of Toll-like Receptors 7 and 8" is published in the June issue of Molecular Cancer Therapeutics (Vol. 9: 1788, 2010) and is authored by Idera scientists.

"Our proprietary dual TLR7 and TLR8 agonist induced strong Th1-type immune responses and showed mechanism-based antitumor activity in preclinical models of cancer," said Tim Sullivan, Ph.D., Vice President of Development Programs and Alliance Management. "We plan to present data from ongoing studies in preclinical models of hematological malignancies at upcoming scientific meetings. We intend to use the results of these studies to confirm selection of a dual TLR7 and TLR8 agonist as a lead drug candidate by the end of the year."

In the published studies, one of the Company's dual TLR7 and TLR8 agonists ("agonist") was evaluated for its ability to induce immune responses and its antitumor effects in preclinical models of cancers. Administration of the agonist elicited a potent dose-dependent antitumor activity that was associated with induction of both innate and adaptive immune responses, development of tumor antigen-specific interferon-gamma secreting effector cells, and reduced frequency of T-regulatory cells at the tumor site. Absence of agonist activity in TLR7 and MyD88 (an adaptor molecule in the TLR7 signaling pathway) knockout mice confirmed that the agonist works through the TLR7 pathway.

TLR7 is expressed in human B-cells and plasmacytoid dendritic cells. TLR8 is expressed in human myeloid dendritic cells and monocytes. TLR8 is non-functional in mice.

About Idera Pharmaceuticals, Inc.

Idera Pharmaceuticals develops drug candidates to treat infectious diseases, autoimmune and inflammatory diseases, cancer, and respiratory diseases, and for use as vaccine adjuvants. Our proprietary drug candidates are designed to modulate specific Toll-like Receptors, which are a family of immune system receptors that direct immune system responses. Our pioneering DNA and RNA chemistry expertise enables us to create drug candidates for internal development and generates opportunities for multiple collaborative alliances. For more information, 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, whether results obtained in preclinical studies and early clinical trials such as the studies referred to in this release will be indicative of results obtained in future clinical trials; 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 Merck KGaA and Merck Sharp & Dohme Corp., 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 for the three months ended March 31, 2010, which important factors are incorporated herein by reference. Idera disclaims any intention or obligation to update any forward-looking statements.

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