

# Idera Pharmaceuticals Presents Preclinical Data on its Gene-silencing Oligonucleotides (GSOs) at EuroTIDES 2011 Conference

## November 15, 2011 1:00 PM EST

CAMBRIDGE, Mass.--(BUSINESS WIRE)--Nov. 15, 2011-- Idera Pharmaceuticals, Inc. (NASDAQ: IDRA) today presented new data on its novel gene-silencing oligonucleotide (GSO) technology at the 12<sup>th</sup> annual EuroTIDES conference being held in Berlin, Germany November 15-16, 2011. The preclinical data demonstrated that GSOs exert target-specific gene-silencing activity following systemic delivery and, due to their novel structure, minimize the sequence-dependent immune stimulation that is associated with other approaches to gene-silencing.

"We are very pleased to have observed that the novel structure of GSOs, in which the five-prime end is not accessible, minimizes immune stimulation," commented Nicola La Monica, Ph.D., Vice President of Biology at Idera Pharmaceuticals. "The immune stimulatory effects of other gene-silencing approaches have resulted in off-target effects that may interfere with the intended mechanism of action or have other unintended consequences. GSOs provide a potential approach for gene-silencing following systemic delivery with reduced off-target effects."

The data presented are from preclinical studies evaluating the gene silencing activity of GSOs targeted to various messenger RNA targets. The GSOs were administered systemically to mice, without the use of any delivery technology. The GSOs showed significant specific gene-silencing activity as monitored by suppression of targeted RNA and protein. For comparison, a number of antisense sequences were evaluated for in vivo immune activation, as monitored by circulating cytokines. The data showed that GSOs minimized the induction of immune responses compared to antisense oligonucleotides. GSOs are single-stranded oligonucleotides with two exposed 3'-ends and 5'-ends that are not accessible. It has been shown that accessibility of the 5'-ends of oligonucleotides maximizes immune activation.

The presentation entitled "Gene-silencing oligonucleotides: Innovative design of oligonucleotides with enhanced efficacy and RNAi-like mechanism of action" was presented by Nicola La Monica of Idera Pharmaceuticals.

#### **About Gene-silencing Oligonucleotides**

Idera's gene-silencing oligonucleotides (GSOs) are single-stranded RNA or DNA constructs with two exposed 3'-ends that are complementary to targeted mRNA sequences of therapeutic interest. In preclinical studies, GSOs have inhibited gene expression in vivo without requiring a delivery enhancement technology. Idera has filed multiple patent applications for its GSOs that are pending in many countries around the world.

#### About Idera Pharmaceuticals, Inc.

Idera Pharmaceuticals applies its proprietary Toll-like Receptor (TLR) drug discovery platform to create immunomodulatory drug candidates. The Company's TLR-targeted candidates are being developed to treat autoimmune and inflammatory diseases and cancer, and for use as vaccine adjuvants. Additionally, the Company is advancing its gene-silencing oligonucleotide (GSO) technology for the purpose of inhibiting the expression of disease-promoting genes. For more information, visit <a href="http://www.iderapharma.com">http://www.iderapharma.com</a>.

### **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, including whether data from preclinical studies such as the data discussed in this release will be indicative of results obtained in later preclinical studies and 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 will be successful; 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 quarter ended September 30, 2011 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
Iarcudi@iderapharma.com
or
MacDougall Biomedical Communications
Chris Erdman, 781-235-3060
cerdman@macbiocom.com