Idera Pharmaceuticals Presents Preclinical Data of its Gene-silencing Oligonucleotides (GSO) at Cell Symposium on Regulatory RNAs

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CAMBRIDGE, Mass., Oct 11, 2011 (BUSINESS WIRE) -- Idera Pharmaceuticals, Inc. (NASDAQ: IDRA) today presented new data on its novel gene-silencing oligonucleotide (GSO) technology at the Cell Symposium on Regulatory RNAs in Chicago, IL. In preclinical studies, systemic delivery of GSOs targeted to ApoB or PCSK9 mRNA caused a reduction in the level of the targeted mRNA and associated protein and resulted in a decrease in serum total cholesterol and LDL-cholesterol concentration. ApoB and PCSK9 are two validated targets associated with cardiovascular diseases.

"These data are an important step for Idera's GSO program as they show significant *in vivo* gene-silencing activity following systemic delivery of GSOs without using any carrier technologies," said Nicola La Monica, Ph.D., Vice President of Biology at Idera Pharmaceuticals. "These attributes demonstrate the potential for GSOs to overcome some of the issues associated with other gene-silencing technologies."

The presentation, entitled "Design and characterization of novel Gene Silencing Oligonucleotides", was authored by Idera scientists Nicola La Monica, Weiwen Jiang, Lakshmi Bhagat, Ekambar R. Kandimalla and Sudhir Agrawal.

In this study, Idera created 19mer GSOs for apolipoprotein B (ApoB) and proprotein convertase subtilisin/kexin type 9 (PCSK9) mRNA and evaluated their *in vivo* activity in mice following subcutaneous administration. The data demonstrate that treatment with each GSO led to a significant reduction in the concentration of the target associated mRNAs and protein. The effects were specific, with no significant effects being observed on ABCA1, ABCG1 or LXR mRNA levels. In addition, treatment with GSOs for either ApoB or PCSK9 resulted in a decrease in total serum cholesterol and LDL-cholesterol.

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 develops drug candidates to treat infectious diseases, autoimmune and inflammatory diseases, cancer, and respiratory diseases, and for use as vaccine adjuvants. The Company's proprietary drug candidates are designed to modulate specific Toll-like Receptors, which are a family of immune system receptors that direct immune system responses. Additionally, the Company is advancing gene-silencing oligonucleotide (GSO) technology for the purpose of inhibiting the expression of disease-promoting genes. 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 http://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, including whether results obtained in preclinical studies such as the results referenced in this release will be indicative of results obtained in later preclinical studies and future clinical trials, if any; 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 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 year ended June 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.

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