Idera Pharmaceuticals Presents Preclinical Data Demonstrating Potent Anti-Tumor Response From Combination Treatment With Intra-Tumoral IMO-2125 and Anti-PD-1 Monoclonal Antibody at AACR-NCI-EORTC International Conference

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CAMBRIDGE, Mass. and EXTON, Pa., Nov. 05, 2015 (GLOBE NEWSWIRE) -- Idera Pharmaceuticals, Inc. (NASDAQ:IDRA), a clinical-stage biopharmaceutical company developing Toll-like receptor (TLR) and RNA therapeutics for patients with cancer and rare diseases, today announced new preclinical data demonstrating potent and systemic anti-tumor activity in preclinical cancer models with intra-tumoral administration of IMO-2125 in combination with an anti-PD-1 monoclonal antibody (mAb). IMO-2125 is a synthetic oligonucleotide-based agonist of Toll-like receptor 9 discovered and developed by Idera. There are currently two anti-PD-1 antibodies that have been recently approved for the treatment of melanoma and non-small lung cancer. These data are being presented at the AACR-NCI-EORTC International Conference on Molecular Targets and Cancer Therapeutics in Boston, beginning today.

“The emerging data on preclinical studies with IMO-2125 is continuing to expand the potential of IMO-2125 in immunotherapy of cancer. This data is helping guide our strategic direction for the clinical development of the program in terms of understanding the right combinations and tumor targets,” stated Sudhir Agrawal, D.Phil., President of Research at Idera Pharmaceuticals. “The data we have assembled to date both in-house and through our academic collaboration clearly demonstrates the impact that intra-tumoral administration of IMO-2125 is having on the tumor microenvironment and the resulting anti-tumor activity both in treated and distant tumors.”

In the presentation, entitled “Intra-tumoral administration of IMO-2125, a novel TLR9 agonist, modulates tumor microenvironment and potentiates antitumor activity of anti-PD-1 (mAb) in a murine colon carcinoma model,” Idera scientists presented data providing evidence that intra-tumoral IMO-2125 administration changes the tumor microenvironment by increasing infiltration of tumor-infiltrating lymphocytes (TILs) and by modulating gene expression of multiple checkpoints, including PD-L1. In the study, treatment with a combination of intra-tumoral IMO-2125 with anti-PD-1 antibody showed more potent anti-tumor activity than either agent alone, with potent anti-tumor activity observed on treated as well as distant tumors. Additionally, increased infiltration levels of TILs and increased PD-L1 and other checkpoint expression was observed in both treated and distant tumors.

Idera expects to initiate the first clinical study of intra-tumoral IMO-2125 in combination with ipilimumab in patients with metastatic melanoma in the fourth quarter of this year as part of the previously announced clinical research alliance with MD Anderson Cancer Center.

The presentation is currently available on Idera’s website at http://www.iderapharma.com/our-science/key-presentations-and-publications.

About Toll-like Receptors and Idera's Immuno-Oncology Research Program

Toll-like receptors (TLRs) are key components of the innate immune system, the body's first line of defense against invading pathogens, as well as damaged or dysfunctional cells including cancer cells. The innate immune system is also involved in activating the adaptive immune system, which marshals highly specific immune responses to target pathogens or tissue. Cancer cells may exploit regulatory checkpoint pathways to avoid being recognized by the immune system, thereby shielding the tumor from immune attack. Checkpoint inhibitors such as agents targeting CTLA4 or programmed cell death protein 1 (PD1) are designed to enable the immune system to recognize tumor cells. To further potentiate the efficacy of checkpoint inhibitor therapy, intra-tumoral administration of a TLR9 agonist may create a beneficial tumor microenvironment by increasing the tumor-infiltrating lymphocytes (TILs) in both the injected tumor and distant tumors.

Idera’s TLR9 agonists, IMO-2125 and IMO-2055, have been created using the company's proprietary chemistry-based discovery platform. IMO-2125 has been shown to activate dendritic cells and induce interferon and other cytokines. Idera selected IMO-2125 to advance into clinical development in combination with checkpoint inhibitors based on this immunological profile. In previously completed clinical trials, subcutaneous administration of IMO-2125 was generally well tolerated in about 80 patients with hepatitis C. In preclinical studies in cancer models, IMO-2125 has shown dose-dependent anti-tumor activity in the injected tumor as well as in distant tumors. Anti-tumor activity is associated with changes in the tumor microenvironment, increased T-cell infiltration, and modulation of various checkpoints. In combination with anti-CTLA4 and anti-PD1, IMO-2125 has shown greater anti-tumor activity than with either agent alone.

About Idera Pharmaceuticals

Idera Pharmaceuticals is a clinical-stage patient focused biopharmaceutical company developing novel therapeutic approaches for the treatment of cancer and rare diseases. Idera’s proprietary technology involves creating novel nucleic acid therapeutics. Idera’s immunotherapy approach is based on the modulation of Toll-like receptors (TLRs). In addition to its TLR modulation programs, Idera is developing third generation antisense technology that it has created to inhibit the production of disease-associated proteins by targeting RNA. To learn more about Idera, visit www.iderapharma.com.

Forward Looking Statements

This press release contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, including statements about potential treatments for cancer employing combinations of drug therapies. Such statements may be identified by words such as "believe," "expect," "may," "plan," "potential," "will" and similar expressions, and are based on the company’s current beliefs and expectations. Development of drug therapies involves a high degree of risk, and only a small percentage of research and development programs undertaken may result in the commercialization of a product. Positive preclinical data does not ensure that later stage clinical trials will be successful. For more detailed information on the risks and uncertainties associated with Idera’s development activities, please review the Risk Factors section of Idera's most recent annual or quarterly report filed with the Securities and Exchange Commission. Any forward-looking statements speak only as of the date of this press release and the company assumes no obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise.

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