

# Idera Pharmaceuticals Presents Pre-Clinical Data Demonstrating Potential for Tilsotolimod (IMO-2125) in Combination with Checkpoint Inhibitors at the American Association for Cancer Research (AACR) 2018 Annual Meeting

April 17, 2018 11:00 AM EDT

# Triple combination of tilsotolimod (IMO-2125), epacadostat (IDO-1) and anti-PD-1 antibody demonstrate maximal anti-tumor efficacy in pre-clinical models

CHICAGO, April 17, 2018 (GLOBE NEWSWIRE) -- Idera Pharmaceuticals, Inc. (NASDAQ:IDRA), a clinical-stage biopharmaceutical company focused on the discovery, development and commercialization of novel oligonucleotide therapeutics for oncology and rare diseases, today is reporting pre-clinical data from a study evaluating a combination regimen that involved the TLR-9 agonist tilsotolimod (IMO-2125) and checkpoint inhibitors targeting two negative immune regulators, IDO-1 and PD-1 to eliminate established tumors in syngeneic tumor models at the AACR 2018 Annual Meeting being held in Chicago, IL.

In the poster presentation entitled, "Triple combination of tilsotolimod, epacadostat and anti-PD-1 antibody demonstrates maximal antitumor efficacy and eradicates large established tumors in preclinical models," Daqing Wang, Ph.D., Principal Scientist & Group Leader, Idera Pharmaceuticals, presented results from this pre-clinical study.

The key findings in Dr. Wang's presentation were that intratumoral administration of tilsotolimod increases TIL infiltration and checkpoint expression in both injected and distant lesions creating a favorable tumor microenvironment to enhance the antitumor activity of checkpoint inhibitors. Specifically in this study, it was found that the combination of tilsotolimod with checkpoint inhibitors targeting IDO-1 and PD-1 induced maximal antitumor efficacy and eradicated large established tumors both treated and distant, in preclinical models compared to either agent alone as well as combinations of IDO-1 inhibitor and anti-PD-1.

"The results from this study further elucidate the mechanism of tilsotolimod to stimulate an immune response and highlight the utility of complementing checkpoint inhibition with immune stimulation achievable with intratumoral TLR9 agonism yielding more robust tumor regression," stated Jonathan Yingling Idera's Senior Vice President, Chief Scientific Officer. "We've been steadily building the pre-clinical, translational and clinical datasets for tilsotolimod and are looking forward to our next data update from the ILLUMINATE-204 trial in anti-PD-1 refractory metastatic melanoma at the upcoming American Society of Clinical Oncology (ASCO) meeting in June."

A copy of the poster presentations are currently available on Idera's corporate website at <a href="http://www.iderapharma.com/our-approach/key-publications/">http://www.iderapharma.com/our-approach/key-publications/</a>.

#### About Tilsotolimod (IMO-2125)

Tilsotolimod received orphan drug designation from the US Food and Drug Administration (FDA) in 2017 for the treatment of melanoma Stages IIb to IV. Tilsotolimod, in combination with ipilimumab, for PD-1 inhibitor refractory metastatic melanoma was granted fast track application by the FDA in 2017. Tilsotolimod is a toll-like receptor (TLR) 9 agonist that signals the immune system to create and activate cancer-fighting cells (T-cells). Currently approved immuno-oncology treatments for patients with metastatic melanoma, specifically check-point inhibitors, work for some but not all, as many patients' immune response is missing or weak and thus they do not benefit from the checkpoint therapy making them so-called "refractory". The combination of ipilimumab and tilsotolimod appears to activate an immune response in these patients who have exhausted all options. Intratumoral injections with tilsotolimod are designed to selectively enable the T-cells to recognize and attack cancers that remained elusive and unrecognized by the immune system exposed to checkpoint inhibitors alone, while limiting toxicity or impact on healthy cells in the body.

## About Idera Pharmaceuticals

Harnessing the approach of the earliest researchers in immunotherapy and the Company's vast experience in developing proprietary immunology platforms, Idera's lead development program is focused on priming the immune system to play a more powerful role in fighting cancer, ultimately increasing the number of people who can benefit from immunotherapy. Idera continues to invest in research and development, and is committed to working with investigators and partners who share the common goal of addressing the unmet needs of patients suffering from rare, life-threatening diseases. To learn more about Idera, visit <a href="https://www.iderapharma.com">www.iderapharma.com</a>.

## 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. All statements, other than statements of historical fact, included or incorporated in this press release, including statements regarding the Company's strategy, future operations, collaborations, intellectual property, cash resources, financial position, future revenues, projected costs, prospects, plans, and objectives of management, are forward-looking statements. The words "believes," "anticipates," "estimates," "plans," "expects," "intends," "may," "could," "should," "potential," "likely," "projects," "continue," "will," and "would" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Idera cannot guarantee that it will actually achieve the plans, intentions or expectations disclosed in its forward-looking statements and you should not place undue reliance on the Company's forward-looking statements. There are a number of important factors that could cause Idera's actual results to differ materially from those indicated or implied by its forward-looking statements. Factors that may cause such a difference include: whether interim results from a clinical trial, such as preliminary results reported in this release, will be predictive of the final results of the trial, whether results obtained in preclinical studies and clinical trials such as the preclinical data described in this release will be indicative of the results that will be generated in future clinical trials, including in clinical trials in different disease indications; 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; and such other important factors as are set forth under the caption "Risk Factors" in the Company's Annual Report on form 10K for the period ended December 31, 2017. Although Idera may elect to do so at some point in the future, the Company does not assume any obligation to update any forward-looking statements and it disclaims any intention or obligation to update or revise any forward-looking statement, whether as a result of new information, future events or otherwise

Robert Doody Vice President, Investor Relations and Corporate Communications Office: 617-679-5515 Mobile: 484-639-7235

rdoody@iderapharma.com



Source: Idera Pharmaceuticals, Inc.