Omega Therapeutics Presents New Preclinical Data Supporting the Potential of OTX-2101 in Combination Settings for Treatment of NSCLC

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Combination of a MYC-targeting epigenomic controller with immune checkpoint or EGFR inhibitor enhanced anti-tumor activity in models of NSCLC

CAMBRIDGE, Mass., Oct. 16, 2023 (GLOBE NEWSWIRE) -- Omega Therapeutics, Inc. (Nasdaq: OMGA) ("Omega"), a clinical-stage biotechnology company pioneering the development of a new class of programmable epigenomic mRNA medicines, today announced new preclinical data supporting the potential of OTX-2101, a c-MYC-targeting epigenomic controller (MYC-EC) being developed for the treatment of non-small cell lung cancer (NSCLC), in combination with immune checkpoint inhibitors or EGFR inhibitors at the AACR-NCI-EORTC International Conference on Molecular Targets and Cancer Therapeutics which took place in Boston, Mass., October 11 – 15, 2023.

"The unique properties of epigenomic controllers, which are designed to have transient residence in the body while imparting durable epigenetic changes, make them well suited for use in combination treatment strategies due to their inherently orthogonal mechanism of action," said Thomas McCauley, Ph.D., Chief Scientific Officer of Omega Therapeutics. "These new data build on our previous results demonstrating anti-tumor activity of OTX-2101 as a monotherapy in preclinical NSCLC models and highlight its potential ability to synergize with clinically validated strategies. These encouraging results give us confidence in OTX-2101's potential as meaningful new treatment option for patients living with NSCLC."

Key Findings:

- Analysis of biopsy data from NSCLC patients treated with anti-PD1 or EGFR inhibitors found that high MYC mRNA levels correlated with a shorter time to disease progression, establishing a rationale to evaluate MYC-targeting epigenomic controllers in a combination treatment setting.
- Combination of a MYC-targeting epigenomic controller (MYC-EC) with immune checkpoint or EGFR inhibitor enhanced anti-tumor activity.
    - Treatment with a MYC-EC plus an anti-PD-L1 antibody resulted in enhanced anti-tumor activity in a syngeneic mouse model of NSCLC.
    - Combination of MYC-EC with EGFR inhibitor, osimertinib, synergistically reduced tumor cell viability *in vitro* and significantly inhibited tumor growth *in vivo* in a human xenograft model of NSCLC.

The poster can be viewed on the Omega website at https://omegatherapeutics.com/science/publications/

About Omega Therapeutics

Omega Therapeutics is a clinical-stage biotechnology company pioneering the development of a new class of programmable epigenomic mRNA medicines to treat or cure a broad range of diseases. By pre-transcriptionally modulating gene expression, Omega's approach enables controlled epigenomic modulation of nearly all human genes, including historically undruggable and difficult-to-treat targets, without altering native nucleic acid sequences. Founded in 2017 by Flagship Pioneering following breakthrough research by world-renowned experts in the field of epigenetics, Omega is led by a seasoned and accomplished leadership team with a track record of innovation and operational excellence. The Company is committed to revolutionizing genomic medicine and has a diverse pipeline of therapeutic candidates derived from its OMEGA platform spanning oncology, regenerative medicine, multigenic diseases including immunology, and select monogenic diseases.

For more information, visit omegatherapeutics.com, or follow us on X (formerly Twitter) and LinkedIn.

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. All statements contained in this press release that do not relate to matters of historical fact should be considered forward-looking statements, including without limitation statements regarding the future use of epigenomic controllers in combination treatment strategies; potential of the OMEGA platform to pre-transcriptionally modulate gene expression and revolutionize genomic medicine; expectations surrounding the potential of our product candidates, including OTX 2101; and expectations regarding our pipeline, including trial design, initiation of preclinical studies and advancement of multiple preclinical development programs in oncology, immunology, regenerative medicine, and select monogenic diseases. These statements are neither promises nor guarantees, but involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements, including, but not limited to, the following: the novel technology on which our product candidates are based makes it difficult to predict the time and cost of preclinical and clinical development and subsequently obtaining regulatory approval, if at all; the substantial development and regulatory risks associated with epigenomic controllers due to the novel and unprecedented nature of this new category of medicines; our limited operating history; the incurrence of significant losses and the fact that we expect to continue to incur significant additional losses for the foreseeable future; our need for substantial additional financing; our investments in research and development efforts that further enhance the OMEGA platform, and their impact on our results; uncertainty regarding preclinical development, especially for a new class of medicines such as epigenomic controllers; potential delays in and unforeseen costs arising from our clinical trials; the fact that our product candidates may be associated with serious adverse events, undesirable side effects or have other properties that could halt their regulatory development, prevent their regulatory approval, limit their

commercial potential, or result in significant negative consequences; the impact of increased demand for the manufacture of mRNA and LNP based vaccines to treat COVID-19 on our development plans; difficulties manufacturing the novel technology on which our OEC candidates are based; our ability to adapt to rapid and significant technological change; our reliance on third parties for the manufacture of materials; our ability to successfully acquire and establish our own manufacturing facilities and infrastructure; our reliance on a limited number of suppliers for lipid excipients used in our product candidates; our ability to advance our product candidates to clinical development; and our ability to obtain, maintain, enforce and adequately protect our intellectual property rights. These and other important factors discussed under the caption “Risk Factors” in our Quarterly Report on Form 10-Q for the quarter ended June 30, 2023, and our other filings with the SEC, could cause actual results to differ materially from those indicated by the forward-looking statements made in this press release. Any such forward-looking statements represent management’s estimates as of the date of this press release. While we may elect to update such forward-looking statements at some point in the future, we disclaim any obligation to do so, even if subsequent events cause our views to change.

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