Neoleukin Therapeutics Announces Preclinical Data for NL-201 at American Association for Cancer Research (AACR) Annual Meeting

April 13, 2022

- NL-201 demonstrates antitumor activity in preclinical B-cell lymphoma models -

- NL-201 synergizes with radiation therapy to generate potent, antitumor immunity -

SEATTLE, April 13, 2022 (GLOBE NEWSWIRE) -- Neoleukin Therapeutics, Inc., “Neoleukin” (NASDAQ:NLTX), a biopharmaceutical company utilizing sophisticated computational methods to design *de novo* protein therapeutics, today announced the presentation of preclinical data and a trial in progress overview for its immunotherapy candidate NL-201, an IL-2 and IL-15 agonist, at the American Association for Cancer Research (AACR) Annual Meeting.

“The research presented by Neoleukin researchers highlights the potential for NL-201 to treat hematologic cancers. In addition, data generated by our academic collaborators demonstrate synergistic antitumor activity when NL-201 is combined with radiation therapy, including significant inhibition of tumor growth and increased survival in preclinical models,” said Jonathan Drachman, M.D., Chief Executive Officer of Neoleukin. “We believe these data support the potential for NL-201 to provide broad benefit across a range of indications and in combination with other modalities of therapy to improve outcomes for cancer patients.”

Details of the poster presentations are as follows:

NL-201, a *de novo* agonist of IL-2 and IL-15 receptors, demonstrates antitumor activity in preclinical B cell lymphoma models

Presenter: Justin Huard, Neoleukin Therapeutics
Abstract Number: 4227

- NL-201 promotes *in vitro* cytotoxicity as a single agent and increases antibody-dependent cellular cytotoxicity (ADCC) in combination with anti-CD20 monoclonal antibody.
- NL-201 monotherapy demonstrates antitumor activity in the human Pfeiffer xenograft lymphoma model.
- NL-201 demonstrates robust monotherapy antitumor activity in the syngeneic murine A20 B cell lymphoma model and results in potent combination activity when NL-201 is combined with anti-PD-1 therapy.
- These findings support the evaluation of NL-201 in a planned clinical study in patients with B cell lymphomas and other hematological malignancies.

NL-201, a *de novo* engineered IL2/IL15 mimic, synergizes with radiation to generate potent antitumor immunity

First author: Wen Jiang, M.D., Assistant Professor, Department of Radiation Oncology, The University of Texas MD Anderson Cancer Center
Abstract Number: 2067

- NL-201, in combination with radiotherapy (RT), is well-tolerated in murine models and elicits robust antitumor activity through both innate and adaptive responses, including in checkpoint resistant tumors and brain metastases.
- NL-201 in combination with radiation therapy enhances activation of the cytosolic DNA sensor cyclic GMP-AMP synthase stimulator of interferon genes (cGAS-STING) pathway.
- The immune mechanisms triggered by NL-201 plus radiation result in superior tumor growth inhibition and survival in both localized and metastatic murine breast cancers.
- Results support further investigation of this novel combination regimen in localized and metastatic cancers.

A first-in-human Phase 1 study of NL-201 in patients with relapsed or refractory cancer

First author: Aung Naing, M.D., Professor, Department of Investigational Cancer Therapeutics, The University of Texas MD Anderson Cancer Center
Abstract Number: CT250

- The multinational, first-in-human, open-label Phase 1 trial of NL-201 monotherapy is assessing the safety profile, recommended Phase 2 dose and treatment schedule in patients with advanced and/or refractory solid tumors.
- The primary objectives are to assess the safety and toxicity profile of NL-201 and define the recommended Phase 2 dose and treatment schedule.
- Enrollment is ongoing at sites in North America and Australia (ClinicalTrials.gov Identifier: NCT04659629).

About NL-201

NL-201 is a *de novo* protein that acts as an agonist of the IL-2 and IL-15 receptors and is designed to expand cancer-fighting CD8 T cells and natural killer (NK) cells without any bias toward cells expressing the alpha receptor subunit (CD25). Preclinical data highlights the ability of NL-201 to stimulate and expand CD8+ and NK cells at very low doses with minimal impact on immunosuppressive regulatory T cells. Treatment with NL-201 in animal models was well-tolerated and induced durable, antitumor activity. Additionally, a low rate of immunogenicity was observed following five weekly doses

of NL-201 in non-human primates.

About Neoleukin Therapeutics, Inc.

Neoleukin is a biopharmaceutical company creating next generation immunotherapies for cancer, inflammation and autoimmunity using *de novo* protein design technology. Neoleukin uses sophisticated computational methods to design proteins that demonstrate specific pharmaceutical properties that provide potentially superior therapeutic benefit over native proteins. Neoleukin's lead product candidate, NL-201, is a combined IL-2 and IL-15 agonist designed to improve tolerability and activity by eliminating the alpha receptor binding interface. For more information, please visit the Neoleukin website: www.neoleukin.com.

Safe Harbor / Forward-Looking Statements

This press release contains "forward-looking" statements within the meaning of the safe harbor provisions of the U.S. Private Securities Litigation Reform Act of 1995, including, but not limited to, statements regarding the therapeutic properties and potential of the company's *de novo* protein design technology, the results of preclinical and clinical trials for NL-201, and planned clinical and development activities and timelines. Forward-looking statements can be identified by words such as: "anticipate," "intend," "plan," "goal," "seek," "believe," "project," "estimate," "expect," "strategy," "future," "likely," "may," "should," "will" and similar references to future periods. These statements are subject to numerous risks and uncertainties, including risks and uncertainties related to the company's cash forecasts, the company's ability to advance its product candidates, the receipt and timing of potential regulatory submissions, designations, approvals and commercialization of product candidates, the timing and results of preclinical and clinical trials, the timing of announcements and updates relating to the company's clinical trials and related data market conditions and further impacts of COVID-19, that could cause actual results to differ materially from what Neoleukin expects. Further information on potential risk factors that could affect Neoleukin's business and its financial results are detailed under the heading "Risk Factors" in documents the company files from time to time with the Securities and Exchange Commission (SEC), and other reports as filed with the SEC. Neoleukin undertakes no obligation to publicly update any forward-looking statement, whether written or oral, that may be made from time to time, whether as a result of new information, future developments or otherwise.

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