



## Neoleukin Therapeutics Announces Oral Presentation at IDWeek 2021 of Data Demonstrating that NL-CVX1, a Computationally Designed De Novo Protein, Can Block Infection by SARS-CoV-2 Viral Variants of Concern

September 29, 2021

– Single intranasal dose of NL-CVX1 in mice prevents infection by multiple variants of SARS-CoV-2 –

– Transgenic mice that are protected from disease by NL-CVX1 remain resistant to rechallenge after one month –

SEATTLE, Sept. 29, 2021 (GLOBE NEWSWIRE) -- Neoleukin Therapeutics, Inc., "Neoleukin" (NASDAQ:NLTX), a biopharmaceutical company utilizing sophisticated computational methods to design *de novo* protein therapeutics, today announced new data highlighting the ability of its *de novo* protein decoy, NL-CVX1, to block SARS-CoV-2 infection in certain viral variants. Data were presented in an oral presentation at IDWeek 2021 titled "[Antiviral NL-CVX1 efficiently blocks infection by SARS-CoV-2 viral variants of concern \(VOC\)](#)" (Conference Track A1, Session [O-27]: Novel Microbial Agents).\*

NL-CVX1 is a computationally designed, *de novo* protein that acts as a hACE2 decoy, neutralizing SARS-CoV-2 both *in vitro* and *in vivo* and inhibiting SARS-CoV-2 replication. ([T. W. Linsky et al. Science. 10.1126/science.abe0075 \(2020\)](#)). New data presented demonstrates that NL-CVX1 protects transgenic hACE2 mice from SARS-CoV-2 infection with a single intranasal dose and that this protection persists following a viral rechallenge one month later. In addition, the data indicates that NL-CVX1 effectively outcompetes binding of the SARS-CoV-2 receptor binding domain to hACE2 in the variants of concern that were tested. Findings also revealed the ability of NL-CVX1 to neutralize pseudoviruses expressing spike proteins of SARS-CoV-2 variants. The IDWeek presentation summarizes research performed by Neoleukin and research collaborators at the Instituto de Medicina Molecular João Lobo Antunes in Lisbon and Hong Kong University.

"These latest findings are encouraging as we now see the resiliency that NL-CVX1 has to protect animals from SARS-CoV-2 variants of concern. We're particularly interested in the protective effect to rechallenge in the mouse model. Our data suggest that while NL-CVX1 protects mice from acute infection, it also enables development of lasting immunity that protected mice from re-challenge with SARS-CoV-2 after one month. That is very exciting to us," said Gonçalo Bernardes, Ph.D., Associate Professor of Chemical Biology, University of Cambridge, U.K., and Group Leader at the Instituto de Medicina Molecular, Portugal, and member of the Neoleukin Scientific Advisory Board.

"The global impact of the SARS-CoV-2 pandemic and emerging variants of concern highlights the urgent need for effective prophylaxis and early treatment of SARS-CoV-2 infection. These data demonstrate that NL-CVX1 is resilient to mutations of the SARS-CoV-2 spike protein and provide evidence of both the potential value of NL-CVX1 and the broad power and promise of our *de novo* protein design platform," said Jonathan Drachman, M.D., Chief Executive Officer of Neoleukin. "We are grateful to our outstanding collaborators, including Dr. Maria Rebelo, presenter of these exciting data at IDWeek 2021."

\*IDWeek abstracts/presentations will be published in an online supplement to [Open Forum Infectious Diseases](#) (OFID), the Open Access Journal from the Infectious Diseases Society of America (IDSA) on or about November 1, 2021.

### 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](http://www.neoleukin.com).

### About NL-CVX1

NL-CVX1 is a computationally designed, *de novo* protein that binds to the spike protein of SARS-CoV-2. In preclinical studies, NL-CVX1 has been shown to neutralize SARS-CoV-2 both *in vitro* and *in vivo* and to inhibit SARS-CoV-2 replication. NL-CVX-1 has progressed through preclinical development, including toxicology and process development, which could potentially enable future low-cost scale up and manufacturing for intranasal administration. Neoleukin is considering opportunities to license NL-CVX1. Inquiries should be directed to [partnering@neoleukin.com](mailto:partnering@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 ability to develop or identify a partner for the NL-CVX1 program, 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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Source: Neoleukin Therapeutics, Inc.