Neurimmune and Ethris Sign Collaboration Agreement to Rapidly Develop Inhaled mRNA-based Antibody Therapy for the Treatment of Covid-19

-- Companies expect to initiate clinical testing in 2020 --

Zurich, Switzerland and Munich, Germany, April 1, 2020 – Neurimmune AG and Ethris GmbH announced today an exclusive partnership to develop mRNA-encoded, neutralizing anti-SARS-CoV-2 antibodies administered by inhalation for the treatment of Covid-19. The collaboration brings together Neurimmune’s expertise in developing human antibodies based on high-throughput immunoglobulin sequence analyses from Covid-19 patients who have recovered from the disease with Ethris’ proprietary and unique pulmonary SNIM®RNA therapeutics platform. Both companies will work together to rapidly develop an immunotherapy designed to produce therapeutic antibodies directly in the lungs of affected patients.

Enabled by Ethris’ mRNA technology, the production of specific, neutralizing antibodies directly in patients’ lungs provides the opportunity to significantly impact the viral lung disease that is the primary driver of morbidity and mortality. The planned treatment could be effective in all Covid-19 patients.

Neurimmune is identifying human anti-SARS-CoV-2 antibodies from the immune cells of recovered Covid-19 patients using its RTM™ Technology platform. Potent neutralizing antibodies will be translated into therapeutic SNIM®RNA products for inhalation. Based on current development plans, the first product candidate is expected to begin clinical testing in the fourth quarter of 2020, pending regulatory approval.

“The speed and precision that mRNA technologies provide make them well-suited for designing therapeutic candidates to treat the Covid-19 pandemic. We have built a strong platform for developing potent mRNAs to treat pulmonary disorders and local delivery in the lung may provide significant therapeutic benefits. By combining our approach with Neurimmune’s proven human antibody technology, we are well-positioned to expediently develop a treatment that could save lives,” said Ethris CEO, Dr. Gita Dittmar.
“Covid-19 patients with lung disease require a safe and effective therapy urgently. Together, we aim to develop this novel treatment at the highest speed possible. Time is of the essence.” said Roger Nitsch, Neurimmune’s CEO.

Jan Grimm, CSO of Neurimmune added: “With Ethris' pulmonary SNIM®RNA technology we can leverage state-of-the-art technology to express human SARS-CoV-2 neutralizing antibodies directly in the lung to rapidly achieve effective pulmonary antibody concentrations.”

Dr. Carsten Rudolph, CSO of Ethris added: “This collaborative effort is underscored by the immense need for a treatment and our combined commitment to put a therapy into the hands of the doctors and nurses who are fighting this disease across the globe. We are two companies among many that are applying innovation and speed to make a valuable contribution to curb this pandemic, and we thank our partners at Neurimmune for joining us for this effort.”

Under the collaboration agreement, Neurimmune and Ethris will jointly conduct research and development activities while sharing costs and revenues resulting from the collaboration. The companies intend to initiate manufacturing of the drug product for clinical trials this summer, and will inform about progress made as the collaboration advances.

About Neurimmune
Neurimmune AG is a leading biopharmaceutical company in the field of human antibody therapeutics. Six programs are currently in clinical study phases, including Aducanumab that concluded phase III clinical trials (licensed to Biogen Inc., Cambridge, Mass. USA). Neurimmune’s technology focusses on the cloning of authentic human antibodies from healthy elderly subjects, or from patients who recovered from disease,
by translating the immune memory of functionally active antibodies into transformative immunotherapeutics. This technology platform is known as RTM™ (Reverse Translational Medicine) technology.

Besides Covid-19, Neurimmune develops drug candidates for CNS and related protein aggregation diseases including Alzheimer's and Parkinson's diseases, ALS, frontotemporal dementia, dementia with Lewy bodies and ATTR cardiomyopathy. Neurimmune has three additional antibody programs in preclinical development, and expanded its treatment modalities by programs involving the vectorized expression of human antibody genes and a small molecule program.

www.neurimmune.com

About Ethris
Ethris is paving a new path from genes to therapeutic proteins using its proprietary messenger RNA technology platform, which enables the discovery, design and development of transcript therapies that drive the production of therapeutic proteins within patients' cells and tissues. Ethris' remains a global leader in delivery of mRNA directly to the respiratory system via nebulization. The company’s lead program ETH42 is in preclinical development for treatment of a rare pulmonary disease, primary ciliary dyskinesia, and the company collaborates with AstraZeneca in the fields of asthma, chronic obstructive pulmonary disease, and idiopathic pulmonary fibrosis. For more information, visit www.ethris.com.

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