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NeuroRx and Relief Therapeutics Establish Supply and Distribution Agreements for RLF-100™ (aviptadil)

Development partners establish supply chain agreements and order sufficient drug substance to treat 1 million patients

GENEVA and RADNOR, Pa., Sept. 30, 2020 /PRNewswire/ -- RELIEF THERAPEUTICS Holding AG (SIX: RLF, OTCQB: RLFTF) ("Relief" or the "Company") and NeuroRx, Inc. have established supply chain agreements and ordered sufficient drug substance (RLF-100TM) to prepare to treat 1 million patients with COVID-19, should the pandemic continue.

RLF-100™ is still in FDA-approved phase 2b/3 clinical trials for the treatment of critical COVID-19 in the US. A readout by the study's Data Monitoring Committee is expected within the next month. European trials with RLF-100TM are in preparation and are scheduled to start in Q1 2021.

The development partners, NeuroRx and Relief, are leading US and EU commercialization plans, respectively. They have now contracted with Nephron Pharmaceuticals, Inc. to manufacture commercial supplies of RLF-100™, in order to ensure that adequate drug inventory will be immediately available, should the clinical trials demonstrate safety and efficacy.

NeuroRx and Relief have similarly contracted with Bachem Americas (www.bachem.ch) to manufacture sufficient RLF-100TM drug substance to treat 1 million patients. Bachem was the first peptide manufacturer to synthesize RLF-100TM and has played a leading role in the development of the drug substance over the past 20 years.

NeuroRx and Relief have additionally contracted with a leading nationwide pharmaceutical logistics partner in order to ensure overnight supply to US hospitals, should RLF-100™ continue to succeed in clinical trials.

"In normal circumstances, it would be prudent to wait until all the data are in before initiating commercial scale-up. However, in an environment where more than 40,000 Americans are contracting COVID-19 daily and 800 are dying each day, there is not a moment to lose in ensuring that sufficient quantities of RLF-100™ will be available, should the clinical trials succeed in proving safety and efficacy," said Dr. Jonathan Javitt, CEO and Chairman of NeuroRx, Inc.

Dr. Raghuram (Ram) Selvaraju, Chairman of the Board of Relief continued: "We are living in unprecedented times, which call for flexibility and innovative thinking, in and outside the clinic. Therefore, we have taken the necessary steps to match the rapid clinical development of RLF-100TM by establishing a supply chain capable of scaling up to meet the urgent medical needs of critical COVID-19 patients."

About VIP in Lung Injury
Vasoactive Intestinal Polypeptide (VIP) was first discovered by the late Dr. Sami Said in 1970. Although first identified in the intestinal tract, VIP is now known to be produced throughout the body and to be primarily concentrated in the lungs. VIP has been shown in more than 100 peer-reviewed studies to have potent anti-inflammatory/anti-cytokine activity in animal models of respiratory distress, acute lung injury, and

inflammation. Most importantly, 70% of the VIP in the body is bound to a rare cell in the lung, the alveolar type 2 cell, which is critical to the transmission of oxygen to the body. VIP has a 20-year history of safe use in humans in multiple human trials for sarcoidosis, pulmonary fibrosis, asthma/allergy, and pulmonary hypertension.

COVID-19-related death is primarily caused by Respiratory Failure. Before this acute phase, however, there is evidence of early viral infection of the alveolar type 2 cells. These cells are known to have angiotensin converting enzyme 2 (ACE2) receptors at high levels, which serve as the route of entry for the SARS-CoV-2 into the cells. Coronaviruses are shown to replicate in alveolar type 2 cells, but not in the more numerous type 1 cells. These same type 2 alveolar cells have high concentrations of VIP receptors on their cell surfaces giving rise to the hypothesis that VIP could specifically protect these cells from injury.

Injury to the type 2 alveolar cells is an increasingly plausible mechanism of COVID-19 disease progression. (Mason 2020). These specialized cells replenish the more common type 1 cells that line the lungs. More importantly, type 2 cells manufacture surfactant that coats the lung and is essential for oxygen exchange. Other than RLF-100, no currently proposed treatments for COVID-19 specifically target these vulnerable type 2 cells.

About RLF-100
RLF-100 (Aviptadil) is a formulation of Vasoactive Intestinal Polypeptide (VIP) that was developed based on Dr. Said's original work at Stony Brook University, for which Stony Brook was awarded an FDA Orphan Drug Designation in 2001. VIP is known to be highly concentrated in the lungs, where it inhibits coronavirus replication, blocks the formation of inflammatory cytokines, prevents cell death, and upregulates the production of surfactant. FDA has now granted IND authorization for intravenous and inhaled delivery of RLF-100 for the treatment of COVID-19 and awarded Fast Track designation. RLF-100 is being investigated in two placebo-controlled US Phase 2b/3 clinical trials in respiratory deficiency due to COVID-19. Since July 2020, severe COVID-19 patients have been treated with RLF-100 under U.S. FDA Emergency Use Investigational New Drug (IND) authorization for treatment of individual patients, and an Expanded Access Protocol IND authorization for the treatment of respiratory failure in COVID-19.

About RELIEF THERAPEUTICS Holding AG
Relief focuses primarily on clinical-stage programs based on molecules of natural origin (peptides and proteins) with a history of clinical testing and use in human patients or a strong scientific rationale. Currently, Relief is concentrating its efforts on developing new treatments for respiratory disease indications. Relief holds orphan drug designations from the U.S. FDA and the European Union for the use of VIP to treat ARDS, pulmonary hypertension, and sarcoidosis. Relief also holds a patent issued in the U.S. and multiple other countries covering potential formulations of RLF-100.

RELIEF THERAPEUTICS Holding AG is listed on the SIX Swiss Exchange under the symbol RLF and quoted in the U.S. on OTCQB under the symbol RLFTF.

About NeuroRx, Inc.
NeuroRx draws upon more than 100 years of collective drug development experience and is led by former senior executives of Johnson & Johnson, Eli Lilly, Pfizer, and AstraZeneca, PPD. In addition to its work on RLF-100, NeuroRx has been awarded Breakthrough Therapy Designation and a Special Protocol Agreement to develop NRX-101 in suicidal bipolar depression and is currently in Phase 3 trials. Its executive team is led by Prof. Jonathan C. Javitt, MD, MPH, who has served as a health advisor to four Presidential administrations and worked on paradigm-changing drug development projects for Merck, Allergan, Pharmacia, Pfizer, Novartis, and Mannkind, together with Robert Besthof, MIM, who served as the Global Vice President (Commercial) for Pfizer's Neuroscience and Pain Division. Its Board of Directors and Advisors includes Hon. Sherry Glied, former Assistant Secretary, U.S. Dept. of Health and Human Services; Mr. Chaim Hurvitz, former President of the Teva International Group, Lt. Gen. HR McMaster, the 23rd National Security Advisor, Wayne Pines, former Associate Commissioner of the U.S. Food and Drug Administration, Judge Abraham Sofaer, and Daniel Troy, former Chief Counsel, U.S. Food and Drug Administration.

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