August 26, 2021

# NRx Pharmaceuticals to Work with Cardinal Health to Ensure Efficient Distribution of Potential Therapies

### - Agreement Represents Path to Market for ZYESAMI™, as Time to Treatment is Crucial for Patients

### - Cardinal Health Third Party Logistics Services to Provide Logistical and Distribution Support for ZYESAMI™ (aviptadil) Upon Potential FDA Approval

### - Cardinal Health Specialty Pharmaceutical Distribution to Serve as the Exclusive Distributor to Ensure Access to ZYESAMI™ (aviptadil) Upon Potential FDA Approval

RADNOR, Pa., Aug. 26, 2021 /PRNewswire/ -- NRx Pharmaceuticals (NRx) (Nasdaq: NRXP) announced today it has signed an agreement with Cardinal Health to provide third party logistics and distribution of ZYESAMI™ upon the potential Emergency Use Authorization (EUA) approval by the US Food and Drug Administration (FDA). In May, NRx submitted an application for EUA to the FDA for ZYESAMI™ (aviptadil) for patients suffering from Critical COVID-19 with respiratory failure.

This partnership creates an efficient and highly flexible logistics and distribution model for NRx.

"This partnership creates an efficient and highly flexible logistics and distribution model for NRx. Cardinal Health's expertise will enable ZYESAMI to quickly reach patients in the intensive care units, as limiting the time to treatment is crucial," said Robert Besthof, Head of Operations and Chief Commercial Officer of NRx. "This also allows NRx to continue focusing on answering requests from the FDA in support of our application for Emergency Use Authorization for ZYESAMI."

Cardinal Health Specialty Pharmaceutical Distribution will serve as the exclusive distributor for ZYESAMI, providing broad access to hospitals for this needed medicine upon FDA authorization. With one of the largest healthcare supply chains, Cardinal Health services more than 90% of hospitals in the U.S., and has more than 20 years of experience supporting rapid delivery of lifesaving medicines.

Additionally, Cardinal Health's Third-Party Logistics Services (3PL) will support the warehousing and distribution, full order to cash, and necessary title model services.

"As the COVID-19 pandemic continues, so does the need for more innovative, effective and FDA-approved therapies for critically-ill patients with respiratory failure," said Marc DeLorenzo, Senior Vice President of Strategic Sourcing at Cardinal Health. "Cardinal Health is pleased to ensure that COVID-19 patients get access to treatment in a timely and efficient manner."

**About ZYESAMI™**

ZYESAMI™ (aviptadil) is a synthetic form of Vasoactive Intestinal Polypeptide (VIP) first discovered by the late Prof. Sami Said in 1970, and ZYESAMI™ is named in his honor. Although primarily concentrated in the lung, it was first purified from the intestinal tract. VIP binds specifically to the alveolar type II cell (ATII) in the air sac (alveolus) of the lung, where it has been shown have potent anti-inflammatory/anti-cytokine activity in animal models of respiratory distress, acute lung injury, and inflammation. VIP stimulates ATII cells to make the surfactant that must coat the lining of the lungs in order for them to exchange oxygen with the blood. Loss of surfactant causes respiratory failure and alveolar collapse, which are hallmarks of COVID-19.

COVID-19-related respiratory failure is caused by selective infection of the ATII cell by the SARS-CoV-2 virus. The ATII cells are vulnerable because of their (ACE2) surface receptors, which serve as the route of entry for the virus. Coronavirus infection of the ATII cell shuts down surfactant production, triggers the formation of inflammatory cytokines, and causes cell death (cytopathy). VIP is shown to upregulate surfactant production, block Coronavirus replication in the ATII cell, block cytokine synthesis, and prevent viral-induced cell death (cytopathy). Other than ZYESAMI™, no currently proposed treatments for COVID-19 specifically target this mechanism of action.

**About NRx Pharmaceuticals**

NRx Pharmaceuticals (Nasdaq:NRXP) draws upon more than 300 years of collective, scientific and drug-development experience to bring improved health to patients. Its investigational product, ZYESAMI™ (aviptadil) for patients with COVID-19, has been granted Fast Track designation by the US Food and Drug Administration (FDA) and is currently undergoing phase 3 trials funded by the US National Institutes of Health, the

Biomedical Advanced Research and Development Authority part of the US Department of Health and Human Services, and the Medical Countermeasures program, part of the US Department of Defense. The FDA has additionally granted Breakthrough Therapy Designation, a Special Protocol Agreement, and a Biomarker Letter of Support to NRx for NRX-101, an investigational medicine to treat suicidal bipolar depression. NRX-101 is currently in Phase 3 trials, with readouts expected in 2022. In July 2021, NRx was awarded an exclusive worldwide license to develop and commercialize the BriLife (VSV-ΔG) COVID-19 vaccine developed by the Israel Institute of Biological Research.

NRx is led by executives who have held senior roles at Allergan, J&J, Lilly, Novartis, Pfizer, and the US FDA. NRx is chaired by Prof Jonathan Javitt, MD, MPH, who has held leadership roles in six biotechnology startup companies with public exits and been appointed to advisory roles in four US Presidential administrations. The NRx board includes Dr. Sherry Glied, former US Assistant Secretary for Health (ASPE), Daniel E. Troy, JD, former Chief Counsel of the US FDA, Chaim Hurvitz, former director of Teva and President of the Teva International Group, and General H.R. McMaster, Ph.D. (US Army, Ret.) the 26th United States National Security Advisor.

**About Cardinal Health**
Cardinal Health is a distributor of pharmaceuticals, a global manufacturer and distributor of medical and laboratory products, and a provider of performance and data solutions for health care facilities. With 50 years in business, operations in more than 35 countries and approximately 44,000 employees globally, Cardinal Health is essential to care. Information about Cardinal Health is available at cardinalhealth.com.

**Cautionary Note Regarding Forward-Looking Statements**

This announcement of NRx Pharmaceuticals, Inc. includes "forward-looking statements" within the meaning of the "safe harbor" provisions of the U.S. Private Securities Litigation Reform Act of 1995, which may include, but are not limited to, statements regarding our financial outlook, product development, business prospects, and market and industry trends and conditions, as well as the company's strategies, plans, objectives, and goals. These forward-looking statements are based on current beliefs, expectations, estimates, forecasts, and projections of, as well as assumptions made by, and information currently available to, the company's management.

The company assumes no obligation to revise any forward-looking statement, whether as a result of new information, future events or otherwise. Accordingly, you should not place reliance on any forward-looking statement, and all forward-looking statements are herein qualified by reference to the cautionary statements set forth above.


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