November 4, 2021

US Food and Drug Administration Declines Emergency Use Authorization for ZYESAMI® (aviptadil) for Patients with Critical COVID-19 with Respiratory Failure

- NRx Pharmaceuticals Has Requested a Type A Meeting with US Food and Drug Administration (FDA) to Include Treating Physicians and Patients

- FDA Commits to Working with NRx to Develop ZYESAMI®

- ZYESAMI Clinical Trials Funded by the US National Institutes of Health and BARDA Continue and Advance Towards Enrollment in Brazil and Europe

RADNOR, Pa., Nov. 4, 2021 /PRNewswire/ -- NRx Pharmaceuticals (NASDAQ: NRXP), a clinical-stage biopharmaceutical company (NRx), today announced that the US Food and Drug Administration (FDA) has declined to issue an Emergency Use Authorization (EUA) for ZYESAMI® (aviptadil). The FDA stated that it was unable to issue the EUA at this time due to insufficient data regarding the known and potential benefits of the medicine and the known and potential risks of ZYESAMI in patients suffering from Critical COVID-19 with respiratory failure. In its letter, the FDA noted that so far, it has reviewed safety in only 131 randomized patients treated with ZYESAMI. NRx will attempt to coordinate a review by the FDA of the 150 or more additional patients already treated with ZYESAMI in the NIH ACTIV-3b trial. Last week, the study's Data Safety and Monitoring Board reviewed the ongoing NIH ACTIV-3b trial and found no new safety issues.

"Yesterday, more than 1,500 Americans and many more around the world died lonely deaths from COVID-19, isolated from their loved ones in ICUs despite widespread vaccination and currently-available approved treatments," said Jonathan Javitt, MD, MPH, Chief Executive Officer and Chairman of the Board of NRx. "We believe that ZYESAMI has demonstrated a high degree of safety and a two-fold increase in the odds of surviving the ICU. Patients treated at the nation's top hospitals with ZYESAMI had a four-fold increase in odds of survival. We will work actively with the FDA to deliver the data it has requested so that we may offer those patients another chance at life, and have asked the FDA for a Type A meeting that will include the experience of physicians who have witnessed the effects of our medicine firsthand and the experience of patients who are alive today because they were given one last chance at life. In the meantime, we are actively engaged with regulators and potential partners on multiple continents to advance ZYESAMI towards regulatory approval. Now that we have completed the Chemical and Manufacturing Controls (CMC) required for traditional approval pathways, we will move towards filing for accelerated approval based on the unexpectedly strong biomarker results seen in our two clinical trials."

Last week, NRx requested a Type A meeting with FDA officials, a request endorsed by key study investigators, to discuss the development of ZYESAMI. In the meantime, ZYESAMI remains available upon a physician's request under Federal and state Right to Try laws for those patients who meet the legal criteria for Right to Try.

The US National Institutes of Health has enrolled more than 300 patients in the ACTIV-3b trial. a confirmatory study that randomizes patients with COVID-19 respiratory failure to ZYESAMI® vs. Veklury® (remdesivir) and placebo in a factorial design trial (NCT04843761). A second nationwide trial to determine if similar benefits may be achieved in critically ill patients with inhaled ZYESAMI is being conducted on the I-SPY platform, maintained by the Quantum Leap Healthcare Collaborative. This week, the Data Safety Monitoring Board of the NIH ACTIV-3b

trial reported that no new drug-related Serious Adverse Events were seen and approved the trial for continued enrollment. NRx also continues to study the effect of inhaled ZYESAMI in patients with severe but not critical COVID-19 in a placebo-controlled trial that aims to demonstrate the ability of ZYESAMI to keep patients from requiring intensive care.

About NRx Pharmaceuticals

NRx Pharmaceuticals (NRx) 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, the Government of Israel awarded NRx the exclusive worldwide right to develop and market the BriLife™ COVID vaccine developed by the Israel Institute for 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.

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 US 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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