April 8, 2024

NRx Pharmaceuticals (NASDAQ:NRXP) Announces Data-Lock of Phase 2b/3 Trial of NRX-101 in Suicidal Treatment Resistant Bipolar Depression

- Data transferred for independent statistical analysis
- Top-line data expected in April 2024

RADNOR, Pa., April 8, 2024 /PRNewswire/ -- NRx Pharmaceuticals, Inc. (Nasdaq: NRXP) ("NRx Pharmaceuticals", the "Company"), a clinical-stage biopharmaceutical company, today announced that the Company has achieved data-lock in its Phase 2b/3 Suicidal Treatment Resistant Bipolar Depression Study with NRX-101. With data-lock, as forecast in last week's earnings call, the complete data set passed on for statistical analysis; top-line data release expected in April 2024.

With positive data from this study and FDA comment, NRx becomes eligible to receive the balance of its first milestone (an additional $4 million) from partners Alvogen, Inc. and Lotus Pharmaceuticals, Inc. (1745.TW). These partners would then be responsible for all future development costs in this indication. NRx retains rights for all other indications, including chronic pain and PTSD. NRx is then poised to receive $320 million in further milestones along with mid-teen royalties on Net Sales.

NRX-101 has been awarded Breakthrough Therapy Designation, Fast Track Designation, a Biomarker Letter of Support, and a Special Protocol Agreement by the FDA for treatment of Suicidal Treatment Resistant Bipolar Depression. It is the only oral medication to have demonstrated both reduced symptoms of depression and reduced suicidal ideation in patients with bipolar depression, a lethal disease that claims the lives of one in five who live with it.

The previous STABIL-B trial, (Ref. STABIL-B) resulted in the award of Breakthrough Therapy Designation for the use of NRX-101 following ketamine in hospitalized patients with Severe Bipolar Depression and Acute Suicidal Ideation and NRx was cleared by FDA to conduct a phase III trial in this regard under the Special Protocol Agreement. FDA then suggested that the Company explore whether NRX-101 might be applicable to the much larger population of patients with subacute suicidality who are cared for in the outpatient setting on a chronic basis. The purpose of this trial was to determine whether a signal could be detected that would support a much broader indication for NRX-101. Successful data in this regard would expand the potential market for NRX-101 from several hundred thousand patients per year to several million patients per year.

"Patients with active suicidal ideation have been excluded from the clinical trials of all previously known oral antidepressants. This trial of NRX-101 is the first under an FDA Investigational New Drug application to attempt to develop an oral therapy that offers patients with suicidal bipolar depression an alternative to electroconvulsive therapy, which is currently the only FDA-approved therapy for suicidal depression," said Dr. Jonathan Javitt, Founder, Chairman and Chief Scientist of NRx Pharmaceuticals. "The Company has also announced plans to submit a New Drug Application to FDA this quarter for the use of ketamine as a short-term therapy for suicidal bipolar depression. We believe this is the first trial to demonstrate that suicidal patients can safely be enrolled and treated within the context of a clinical trial, and this was only possible because of the close monitoring of our study investigators and site personnel. We are deeply appreciative of the tremendous work done by our clinical development team, the study sites and, most importantly, the patients who participated in our trial."

The Phase 2b/3 trial (www.clinicaltrials.gov NCT 03395392) is a randomized, prospective, multicenter, double-blind study comparing NRX-101 to lurasidone over six weeks. The Principal Investigator is Prof. Andrew Nierenberg of Harvard Massachusetts General Hospital. The primary efficacy endpoint is reduction in depression as measured on the Montgomery-Asberg Depression Rating Scale (MADRS) and the secondary endpoint is reduction of suicidal ideation as measured by the Clinical Global Impression Suicidality Scale (CGI-SS). As previously disclosed, treatment compliance and concordance of local raters to central raters scores was in excess of 94%, well above the industry standard that is normally seen in CNS trials.

About NRx Pharmaceuticals

NRx Pharmaceuticals is a clinical-stage biopharmaceutical company developing therapeutics based on its NMDA platform for the treatment of central nervous system disorders, specifically suicidal bipolar depression, chronic pain and PTSD. The Company is developing NRX-101, an FDA-designated investigational Breakthrough Therapy for suicidal treatment-resistant bipolar depression and chronic pain. NRx has partnered with Alvogen and Lotus around the development and marketing of NRX-101 for the treatment of suicidal bipolar depression. NRX-101 additionally has potential to act as a non-opioid treatment for chronic pain, as well as a treatment for complicated UTI.

NRx has recently announced plans to submit a New Drug Application for HTX-100 (IV ketamine), through Hope Therapeutics, in the treatment of suicidal depression, based on results of well-controlled clinical trials conducted under the auspices of the US National Institutes of Health and newly obtained data from French health authorities, licensed under a data sharing agreement. NRx was awarded Fast Track Designation for development of ketamine (NRX-100) by the US FDA as part of a protocol to treat patients with acute suicidality.

About HOPE Therapeutics, Inc.

HOPE Therapeutics, Inc. (www.hopetherapeutics.com) is a Specialty Pharmaceutical Company, wholly-owned by NRX Pharmaceuticals focused on development and marketing of an FDA-approved form of intravenous ketamine for the treatment of acute suicidality and depression together with a digital therapeutic-enabled platform designed to augment and preserve the clinical benefit of NMDA-targeted drug therapy.

Notice Regarding Forward-Looking Statements

The information contained herein includes forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, and Section 27A of the Securities Act of 1933, as amended. These statements include, among others, statements regarding the proposed public offering and the timing and the use of the proceeds from the offering. Forward-looking statements generally include statements that are predictive in nature and depend upon or refer to future events or conditions, and include words such as "may," "will," "should," "would," "expect," "plan," "believe," "intend," "look forward," and other similar expressions among others. These statements relate to future events or to the Company's future financial performance, and involve known and unknown risks, uncertainties and other factors that may cause the Company's actual results to be materially different from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements. You should not place undue reliance on forward-looking statements since they involve known and unknown risks, uncertainties and other factors which are, in some cases, beyond the Company's control and which could, and likely will, materially affect actual results, levels of activity, performance or achievements. Any forward-looking statement reflects the Company's current views with respect to future events and is subject to these and other risks, uncertainties and assumptions relating to the Company's operations, results of operations, growth strategy and liquidity. More detailed information about the Company and the risk factors that may affect the realization of forward-looking statements is set forth in the Company's most recent Annual Report on Form 10-K and other filings with the Securities and Exchange Commission. Investors and security holders are urged to read these documents free of charge on the SEC's website at http://www.sec.gov. Except as may be required by applicable law, The Company assumes no obligation to publicly update or revise these forward-looking statements for any reason, or to update the

reasons actual results could differ materially from those anticipated in these forward-looking statements, whether as a result of new information, future events or otherwise.

SOURCE NRx Pharmaceuticals, Inc.

For further information: CORPORATE CONTACTS: Jeremy Feffer, LifeSci Advisors, Inc., jfeffer@lifesciadvisors.com; Matthew Duffy, Chief Business Officer, NRx Pharmaceuticals, Co-CEO, HOPE Therapeutics, Inc., mduffy@nrxpharma.com

---