NRx Pharmaceuticals (Nasdaq:NRXP) notes presentation by Osmind, Inc. of IV Ketamine Efficacy vs. Nasal esketamine Efficacy at American Society of Clinical Psychopharmacology.

June 5, 2026

- Osmind presented a retrospective comparative study of de-identified electronic health record data in a sample of 8,224 patients with treatment resistant depression treated with IV ketamine and 1,830 patients treated with intranasal esketamine from 800 community psychiatry clinics.
- IV ketamine patients demonstrated significantly higher rates of remission (OR 1.51; P<.001) from depression and response (OR 1.22; P<.003) compared to patients treated with nasal esketamine.
- The primary study limitation is that treatment assignments were not randomized.
- Use of Real World Evidence for approval of drugs to treat depression has been emphasized in a recent White House Executive Order and recent Congressional Appropriations Language.

MIAMI, June 05, 2026 (GLOBE NEWSWIRE) -- NRx Pharmaceuticals (Nasdaq:NRXP, "the Company") announces the presentation of a peer-reviewed poster at the 2026 American Society of Clinical Psychopharmacology annual conference documenting Real World Evidence of effectiveness associated with the use of intravenous (IV) ketamine to treat depression compared to intranasal esketamine. The presentation, entitled "Real World Evidence of Clinical Treatment Response Following Intravenous Racemic Ketamine Versus Intranasal Esketamine in Adults with Major Depressive Disorder" was jointly authored by Robert Dougherty, Emily Shih, Jamie Lo, and Jimmy Qian of Osmind, Inc., and Prof. Samuel Wilkinson, MD, of Yale University Department of Psychiatry.

In a study of the medical records of 8,224 patients treated with IV ketamine and 1,830 patients treated with intranasal esketamine, the authors reported that both groups of patients demonstrated meaningful and sustained reductions in depression as measured by the PHQ-9 scale depression scale. Patients were matched on baseline characteristics to create an analysis set of 3,560 people. In the study, 34% of IV ketamine patients achieved remission and 63% demonstrated response, compared to 26% remission and 58% response among intranasal S-ketamine patients. The IV ketamine patients were approximately 22% more likely to demonstrate response to treatment (OR 1.22; P<.003) and approximately 50% more likely to demonstrate remission from depression (OR 1.51; P<.001).

The authors concluded that "in routine clinical care, both IV ketamine and intranasal esketamine rapidly improve depression symptoms with IV ketamine showing higher remission and response rates than intranasal esketamine." The authors further noted that the main weakness of the analysis is that treatment assignments were not randomized, hence unmeasured confounding variables may contribute to differences in outcomes. It should be noted that the trial included patients who presented for care at clinical facilities using the Osmind electronic medical record system and these patients may not be representative of all patients treated with these medications nationwide.

The use of Real World evidence in approvals of new drugs for the treatment of depression and suicidality, such as that reported in this study has been emphasized in a recent Presidential Executive Order[1] and by in recent appropriations language posted by the US House of Representatives.[2]

"We at NRx appreciate the rigor with which Osmind and its academic partner approached this Real World Evidence study and look forward to the results of larger, confirmatory studies, as envisioned in our recent Type C meeting with the FDA," said Dr. Jonathan Javitt, Chairman and CEO of NRx Pharmaceuticals.

About NRx Pharmaceuticals, Inc.
NRx Pharmaceuticals, Inc. (www.nrxpharma.com), is a clinical-stage biopharmaceutical company developing therapeutics based on its NMDA platform for the treatment of central nervous system disorders, specifically suicidal depression, chronic pain, and PTSD. The Company is developing NRX-100 (preservative-free intravenous ketamine) and NRX-101, (oral D-cycloserine/lurasidone). NRX-100 has been awarded Fast Track Designation for the treatment of Suicidal ideation in Depression, including Bipolar Depression. NRX-101 has been awarded Breakthrough Therapy Designation for the treatment of suicidal bipolar depression. NRx has filed an Abbreviated New Drug Application (ANDA), and initiated a New Drug Application filing for NRX-100 with an application for the Commissioner's National Priority Voucher Program for the treatment of suicidal ideation in patients with depression, including bipolar depression.

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. 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. The Company has reported regulatory milestones as they have been achieved but has not predicted the outcome of any future regulatory determination. 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, including uncertainties and assumptions relating to the Company's operations, results of operations, growth strategy, and, among other things, 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.

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[1] https://www.whitehouse.gov/presidential-actions/2026/04/accelerating-medical-treatments-for-serious-mental-illness/

[2] https://docs.house.gov/meetings/AP/AP00/20260429/119253/HMKP-119-AP00-20260429-SD002.pdf