Praxis Precision Medicines announces positive topline results from the EMBOLD study in SCN2A and 8A developmental epilepsies, highlighting the disease-modifying potential of relutrigine

September 3, 2024

Placebo-adjusted monthly motor seizure reduction of 46% during double-blind period

Over 30% of patients achieved seizure freedom status while on relutrigine

Meaningful gains observed in alertness, communication and seizure severity

75% reduction in median seizure rate seen for patients in the long-term extension

Registrational phase of the EMBOLD study for SCN2A and 8A initiated

BOSTON, Mass., Sept. 03, 2024 (GLOBE NEWSWIRE) -- Praxis Precision Medicines, Inc. (NASDAQ: PRAX), a clinical-stage biopharmaceutical company translating genetic insights into the development of therapies for central nervous system (CNS) disorders characterized by neuronal excitation-inhibition imbalance, today shared positive topline results for its Phase 2, proof of concept study evaluating relutrigine in SCN2A and SCN8A developmental and epileptic encephalopathy (DEE) patients.

“We are thrilled to see the combination of positive efficacy and tolerability of relutrigine for SCN2A and 8A, where there are no approved treatments. When comparing to the baseline rates, patients in EMBOLD had over 2,000 fewer seizures since the beginning of the study. This kind of remarkable impact keeps us focused on advancing our programs,” said Marcio Souza, president and chief executive officer. “Seizure freedom is the ultimate goal for patients, and we were humbled by the progress made with relutrigine during the EMBOLD study with over 30% of patients achieving this life-altering milestone. Most importantly, we are grateful to the patients, families, caregivers and clinicians who participated in the trial.”

"With over 30 years of experience treating pediatric epilepsy, I am profoundly excited by the results we've seen in the EMBOLD Study. The meaningful reduction in seizures, with many patients experiencing a dramatic decrease, gives us real hope for improving the lives of these children” said Dr. Antonio Gil-Nagel, Director of the Epilepsy Program at the Ruber International Hospital and Principal Investigator for the EMBOLD Study. “Seeing over 30% of patients achieve seizure freedom and the remarkable improvements in their alertness and communication are especially encouraging. The magnitude of these results suggests that relutrigine could truly transform the landscape of pediatric epilepsy treatment”.

“On behalf of the international SCN2A and SCN8A communities, whose loved ones face severe, life-threatening health challenges due to devastating seizures and the absence of approved treatments, we are optimistic about the initial results from EMBOLD. The achievement of significant reduction in seizures compared to placebo could represent a meaningful improvement in the lives of these children and their families. While early, the signals of seizure freedom and positive outcomes across multiple clinical assessments are also promising. We are very excited that the next phase of the study is already initiated, and we remain hopeful that this drug will prove to be a valuable therapy for our community, offering much-needed relief and hope,” said Kacie Craig, Gabi Conecker, Kris Pierce and Shawn Egan, in a joint statement from The Cute Syndrome Foundation, International SCN8A Alliance, SCN2A Australia, and the FamilieSCN2A Foundation.

About the EMBOLD Study
EMBOLD is a multicenter, double-blind, placebo-controlled, intervention-period-masked, randomized study, followed by open-label extension (OLE), which enrolled eligible male and female participants aged 2-18 years with a diagnosis of early onset *SCN2A*-DEE or *SCN8A*-DEE.

- Sixteen patients were randomized (1:1) to receive relutrigine QD for 16 weeks, or relutrigine QD for 12 weeks and matching placebo QD for 4 weeks, administered orally or via gastrostomy/jejunostomy tube (G/J-tube). Fifteen patients were determined to be eligible for efficacy assessments.
- Dose adjustment was permitted to a maximum of 1.0 mg/kg/day and a minimum of 0.25 mg/kg/day.
- Thirteen patients enrolled in the open-label extension

Summary of EMBOLD results
Relutrigine was generally safe and well tolerated by patients during the EMBOLD study. Seven patients increased the daily dose from 0.5 to 1 mg/kg/day during the double-blind period of the study. No patient required dose reduction. The most common adverse events (AEs) were infections, vomiting, pyrexia, somnolence and constipation in patients receiving relutrigine. No patients discontinued due to an AE. Patients on relutrigine observed a placebo-adjusted reduction of 46% in countable motor seizures (log-transformed). Change in Global Impression of Improvement, assessed by the caregiver and clinician at week 16 for patients on relutrigine, showed an improvement (caregiver, clinician) in disruptive behavior (29%, 23%), communication (43%, 31%),

seizure severity and intensity (71%, 62%) and alertness (57%, 69%). Eight patients have completed at least one 28-day period in the long-term extension of EMBOLD with a median reduction in motor seizures of 75%. Five patients achieved a 28-day seizure free status while receiving relutrigine, compared to none on placebo.

Praxis to host a call on Tuesday, September 3 at 8:00 am ET to discuss the study results and next steps. To register for the call, please click here LINK

The live webcast and replay will be available through the Events & Presentations page of the Investors and Media section of the company's website at www.praxismedicines.com.

About Relutrigine (PRAX-562)
Relutrigine is a first-in-class small molecule in development for the treatment of developmental and epileptic encephalopathy (DEE) as a preferential inhibitor of persistent sodium current, shown to be a key driver of seizure symptoms in SCN2A-DEE and SCN8A-DEE. Relutrigine's mechanism of sodium channel modulation is consistent with superior selectivity for disease state sodium channel (NaV) channel hyperexcitability. In vivo studies of relutrigine have demonstrated dose-dependent inhibition of seizures up to complete control of seizure activity in SCN2A, SCN8A and other DEE mouse models. Relutrigine has been generally well-tolerated in three Phase 1 studies and has demonstrated biomarker changes indicative of NaV channel blocking effects. Relutrigine has received Orphan Drug Designation (ODD) and Rare Pediatric Designation (RPD) from the FDA, and ODD from the European Medicines Agency for the treatment of SCN2A-DEE and SCN8A-DEE. To learn more about the EMBOLD study, please visit https://www.emboldstudy.org/.

About Praxis
Praxis Precision Medicines is a clinical-stage biopharmaceutical company translating insights from genetic epilepsies into the development of therapies for CNS disorders characterized by neuronal excitation-inhibition imbalance. Praxis is applying genetic insights to the discovery and development of therapies for rare and more prevalent neurological disorders through our proprietary small molecule platform, Cerebrum™, and antisense oligonucleotide (ASO) platform, Solidus™, using our understanding of shared biological targets and circuits in the brain. Praxis has established a diversified, multimodal CNS portfolio including multiple programs across movement disorders and epilepsy, with four clinical-stage product candidates. For more information, please visit www.praxismedicines.com and follow us on Facebook, LinkedIn and Twitter/X.

Forward-Looking Statements
This press release contains forward-looking statements within the meaning of The Private Securities Litigation Reform Act of 1995 and other federal securities laws, including express or implied statements regarding Praxis' future expectations, plans and prospects, or the clinical development of relutrigine, including with respect to the EMBOLD and related long-term extension study, the potential benefits of relutrigine to treat patients with aged 2-18 years with a diagnosis of early onset SCN2A-DEE or SCN8A-DEE and the potential impact to patients' quality of life, as well as other statements containing the words "anticipate," "believe," "continue," "could," "endeavor," "estimate," "expect," "anticipate," "intend," "may," "might," "plan," "potential," "predict," "project," "seek," "should," "target," "will" or "would" and similar expressions that constitute forward-looking statements under the Private Securities Litigation Reform Act of 1995.

The express or implied forward-looking statements included in this press release are only predictions and are subject to a number of risks, uncertainties and assumptions, including, without limitation: uncertainties inherent in clinical trials; the expected timing of clinical trials, data readouts and the results thereof, and submissions for regulatory approval or review by governmental authorities; regulatory approvals to conduct trials; and other risks concerning Praxis' programs and operations as described in its Annual Report on Form 10-K for the year ended December 31, 2023 and other filings made with the Securities and Exchange Commission. Although Praxis' forward-looking statements reflect the good faith judgment of its management, these statements are based only on information and factors currently known by Praxis. As a result, you are cautioned not to rely on these forward-looking statements. Any forward-looking statement made in this press release speaks only as of the date on which it is made. Praxis undertakes no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future developments or otherwise.

Investor Contact: Praxis Precision Medicines investors@praxismedicines.com 857-702-9452 Media Contact: Dan Ferry Life Science Advisors Daniel@lifesciadvisors.com 617-430-7576