# Xenon Pharmaceuticals Provides Updates on Neurology Pipeline Programs at the Annual Meeting of the American Epilepsy Society (AES 2023)

December 2, 2023

VANCOUVER, British Columbia, Dec. 02, 2023 (GLOBE NEWSWIRE) -- Xenon Pharmaceuticals Inc. (Nasdaq:XENE), a neurology-focused biopharmaceutical company, today announced it will provide updates on its neurology programs at the Annual Meeting of the American Epilepsy Society (AES 2023).

Mr. Ian Mortimer, Xenon's President and Chief Executive Officer, stated, "Xenon will have another strong presence at AES this year, with many presentations and activities aimed at raising awareness about our XEN1101 program with the epileptologists and neurologists in attendance. Importantly, we are looking forward to presenting new interim data from our ongoing open-label extension study from our Phase 2b X-TOLE trial. These new data demonstrate impressive seizure freedom rates, including almost one in four patients who were on treatment for at least two years achieving at least 12 months of consecutive seizure freedom. In addition, we have now generated more than 500 patient years of safety data through our open label study, continuing to build on the significant body of evidence to support XEN1101's safety and tolerability profile."

Mr. Mortimer continued, "In addition, at our Xenon-sponsored scientific exhibit, we will present survey results on general burden of illness, quality of life, and mental health burden of illness from patients reporting focal onset seizures, which suggest that depression and anxiety, common comorbidities in epilepsy, further exacerbate the burden of epilepsy and may require additional care or support. Also at our scientific exhibit, we will feature a summary of the promising topline data from our XEN1101 Phase 2 X-NOVA study in major depressive disorder, or MDD, that we released earlier this week, and we look forward to engaging with the neurology community on these important data."

**AES XEN1101 Poster Highlights**

Poster No. 1.277 (French et al.) "Interim Long-Term Safety and Efficacy of XEN1101, a Potent, Selective Potassium Channel Opener: Update From an Ongoing, Open-Label Extension of a Phase 2b Study (X-TOLE) in Adults With Focal Epilepsy"

- Once daily (QD) dosing of 20 mg of XEN1101 with food yielded long-term efficacy in this interim analysis with 60% retention at 24 months.
- During open-label extension (OLE) study months 18 to 30, there was a sustained monthly reduction in seizure frequency (78%–95% median percent change) from double-blind period baseline, and higher reductions were observed for patients who were receiving one to two anti-seizure medications (ASMs) at baseline compared to those receiving three ASMs.
- Seizure freedom for ≥3-month, ≥6-month, and ≥12-month consecutive durations was achieved in 37.5%, 22.2%, and 14.9% of all patients enrolled in the OLE (n=275), respectively.
- Seizure freedom for ≥3-month, ≥6-month, and ≥12-month consecutive durations was achieved in 56.4%, 34.5% and 23.6% of those patients with at least 24 months of treatment in the OLE (n=165), respectively.
- XEN1101 continues to be generally well-tolerated in the OLE with adverse events (AEs) consistent with prior results and other AEs seen with other anti-seizure medications; no new safety signals were identified.

Poster No. 2.260 (Brandt et al.) "Long-Term Quality-of-Life Improvements in Adults With Focal Onset Seizures Treated With XEN1101 in an Ongoing Open-Label Extension of a Phase 2b Study (X-TOLE)"

- Clinically important improvements in the Quality of Life in Epilepsy Inventory-31 (QOLIE-31) subscales of Seizure Worry, Social Functioning, and Medication Effects were seen across all patients, with even greater improvements in the seizure-free group (SFG).
- The SFG achieved clinically important improvements in all quality-of-life domains assessed by the QOLIE-31 except for Energy/Fatigue.
- The improvements in Medication Effects across all patients is notable as this documented improved drug tolerability accompanied long-term seizure reduction in a difficult-to-treat epilepsy patient population.
- The rapid marked improvements seen in Medication Effects, Seizure Worry, and Social Functioning in the SFG over the first 3 months of the OLE were sustained and continued to improve over the first 2 years of the OLE.
- Quality-of-life improvements, as measured by the QOLIE-31, originally reported at year 1 were maintained or improved at year 2 of the X-TOLE OLE.

Poster No. 2.259 (Porter et al.) "The Impact of Disease Severity on Responder Rates in a Phase 2b Study of XEN1101, a Potent,

Selective Potassium Channel Opener, in Adults With Focal Epilepsy (X-TOLE)"

- Consistent with the significant MPC reduction in X-TOLE, 54.5% of the patients in the 25 mg group achieved the benchmark of RR50, which is the percentage of patients with a >50% reduction in seizure frequency during a given treatment period compared with baseline.
- This effect was observed in a difficult-to-treat patient population.
- XEN1101 was relatively more effective in patients with indicators of less-severe disease in the trial population.

**Other Posters and Exhibits**

Xenon is also presenting pre-clinical work from its discovery efforts related to the exploration of Nav1.1 potentiators for the treatment of Dravet Syndrome:

- Poster No. 2.247 (Goodchild et al.) "A Selective Nav1.1 Potentiator Enhances Interneuron Excitability to Normalize Motor Performance in a Dravet Syndrome Mouse Model"

*Scientific Exhibit*

Xenon is hosting a scientific exhibit at AES 2023 providing an overview of its clinical and research programs on Sunday, December 3, 2023 from 2-5 pm ET in Room w315B, Level 3 of the Orange County Convention Center in Orlando, FL. In addition to the posters noted above, the exhibit will provide information related to the XEN1101 Phase 3 epilepsy program, including the X-TOLE2 and X-TOLE3 clinical trials in focal onset seizures and X-ACKT clinical trial in primary generalized tonic-clonic seizures. The exhibit will also feature the topline results from the Phase 2 proof-of-concept X-NOVA clinical trial in major depressive disorder. Other poster presentations will cover results from two Xenon-sponsored web-enabled surveys using validated patient-reported outcome measures to assess the general burden of illness, quality of life, and mental health burden of illness in patients reporting focal onset seizures.

*Exhibit Hall Booth*

Xenon is also hosting a booth (#502) in the Exhibit Hall, which is scheduled to open at 12 pm ET on Saturday, December 2, 2023 and close on Monday, December 4, 2023 at 2 pm ET.

Posters will be added to the Xenon website consistent with AES 2023 conference guidelines.

**About Xenon Pharmaceuticals Inc.**

Xenon Pharmaceuticals (NASDAQ:XENE) is a clinical stage biopharmaceutical company committed to developing innovative therapeutics to improve the lives of patients with neurological disorders. We are advancing a novel product pipeline of neurology therapies to address areas of high unmet medical need, with a focus on epilepsy. For more information, please visit www.xenon-pharma.com.

**Safe Harbor Statement**

This press release contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, and the Private Securities Litigation Reform Act of 1995 and Canadian securities laws. These forward-looking statements are not based on historical fact, and include statements regarding the results from clinical trials; the potential efficacy, safety profile, future development plans, addressable market, regulatory success and commercial potential of product candidates; the efficacy of our clinical trial designs; our ability to successfully develop and achieve milestones in our XEN1101 and other development programs; and our ability to successfully develop and obtain regulatory approval of XEN1101 and our other product candidates. These forward-looking statements are based on current assumptions that involve risks, uncertainties and other factors that may cause the actual results, events, or developments to be materially different from those expressed or implied by such forward-looking statements. These risks and uncertainties, many of which are beyond our control, include, but are not limited to: clinical trials may not demonstrate safety and efficacy of any of our or our collaborators' product candidates; promising results from pre-clinical development activities or early clinical trial results may not be replicated in later clinical trials; our assumptions regarding our planned expenditures and sufficiency of our cash to fund operations may be incorrect; our ongoing discovery and pre-clinical efforts may not yield additional product candidates; any of our or our collaborators' product candidates, including XEN1101, may fail in development, may not receive required regulatory approvals, or may be delayed to a point where they are not commercially viable; we may not achieve additional milestones in our proprietary or partnered programs; regulatory agencies may impose additional requirements or delay the initiation of clinical trials; the impact of competition; the impact of expanded product development and clinical activities on operating expenses; the impact of new or changing laws and regulations; the impact of pandemics, epidemics and other public health crises on our research and clinical development plans and timelines and results of operations, including impact on our clinical trial sites, collaborators, regulatory agencies and related review times, and contractors who act for or on our behalf; the impact of unstable economic conditions in the general domestic and global economic markets; adverse conditions from geopolitical events; as well as the other risks identified in our filings with the Securities and Exchange Commission and the securities commissions in British Columbia, Alberta, and Ontario. These forward-looking statements speak only as of the date hereof and we assume no obligation to update these forward-looking statements, and readers are cautioned not to place undue reliance on such

forward-looking statements.

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