Xenon Outlines Key Upcoming Milestones at the 2026 J.P. Morgan Healthcare Conference

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- *Phase 3 X-TOLE2 topline data for azetukalner in FOS expected March 2026 followed by anticipated NDA submission in H2 2026*
- *Five additional Phase 3 azetukalner studies continuing to enroll patients in multiple indications in epilepsy and neuropsychiatry; Phase 3 X-NOVA2 topline data in MDD expected in H1 2027*
- *Data from two Phase 1 studies of novel $Na_V1.7$ (XEN1701) and K_V7 (XEN1120) candidates expected in 2026 to support Phase 2 proof-of-concept studies in pain*

VANCOUVER, British Columbia and BOSTON, Jan. 12, 2026 (GLOBE NEWSWIRE) -- Xenon Pharmaceuticals Inc. (Nasdaq: XENE), a neuroscience-focused biopharmaceutical company dedicated to drug discovery, clinical development and commercialization of life-changing therapeutics for patients in need, today outlined forward momentum across the Company's Phase 3 portfolio and discussed pipeline progress at the 2026 J.P. Morgan Healthcare Conference.

"We're approaching an important inflection point as we expect to report topline data for our X-TOLE2 Phase 3 study of azetukalner in focal onset seizures later this quarter, a major milestone on the path toward regulatory submission, and ultimately, approval and our first commercial launch," said Ian Mortimer, President and Chief Executive Officer of Xenon. "We are excited about the anticipation in the epilepsy community and our potential opportunity to bring a different mechanism to the epilepsy treatment paradigm. Beyond our Phase 3 X-TOLE2 program, we continue to build momentum through progress across five additional placebo-controlled Phase 3 studies of azetukalner in epilepsy and neuropsychiatry, and through our maturing pipeline with multiple studies underway in our early-stage pain portfolio."

The Company's presentation at the J.P. Morgan Healthcare Conference will take place on Monday, January 12th at 9:00 am PST. A live webcast will be available on the Investors section of Xenon's website and posted for replay following the event.

Phase 3 Azetukalner Program in Epilepsy & Depression

- Phase 3 X-TOLE2 study of azetukalner in focal onset seizures (FOS) has completed enrollment with 380 patients randomized, and final data are being collected to support the topline data readout anticipated in March 2026. Patient baseline characteristics and the open-label extension (OLE) rollover rate in X-TOLE2 are consistent with the Phase 2b X-TOLE study.
- Xenon recently presented 48-month data from the ongoing X-TOLE OLE study of azetukalner in patients with FOS at the American Epilepsy Society (AES) meeting. These data highlighted the long-term efficacy and safety of azetukalner, with reductions in monthly FOS frequency of over 90% from double-blind period (DBP) baseline among participants treated ≥48 months. Seizure freedom for any ≥12, ≥24, ≥36, and ≥48-month consecutive duration was attained by 38.2%, 25.2%, 19.8%, and 10.7% of participants treated for ≥48 months, respectively. These data, along with an update on Xenon's progress preparing for potential commercialization of azetukalner, were also highlighted in a webinar for investors in December 2025.
- Phase 3 X-TOLE3 study of azetukalner in FOS continues to enroll and is intended to support regulatory submissions outside the United States. In support of a potential regulatory submission in Japan, Xenon has completed an ethnobridging study and shared the results in a recent meeting with Japan's Pharmaceutical and Medical Devices Agency (PMDA). Xenon has aligned with PMDA to enroll approximately 60 of the planned 360 X-TOLE3 participants in Japan. Enrollment of non-Japanese participants in X-TOLE3 is expected to complete in 2026.
- Phase 3 X-ACKT study of azetukalner in Primary Generalized Tonic-Clonic Seizures (PGTCS) continues to enroll and is intended to support regulatory submissions for an additional epilepsy indication.
- Phase 3 X-NOVA2 and X-NOVA3 studies are ongoing as the first two of three planned Phase 3 clinical studies evaluating azetukalner in patients with major depressive disorder (MDD). Topline data from X-NOVA2 are expected in H1 2027.
- Phase 3 X-CEED study evaluating azetukalner in patients with bipolar depression (BPD) I or II is underway.

Broader Pipeline Opportunity

- Phase 1 Single Ascending Dose (SAD)/Multiple Ascending Dose (MAD) study in healthy adult participants is underway for

XEN1701 targeting the sodium channel $Na_V1.7$. Preliminary Phase 1 data from the SAD portion of the study suggest that XEN1701 has reached drug concentrations that are predicted to achieve receptor occupancies required for therapeutic activity based on human genetic data. Study completion is expected in 2026 to support initiating a Phase 2 proof-of-concept study in acute pain. $Na_V1.7$ is an important target for pain based on strong human genetic validation and may represent a new class of pain medicines without the limitations of opioids.

- Phase 1 SAD/MAD study in healthy adult participants is underway for XEN1120 targeting K_V7. Preliminary Phase 1 data from the SAD portion of the study suggest that XEN1120 has reached drug concentrations that are consistent with pain reductions in preclinical models. Study completion is expected in 2026 to support initiating a Phase 2 proof-of-concept study in acute pain.
- IND-enabling studies are ongoing for the Company's Na $_V1.1$ program for the treatment of Dravet syndrome. Pre-clinical data suggest that targeting $Na_V1.1$ could potentially address the underlying cause and symptoms of Dravet syndrome.
- In collaboration with Neurocrine Biosciences, a Phase 1 study is ongoing for NBI-921355, an investigational, selective inhibitor of voltage-gated sodium channels $Na_V1.2$ and $Na_V1.6$ in development for the potential treatment of certain types of epilepsy.

About Azetukalner
Azetukalner is a novel, potent K_V7 potassium channel opener currently in Phase 3 clinical trials for the treatment of epilepsy, major depressive disorder (MDD) and bipolar depression (BPD). It represents the most advanced, clinically validated potassium channel modulator in late-stage clinical development. Azetukalner is designed to open potassium channels in the central nervous system, allowing potassium ions to flow and hyperpolarizing neurons. This process helps reduce excessive neuronal firing, which is a key contributor to several neurologic and psychiatric disorders. It is the only K_V7 potassium channel opener in development for multiple indications that is backed by long-term efficacy and safety data in epilepsy patients and proof-of-concept data in MDD patients.

About the X-TOLE2 Phase 3 Study
The X-TOLE2 clinical trial (ClinicalTrials.gov ID: NCT05614063) is a randomized, double-blind, placebo-controlled, multicenter Phase 3 study evaluating the efficacy, safety, and tolerability of azetukalner, administered as an adjunctive therapy in patients with focal onset seizures (FOS). The study was designed to randomize approximately 360 participants in a blinded manner to one of two active treatment groups or placebo in a 1:1:1 fashion (azetukalner 25 mg : 15 mg : placebo). The trial is designed to assess the median percent change in monthly seizure frequency from baseline through the double-blind treatment period (DBP). During the DBP, participants will be instructed to orally take azetukalner or placebo once daily with food. Participants who complete the 12-week DBP may enroll in a separate open-label extension (OLE) study for continued treatment with azetukalner.

About Epilepsy and Focal Onset Seizures
Epilepsy is a neurological condition characterized by abnormal electrical activity in the brain that leads to spontaneous, recurrent and unprovoked seizures. It is the fourth most common neurological condition and affects approximately 3 million adults in the U.S. Focal epilepsy is characterized by recurrent seizures that originate in a specific area of the brain (i.e. "focal onset seizures"), leading to various symptoms depending on the affected region. Despite the availability of multiple anti-seizure medications, existing treatment options fail around a third of people living with epilepsy, underscoring a persistent, substantial unmet medical need.

About Xenon Pharmaceuticals Inc.
Xenon Pharmaceuticals (Nasdaq: XENE) is a neuroscience-focused biopharmaceutical company dedicated to drug discovery, clinical development and commercialization of life-changing therapeutics for patients in need. Xenon's lead molecule, azetukalner, is a novel, potent K_V7 potassium channel opener in Phase 3 clinical trials for the treatment of epilepsy, major depressive disorder (MDD) and bipolar depression (BPD). Xenon is also advancing an early-stage portfolio of multiple promising potassium and sodium channel modulators, including K_V7 and $Na_V1.7$ programs in Phase 1 development for the potential treatment of pain. Xenon has offices in Vancouver, British Columbia, and Boston, Massachusetts. For more information, visit www.xenon-pharma.com and follow us on LinkedIn and X.

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 timing of and potential results from clinical studies; the potential efficacy, safety profile, future development plans in current and anticipated indications, addressable market, regulatory success and commercial potential of our and our partners' product candidates; the efficacy of our clinical study designs; our ability to successfully develop and achieve milestones in our azetukalner and other pipeline and development programs, including the anticipated filing of INDs and NDAs; the timing and results of our interactions with regulators, including the timing of any NDA submission; our ability to successfully develop and obtain regulatory approval of azetukalner and our other product candidates; and anticipated timing of topline data readout from our

clinical studies of azetukalner. 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 studies 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 study results may not be replicated in later clinical studies; 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 azetukalner, 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 or completion of clinical studies; the impact of market, industry, and regulatory conditions on clinical study enrollment; 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 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 U.S. 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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