Acumen Pharmaceuticals Highlights Enhanced Brain Delivery™ Technology for Oligomer-Selective Antibodies and Recruitment Strategies for Phase 2 ALTITUDE-AD Clinical Trial at 18th Annual Clinical Trials on Alzheimer's Disease (CTAD) Conference

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NEWTON, Mass., Dec. 02, 2025 (GLOBE NEWSWIRE) -- Acumen Pharmaceuticals, Inc. (NASDAQ: ABOS), a clinical-stage biopharmaceutical company developing a novel therapeutic that targets soluble amyloid beta oligomers (AβOs) for the treatment of Alzheimer's disease (AD), today announced new research at the 18th Annual Clinical Trials on Alzheimer's Disease (CTAD) conference, taking place December 1-4, 2025, in San Diego and online. Results from a collaborative study with JCR Pharmaceuticals demonstrated improved delivery of AβO-targeting monoclonal antibodies to the central nervous system, including sabirnetug (ACU193), through the blood-brain barrier using the transferrin receptor (TfR) pathway, which is being developed to potentially increase and broaden brain distribution and maximize the efficacy-to-safety ratio. Building on these results, Acumen and JCR Pharmaceuticals are now developing TfR-targeting antibodies for clinical testing. Additionally, results on clinical trial recruitment from the Phase 2 ALTITUDE-AD clinical trial showed that site databases and physician referrals were the most reliable recruitment methods overall.

"The data we're presenting at CTAD highlights two critical aspects of successful Alzheimer's drug development," said Jim Doherty, PhD, President and Chief Development Officer of Acumen Pharmaceuticals. "This research is advancing the understanding of two major challenges in the treatment of Alzheimer's disease – targeted drug delivery into the CNS and clinical trial execution. Our research with JCR Pharmaceuticals on transferrin receptor approaches and our insights into strategic trial recruitment represent meaningful contributions that we believe will benefit the broader effort to develop effective therapeutics for Alzheimer's disease."

Fusing Transferrin Receptor Binders to the AβO-targeting Antibody Sabirnetug Achieves Increased Brain Penetration in Mice While Preserving Target Binding

Intravenous delivery of IgG antibodies results in poor brain penetration, with typically less than 1% of the delivered dose reaching the brain. To overcome this limitation, murine TfR-binding antibody fragments from the J-Brain Cargo® platform were fused with ACU193 or ACU234, monoclonal IgG2 antibodies targeting soluble AβO species. The resulting fusion proteins demonstrated 15 to 68 fold increases in brain penetration following intravenous administration in mice. The potency and selectivity for soluble AβO species of these fusion proteins was maintained in mouse models of Alzheimer's disease. TfR -mediated transcytosis is a promising approach that offers the potential to enhance the brain levels of soluble ABO-targeting antibodies like ACU193 and ACU234, while simultaneously limiting exposure to vascular amyloid found primarily in cerebral arteries.

ALTITUDE-AD: Recruitment strategies for a global phase 2 trial of sabirnetug in early Alzheimer's disease

Acumen shares study insights from analyzed recruitment data from its Phase 2 ALTITUDE-AD trial to help optimize early AD trial enrollment. The study tracked 2,362 participants screened across 76 sites, with 542 ultimately enrolled. Of the six recruitment methods utilized, site databases and physician referrals were most effective for recruiting due to established relationships and pre-screened eligibility. These findings provide the field with actionable insights for improving trial recruitment efficiency and reducing screen failure rates in future early AD studies.

The data posters presented will be available after each poster session concludes on the Company's website at: https://acumenpharm.com/publications/.

About Sabirnetug (ACU193)

Sabirnetug (ACU193) is a humanized monoclonal antibody (mAb) discovered and developed based on its selectivity for soluble amyloid beta oligomers (AβOs), which are a highly toxic and pathogenic form of Aβ, relative to Aβ monomers and amyloid plaques. Soluble AβOs have been observed to be potent neurotoxins that bind to neurons, inhibit synaptic function and induce neurodegeneration. By selectively targeting toxic soluble AβOs, sabirnetug aims to address the hypothesis that soluble AβOs are an early and persistent underlying cause of the neurodegenerative process in Alzheimer's disease (AD). Sabirnetug has been granted Fast Track designation for the treatment of early AD by the U.S. Food and Drug Administration and is currently being evaluated in a Phase 2 study in patients with early AD.

About ALTITUDE-AD (Phase 2)

Initiated in 2024, ALTITUDE-AD is a Phase 2, multi-center, randomized, double-blind, placebo-controlled clinical trial designed to evaluate the efficacy and safety of sabirnetug (ACU193) infusions administered once every four weeks in slowing cognitive and functional decline as compared to placebo in participants with early Alzheimer's disease. The study has enrolled 542 individuals with early Alzheimer's disease (mild cognitive impairment or mild dementia due to AD) at multiple investigative sites located in the United States, Canada, the European Union and the United Kingdom. More information can be found on www.clinicaltrials.gov, NCT identifier NCT06335173.

About Acumen Pharmaceuticals, Inc.

Acumen Pharmaceuticals is a clinical-stage biopharmaceutical company developing a novel therapeutic that targets toxic soluble amyloid beta oligomers (AβOs) for the treatment of Alzheimer's disease (AD). Acumen's scientific founders pioneered research on AβOs, which a growing body of evidence indicates are early and persistent triggers of Alzheimer's disease pathology. Acumen is currently focused on advancing its investigational product candidate, sabirnetug (ACU193), a humanized monoclonal antibody that selectively targets synaptotoxic AβOs, in its ongoing Phase 2 clinical trial ALTITUDE-AD (NCT06335173) in early symptomatic Alzheimer's disease patients, following positive results in its Phase 1 trial INTERCEPT-AD. The company is headquartered in Newton, Mass. For more information, visit www.acumenpharm.com.

About the J-Brain Cargo® Platform Technology

JCR Pharmaceuticals has developed a proprietary blood-brain barrier (BBB)-penetrating technology, J-Brain Cargo®, to bring biotherapeutics into the central nervous system (CNS). The first drug developed based on this technology is IZCARGO® (INN: pabinafusp alfa) and is approved in Japan for the treatment of a lysosomal storage disorder.

About JCR Pharmaceuticals Co., Ltd.

JCR Pharmaceuticals Co., Ltd. (TSE 4552) is a global specialty pharmaceutical company that develops treatments that go beyond rare diseases to solve the world's most complex healthcare challenges. We continue to build upon our 50-year legacy in Japan while expanding our global footprint into the U.S., Europe, and Latin America. We improve patients' lives by applying our scientific expertise and unique technologies to research, develop, and deliver next-generation therapies. Our approved products in Japan include therapies for the treatment of growth disorder, MPS II (Hunter syndrome), Fabry disease, acute graft-versus host disease, and renal anemia. Our investigational products in development worldwide are aimed at treating rare diseases including MPS I (Hurler, Hurler-Scheie and Scheie syndrome), MPS II, MPS IIIA and B (Sanfilippo syndrome type A and B), and more. Our core values – Putting people first, Forging our own path, Always advancing, and Committed to excellence – mean that the work we do benefits all our stakeholders, including partners, patients and employees. We strive to expand the possibilities for patients while accelerating medical advancement at a global level. For more information, please visit JCR's global website: https://jcrpharm.com/.

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of The Private Securities Litigation Reform Act of 1995. Any statement describing Acumen's goals, expectations, financial or other projections, intentions or beliefs is a forward-looking statement and should be considered an at-risk statement. Words such as "potential," "will" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Forward-looking statements include statements concerning the therapeutic potential and potential clinical efficacy of Acumen's product candidate, sabirnetug (ACU193) and Enhanced Brain Delivery technology. These statements are based upon the current beliefs and expectations of Acumen's management, and are subject to certain factors, risks and uncertainties, particularly those inherent in the process of discovering, developing and commercializing safe and effective human therapeutics. Such risks may be amplified by the impacts of geopolitical events and macroeconomic conditions, such as rising inflation and interest rates, supply disruptions and uncertainty of credit and financial markets. These and other risks concerning Acumen's programs are described in additional detail in Acumen's filings with the Securities and Exchange Commission ("SEC"), including in Acumen's most recent Annual Report on Form 10-K, and in subsequent filings with the SEC. Copies of these and other documents are available from Acumen. Additional information will be made available in other filings that Acumen makes from time to time with the SEC. These forward-looking statements speak only as of the date hereof, and Acumen expressly disclaims any obligation to update or revise any forward-looking statement, except as otherwise required by law, whether, as a result of new information, future events or otherwise.

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