Acumen Pharmaceuticals Showcases pTau217 Trial Screening Progress in Phase 2 ALTITUDE-AD Trial and Preclinical Research Methods at AD/PD 2025 and AAN Annual Meeting

April 2, 2025

Biomarker results from Phase 1 INTERCEPT-AD trial of sabirnetug in patients with early Alzheimer's disease recently published in The Journal of Prevention of Alzheimer's Disease

NEWTON, Mass., April 02, 2025 (GLOBE NEWSWIRE) -- Acumen Pharmaceuticals, Inc. (NASDAQ: ABOS), 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), presented extended results from its validated research-use plasma pTau217 assay to screen potential participants in the ongoing Phase 2 ALTITUDE-AD clinical trial of sabirnetug, showing this strategy has performed as intended. The company presented the results during an oral presentation at the International Conference on Alzheimer's and Parkinson's Diseases and related neurological disorders (AD/PD) in Vienna, Austria, from April 1-5, 2025, and will deliver an encore presentation at the American Academy of Neurology (AAN) Annual Meeting in San Diego, Calif., from April 5-9, 2025. Acumen is also presenting posters on methods of interrogating the binding of AβOs to a model of human neurons, methods to advance Aβ selectivity measurements and early effects of sabirnetug on synaptic biomarkers in AD.

"We are pleased that our pTau217 screening assay enrichment strategy performed as expected with this expanded dataset including all randomized individuals in ALTITUDE-AD where the pTau217 assay was available. The use of pTau217 screening for ALTITUDE-AD allowed screening and enrollment to be conducted efficiently," said Eric Siemers, M.D., Chief Medical Officer of Acumen Pharmaceuticals. "Tools like this can ease the burden on patients, clinical trial investigators, and site staff, ultimately fostering a more patient-centric and efficient clinical trial experience. Collectively, our presentations reinforce the robust development program for sabirnetug, which Acumen is advancing as a potential next-generation antibody therapy for early symptomatic Alzheimer's disease."

pTau217 Enrichment Strategy Continues to Reduce Amyloid PET Scans and CSF Testing in Screening (AD/PD Oral Presentation #2813; Encore AAN Oral Presentation #3870)

The pTau217 enrichment strategy in the ALTITUDE-AD trial performed as intended, resulting in fewer amyloid PET scans or CSF procedures for potential trial participants as compared to INTERCEPT-AD, which did not use this enrichment strategy. The results build on a previous presentation with an expanded set of participants assessed. The updated data are included in the oral presentations, and an archived version of the presentation will be available after the conferences in the Presentations section of the Company's website at https://acumenpharm.com/document-library/.

Preparing Stable Monomeric Aβ to Assess AβO Selectivity Assays (AD/PD Poster 01-177)

Developing accurate AβO selectivity assays is critical for characterizing the specificity of AβO-targeting antibodies for AβOs as Aβ monomers are significantly more abundant in CSF. However, Aβ peptides rapidly aggregate, making it difficult to study them in preclinical settings. The presentation described a method to produce stable Aβ monomers that can be used to reproducibly evaluate the selectivity of AβO therapeutic antibody candidates.

Utility of Human iPSC-derived Neuronal Model for Evaluating Synaptic Binding of Aβ Oligomers (AD/PD Poster 01-272)

This study established a model of human neurons derived from induced pluripotent stem cells (iPSC) of healthy donors to assess the binding of AβOs derived from human brains with Alzheimer's disease. The study showed that both synthetic and human-derived AβOs bound to synapses in this model of human neurons, and sabirnetug was shown to block the binding of AβOs to synapses. This is a significant step in developing a non-clinical model for testing the interaction between sabirnetug and AβOs that more closely replicates the human brain environment.

Evaluating Binding Specificity of Aβ-targeting Antibodies in Brain Tissue (AD/PD Poster 01-474)

The study investigated the binding profiles of three anti-amyloid beta (Aβ) monoclonal antibodies – recombinant lecanemab, recombinant murine lecanemab precursor, and sabirnetug – in mouse brain tissue to understand their selectivity for vascular and parenchymal amyloid. This research may improve the understanding of whether differences in binding of Aβ antibodies to cerebral amyloid angiopathy (CAA) deposits can be detected. Study results, in a small number of samples, begin to show differences in binding affinities. Further high-magnification analyses using additional samples are planned.

INTERCEPT-AD Biomarker Results: Early effect of sabirnetug treatment on synaptic biomarkers in Alzheimer's disease (AAN Poster 3-003 in Neighborhood 3)

This study was conducted to examine early effects of sabirnetug on CSF levels of synaptic biomarkers in study participants with early symptomatic AD from the Phase 1 INTERCEPT-AD trial. The effects of sabirnetug on the synaptic biomarkers vesicle-associated membrane protein 2 (VAMP2) and neurogranin in the CSF will be presented. Longer term changes in biomarkers and their relationship with clinical efficacy will be evaluated in the ongoing Phase 2 ALTITUDE-AD study.

Additional biomarker findings from the INTERCEPT-AD study were recently published in *The Journal of Prevention of Alzheimer's Disease* (Volume 12, Issue 4).

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 toxic soluble 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.

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). 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.

Investors:
Alex Braun
abraun@acumenpharm.com

Media:
Jon Yu
ICR Healthcare
AcumenPR@icrhealthcare.com