Acumen Publishes Phase 1 Trial Design and Clinical Development Plan for ACU193, an Anti-Amyloid Beta Oligomer Antibody for Alzheimer's Disease

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Clinical development plan published in Journal of Prevention of Alzheimer's Disease

CHARLOTTESVILLE, Va. and CARMEL, Ind., Nov. 01, 2022 (GLOBE NEWSWIRE) -- Acumen Pharmaceuticals, Inc. (NASDAQ: ABOS) today announced that it published its development rationale and clinical development plan for ACU193, the first clinical-stage monoclonal antibody that selectively targets toxic soluble amyloid beta oligomers (AβOs). The article was published in the *Journal of Prevention of Alzheimer's Disease* and outlines the design of its ongoing Phase 1 INTERCEPT-AD trial for ACU193 and planned criteria for advancing to a Phase 2/3 clinical trial based on recent advancements in clinical research on Alzheimer's disease.

ACU193 is a humanized monoclonal antibody discovered and developed based on its selectivity for soluble AβOs, which scientific evidence indicates are the most toxic and pathogenic form of Aβ, relative to Aβ monomers and amyloid plaques. ACU193 was recently granted Fast Track designation for the treatment of early Alzheimer's disease by the U.S. Food and Drug Administration.

The criteria for advancing from the Phase 1 to a Phase 2/3 trial will be based on safety and tolerability, pharmacokinetic parameters, and target engagement at doses that have acceptable safety and tolerability. The Phase 2/3 trial would initiate with a patient sample size typical of a Phase 2 trial but would include an interim analysis to determine whether to increase the sample size to meet the statistical power of a typical Phase 3 trial. This interim analysis may be based on several cognitive measures and various biomarkers, including phosphorylated tau in the blood and cerebrospinal fluid (CSF). Pending discussions with regulators, if the interim analysis is positive, and the trial is expanded, the Phase 2/3 trial could potentially serve as a registration trial.

"Recent clinical results in the Alzheimer's disease field are consistent with the concept that targeting Aβ species other than monomers or amyloid plaques may lead to more effective or safer disease-modifying treatments that the field has long needed," said Eric Siemers, M.D., Chief Medical Officer at Acumen Pharmaceuticals and first author on the publication. "The Phase 1 trial design and clinical development plan for ACU193 reflect several advances in Alzheimer's disease research methodology and incorporate moving from a first-in-humans trial directly to a registration-quality Phase 2/3 trial which uses an adaptive design. Considerable evidence is available supporting oligomers as a promising therapeutic target for Alzheimer's disease, and we are in a position to more rapidly evaluate this target and accelerate the development of a new treatment for patients."

The publication, titled "ACU193, a Monoclonal Antibody that Selectively Binds Soluble Aβ Oligomers: Development Rationale, Phase 1 Trial Design, and Clinical Development Plan," can be viewed online here.

About ACU193

ACU193 is a humanized monoclonal antibody (mAb) discovered and developed based on its selectivity for soluble AβOs, which Acumen believes are the most 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, ACU193 aims to directly address what a growing body of evidence indicates is a primary underlying cause of the neurodegenerative process in AD.

ACU193 has been granted Fast Track designation for the treatment of early Alzheimer's disease by the U.S. Food and Drug Administration.

About INTERCEPT-AD

Approximately 62 individuals with early AD (mild cognitive impairment or mild dementia due to AD) are expected to be randomized into this double-blind, placebo-controlled, first-in-human study of ACU193. INTERCEPT-AD is designed to establish safety and proof of mechanism. It consists of single-ascending-dose (SAD) and multiple-ascending-dose (MAD) cohorts and is designed to evaluate the safety, tolerability, pharmacokinetics (PK), and target engagement of intravenous doses of ACU193. The study is enrolling at multiple investigative sites located in the United States. More information can be found on www.clinicaltrials.gov, NCT identifier NCT04931459.

About Acumen Pharmaceuticals, Inc.
Acumen, headquartered in Charlottesville, VA, with clinical operations based in Carmel, IN, is a clinical stage biopharmaceutical company developing a novel disease-modifying approach to treat Alzheimer's disease. Acumen's scientific founders pioneered research on AβOs, which a growing body of evidence indicates are primary triggers of Alzheimer's disease pathology. Acumen is currently focused on advancing its investigational product candidate, ACU193, a humanized monoclonal antibody that selectively targets toxic soluble AβOs in INTERCEPT-AD, a Phase 1 clinical trial involving early Alzheimer's disease patients. 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 "believes," "expects," "anticipates," "could," "would," "seeks," "aims," "plans," "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 Acumen's business and the therapeutic potential of Acumen's product candidate, ACU193, including its potential for improved safety and efficacy as compared to other monoclonal antibodies in development, as well as the expectations concerning the Phase 1 INTERCEPT-AD trial and the development of a subsequent Phase 2/3 trial, and expectations with respect to the role of toxic soluble AβOs in the potential treatment of Alzheimer's disease. These statements are based upon the current beliefs and expectations of Acumen

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 the COVID-19 pandemic. 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 Annual Report on Form 10 -K for the year ended December 31, 2021, filed with the SEC on March 28, 2022, which is available on the SEC's website at www.sec.gov, and its other documents subsequently filed with or furnished to 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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