BIOARCTIC

Press release

Eisai initiates rolling submission for the US FDA Biologics license application of lecanemab for early Alzheimer's disease under the accelerated approval pathway

Stockholm, September 28, 2021 - BioArctic AB's (publ) (Nasdaq Stockholm: BIOA B) partner Eisai today announced that they have initiated a rolling submission to the U.S. Food and Drug Administration (FDA) of a Biologics License Application (BLA) for lecanemab (BAN2401), an investigational anti-amyloid beta (Aβ) protofibril antibody, for the treatment of early Alzheimer's disease (early AD). The BLA is being submitted under the accelerated approval pathway and is primarily based on clinical, biomarker and safety data from the Phase 2b clinical trial in people with early Alzheimer's disease and confirmed amyloid pathology. The lecanemab Phase 2b trial results demonstrated a high degree of Aβ plaque lowering and consistent reduction of clinical decline across several clinical endpoints. The correlation between the extent of Aβ plaque reduction and effect on clinical endpoints in the Phase 2b study further supports Aβ as a surrogate endpoint that is reasonably likely to predict clinical benefit. AD is a serious, progressive and devastating disease with few treatment options. Eisai is utilizing the accelerated approval pathway after discussions with the FDA and aims to bring a new potential treatment option to people living with early AD, their families and healthcare professionals.

In June 2021, lecanemab was granted Breakthrough Therapy designation, which is an FDA program intended to expedite the development and review of medicines for serious or life-threatening conditions. Eisai has an agreement with the FDA to submit the BLA for lecanemab as a rolling submission. This agreement allows completed portions of the application to be submitted to the FDA for review on an ongoing basis. After all portions are submitted to the FDA and the agency accepts the BLA, the Prescription Drug User Fee Act (PDUFA) action date (target date for completion of examination) will be set.

The BLA submission for lecanemab is primarily based on the results of the proof-of-concept Phase 2b study in 856 patients with mild cognitive impairment (MCI) due to AD and mild AD (collectively known as early AD) with confirmed presence of amyloid pathology. The results were published in a peer-reviewed journal in April 2021.[1] The Phase 2b study explored the impact of treatment with lecanemab on reducing brain Aβ and clinical decline. At 18 months of treatment, 10-mg/kg biweekly lecanemab reduced brain amyloid by 0.306 SUVr units (from a baseline mean of 1.37), and over 80% of subjects became amyloid negative by visual read. Furthermore, the extent of reduction in amyloid was correlated with slower clinical decline on ADCOMS (Alzheimer's Disease Composite Score), CDR-SB (Clinical Dementia Rating-Sum-of-Boxes), and ADAS-cog (Alzheimer Disease Assessment Scale-

[1] Alzheimer's Research & Therapy volume 13, Article number: 80 (2021)
https://alzres.biomedcentral.com/articles/10.1186/s13195-021-00813-8

Cognitive Subscale) at the treatment group and patient level. The rate of amyloid-related imaging abnormalities-edema/effusion (ARIA-E), an adverse event associated with amyloid targeted therapies, for the 10 mg/kg biweekly dosing was 9.9%.

After completion of the Core period and a Gap period off treatment (average of 24 months), all 180 patients in the Phase 2b open-label extension study received 10 mg/kg bi-weekly lecanemab dosing. The data confirmed lecanemab produces reductions of amyloid PET SUVr, with significant reduction occurring as early as 3 months, and >80% of subjects achieved amyloid negative status by visual read in as early as 12 months. Significant amyloid reduction relative to placebo in those exposed to lecanemab in the Core period was maintained while off-treatment over the Gap period. The rate of ARIA-E was consistent with the Core study at around 10%.

The lecanemab Clarity AD Phase 3 clinical trial in early AD is ongoing and completed enrollment in March 2021 with 1,795 patients. The U.S. FDA has agreed that the results of Clarity AD, when completed, can serve as the confirmatory study to verify the clinical benefit of lecanemab. Blinded safety data from Clarity AD will be included to support the BLA.

“We are very impressed with our partner Eisai’s diligent work and clinical programs to progress the development of lecanemab. Alzheimer’s disease is devastating and the rolling BLA submission for lecanemab brings us one step closer to potentially being able to offer a new treatment option to millions of patients and their families,” said BioArctic's CEO Gunilla Osswald.

This release discusses investigational uses of an agent in development and is not intended to convey conclusions about efficacy or safety. There is no guarantee that any investigational uses of such product will successfully complete clinical development or gain health authority approval.

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This information is information that BioArctic AB (publ) is obliged to disclose pursuant to the EU Market Abuse Regulation. The information was released for public disclosure, through the agency of the contact persons above, on September 28, 2021, at 1:35 a.m. CET.

Note to editors

About lecanemab (BAN2401)
Lecanemab is an investigational humanized monoclonal antibody for Alzheimer's disease (AD) that is the result of a strategic research alliance between Eisai and BioArctic. Lecanemab selectively binds to, neutralize and eliminate soluble toxic Aβ aggregates (protofibrils) that are thought to contribute to the neurodegenerative process in AD. As such, lecanemab may have the potential to have an effect on disease pathology and to slow down the progression of the disease. Eisai obtained the global rights to study, develop, manufacture, and market lecanemab for the treatment of AD pursuant to an agreement concluded with BioArctic in December 2007. In March 2014, Eisai and Biogen entered into a joint development and commercialization agreement for lecanemab. Currently, lecanemab is being studied in a pivotal Phase 3 clinical study in symptomatic early AD (Clarity AD), following the outcome of the Phase 2b clinical study (Study 201). In July of 2020, the Phase 3 clinical study, AHEAD 3-45, for individuals with preclinical (asymptomatic) AD, meaning they are clinically normal and have intermediate or elevated levels of brain amyloid, was initiated. AHEAD 3-45 is conducted as a public-private partnership between the Alzheimer's Clinical Trial Consortium, funded by the National Institute on Aging, part of the National Institutes of Health and Eisai. In June 2021, FDA granted lecanemab Breakthrough Therapy designation.

About the collaboration between BioArctic and Eisai
Since 2005, BioArctic has long-term collaboration with Eisai regarding the development and commercialization of drugs for the treatment of Alzheimer's disease. The most important agreements are the Development and Commercialization Agreement for the lecanemab antibody, which was signed in December 2007, and the Development and Commercialization agreement for the antibody BAN2401 back-up for Alzheimer's disease, which was signed in May 2015. Eisai is responsible for the clinical development, application for market approval and commercialization of the products for Alzheimer's disease. BioArctic has no development costs for lecanemab in Alzheimer's disease.

About BioArctic AB
BioArctic AB (publ) is a Swedish research-based biopharma company focusing on disease-modifying treatments and reliable biomarkers and diagnostics for neurodegenerative diseases, such as Alzheimer's disease and Parkinson's disease. BioArctic focuses on innovative treatments in areas with high unmet medical needs. The company was founded in 2003 based on innovative research from Uppsala University, Sweden. Collaborations with universities are of great importance to the company together with its strategically important global partners in the Alzheimer (Eisai) and Parkinson (AbbVie) projects. The project portfolio is a combination of fully funded projects run in partnership with global pharmaceutical companies and innovative in-house projects with significant market and out-licensing potential. BioArctic's Class B share is listed on Nasdaq Stockholm Mid Cap (ticker: BIOA B). For more information about BioArctic, please visit www.bioarctic.com.