# Update on Regulatory Submission for Aducanumab in the European Union

April 22, 2022

Biogen Inc. (Nasdaq: BIIB) has notified the European Medicines Agency (EMA) of its decision to withdraw its Marketing Authorization Application (MAA) for aducanumab for the treatment of the early stages of Alzheimer's disease. The company withdrew its application following interactions with EMA's Committee for Medicinal Products for Human Use (CHMP) indicating that the data provided thus far would not be sufficient to support a positive opinion on the marketing authorization of aducanumab by EMA. Biogen's MAA had been under review by the CHMP in response to the company's request for a re-examination of the negative opinion the regulatory body issued in December 2021.

"We are thankful to the patients, caregivers and physicians that supported the re-examination process as part of the EMA review," said Priya Singhal, M.D., M.P.H., Head of Global Safety & Regulatory Sciences and interim Head of Research & Development at Biogen. "We stand by the safety and efficacy of aducanumab, and we look forward to upcoming data readouts to continue to provide important information on the science of this new class of compound."

Biogen will continue to advocate for patients and remains committed to research and development, as well as to its collaboration with Eisai, working towards the goal of bringing new treatment options to people living with Alzheimer's disease.

ADUHELM (aducanumab-avwa) was approved by the U.S. Food and Drug Administration (FDA), under the accelerated approval pathway, for the treatment of Alzheimer's disease. Continued approval for this indication may be contingent upon verification of clinical benefit in confirmatory trial(s). Further details on the indication are provided below.

**About ADUHELM® (aducanumab-avwa) injection 100 mg/mL solution for intravenous use**
In the U.S., ADUHELM (aducanumab-avwa) injection 100 mg/mL solution for intravenous use is indicated for the treatment of Alzheimer's disease. Treatment with ADUHELM should be initiated in patients with mild cognitive impairment or mild dementia stage of disease, the population in which treatment was initiated in clinical trials. There are no safety or effectiveness data on initiating treatment at earlier or later stages of the disease than were studied. This indication is approved under accelerated approval based on reduction in amyloid beta plaques observed in patients treated with ADUHELM. Continued approval for this indication may be contingent upon verification of clinical benefit in confirmatory trial(s).

ADUHELM is a monoclonal antibody directed against amyloid beta. The accumulation of amyloid beta plaques in the brain is a defining pathophysiological feature of Alzheimer's disease. The accelerated approval of ADUHELM has been granted based on data from clinical trials showing the effect of ADUHELM on reducing amyloid beta plaques, a surrogate biomarker that is reasonably likely to predict clinical benefit, in this case a reduction in clinical decline.

ADUHELM can cause serious side effects including: Amyloid Related Imaging Abnormalities or "ARIA". ARIA is a common side effect that does not usually cause any symptoms but can be serious. Although most people do not have symptoms, some people may have symptoms such as: headache, confusion, dizziness, vision changes, and nausea. The patient's healthcare provider will do magnetic resonance imaging (MRI) scans before and during treatment with ADUHELM to check for ARIA. ADUHELM can also cause serious allergic reactions. The most common side effects of ADUHELM include: swelling in areas of the brain, with or without small spots of bleeding in the brain or on the surface of the brain (ARIA); headache; and fall. Patients should call their healthcare provider for medical advice about side effects.

From 2017 to March 13, 2022, Biogen and Eisai jointly collaborated on the development, commercialization and manufacturing of ADUHELM. Effective March 14, 2022, Biogen has sole decision-making authority over the development, commercialization and manufacturing of ADUHELM. In 2022 the parties will continue in a global profit/loss sharing arrangement subject to a cap on Eisai's expenses for 2022. Eisai will be entitled to a tiered royalty on net sales of ADUHELM as of January 1, 2023.

Please click here for full Prescribing Information, including Medication Guide, for ADUHELM.

**About Biogen**
As pioneers in neuroscience, Biogen discovers, develops, and delivers worldwide innovative therapies for people living with serious neurological diseases as well as related therapeutic adjacencies. One of the world's first global biotechnology companies, Biogen was founded in 1978 by Charles Weissmann, Heinz Schaller, Sir Kenneth Murray, and Nobel Prize winners Walter Gilbert and Phillip Sharp. Today, Biogen has a leading portfolio of medicines to treat multiple sclerosis, has introduced the first approved treatment for spinal muscular atrophy, and is providing the first and only approved treatment to address a defining pathology of Alzheimer's disease. Biogen is also commercializing biosimilars and focusing on advancing the industry's most diversified pipeline in neuroscience that will transform the standard of care for patients in several areas of high unmet need.

In 2020, Biogen launched a bold 20-year, $250 million initiative to address the deeply interrelated issues of climate, health, and equity. Healthy Climate, Healthy Lives™ aims to eliminate fossil fuels across the company's operations, build collaborations with renowned institutions to advance the science to improve human health outcomes, and support underserved communities.

The company routinely posts information that may be important to investors on our website at www.biogen.com. To learn more, please visit www.biogen.com and follow Biogen on social media – Twitter, LinkedIn, Facebook, YouTube.

**Biogen Safe Harbor**
This news release contains forward-looking statements, including statements made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995, the potential clinical effects of ADUHELM; the potential benefits, safety and efficacy of ADUHELM; Biogen's strategy and plans; potential of, and expectations for, Biogen's commercial business and pipeline programs, including ADUHELM; planning and timing for the commercial launch of, and access to, ADUHELM; anticipated manufacturing, distribution, and supply of ADUHELM; the treatment of Alzheimer's disease; the potential of Biogen's commercial business and pipeline programs, including ADUHELM; and risks and uncertainties associated with drug development and commercialization. These statements may be identified by words such as "aim," "anticipate," "believe," "could," "estimate," "expect," "forecast," "intend," "may," "plan," "possible," "potential," "will," "would" and other words and terms of similar meaning. Drug development and commercialization involve a high degree of risk, and only a small number of research and development programs result in commercialization of a product. Results in early stage clinical trials may not be indicative of full results or results from later stage or larger scale clinical trials and do not

ensure regulatory approval. You should not place undue reliance on these statements or the scientific data presented.

These statements involve risks and uncertainties that could cause actual results to differ materially from those reflected in such statements, including, without limitation, uncertainty of success in the development and commercialization of ADUHELM; risks relating to the launch of ADUHELM, including preparedness of healthcare providers to treat patients, the ability to obtain and maintain adequate reimbursement for ADUHELM, and other unexpected difficulties or hurdles; unexpected concerns that may arise from additional data or analysis obtained during clinical trials; the occurrence of adverse safety events, restrictions on use, or product liability claims; regulatory authorities may require additional information or further studies, or may fail or refuse to approve or may delay approval of Biogen's drug candidates, including ADUHELM; risks of unexpected costs or delays; the risk of other unexpected hurdles; risks relating to investment in our manufacturing capacity; problems with our manufacturing processes; failure to protect and enforce our data, intellectual property, and other proprietary rights and uncertainties relating to intellectual property claims and challenges; third party collaboration risks; risks associated with current and potential future healthcare reforms; risks relating to the distribution and sale by third parties of counterfeit or unfit versions of our products; and the direct and indirect impacts of the ongoing COVID-19 pandemic on our business, results of operations and financial condition. The foregoing sets forth many, but not all, of the factors that could cause actual results to differ from Biogen's expectations in any forward-looking statement. Investors should consider this cautionary statement as well as the risk factors identified in Biogen's most recent annual or quarterly report and in other reports Biogen has filed with the U.S. Securities and Exchange Commission. These statements are based on Biogen's current beliefs and expectations and speak only as of the date of this news release. Biogen does not undertake any obligation to publicly update any forward-looking statements, whether as a result of new information, future developments or otherwise.

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