Biogen Exercises Option with Denali to Develop and Commercialize Antibody Transport Vehicle Program Targeting Amyloid Beta

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Program uses Denali's Antibody Transport Vehicle (ATV) technology to cross the blood-brain barrier (BBB) and aims to increase target engagement

CAMBRIDGE, Mass. and SOUTH SAN FRANCISCO, Calif., April 12, 2023 (GLOBE NEWSWIRE) -- Biogen Inc. (Nasdaq: BIIB) and Denali Therapeutics Inc. (Nasdaq: DNLI) today announced that Biogen has exercised the option to license Denali's Antibody Transport Vehicle (ATV):Amyloid beta program (ATV:Aβ). Accumulation of Aβ plaque in the brain is a defining feature of Alzheimer's disease (AD). Using Denali's ATV platform to cross the blood-brain barrier (BBB), ATV:Aβ is designed to increase brain exposure and target engagement of antibody therapeutics directed against Aβ, which may enable improved plaque clearance and/or reduced amyloid-related imaging abnormalities (ARIA).

"Recent progress with Aβ-directed therapeutic antibodies enables new treatment options for people living with AD, and clinical trial data have demonstrated that clearance of aggregated Aβ is associated with benefit for patients," said Joseph Lewcock, Ph.D., Chief Scientific Officer of Denali. "Our ATV:Aβ program is designed to safely increase exposure of the therapeutic antibody in the brain and potentially lead to improved efficacy and/or safety. We are pleased with Biogen's decision to license ATV:Aβ and we are hopeful this will foster the development of next-generation anti-Aβ therapeutics."

"This decision is an important next step of our collaboration with Denali on ATV:Aβ that aims to advance the next generation of Aβ immunotherapies for the treatment of Alzheimer's disease," said Dominic Walsh, Head of the Neurodegenerative Research Unit at Biogen. "This program reinforces the importance of targeting Aβ and our commitment to Alzheimer's disease."

The option was exercised pursuant to a collaboration between Biogen and Denali announced in 2020. Following the exercise of the option, Biogen will assume responsibility for all development and commercial activities and associated expenses. Denali will receive a one-time option exercise payment and, should certain milestones be achieved, Denali will be eligible to receive potential development and commercial milestone payments and royalties based on future net sales.

About Denali's Transport Vehicle Platform

The BBB is essential in maintaining the brain's microenvironment and protecting it from harmful substances and pathogens circulating in the bloodstream. Historically, the BBB has posed significant challenges to drug development for central nervous system diseases by preventing most drugs from reaching the brain in therapeutically relevant concentrations. Denali's Transport Vehicle platform is a proprietary technology designed to effectively deliver large therapeutic molecules such as antibodies, enzymes, proteins, and oligonucleotides across the BBB after intravenous administration. The Transport Vehicle technology is based on engineered Fc domains that bind to specific natural transport receptors, such as transferrin receptors, which are expressed at the BBB and deliver the Transport Vehicle and its therapeutic cargo to the brain through receptor-mediated transcytosis. In animal models, antibodies and enzymes engineered with the Transport Vehicle technology demonstrate more than 10- to 30-fold greater brain exposure than similar antibodies and enzymes without this technology. Improved exposure and broad distribution in the brain may increase therapeutic efficacy by enabling widespread achievement of therapeutically relevant concentrations of product candidates.

About Biogen

Founded in 1978, Biogen is a leading global biotechnology company that has pioneered multiple breakthrough innovations including a broad portfolio of medicines to treat multiple sclerosis, the first approved treatment for spinal muscular atrophy, and two co-developed treatments to address a defining pathology of Alzheimer's disease. Biogen is advancing a pipeline of potential novel therapies across neurology, neuropsychiatry, specialized immunology and rare diseases and remains acutely focused on its purpose of serving humanity through science while advancing a healthier, more sustainable and equitable world.

We routinely post information that may be important to investors on our website at www.biogen.com. Follow us on social media - Twitter, LinkedIn, Facebook, YouTube.

About Denali Therapeutics

Denali Therapeutics is a biopharmaceutical company developing a broad portfolio of product candidates engineered to cross the blood-brain barrier (BBB) for the treatment of neurodegenerative and lysosomal storage diseases. Denali pursues new treatments by rigorously assessing genetically validated targets, engineering delivery across the BBB and guiding development through biomarkers that demonstrate target and pathway engagement. Denali is based in South San Francisco. For additional information, please visit www.denalitherapeutics.com.

Biogen Safe Harbor

This press release contains forward-looking statements, made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995, including the potential benefits of Denali's TV technology platform and TV programs including its ATV: anti-amyloid beta program; the treatment of Alzheimer's disease; the potential of Biogen's commercial business and pipeline programs; Biogen's strategy and plans; the potential treatment of neurological and neurodegenerative diseases; and risks and

uncertainties associated with drug development and commercialization. These forward-looking statements may be accompanied by words such as “aim,” “anticipate,” “believe,” “could,” “estimate,” “expect,” “forecast,” “goal,” “intend,” “may,” “plan,” “potential,” “possible,” “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: risks that the proposed transaction will be completed in a timely manner or at all; the possibility that certain closing conditions to the proposed transaction will not be satisfied; uncertainty as to whether the anticipated benefits of the proposed collaboration can be achieved; risks of unexpected hurdles, costs or delays; uncertainty of success in the development and potential commercialization of Denali’s TV technology platform and TV programs including its ATV: anti-amyloid beta program, which may be impacted by, among other things, unexpected concerns that may arise from additional data or analysis, the occurrence of adverse safety events, failure to obtain regulatory approvals in certain jurisdictions, failure to protect and enforce Biogen’s data, intellectual property and other proprietary rights and uncertainties relating to intellectual property claims and challenges; product liability claims; third party collaboration risks; and the direct and indirect impacts of the ongoing COVID-19 pandemic on Biogen’s 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 risks 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 speak only as of the date of this press 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.

Denali Safe Harbor
This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements expressed or implied in this press release include, but are not limited to, statements regarding plans, timelines and expectations related to the ATV:Aβ program, including the therapeutic potential benefit ATV:Aβ; ATV:Aβ’s ability to treat Alzheimer's disease, and the commercial potential of ATV:Aβ; the potential benefits of, likelihood of success of, and expectations related to Denali's collaboration with Biogen, including potential milestone or royalty payments; and statements made by Denali’s CSO. Actual results are subject to risks and uncertainties and may differ materially from those indicated by these forward-looking statements as a result of these risks and uncertainties, including but not limited to, risks related to: Denali’s transition to a late stage clinical drug development company; Denali’s and its partners’ ability to initiate, enroll patients in, conduct, and complete its ongoing and future clinical trials on expected timelines; Denali’s reliance on third parties for the manufacture and supply of its product candidates for clinical trials; the potential for clinical trial results of ATV:Aβ to differ from preclinical, preliminary or expected results; risks related to Denali’s collaborations; the risk that results from early clinical biomarker studies will not translate to clinical benefit in late clinical studies; the risk that ATV:Aβ may not in the future receive regulatory approval as a treatment for Alzheimer’s or other indications for which it is being developed; Denali’s ability to obtain, maintain, or protect intellectual property rights related to its product candidates; implementation of Denali’s strategic plans for its business, product candidates and BBB platform technology; and other risks. In light of these risks, uncertainties, and assumptions, the forward-looking statements in this press release are inherently uncertain and may not occur, and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements. Accordingly, you should not rely upon forward-looking statements as predictions of future events. Information regarding additional risks and uncertainties may be found in Denali’s Annual Report on Form 10-K filed with the SEC on February 27, 2023, and Denali’s future reports to be filed with the SEC. The forward-looking statements in this press release are based on information available to Denali as of the date hereof. Denali disclaims any obligation to update any forward-looking statements, except as required by law.

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