Biogen and Capsigen Announce Collaboration to Discover and Develop Novel AAV Capsids for Targeted CNS and Neuromuscular Disorders

May 10, 2021

- *Collaboration aims to identify novel AAV capsids with enhanced properties to facilitate the development of new gene therapies for CNS and neuromuscular disorders*
- *Capsigen's screening technology is designed to produce dose optimized, fit for purpose vectors that may have applicability across Biogen's gene therapy pipeline*
- *Capsigen to receive a $15 million upfront payment and is eligible to receive potential research, development and commercial milestone payments*

CAMBRIDGE, Mass. and VANCOUVER, Wash., May 10, 2021 (GLOBE NEWSWIRE) -- Biogen Inc. (Nasdaq: BIIB) and Capsigen Inc. announced today that they have entered into a strategic research collaboration to engineer novel adeno-associated virus (AAV) capsids that have the potential to deliver transformative gene therapies that address the underlying genetic causes of various CNS and neuromuscular disorders.

As a part of the collaboration, Capsigen's proprietary TRADE™ platform and associated technologies will be utilized with the aim to create and identify novel AAV capsids tailored to meet disease-specific transduction profiles. Capsids are the protein coat that protects and facilitates delivery of the virus' genetic payload into host cells. The collaboration will leverage Capsigen's capsid engineering expertise and Biogen's discovery, development, manufacturing and commercialization capabilities with the goal to accelerate delivery of gene therapies to patients in need.

"Through this collaboration, we aim to solve key technological challenges in the delivery of gene therapies to target tissues. One of our priorities for technology innovation is the discovery of AAV capsids with improved delivery profiles," said Alfred Sandrock, Jr., M.D., Ph.D., Head of Research and Development at Biogen. "We are investing for the long-term by building platform capabilities and advanced manufacturing technologies with the goal of accelerating our efforts in gene therapy."

"At Capsigen, we believe the next revolution in gene therapy will be driven by engineered AAV capsids designed to meet disease-specific transduction profiles," said John Bial, Chief Executive Officer. "Biogen is a leader in neuroscience, and we are excited for the opportunity to work with them to potentially bring new treatments to patients. This collaboration is consistent with our strategy to work with world-class companies to develop the next generation of gene therapies."

Under the terms of the agreement, Capsigen will apply its vector engineering approaches to develop novel capsids designed to meet highly customized, disease-specific transduction profiles. Biogen will receive an exclusive license under Capsigen's proprietary technology for an undisclosed number of CNS and neuromuscular disease targets. Capsigen will receive a $15 million upfront payment and is eligible to receive up to $42 million in potential research milestones and up to an additional $1.25 billion in potential development and commercial payments should the collaboration programs achieve certain developmental milestones and sales thresholds. Capsigen is also eligible to receive royalties on future net sales of products that incorporate capsids resulting from the collaboration.

About Biogen
At Biogen, our mission is clear: we are pioneers in neuroscience. Biogen discovers, develops and delivers worldwide innovative therapies for people living with serious neurological and neurodegenerative 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, Kenneth Murray and Nobel Prize winners Walter Gilbert and Phillip Sharp. Today Biogen has the leading portfolio of medicines to treat multiple sclerosis, has introduced the first approved treatment for spinal muscular atrophy, commercializes biosimilars of advanced biologics and is focused on advancing research programs in multiple sclerosis and neuroimmunology, Alzheimer's disease and dementia, neuromuscular disorders, movement disorders, ophthalmology, neuropsychiatry, immunology, acute neurology and neuropathic pain.

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 Capsigen
At Capsigen, we're developing the next generation of AAV vectors to fuel the gene therapy needs of the future. Our end-to-end platform employs customized, highly diverse libraries using the most clinically relevant models and routes of administration. Our proprietary TRADE™ technology eliminates background and employs novel selection strategies to identify only those vectors which are fully functional and meet the disease-specific transduction criteria of interest. The final results are fit-for-purpose vectors designed to deliver the highest level of clinical utility in a rapid and high-throughput manner.

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, relating to the potential benefits and results that may be achieved through Biogen's collaboration with Capsigen; the potential benefits of Capsigen's TRADE platform; 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," "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, uncertainty as to whether the anticipated benefits of the collaboration can be achieved; risks of unexpected costs or delays or other unexpected hurdles; uncertainty of success in the development of potential gene therapies, 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 data, intellectual property and other proprietary rights and uncertainties relating to intellectual property claims and challenges; the direct and indirect impacts of the ongoing COVID-19 pandemic on Biogen's business, results of operations and financial condition; product liability claims; and third party collaboration risks. 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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