Passage Bio Announces First Patient Dosed in Imagine-1 Study of PBGM01 Gene Therapy for Infantile GM1 Gangliosidosis

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– PBGM01 advancement to clinical development represents key milestone for Passage Bio as a clinical-stage company –

PHILADELPHIA, April 01, 2021 (GLOBE NEWSWIRE) -- Passage Bio, Inc. (Nasdaq: PASG), a clinical-stage genetic medicines company focused on developing transformative therapies for rare monogenic central nervous system (CNS) disorders, announced that the first patient has been dosed in the company's global Phase 1/2 clinical trial program for PBGM01, an adeno-associated virus (AAV)-delivery gene therapy that is being studied for the treatment of infantile GM1 gangliosidosis (GM1). The patient in the Imagine-1 clinical trial received PBGM01 at The Children's Hospital at Saint Peter's University Hospital in New Brunswick, NJ. This officially marks an important milestone in the company's advancement to a clinical-stage company.

"In keeping with our company's mission to develop life-transforming therapies for rare CNS disorders, we are truly excited to progress the clinical development of PBGM01 with the dosing of our first patient. We look forward to sharing initial safety and biomarker data mid-year," said Bruce Goldsmith, Ph.D., president and chief executive officer at Passage Bio. "We are also proud of our team at Passage Bio for their outstanding work and the University of Pennsylvania's Gene Therapy Program for their collaboration in successfully advancing our first investigational therapy into the clinic."

GM1, a rare monogenic lysosomal storage disease, is caused by mutations in the *GLB1* gene, which encodes the lysosomal enzyme beta-galactosidase (β-gal). Reduced β-gal activity results in the accumulation of toxic levels of GM1 gangliosides in neurons throughout the brain, causing rapidly progressive neurodegeneration. GM1 accumulation also results in progressive damage to other tissues including the heart, liver, and bones and manifests with hypotonia (reduced muscle tone), progressive CNS dysfunction, seizures, and rapid developmental regression. Life expectancy for infants with GM1 ranges from 2-10 years, and infantile GM1 represents approximately 60 percent of the global GM1 incidence of 0.5 to 1 in 100,000 live births.

"Our ultimate aim is to develop a transformative gene therapy that will preserve neurological function, and improve developmental potential, survival and quality of life for patients with GM1," said Gary Romano, M.D., Ph.D., chief medical officer at Passage Bio. "We are extremely grateful to the families and patients for volunteering to support the effort to bring the PBGM01 gene therapy into clinical studies."

Imagine-1 study designed to assess safety, tolerability and efficacy

Imagine-1 is a global open-label dose-escalation study of PBGM01 administered by a single injection into the cisterna magna in pediatric subjects with early and late infantile GM1. Early infantile GM1 is characterized by onset in the first six months of life, while late infantile GM1 is characterized by onset between six and 24 months. The clinical program will enroll a total of four cohorts of two patients each, with separate dose-escalation cohorts for late infantile GM1 and early infantile GM1. Initial dosing in the first cohort will be in late infantile patients who are older than one year of age to establish safety before beginning dose escalation or moving into younger patients.

The primary goal of the Phase 1/2 study is to first assess safety and tolerability and then efficacy of PBGM01 in patients. Passage Bio anticipates reporting initial safety and 30-day biomarker data from the first cohort of patients in the Imagine-1 trial in mid-2021.

"In studying GM1-gangliosidosis for many years, I have worked closely with patients and families who have been affected by the devastation of this horrible disease," said Jeanine Jarnes, Pharm. D., BCOP, BCPS, assistant professor, Department of Pediatrics, University of Minnesota Medical School, who is the lead clinical trial investigator for Imagine-1. "PBGM01 offers potential hope to patients and their families as well as to the medical and research communities, and I am excited to see this program advance into clinical development so that we can begin to explore its potential as a disease-modifying therapy for patients with infantile and late-infantile GM1-gangliosidosis."

Imagine-1 clinical sites continue to open

As part of the global Imagine-1 study for PBGM01, Passage Bio plans to open 10 clinical study sites around the world, many of which are considered GM1 Centers of Excellence. In addition to the first trial site at The Children's Hospital at Saint Peter's University Hospital, New Brunswick, NJ, there are three additional sites planned in the United States, three in Canada, one in the United Kingdom (UK), one in Brazil and another in Turkey. In addition to the FDA clearance, clinical trial authorizations have been so far received for Imagine-1 in Canada and the UK.

Imagine-1 continues to enroll patients with GM1. If you are a caregiver seeking information for possible referral to a clinical trial site, please visit: https://www.PBGM01.com

About PBGM01

PBGM01 is an AAV-delivery gene therapy currently being developed for the treatment of infantile GM1, in which patients have mutations in the GLB1 gene causing little or no residual β-gal enzyme activity and subsequent neurodegeneration. PBGM01 utilizes a next-generation AAVhu68 capsid administered through the cisterna magna to deliver a functional GLB1 gene encoding β-gal to the brain and peripheral tissues. By reducing the accumulation of GM1 gangliosides, PBGM01 has the potential to reverse neuronal toxicity, thereby restoring developmental potential. In preclinical models, PBGM01 has demonstrated broad brain distribution and high levels of expression of the β-gal enzyme in both the CNS and critical peripheral organs, suggesting potential treatment for both the CNS and peripheral manifestations of GM1. PBGM01 has been granted Orphan Drug designations by the U.S. Food and Drug Administration (FDA) and the European Commission as well as Fast Track and Rare Pediatric Disease designations by FDA.

To learn more about the clinical trial program, please visit ClinicalTrials.gov: NCT04713475.

About Passage Bio

At Passage Bio (Nasdaq: PASG), we are on a mission to provide life-transforming gene therapies for patients with rare, monogenic CNS diseases that replace their suffering with boundless possibility, all while building lasting relationships with the communities we serve. Based in Philadelphia, PA, our company has established a strategic collaboration and licensing agreement with the renowned University of Pennsylvania's Gene Therapy Program to conduct our discovery and IND-enabling preclinical work. This provides our team with enhanced access to a broad portfolio of gene therapy candidates and future gene therapy innovations that we then pair with our deep clinical, regulatory, manufacturing and commercial expertise to rapidly advance our robust pipeline of optimized gene therapies into clinical testing. As we work with speed and tenacity, we are always mindful of patients who may be able to benefit from our therapies. More information is available at www.passagebio.com.

Forward-Looking Statements

This press release contains "forward-looking statements" within the meaning of, and made pursuant to the safe harbor provisions of, the Private Securities Litigation Reform Act of 1995, including, but not limited to: our expectations about timing and execution of anticipated milestones, including initiation of clinical trials and the availability of clinical data from such trials; our expectations about our collaborators' and partners' ability to execute key initiatives; our expectations about manufacturing plans and strategies; our expectations about cash runway; and the ability of our lead product candidates to treat their respective target monogenic CNS disorders. These forward-looking statements may be accompanied by such words as "aim," "anticipate," "believe," "could," "estimate," "expect," "forecast," "goal," "intend," "may," "might," "plan," "potential," "possible," "will," "would," and other words and terms of similar meaning. These statements involve risks and uncertainties that could cause actual results to differ materially from those reflected in such statements, including: our ability to develop and obtain regulatory approval for our product candidates; the timing and results of preclinical studies and clinical trials; risks associated with clinical trials, including our ability to adequately manage clinical activities, unexpected concerns that may arise from additional data or analysis obtained during clinical trials, regulatory authorities may require additional information or further studies, or may fail to approve or may delay approval of our drug candidates; the occurrence of adverse safety events; the risk that positive results in a preclinical study or clinical trial may not be replicated in subsequent trials or success in early stage clinical trials may not be predictive of results in later stage clinical trials; failure to protect and enforce our intellectual property, and other proprietary rights; our dependence on collaborators and other third parties for the development and manufacture of product candidates and other aspects of our business, which are outside of our full control; risks associated with current and potential delays, work stoppages, or supply chain disruptions caused by the coronavirus pandemic; and the other risks and uncertainties that are described in the Risk Factors section in documents the company files from time to time with the Securities and Exchange Commission (SEC), and other reports as filed with the SEC. Passage Bio undertakes no obligation to publicly update any forward-looking statement, whether written or oral, that may be made from time to time, whether as a result of new information, future developments or otherwise.

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