PepGen to Advance PGN-EDODM1 Into Highest Dose Cohort in Phase 2 FREEDOM2-DM1 Study Following DSMB Review

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– DSMB also recommended dose escalation in FREEDOM-OLE from 5 mg/kg to 10 mg/kg –

BOSTON--(BUSINESS WIRE)--Aug. 6, 2026-- PepGen Inc. (Nasdaq: PEPG), a clinical-stage biotechnology company advancing the next generation of oligonucleotide therapies with the goal of transforming the treatment of severe neuromuscular and neurological diseases, today announced that an independent Data and Safety Monitoring Board (DSMB) has recommended advancing the ongoing Phase 2 FREEDOM2-DM1 study evaluating PGN-EDODM1 in participants with myotonic dystrophy type 1 (DM1) into the third and highest multiple ascending dose (MAD) cohort of 12.5 mg/kg, with no recommended changes to the study protocol. The DSMB also recommended dose escalation in the open-label extension (OLE) study from 5 mg/kg to 10 mg/kg. Notably, 6 of 8 participants from the 5 mg/kg FREEDOM2 cohort have elected to enroll in the OLE, bringing total OLE enrollment to 16 participants. The recommendation followed a review of available safety data from the fully enrolled 10 mg/kg MAD cohort and the OLE study.

PGN-EDODM1 remains generally well-tolerated, with no serious adverse events or dose-limiting toxicities reported in FREEDOM2 or the OLE to date. Repeat dosing at both the 5 mg/kg and 10 mg/kg dose levels shows no evidence of cumulative toxicity, and no treatment discontinuations were reported in FREEDOM2 or the OLE.

“The DSMB's recommendation to advance FREEDOM2 into the highest planned dose level in the study and escalate dosing in the OLE supports the encouraging safety profile of PGN-EDODM1 following multiple months of treatment,” said James McArthur, PhD, President and Chief Executive Officer of PepGen. “In the FREEDOM2 study, 7 of 8 participants in the 10 mg/kg cohort have now completed dosing. We look forward to reporting additional safety, splicing and functional data from FREEDOM2 as we continue to evaluate the potential of PGN-EDODM1 to address the root cause of disease across multiple organ systems.”

The Company expects to report results from the fully enrolled 10 mg/kg FREEDOM2 cohort in November. Results from the 12.5 mg/kg cohort are expected in the first half of 2027, at which time PepGen plans to engage with regulators in an end of Phase 2 meeting to discuss plans for the registrational program. The Company also expects to provide an update from the OLE study by early January.

About PGN-EDODM1

PGN-EDODM1, PepGen's investigational candidate in development for the treatment of DM1, utilizes the Company's proprietary EDO technology to deliver a therapeutic oligonucleotide that is designed to restore the normal splicing function of MBNL1, a key RNA splicing protein. PGN-EDODM1 addresses the deleterious effects of cytosine-uracil-guanine (CUG) repeat expansion in the dystrophia myotonica protein kinase (*DMPK)* transcripts which sequester MBNL1, by binding to the pathogenic CUG trinucleotide repeat expansion present in the *DMPK* transcripts and disrupting the binding between the CUG repeat expansion and MBNL1. PepGen believes this innovative therapeutic approach may have considerable advantages over oligonucleotide modalities that rely on knockdown or degradation of the *DMPK* transcripts as it will allow the DMPK transcripts to continue to perform their normal function within the cell, while also liberating MBNL1 to correct downstream mis-splicing events. The U.S. Food and Drug Administration has granted PGN-EDODM1 both Orphan Drug and Fast Track Designations for the treatment of patients with DM1. The European Medicines Agency (EMA) has recently granted Orphan Designation for PGN-EDODM1.

About PepGen

PepGen Inc. is a clinical-stage biotechnology company developing the next generation of oligonucleotide therapies with the goal of transforming the treatment of severe neuromuscular and neurological diseases. PepGen’s Enhanced Delivery Oligonucleotide (EDO) platform is founded on over a decade of research and development and leverages cell-penetrating peptides to improve the uptake and activity of conjugated oligonucleotide therapeutics. Using these EDO peptides, the Company is generating a pipeline of oligonucleotide therapeutic candidates designed to target the root cause of serious diseases.

For more information, please visit *PepGen.com*. Follow PepGen on *LinkedIn* and *X*.

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, as amended. These statements may be identified by words such as “aims,” “anticipates,” “believes,” “could,” “estimates,” “expects,” “forecasts,” “goal,” “intends,” “may,” “plans,” “possible,” “potential,” “seeks,” “will,” and variations of these words or similar expressions that are intended to identify forward-looking statements. Any such statements in this press release that are not statements of historical fact may be deemed to be forward-looking statements. These forward-looking statements include, without limitation, statements regarding the therapeutic potential and tolerability of PGN-EDODM1, timelines for future data reports from our FREEDOM2-DM1 trial and its open-label extension, and plans to engage with regulators.

Any forward-looking statements in this press release are based on current expectations, estimates and projections only as of the date of this release and are subject to a number of risks and uncertainties that could cause actual results to differ materially and adversely from those set forth in or implied by such forward-looking statements. These risks and uncertainties include, but are not limited to risks related to: delays or failure to successfully initiate or complete our ongoing and planned development activities for PGN-EDODM1; our ability to enroll patients in our clinical trials, including FREEDOM2; that our interpretation of clinical and preclinical study results may be incorrect, or that we may not observe the levels of therapeutic activity in clinical testing that we anticipate based on prior clinical or preclinical results for PGN-EDODM1; that PGN-EDODM1 may not be safe and effective or otherwise demonstrate safety and efficacy in our clinical trials; adverse outcomes from our regulatory interactions, including delays in regulatory review, clearance to proceed or approval by regulatory authorities with respect to our programs, including release of the partial clinical hold or clearance to commence planned clinical studies of our product candidates, or other regulatory feedback requiring modifications to our development programs, including in each case with respect to our PGN-EDODM1 program; changes in regulatory framework that are out of our control; unexpected increases in the expenses associated with our development activities or other events that adversely impact our financial resources and cash runway; and our dependence on third parties for some or all aspects of our product manufacturing, research and preclinical and clinical testing. Additional risks concerning PepGen’s programs and operations are described in our most recent reports filed with the SEC. PepGen

explicitly disclaims any obligation to update any forward-looking statements except to the extent required by law.

This release discusses PGN-EDODM1, an investigational therapy that has not been approved for use in any country and is not intended to convey conclusions about its efficacy or safety. There is no guarantee that PGN-EDODM1 or any other investigational therapy will successfully complete clinical development or gain regulatory authority approval.

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Investor Contact
Laurence Watts
New Street Investor Relations
Laurence@newstreetir.com

Media Contact
Julia Deutsch
Lyra Strategic Advisory
Jdeutsch@lyraadvisory.com

Source: PepGen Inc.