

MitoXcel™ Geropeptide PTC-2105 Attenuates Terminal Lean-Mass Decline and Semaglutide-Associated Lean-Mass Loss in Aged Mice

Daniel Jasinski, Ph.D., Meena Balakrishnan, Kyra Courtney, Samantha Moreno, Stephen Shaw, Keshav Karki, Ashley Perry, Danielle Grabert, Kevin Slawin, MD.

Eos SENOLYTIX, Inc. (“Eos”), Houston, TX, USA

Introduction: Sarcopenia and cachexia are typically framed as slow, chronic processes, but muscle and body mass loss often accelerates sharply in a terminal window preceding death. This late-life trajectory is under-characterized in preclinical aging models and rarely evaluated in conjunction with survival. We applied a death-aligned “terminal decline” framework, paired with survival analysis, to test whether PTC-2105, an 18-mer mitochondria-targeted geropeptide, attenuates late-life lean-mass loss in aged mice, alone and in combination with semaglutide.

Methods: Body weight and DEXA fat/lean mass were aligned to each animal's date of death across three independent aged (75-90 week) C57BL/6J cohorts. Two were on 45% high-fat diet: one (n=20/arm) testing PTC-2105 monotherapy against a single PTC-2105+semaglutide arm; the other (5 arms total, n=10/arm), testing saline, semaglutide alone, PTC-2105 monotherapy, and PTC-2105+semaglutide at 10 and 25 mg/kg (1x/week) are reported here. A third, normal chow cohort (5 arms, n=10/arm) tested four PTC-2105 doses (2.5-25 mg/kg 1X/week) against saline.

Results: PTC-2105 monotherapy reversed the terminal lean-mass trajectory from decline to net gain in the first high-fat cohort (+0.005 vs saline -0.002 g/wk). In a second high-fat cohort, semaglutide alone showed the steepest terminal lean-mass decline (-0.055 g/wk) with shorter survival (p=0.038); PTC-2105 monotherapy avoided this decline (+0.009 g/wk). Both reported PTC-2105+semaglutide arms (10, 25 mg/kg, 1x/week) showed reduced late-life lean-mass loss than semaglutide alone (+0.126, -0.011 vs -0.055 g/wk). Similar results, relative to saline in this case, were observed in the normal chow cohort.

Conclusions: Across independent cohorts of aged mice, PTC-2105 was associated with attenuation of terminal lean-mass decline. Semaglutide monotherapy was associated with pronounced late-life lean-mass loss, while co-administration of PTC-2105 attenuated this trajectory. These findings support further investigation of PTC-2105 as a potential approach to preserving lean mass during late-life aging and to mitigating GLP-1-associated lean-mass loss.

Proposed Merger with Pulmatrix, Inc.

As previously reported in Pulmatrix, Inc.'s (Nasdaq: PULM) (“Pulmatrix”) Current Report on Form 8-K filed with the Securities and Exchange Commission (the “SEC”) on March 26, 2026, Pulmatrix, PUOS Merger Sub, Inc., a Delaware corporation and wholly owned subsidiary of Pulmatrix (“Merger Sub”), and Eos entered into an Agreement and Plan of Merger and Reorganization, dated as of March 26, 2026 (the “Merger Agreement”), pursuant to which Merger Sub will merge with and into Eos, with Eos surviving as a wholly owned subsidiary of Pulmatrix (the “Merger”). If the Merger is completed, the business of Eos will continue as the business of the combined company, and the combined company's common stock is expected to trade on Nasdaq under the new ticker symbol “MTXL.” Merger-associated financings are expected to support advancement of the combined company's pipeline through key clinical milestones. In connection with the Merger, Pulmatrix filed a registration statement on Form S-4 (File No. 333-297342), with the SEC on July 9, 2026, as amended on August 3, 2026, August 7, 2026, September 4, 2026, September 17, 2026 and September 23, 2026, and declared effective by the SEC on September 25, 2026 (the “Registration Statement”), which includes a proxy statement/prospectus. Pursuant to the definitive proxy statement/prospectus filed with the SEC on September 25, 2026, as supplemented on October 7, 2026 (the “Proxy Statement/Prospectus”), Pulmatrix is asking its stockholders to vote at the special meeting of stockholders of Pulmatrix to be held on October 26, 2026 (the “Special Meeting”), unless postponed or adjourned to a later date. The Merger is anticipated to close shortly after the Special Meeting, subject to the satisfaction or waiver of the customary closing conditions set forth in the Merger Agreement.

About Pulmatrix, Inc. Pulmatrix is a biopharmaceutical company that has focused on the development of novel inhaled therapeutic products intended to prevent and treat migraine and respiratory diseases with important unmet medical needs using its patented iSPERSE™ technology. Pulmatrix's proprietary product pipeline includes treatments for central nervous system ("CNS") disorders such as acute migraine and serious lung diseases such as Chronic Obstructive Pulmonary Disease ("COPD") and allergic bronchopulmonary aspergillosis ("ABPA"). Pulmatrix's product candidates are based on its proprietary engineered dry powder delivery platform, iSPERSE™, which seeks to improve therapeutic delivery to the lungs by optimizing pharmacokinetics and reducing systemic side effects to improve patient outcomes. For more on Pulmatrix's inhaled product candidates, please visit: <https://www.pulmatrix.com/pipeline.html>.

About Eos SENOLYTIX, Inc. Eos is a biotechnology company focused on developing first-in-class gerotherapeutic peptide medicines that target the underlying biological mechanisms of aging. Eos's lead clinical candidates, PTC-2105 and PTC-2107, both proprietary MitoXcel™ geropeptides, have demonstrated the ability to rejuvenate naturally aged mice via two separate mechanisms, both via a single, aging-specific target, the mitochondrial membrane potential (MMP), also called the " $\Delta\psi_m$ ". These two mechanisms include (1) the return of the efficiency of mitochondrial. Merger-associated financings are expected to support advancement of the combined company's pipeline through key clinical milestones. Eos is led by Kevin Slawin, M.D., Founder and Chief Executive Officer, a physician-scientist and serial biotechnology entrepreneur with decades of experience in translational medicine, drug development, and company formation. Dr. Slawin was the founder of Bellicum Pharmaceuticals, Inc., an early pioneer in CAR T cell therapies, and has founded and is currently leading multiple life sciences ventures focused on aging biology and mitochondrial therapeutics. He is supported by a team of experienced biotechnology executives, scientists, and advisors with prior leadership roles at major pharmaceutical companies, academic medical centers, and emerging biotechnology firms. For more information, visit <https://eossenolytix.com>.

Forward-Looking Statements

This communication contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), Section 21E of the Securities Exchange Act of 1934, as amended, and the Private Securities Litigation Reform Act of 1995. All statements other than statements of historical fact contained in this press release are forward-looking statements. Forward-looking statements may be identified by words such as "anticipates," "assumes," "believes," "can," "could," "estimates," "expects," "forecasts," "guides," "intends," "is confident that," "may," "plans," "seeks," "projects," "targets," and "would," and their opposites and similar expressions. Such forward-looking statements are based on the beliefs of management as well as assumptions made by and information currently available to management. Forward-looking statements in this communication include, but are not limited to, statements regarding: the Merger, including the expected timing of closing and the ability to satisfy the customary closing conditions and obtain the required approval of Pulmatrix's stockholders; the expected timing and outcome of the Special Meeting; the expected Nasdaq listing of the combined company under the ticker symbol "MTXL"; the expected Merger-associated financings and the combined company's ability to advance its pipeline through key clinical milestones; and the potential of PTC-2105 as an approach to preserving lean mass during late-life aging and mitigating GLP-1-associated lean-mass loss. Actual results could differ materially from those contemplated by the forward-looking statements as a result of certain factors, including but not limited to: the risk that the conditions to closing of the proposed Merger are not satisfied, including the failure to obtain stockholder approval; uncertainties as to the timing of completion of the proposed Merger; risks related to the ability to obtain necessary financings to support the combined company's operations; the risk that preclinical results may not translate into clinical outcomes; risks related to regulatory approvals and the timing thereof; risks related to maintaining the Nasdaq listing; and general market, economic, and business conditions. Additional information concerning factors that could cause actual results to differ materially from those in the forward-looking statements is contained in the Proxy Statement/Prospectus, including under the heading "Risk Factors," and in Pulmatrix's Annual Report on Form 10-K for the year ended December 31, 2025 and subsequent Quarterly Reports on Form 10-Q filed with the SEC. Forward-looking statements speak only as of the date of this communication, and, except as required by law, neither Eos nor Pulmatrix undertakes any obligation to update any forward-looking statement, whether as a result of new information, future events, or otherwise.

No Offer or Solicitation

This communication and the information contained herein is not intended to and does not constitute (i) a solicitation of a proxy, consent or approval with respect to any securities or in respect of the proposed transaction or (ii) an offer to sell or the solicitation of an offer to subscribe for or buy or an invitation to purchase or subscribe for any securities pursuant to the Merger or otherwise, nor shall there be any sale, issuance or transfer of securities in any jurisdiction in contravention of applicable law. No offer of securities shall be made except by means of a prospectus meeting the requirements of Section 10 of the Securities Act, or an exemption therefrom.

Important Additional Information about the Proposed Transaction Will be Filed with the SEC

This communication is not a substitute for the Registration Statement, the Proxy Statement/Prospectus or any other document that Pulmatrix has filed or may file with the SEC in connection with the Merger. The Proxy Statement/Prospectus was first mailed to Pulmatrix's stockholders on or about September 25, 2026. PULMATRIX URGES INVESTORS AND STOCKHOLDERS TO READ THE REGISTRATION STATEMENT, THE PROXY STATEMENT/PROSPECTUS AND ANY OTHER RELEVANT DOCUMENTS FILED OR THAT MAY BE FILED WITH THE SEC, AS WELL AS ANY AMENDMENTS OR SUPPLEMENTS TO THESE DOCUMENTS, CAREFULLY AND IN THEIR ENTIRETY BECAUSE THEY CONTAIN IMPORTANT INFORMATION ABOUT PULMATRIX, EOS, THE MERGER AND RELATED MATTERS. Investors and stockholders may obtain free copies of the Proxy Statement/Prospectus and other documents filed by Pulmatrix with the SEC through the website maintained by the SEC at www.sec.gov or from Pulmatrix's website at <https://www.pulmatrix.com/investors.html>. Stockholders are urged to read the Proxy Statement/Prospectus and the other relevant materials before making any voting or investment decision with respect to the Merger. In addition, investors and stockholders should note that Pulmatrix communicates with investors and the public using its website (<https://www.pulmatrix.com/investors.html/>).

Participants in the Solicitation

Pulmatrix, Eos and their respective directors and executive officers may be deemed to be participants in the solicitation of proxies from Pulmatrix's stockholders in connection with the Merger. Information about Pulmatrix's directors and executive officers, including a description of their interests in Pulmatrix, is included in Pulmatrix's Annual Report on Form 10-K for the year ended December 31, 2025, filed with the SEC on February 26, 2026, as amended, and, subsequent Quarterly Reports on Form 10-Q filed with the SEC, including any information incorporated therein by reference, as filed with the SEC, and other documents that may be filed from time to time with the SEC. Information about Eos's directors and executive officers, and additional information regarding the direct and indirect interests, by security holdings or otherwise, of the participants in the solicitation, is included in the Proxy Statement/Prospectus. These documents can be obtained free of charge from the sources indicated above.