July 17, 2023

# ProMIS Showcases Preclinical Data at the Alzheimer's Association International Conference 2023 on Computationally-Derived Antibody and Vaccine from Alzheimer's Pipeline

- New findings highlight that PMN310 was able to target toxic amyloid-beta oligomers more selectively than other amyloid-beta-directed antibodies which were generated using synthetic oligomers
- Rationally designed vaccine candidate for prevention of Alzheimer's disease showed robust and sustained antibody response focused on pathogenic amyloid-beta oligomers

TORONTO, Ontario and CAMBRIDGE, Massachusetts, July 17, 2023 (GLOBE NEWSWIRE) -- ProMIS Neurosciences Inc. (TSX: PMN) (Nasdaq: PMN), a biotechnology company focused on the generation and development of antibody therapeutics targeting toxic misfolded proteins in neurodegenerative diseases such as Alzheimer's disease (AD), amyotrophic lateral sclerosis (ALS) and multiple system atrophy (MSA), presented preclinical data further supporting the potential therapeutic advantage of lead candidate for AD, PMN310, a humanized IgG1 antibody directed toward toxic amyloid-beta oligomers (AβO). Additionally, the Company presented preclinical mouse studies that further characterize a computationally-derived AD vaccine directed at AβO. ProMIS's proprietary algorithm identifies targets specific to a toxic protein species to avoid cross-reactivity with other forms of the same protein. The data were presented in posters on July 16, 2023, at the Alzheimer's Association International Conference (AAIC) 2023 in Amsterdam, Netherlands.

"We are excited about the new data presented at the AAIC conference on mechanisms and monitoring of Alzheimer's disease and emerging treatment options which we believe may improve the lives of patients and their families," said Gail Farfel, Ph.D., Chief Executive Officer of ProMIS Neurosciences. "The increasingly recognized benefit of targeting oligomers of Aβ underscores the potential advantage of our PMN310 antibody and AβO vaccine candidates. Both were generated using our proprietary computational modeling platform to identify epitopes restricted to misfolded, toxic AbO thereby providing a highly selective AβO-targeted response for potentially greater clinical activity and improved safety profile compared to less selective approaches. Furthermore, we are far along in our preparations to move PMN310 into clinical development with an informative trial design to evaluate its potential as a treatment for Alzheimer's disease."

In May 2023, ProMIS received clearance from the U.S. Food and Drug Administration (FDA) for its Investigational New Drug (IND) application for PMN310 for the treatment of AD. The

Company plans to initiate a Phase 1a clinical trial designed to evaluate the pharmacokinetics, safety and tolerability of a range of PMN310 doses in healthy adult volunteers as the first study in the PMN310 planned clinical development program.

**Details of the poster presentation are as follows:**

**PMN310 for the Potential Treatment of Alzheimer's Disease**

**Title:** Selective targeting and protection against toxic amyloid-beta oligomers by PMN310, a monoclonal antibody rationally designed for greater therapeutic potency in Alzheimer's disease
**Session:** Drug Development
**Presenter:** Neil Cashman, M.D.

In preclinical studies, the binding selectivity of PMN310 was compared to that of other Aβ-directed antibodies using surface plasmon resonance. The results demonstrated that PMN310 was able to selectively bind to toxic AβO in AD brain extract and was less impacted by monomer competition than other Aβ-directed antibodies except ACU193, which was equivalent to PMN310. Additionally, of all antibodies tested including biosimilars for ACU193 and PRX012, only PMN310 and solanezumab did not bind to plaque, potentially reducing the incidence of Aβ-related imaging abnormalities (ARIA) associated with plaque-binding antibodies. Additionally, PMN310 completely protected memory function as measured in two rodent models of AD, supporting evaluation of the candidate as a potential therapeutic option for the treatment.

**Vaccine Candidate for Potential Prevention of Alzheimer's Disease**

**Title:** Rational design of a vaccine for Alzheimer's disease using a computationally-derived conformational epitope to selectively target toxic amyloid-beta oligomers
**Session:** Drug Development
**Presenter:** Neil Cashman, M.D.

ProMIS presented a poster on its vaccine candidate being evaluated preclinically for the prevention of AD at AAIC. The findings were previously shared in an oral presentation at the 2023 at the American Academy of Neurology (AAN) Annual Meeting.

The preclinical evaluation of ProMIS' vaccine candidate consisting of an AβO conformational B cell peptide epitope conjugated to a carrier protein to provide T cell help, elicited a robust and sustained antibody response with either alum or QS-21 as adjuvants approved for human use. The serum antibodies were selective for AβO with no detectable binding to monomers or plaque, potentially reducing the risk of ARIA. In addition, no potentially deleterious T helper responses to the conformational AβO peptide epitope were detected, potentially reducing the risk of meningoencephalitis. These results support ProMIS's approach to designing a vaccine for AD prevention with the potential for sustained anti-disease activity and ease of use with fewer doses compared to chronic antibody treatment.

Both poster presentations are available on the Posters and Publications page of the Company's website at www.promisneurosciences.com.

**About ProMIS Neurosciences Inc.**

ProMIS Neurosciences Inc. is a development stage biotechnology company focused on generating and developing antibody therapeutics selectively targeting toxic misfolded proteins in neurodegenerative diseases such as Alzheimer's disease (AD), amyotrophic lateral sclerosis (ALS) and multiple system atrophy (MSA). The Company's proprietary target discovery engine is based on the use of two complementary techniques. The Company applies its thermodynamic, computational discovery platform - ProMIS™ and Collective Coordinates - to predict novel targets known as Disease Specific Epitopes on the molecular surface of misfolded proteins. Using this unique approach, the Company is developing novel antibody therapeutics for AD, ALS and MSA. ProMIS has offices in Toronto, Ontario and Cambridge, Massachusetts. ProMIS is listed on Nasdaq and the Toronto Stock Exchange under the symbol PMN.

**Forward-looking Statements**

Neither the TSX nor Nasdaq has reviewed and neither accepts responsibility for the adequacy or accuracy of this release. Certain information in this news release constitutes forward-looking statements and forward-looking information (collectively, "forward-looking information") within the meaning of applicable securities laws. In some cases, but not necessarily in all cases, forward-looking information can be identified by the use of forward-looking terminology such as "plans", "targets", "expects" or "does not expect", "is expected", "excited about", "an opportunity exists", "is positioned", "estimates", "intends", "assumes", "anticipates" or "does not anticipate" or "believes", or variations of such words and phrases or state that certain actions, events or results "may", "could", "would", "might", "will" or "will be taken", "occur" or "be achieved". In addition, any statements that refer to expectations, projections or other characterizations of future events or circumstances contain forward-looking information. Specifically, this news release contains forward-looking information relating to targeting of toxic misfolded proteins in neurodegenerative diseases that the Company believes may directly address fundamental AD pathology (including the belief and understanding that toxic oligomers of amyloid-beta are a major driver of AD) and have greater therapeutic potential due to reduction of off-target activity, the initiation of the Company's Phase 1a study and its ability to enroll the requisite number of patients, dose each patient in the intended manner and progress the study, statements related to the presentation of data and the significance of such data, information on the Company's beliefs regarding the significance of preclinical data, the Company's pipeline, statements regarding a computationally-derived amyloid-beta (Aβ) vaccine for AD and the Company's PMN310 antibody and vaccine candidate, management's belief that its patented platform technology has created an antibody candidate specific to toxic misfolded oligomers known to be present in Alzheimer's disease, management's belief that this specificity may indicate greater therapeutic potential due to lower off-target activity and reduce the risk of brain edema and microhemorrhages (ARIA) associated with plaque-binding antibodies and management's belief that PMN310 can selectively bind to toxic AβO in AD brain extract in a way that was minimally impacted by monomer competition better than competing Aβ-directed antibodies. Statements containing forward-looking information are not historical facts but instead represent management's current expectations, estimates and projections regarding the future of our business, future plans, strategies, projections, anticipated events and trends, the economy and other future conditions. Forward-looking information is necessarily based on a number of opinions, assumptions and estimates that, while considered reasonable by the Company as of the date of this news release, are subject to known and unknown risks, uncertainties and assumptions and other factors that may cause the actual results, level of

activity, performance or achievements to be materially different from those expressed or implied by such forward-looking information, including, but not limited to, the Company's ability to fund its operations and continue as a going concern, its accumulated deficit and the expectation for continued losses and future financial results. Important factors that could cause actual results to differ materially from those indicated in the forward-looking information include, among others, the factors discussed throughout the "Risk Factors" section of the Company's most recently filed annual information form available on www.SEDAR.com, in Item 1A of its Annual Report on Form 10-K for the year ended December 31, 2022 and the section entitled "Risk Factors" in its Post-Effective Amendment No. 1 to Form S-1, filed March 17, 2023, and in the Company's subsequent Quarterly Reports on Form 10-Q, each as filed with the Securities and Exchange Commission. Except as required by applicable securities laws, the Company undertakes no obligation to publicly update any forward-looking information, whether written or oral, that may be made from time to time, whether as a result of new information, future developments or otherwise.

**To learn more, visit us at www.promisneurosciences.com.**

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