

# DiagnaMed's BRAIN AGE® Brain Health AI Platform Accomplishes Clinical Validation Milestone with Peer-Reviewed Paper

TORONTO, April 25, 2024 -- DiagnaMed Holdings Corp. ("DiagnaMed" or the "Company") (CSE: DMED) (OTCQB: DGNMF), a healthcare technology company focused on brain health using AI, today announced a clinical validation milestone of the BRAIN AGE® Brain Health AI Platform ("BRAIN AGE®"), a world-first consumer brain health and wellness AI solution that estimates brain age and provides a brain health score, with a first-of-a-kind peer-reviewed paper in Frontiers in Neuroergonomics, titled "Brain-age estimation with a low-cost EEG-headset: effectiveness and implications for large-scale screening and brain optimization". 1

Fabio Chianelli, CEO of DiagnaMed, commented: "The validation of BRAIN AGE® in a peer-reviewed paper is a significant milestone for us that culminates nearly two years of research and now unlocks the potential of BRAIN AGE® for the millions of people seeking to improve their overall brain health. We are now positioned to execute our commercialization plan by educating medical communities about the potential of BRAIN AGE® and its value proposition to a network of healthcare clinics as a service to their clients."

Clinics can add the BRAIN AGE® Brain Health AI Platform by visiting BrainAge.io.

With funding support from DiagnaMed, researchers from Drexel University's Creativity Research Lab and Stockton University, under an IRB-approved research study, developed an artificial intelligence technique that can effectively estimate an individual's brain age based on electroencephalogram (EEG) brain scans. The technology could help to make early, regular screening for degenerative brain diseases more accessible. The research was led by John Kounios, PhD, professor in Drexel's College of Arts and Sciences and Creativity Research Lab director, and the research team used a type of artificial intelligence called machine learning to estimate an individual's brain age similar to the way one might guess another person's age based on their physical appearance.

As announced in a <u>press release</u> by Drexel University, Prof. Kounios was quoted regarding the potential of BRAIN AGE®: "It can be used as a relatively inexpensive way to screen large numbers of people for vulnerability to age-related. And because of its low cost, a person can be screened at regular intervals to check for changes over time," Kounios said. "This can help to test the effectiveness of medications and other interventions. And healthy people could use this technique to test the effects of lifestyle changes as part of an overall strategy for optimizing brain performance."

BRAIN AGE® has several promising applications for the millions of individuals and placements in up to 10,000 licensed physicians, specialists and sports clinics in North America focusing on health and wellness, sports and physical therapy, mental health, chiropractic care, or clinical and academic research for neurological and cognitive disorders. The Company believes that the potential initial target market population for BRAIN AGE®, comprised of healthy individuals, athletes, mental health and neurodegenerative patients, is at least 50 million in the U.S. alone.

BRAIN AGE® can be used as a screening tool to identify individuals whose brain-age gap suggests the possibility of underlying age-related pathology that can be followed up with specific diagnostic tests. Furthermore, it can be performed repeatedly to verify results and detect changes over time. This means that it may become practical to begin screening people in early middle age (or younger) rather than waiting for late middle age, or older, when symptoms become apparent. Essentially, BRAIN AGE® can raise the possibility of large-scale detection and treatment of the earliest phases of age-related neurological disorders rather than later. In addition, BRAIN AGE® may be a useful tool at home or in the workplace and for researchers and medical professionals who wish to test potential interventions for slowing or reversing neurological aging.

### Footnote:

- (1) Kounios John, Fleck Jessica I., Zhang Fengqing, Oh Yongtaek. Brain-age estimation with a low-cost EEG-headset: effectiveness and implications for large-scale screening and brain optimization. Frontiers in Neuroergonomics. 2024; Volume 5. DOI=10.3389/fnrgo.2024.1340732. https://www.frontiersin.org/articles/10.3389/fnrgo.2024.1340732.
  - (2) https://drexel.edu/news/archive/2024/April/New-Al-Technology-Estimates-Brain-Age-Using-Low-Cost-EEG-Device

## **About BRAIN AGE®**

BRAIN AGE® Brain Health AI Platform is a world-first consumer brain health and wellness AI solution that estimates brain age and provides a brain health score. Based on research and development at Drexel University and the University of Miami, BRAIN AGE® Brain Health AI combines a brain age estimation and brain health assessment tool with the aim to 'raise a red flag' for potential brain health issues. BRAIN AGE® Brain Health AI can assess if a brain is aging more quickly or more slowly than is typical for healthy individuals. Brain age is estimated by collecting neural activity data of the brain with a low-cost and easy-to-use electroencephalogram headset and calculating the data with a proprietary machine-learning model. In addition, BRAIN AGE® Brain Health AI can assess if a person has a healthy brain or is in the early stage of cognitive decline. Brain health is scored by taking a clinically validated assessment for brain resilience, vulnerability and performance functions. Individuals can seek out personalized diagnostics and interventions, such as medication or lifestyle changes, that may help to

decrease the development or progression of cognitive decline.

### About DiagnaMed

DiagnaMed Holdings Corp. (CSE: DMED) (OTCQB: DGNMF) is a healthcare technology company focused on brain health using AI. DiagnaMed is commercializing BRAIN AGE® Brain Health AI Platform, a world-first consumer brain health and wellness AI solution that estimates brain age and provides a brain health score. Visit DiagnaMed.com.

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Neither the Canadian Securities Exchange nor its Regulation Services Provider have reviewed or accept responsibility for the adequacy or accuracy of this release.

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Certain statements in this news release are forward-looking statements, including with respect to future plans, and other matters. Forward-looking statements consist of statements that are not purely historical, including any statements regarding beliefs, plans, expectations or intentions regarding the future. Such information can generally be identified by the use of forwarding-looking wording such as "will", "may", "expect", "could", "can", "estimate", "anticipate", "intend", "believe", "aims", and "continue" or the negative thereof or similar variations. The reader is cautioned that assumptions used in the preparation of any forward-looking information may prove to be incorrect. Events or circumstances may cause actual results to differ materially from those predicted, as a result of numerous known and unknown risks, uncertainties, and other factors, many of which are beyond the control of the Company, including but not limited to, business, economic and capital market conditions, the ability to manage operating expenses, and dependence on key personnel. Such statements and information are based on numerous assumptions regarding present and future business strategies and the environment in which the Company will operate in the future, anticipated costs, and the ability to achieve goals. Factors that could cause the actual results to differ materially from those in forward-looking statements include, the continued availability of capital and financing, litigation, failure of counterparties to perform their contractual obligations, loss of key employees and consultants, and general economic, market or business conditions. Factors that could cause actual results to differ materially from those anticipated in these forwardlooking statements are described under the caption "Risk Factors" in Company's management's discussion and analysis for the three months ended December 31, 2023 ("MD&A"), dated February 29, 2024, which is available on the Company's profile at www.sedarplus.ca. Forward-looking statements contained in this news release are expressly qualified by this cautionary statement. The reader is cautioned not to place undue reliance on any forward-looking information. The forward-looking statements contained in this news release are made as of the date of this news release. Except as required by law, the Company disclaims any intention and assumes no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

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