



## **DiagnaMed Expands with Drug and Clinical Research AI Platform**

*Leveraging proprietary EEG data from previous and future research studies with BRAIN AGE® Brain Health AI*

*Accelerating clinical trial development and discovering potential novel treatments for neurological, psychiatric and infectious diseases*

TORONTO, August 21, 2024 (GLOBE NEWSWIRE) – DiagnaMed Holdings Corp. (“DiagnaMed” or the “Company”) (CSE: DMED) (OTCQB: DGNMF), a healthcare technology company focused on brain health using AI, announces it is expanding the use of its novel BRAIN AGE® Brain Health AI Platform (“BRAIN AGE®”) through leveraging its electroencephalograph (“EEG”) data from research studies and future data collection, and applying it to build a potential drug discovery and clinical research AI platform. EEG provides a real-time readout of brain-wave activity in different brain regions and can measure a drug effect on the brain. BRAIN AGE® has the potential to accelerate patient recruitment for clinical trials, data analysis, drug development go/no-go decisions and new treatment options for neurological, psychiatric and infectious diseases.

BRAIN AGE® Brain Health AI estimates brain age by recording brain-wave activity from multiple brain regions and calculating the data with a proprietary machine-learning model. Certain drugs acting on the brain can generate a consistent EEG effect and produce models useful for developing novel drug analogs<sup>1</sup> and potential drug repurposing ideas. In studying the effects of drugs on the brain via EEG, researchers can classify and identify drugs according to their mechanism of action on brain activity.<sup>2</sup>

### *Clinical Validation of BRAIN AGE® Brain Health AI Platform*

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 decrease cognitive decline development or progression.

In 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*”<sup>3</sup>, BRAIN AGE®, as announced in a [press release](#) by Drexel University, Prof. Kounios was quoted regarding the clinical 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.”<sup>4</sup>

## **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](http://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.*

## **Cautionary Statement**

*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”, “projected”, “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 forward-looking statements are described under the caption "Risk Factors" in Company's management's discussion and analysis for the three and six months ended March 31, 2024 ("MD&A"), dated May 29, 2024, which is available on the Company's profile at [www.sedarplus.ca](http://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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Footnotes:

1. Bewernitz M, Derendorf H. Electroencephalogram-based pharmacodynamic measures: a review. *Int J Clin Pharmacol Ther.* 2012 Mar;50(3):162-84. doi: 10.5414/cp201484. PMID: 22373830; PMCID: PMC3637024.
2. Kalitin, Konstantin Y., et al. "Deep learning analysis of intracranial EEG for recognizing drug effects and mechanisms of action." *arXiv preprint arXiv:2009.12984* (2020).
3. 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.
4. <https://drexel.edu/news/archive/2024/April/New-AI-Technology-Estimates-Brain-Age-Using-Low-Cost-EEG-Device>