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Neuroglee raises $2.3M to advance digital therapeutics for neurodegenerative diseases

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Singaporean startup to leverage digital therapeutics solution to collect digital biomarkers via computer tablets in the home to assess and monitor cognitive function, delivering a personalized cognitive intervention



Neuroglee Therapeutics, a Singapore-based healthtech startup that builds evidence-based, prescription digital therapeutics for neurodegenerative diseases, announced today that it has successfully raised $2.3 million in pre-seed funding. The funding will be used to advance the product pipeline for their lead product NG-001 – intended for treatment and management of patients with early stages of Alzheimer's Disease (Alzheimer's).

The round was led by Eisai Co. Ltd, a leading global pharmaceutical company headquartered in Tokyo, Japan. Kuldeep Singh Rajput, Founder & CEO of Biofourmis, also participated in the round.

Neuroglee discovers, designs and commercialises digital therapies to fill the unmet need for complementary therapies to manage neurodegenerative diseases that can run in parallel with pharmacotherapy (treatment through medication). Combining best-in-class closed-loop cognitive intervention strategies and novel biomarkers, Neuroglee's prescription software can be used independently and/or in conjunction with pharmacotherapy for better patient management, creating a more holistic approach to treatment for neurodegenerative diseases.

"Neurodegenerative diseases is a severely underserved market, yet also one that is constantly growing as our population continues to age. Through the power of software, we are able to combine our expertise in cognitive neuroscience, behaviour modification and digital biomarkers into a digital form of treatment that augments conventional medication and bridges the gap between patient and clinician. We are excited to work with Eisai and leading experts in scaling digital

health solutions to facilitate a better quality of life for patients and caregivers, as well as to pave the way for faster development of effective cures," said Aniket Singh Rajput, Founder and CEO of Neuroglee.

The firm's lead product, NG-001, is designed to manage patients with early-stage Alzheimer's by delivering software-based cognitive intervention at home. Using state-of-the-art artificial intelligence, NG-001 deploys engaging gamification techniques and cognitive tasks on a digital tablet. The solution constantly tracks a patient's cognitive function using digital biomarkers and dynamically personalises tasks and intervention for the patient.

For example, the number and type of tasks and games offered can be adjusted based on the speed of the patient's finger movements and task completion time. It can also use images from the patient's past to evoke positive memories and emotions, which have been shown to improve cognitive function and reduce depression and anxiety when employed in tandem with other cognitive behavioural therapy (CBT) techniques.

Using NG-001, caregivers and clinicians can monitor patient adherence to prescribed medication and their response to treatment when they are at home. For caregivers, this reduces the burden of care on them by making them more accessible to the patient, allowing them to provide and follow up on care even when not physically present. For clinicians, this continuous, real-time insight at home enables more accurate assessments of both drug and digital therapeutic treatments during in-person visits instead of having to rely on half-yearly check-ups and incomplete patient testimonials.

Neuroglee plans to begin clinical trials for NG-001 in early 2021. It also plans to open its US operations in Boston in 2021.