

Great Lakes NeuroTechnologies launches DiSCERN study to identify candidates for advanced Parkinson's therapies

24 May 2022: Independence, OH – Great Lakes NeuroTechnologies (GLNT) announced today that it has launched a multicenter research study (DiSCERN) to collect data to enhance its Kinesia™ motor assessment technology specifically for identifying when a patient with Parkinson's disease (PD) is ready to consider an advanced therapy such as deep brain stimulation (DBS) or an implantable drug pump and recognize when a patient needs a therapy adjustment.

Advanced therapies may be recommended when oral medication no longer provides sufficient relief of motor symptoms without causing undesirable side-effects. However, according to Dr. Alberto J. Espay, neurologist at the University of Cincinnati, "Many patients do not have access to movement disorders specialty clinics and there is currently no standardized method for identifying when a patient is ready for an advanced therapy. And when one of my patients receives an advanced intervention such as DBS, it is not currently feasible to know how the patient may be doing until the next clinical visit, which can be several months later. A device that would allow me to remotely check in on the patient or notify me when the patient is not responding well would be extremely valuable."

The DiSCERN study will enroll 60 patients with advanced PD from three clinical sites. Participants will be monitored for 8 months using an iPhone and Apple watch with data collection software based on GLNT's FDA cleared KinesiaU™ motor assessment system, which includes continuous passive monitoring of PD motor symptoms during activities of daily living. Many of the participants are expected to receive an advanced therapy during the study and will be monitored both before and after initiating the therapy. This project builds on the results of a study GLNT previously published demonstrating that a clinician was five times more likely to recommend a patient for an advanced therapy when given access to Kinesia's objective remote monitoring reports [<http://www.ncbi.nlm.nih.gov/pubmed/27392872>].

Dr. Greg Kuhlman, neurologist at the University of Cincinnati, is a co-investigator on the study. "Communication between medical providers and patients with Parkinson's disease is critical for identifying and thereby managing symptoms of wearing off and dyskinesia. However, this is challenging for many reasons such as limited time for the provider, ambiguous symptoms experienced by the patient, poor understanding of symptoms by either party, and high burden on the patient to monitor for symptoms and manage medications. The use of monitoring technologies, such as those created by Great Lakes NeuroTechnologies, has great potential to bridge this communication gap between providers and patients that can improve management of symptoms and quality of life for people suffering from Parkinson's disease."

According to GLNT President and COO, Dustin Heldman, Ph.D., "The DiSCERN study will provide data to tailor our KinesiaU system specifically for identifying candidates for advanced Parkinson's therapies. Remote screening and monitoring will improve patient selection, reduce disparities, and expand access for rural populations and disadvantaged communities. The system will engage and empower patients, providers, and healthcare institutions and lead to improved health, healthcare delivery, and the reduction of health disparities."

Dr. Heldman thanks the NIH for their continued support through the SBIR program, specifically the National Institute on Minority Health and Health Disparities (5R44MD013767-03). The content of this press release is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health. The study is registered on ClinicalTrials.gov under identifier NCT05351580 [<https://clinicaltrials.gov/ct2/show/NCT05351580>].

About Great Lakes NeuroTechnologies

Great Lakes NeuroTechnologies [www.glneurotech.com] is committed to pioneering innovative biomedical technologies to serve research, education, and medical communities, improving access to medical technology for diverse populations, and positively impacting quality of life for people around the world.

About Kinesia™ Technology

GLNT commercialized Kinesia™ technology to provide wearable, objective and automated assessment of movement disorders such as Parkinson’s disease (PD) and essential tremor (ET). The clinically validated technology has been adopted as the gold-standard for objective sensor measurement for movement disorders by many of the world’s leading pharmaceutical and medical device companies. The technology is protected by US and international patents listed at <https://www.glneurotech.com/patents/>.

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