NeuroSense and Genetika+ Initiate Precision Medicine Collaboration Beginning with Ongoing Phase 2 Clinical Trial in Alzheimer's Disease

CAMBRIDGE, Mass., April 22, 2024 /PRNewswire/ -- NeuroSense Therapeutics Ltd. (NASDAQ: NRSN) ("NeuroSense"), a company developing novel treatments for severe neurodegenerative diseases announced today a collaboration in Alzheimer's Disease (AD) drug development with Genetika+, a leader in precision medicine for psychiatry and neurology. The multi-phase collaboration, which will commence in NeuroSense's currently ongoing Phase 2 AD clinical trial, leverages Genetika+'s state-of-the-art technology that derives frontal cortex neurons from individual patients' blood to quantify drug-induced neuronal plasticity *in vitro*.

The Genetika+ technology serves as a human AD disease model and will be used to correlate clinical response with cellular effects, for mechanistic drug insights and patient subset identification, supporting drug development and potentially commercialization. This collaboration addresses key challenges in the development of drugs for AD, by promoting disease and drug mechanistic understanding, increasing the likelihood of success of AD drug development, and enabling the realization of precision medicine approaches.

"We believe Genetika+'s technology presents a unique opportunity to optimize our current ongoing trial. It harmonizes seamlessly with our evaluation of our combination drug therapy through clinical assessments and an extensive array of biomarkers," stated Dr. Shiran Zimri, VP of R&D at NeuroSense. "There are significant opportunities to harness cutting-edge advancements in AD therapeutic research and these are crucial for the future of early detection and treatment of neurodegenerative conditions."

Distinguished by its innovative approach, NeuroSense's PrimeC therapy stands out in the landscape of AD treatments. Unlike conventional methods that predominantly target amyloid-beta (A β), PrimeC adopts a multitargeted strategy, concurrently addressing A β aggregation, TDP-43, and other key disease-related pathologies. This unique approach not only diversifies the therapeutic targets but also offers the potential for more potent treatment outcomes. With a well demonstrated synergistic mode of action, compelling pre-clinical and clinical data in related filed, and a strong safety profile, PrimeC is poised to potentially provide therapeutic efficacy in AD.

"This partnership represents a critical step forward in the fight against Alzheimer's Disease," said Daphna Laifenfeld, co-founder and CSO at Genetika+. "By combining our leading-edge technologies, we anticipate the possibility of both bring efficacious therapies to patients sooner, and to moving beyond a one-size-fits-all approach to AD treatment and unlock the potential for personalized, targeted therapies that significantly improve patient outcomes."

Currently enrolling at the Stroke and Cognition Institute, Rambam Health Care Campus, Haifa, Israel, ROAD, NeuroSense's Phase 2 randomized, prospective double-blind, placebo-controlled study is designed to evaluate the therapeutic potential of PrimeC in treating AD. The study will consist of 20 patients with mild to moderate non-familial AD. Participants will receive PrimeC or placebo (1:1) twice daily for 12 months and will be evaluated every three months. Endpoints include clinical outcome measurements, AD-related biomarkers, and markers of target engagement extracted from plasma and cerebrospinal fluid (CSF). The study is expected to reveal the safety of PrimeC in AD, as well as shed light on the efficacy and biological activity of this combination therapy in this indication.

About Genetika+

Genetika+, founded in 2018 by Talia Cohen-Solal, Ph.D., and Daphna Laifenfeld, Ph.D., is developing personalized medicine solutions to optimize treatment for psychiatric and neurological diseases. The company's proprietary Al-powered platform, *Stemifai*, leverages stem cell differentiation and machine learning to inform and advance CNS drug development processes. To learn more, follow us on <u>LinkedIn</u> or on Twitter @Genetikaplus.

About NeuroSense

NeuroSense Therapeutics, Ltd. is a clinical-stage biotechnology company focused on discovering and developing treatments for patients suffering from debilitating neurodegenerative diseases. NeuroSense believes that these diseases, which include amyotrophic lateral sclerosis (ALS), Alzheimer's disease and Parkinson's disease, among others, represent one of the most significant unmet medical needs of our time, with limited effective therapeutic options available for patients to date. Due to the complexity of neurodegenerative diseases and based on strong scientific research on a large panel of related biomarkers, NeuroSense's strategy is to develop combined

therapies targeting multiple pathways associated with these diseases.

For additional information, please visit the Company's <u>website</u> and follow NeuroSense on <u>LinkedIn</u> and \underline{X} (Twitter).

Forward-Looking Statements

This press release contains "forward-looking statements" that are subject to substantial risks and uncertainties. All statements, other than statements of historical fact, contained in this press release are forward-looking statements. Forward-looking statements contained in this press release may be identified by the use of words such as "anticipate," "believe," "contemplate," "could," "estimate," "expect," "intend," "seek," "may," "might," "plan," "potential," "predict," "project," "target," "aim," "should," "will" "would," or the negative of these words or other similar expressions, although not all forward-looking statements contain these words. Forward-looking statements are based on NeuroSense Therapeutics' current expectations and are subject to inherent uncertainties, risks and assumptions that are difficult to predict and include statements regarding NeuroSense's collaboration with Genetika+, and the timing and results of a Phase 2 trial for Alzheimer's disease. Further, certain forward-looking statements are based on assumptions as to future events that may not prove to be accurate. The future events and trends may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward looking statements. These risks include the risk that NeuroSense's collaboration with Genetika+ will not bring the anticipated benefits, unexpected R&D costs or operating expenses, the timing of expected regulatory and business milestones, a delay in patient enrollment for, and unanticipated results of, a Phase 2 trial for Alzheimer's disease; the potential for PrimeC to safely and effectively target AD; preclinical and clinical data for PrimeC; the uncertainty regarding outcomes and the timing of current and future clinical trials; timing for reporting data; the development and commercial potential of any product candidates of the company; and other risks and uncertainties set forth in NeuroSense's filings with the Securities and Exchange Commission (SEC). You should not rely on these statements as representing our views in the future. More information about the risks and uncertainties affecting the Company is contained under the heading "Risk Factors" in the Annual Report on Form 20-F filed with the Securities and Exchange Commission on April 4, 2024. Forward-looking statements contained in this announcement are made as of this date, and NeuroSense Therapeutics Ltd. undertakes no duty to update such information except as required under applicable law.

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