

NeuroSense Therapeutics and NeuraLight Collaborate to Detect ALS Oculometric Biomarkers Using AI and ML

- *NeuraLight's platform technology uses computer vision, artificial intelligence (AI), deep learning algorithms, and machine learning (ML) to identify and track oculometric digital biomarkers to transform clinical development, diagnostics, and precision medicine in neurology*
- *The NeuroSense-NeuraLight collaboration entails sharing and tracking patient data to advance the identification and use of ALS digital biomarkers*

CAMBRIDGE, Mass., AUSTIN, TX, and TEL AVIV, Israel, July 28, 2022 /PRNewswire/ -- [NeuroSense Therapeutics Ltd.](#) (NASDAQ: NRSN) ("NeuroSense"), a company developing treatments for severe neurodegenerative diseases, and [NeuraLight](#), a company developing objective and sensitive biomarkers for neurological disorders, today announced a collaboration to advance the science of digital biomarkers in the detection and monitoring of neurological diseases including amyotrophic lateral sclerosis (ALS).

NeuraLight's platform, uses proprietary computer vision and deep learning algorithms to extract over 100 oculometric markers from facial videos captured with a standard webcam. NeuroSense is conducting a Phase IIb PARADIGM trial, which is a double-blind, placebo-controlled study evaluating the efficacy of NeuroSense's lead combination drug candidate, PrimeC, in the treatment of ALS. The NeuroSense-NeuraLight collaboration entails sharing and tracking patient data to advance the identification and use of ALS digital biomarkers in a parallel study conducted by NeuraLight. This collaboration marks NeuraLight's first clinical trial and comes on the heels of NeuraLight's [\\$25M Series A raise](#).

"There is compelling value in the use of precise biomarkers to diagnose and track the progression of neurodegenerative diseases. We are very pleased to work with the stellar team at NeuraLight who are pioneering the development of digital oculometric biomarkers, which complement our extensive evaluation of biological markers of ALS," said NeuroSense CEO Alon Ben-Noon. "We believe these tools have the potential to enable patient stratification and increase the likelihood of success in a future NeuroSense pivotal trial of PrimeC in the treatment of ALS. This is a first step in what we envision as a long-term collaboration with NeuraLight in ALS as well as future studies we plan for Alzheimer's disease and Parkinson's disease."

Dr. Rivka Kreitman, NeuraLight's Chief Innovation Officer, commented, "Along with advancing a promising therapy for ALS, we look forward to demonstrating that oculometrics serve as a robust proxy for the Amyotrophic Lateral Sclerosis Functional Rating Scale (ALSFRS) through this partnership. The validation of our technology's efficacy will improve success rates of trials moving forward – ensuring objectivity, reliability, and replicability, as well as reducing costs and friction."

About ALS

Amyotrophic lateral sclerosis (ALS) is an incurable neurodegenerative disease that causes complete paralysis and death within 2-5 years of diagnosis. In the US alone, over 5,000 patients are diagnosed yearly with ALS, and researchers anticipate the number of ALS patients in the US to grow 24 percent by 2040. The cause of ALS is unknown, making it difficult for researchers to develop disease-modifying therapies for the neurodegenerative disease.

About PrimeC

PrimeC, NeuroSense's lead drug candidate is a combination therapy that was granted Orphan Drug Designation by the U.S. Food and Drug Administration (FDA) and the European Medicines Agency (EMA). NeuroSense completed a Phase IIa clinical study which successfully met its safety and efficacy endpoints including reducing functional and respiratory deterioration and statistically significant changes in ALS-related biological markers indicating PrimeC's biological activity. Through a collaboration with Massachusetts General Hospital in Boston on novel Neuron-Derived Exosomes (NDEs), NeuroSense is working to further determine the biological changes in ALS-related pathologies and the effect of PrimeC on relevant targets. Results from this study are expected Q2 2022.

About NeuraLight

NeuraLight is on a mission to transform the lives of billions of people impacted by neurological disorders by digitizing neurological evaluation and care. Our AI-driven platform integrates multiple digital markers to accelerate and improve drug development, monitoring, and precision care for patients with neurological disorders. The technology driving the platform includes proprietary Deep Learning algorithms which automatically extract a host of digital oculometric markers from facial videos captured with a standard webcam or smartphone. Our founders are repeat entrepreneurs and industry veterans (including both the co-founder of Chorus.ai and the founding CTO of Flatiron health) leading a 25-strong team, supported by renowned neurologists and 2 Nobel laureates as well as a stellar Scientific Advisory Board, and have raised \$30.5M to date. To learn more about NeuraLight, please visit: [NeuraLight.ai](#)

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, we invite you to visit our [website](#) and follow us on [LinkedIn](#) and [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 digital oculometric biomarkers ; the company's PrimeC development program; the potential for PrimeC to safely and effectively target ALS; preclinical and clinical data for PrimeC; the timing of current and future clinical trials; the nature, strategy and focus of the company and further updates with respect thereto; and the development and commercial potential of any product candidates of the company. Further, certain forward-looking statements are based on assumptions as to future events that may not prove to be accurate. 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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Additional assets available online:  [Photos \(2\)](#)

<https://neurosense.investorroom.com/2022-07-28-NeuroSense-Therapeutics-and-NeuraLight-Collaborate-to-Detect-ALS-Oculometric-Biomarkers-Using-AI-and-ML>