FOR IMMEDIATE RELEASE

Groundbreaking Alzheimer's Treatment Study

Phoenix, Ariz., (June 6, 2022) – NeuroEM Therapeutics, the biotech company that received the FDA's first ever "Breakthrough" designation for an Alzheimer's Disease treatment, has just announced the publication of a landmark clinical study showing the ability of its bioengineered technology to re-balance or normalize the immune system in Alzheimer's patients.

The study, published in the medical journal *"Frontiers in Aging Neuroscience"*, found that two months of daily in-home treatment with NeuroEM's "MemorEM" medical device re-balanced 11 of 12 immune markers (called cytokines) in the blood and brain. The patented device delivers Transcranial Electromagnetic Treatment (TEMT) to the entire brain. TEMT reversed memory impairment along with improving cognitive functioning in these same Alzheimer's patients, as the Company previously reported.

As explained by Dr. Gary Arendash, the CEO of NeuroEM and a lead author of this study, "The immune system plays a critical role in the development and progression of Alzheimer's disease. "However, this involvement may involve either an over-activation or an under-activation of the immune system. In either scenario, the immune system's cytokine levels are abnormal in Alzheimer's patients and in need of rebalancing or normalization."

During young adulthood and middle-age, the immune system's components are largely in balance/normal ranges. However, in Alzheimer's Disease and many other diseases of aging, immune imbalance occurs in the brain and/or body. Thus, a re-balancing of the immune system in both the brain and periphery of Alzheimer's Disease patients could be very important for stopping and reversing their cognitive impairment.

In the study, Alzheimer's patients with low baseline cytokine levels in their blood always showed increases in those cytokines after 2-months of daily TEMT. By contrast, those Alzheimer's patients with high baseline cytokine levels in plasma showed treatment-induced decreases in those plasma cytokines. As such, TEMT provided a gravitation to normal plasma cytokine levels – in essence "rebalancing" the immune system, which was associated with the reversal of cognitive impairment in these same patients.

NeuroEM's proprietary therapeutic device, MemorEM, is designed for use in the patient's home. It is a head cap, worn by the patient for just 1-hour in the morning and/or 1-hour later in the day, which safely releases transcranial electromagnetic treatment (TEMT) through eight emitters to the entire brain. In fact, the patient does not experience any sound or sensation from wearing the head piece and has near complete mobility because it is powered by a control box strapped to the patient's arm.

In 2020, the Company received the first ever “Breakthrough” designation by the FDA for its patent-protected TEMT technology and MemorEM therapeutic device being developed against Alzheimer’s Diseease.

NeuroEM is currently seeking funding to commence its Pivotal Phase IIb/III clinical study prior to submitting MemorEM for FDA approval to treat Alzheimer’s Disease.

About NeuroEM Therapeutic, Inc.
NeuroEM is a privately-held clinical-stage biotech company focused on the clinical development of its proprietary Transcranial Electromagnetic Treatment (TEMT) technology against Alzheimer’s Disease and other age-related disorders.

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New Study Reference:

Transcranial Electromagnetic Treatment “Rebalances” Blood and Brain Cytokine Levels in Alzheimer’s Patients: A New Mechanism for Reversal of Their Cognitive Impairment, C. Cao et al., *Frontiers in Aging Neuroscience* May 2022 | Volume 14 | Article 829049