



## **National Institutes of Health Bestows Grant to NeuroEM Therapeutics and Arizona State University for Collaborative Research in Alzheimer's Disease**

Phoenix, AZ (December 8<sup>th</sup>, 2016/ PRNewswire) A Small Business Innovative Research (SBIR) grant has been awarded by the National Institutes of Health (NIH) to Phoenix-based NeuroEM Therapeutics, Inc. and Arizona State University.

The grant will seek to determine an optimal set of treatment parameters for NeuroEM's head device, which utilizes electromagnetic waves to treat Alzheimer's Disease. The grant will also investigate the potential of this novel technology to possibly treat other neurologic disorders such as Parkinson's Disease and PTSD.

NeuroEM's transcranial electromagnetic treatment (TEMT) head device is currently in clinical trials in Alzheimer's patients. The trial involves TEMT device settings that proved effective in protecting against and reversing memory impairment in Alzheimer's mice.

This newly-awarded Phase I SBIR grant, administered by the National Institute for Neurologic Disease and Stroke (NINDS), will investigate if changes in various TEMT parameters result in even more benefit. Treatment benefits will be determined by the ability of TEMT to break-up small abnormal proteins (amyloid and tau oligomers) that are thought to initiate and propagate the Alzheimer's Disease process.

At ASU, the collaborative research involves Dr. Michael Sierks of ASU's Dept. of Chemical Engineering, Dr. Jeffrey Yager of ASU's Magnetic Resonance Research Center, and Dr. James Aberle of ASU's Department of Electrical Engineering.

"As a clinical-stage medical device company, NeuroEM is delighted to collaborate with ASU researchers in this important multi-disciplinary effort" said Dr. Gary Arendash, President and CEO of NeuroEM Therapeutics. "ASU offers a rich diversity of technologies and expertise in biomedical research that make it an ideal partner to collaborate with".

Only a small portion of grants submitted to the SBIR program at NIH are funded. For example, last year, only four SBIR Phase I grants for medical research were awarded within the state of Arizona.

In awarding the present grant, NIH and NINDS are acknowledging that there is real merit to the new TEMT technology developed by NeuroEM against Alzheimer's and that the collaboration with ASU could result in substantial advancement of that novel technology.

NeuroEM's Phase I clinical trial involving treatment of Alzheimer's patients with their TEMT head device, is being performed at Banner Sun Health Research Institute and Banner Alzheimer's Institute, both in Phoenix. "Especially given the partnership between ASU and Phoenix-based Banner Health, the collaboration that NeuroEM Therapeutics has with both of these distinguished

institutions could result in real therapeutic progress against the devastating memory impairment of Alzheimer's Disease" said Dr. Arendash.

Although many drugs have been clinical tested in Alzheimer's patients over the past 15 years, none of them have thus far been shown to be effective in slowing down or reversing the memory impairment of Alzheimer's Disease. NeuroEM and collaborating ASU researchers believe, however, that the new technology of TEMT has real potential against Alzheimer's. This is in part because TEMT therapy can effect/treat all areas of the brain and in part because TEMT has several mechanisms of action that appear to be disease-modifying.

Arizona is a major hub of both basic and clinical research into Alzheimer's Disease. It would be a real accomplishment within the state of Arizona if the basic science and clinical collaborations between NeuroEM Therapeutics, ASU, and Banner Health could demonstrate TEMT as the first truly effective therapeutic against this dreaded disease.

### **About NeuroEM Therapeutics, Inc.**

NeuroEM Therapeutics is a medical device company focused on development of Transcranial Electromagnetic Treatment (TEMT) to treat neurodegenerative disorders such as Alzheimer's Disease, Traumatic Brain Injury, and Down's Syndrome. The company is headquartered in Phoenix, AZ, which is a hub of both pre-clinical and clinical investigation into neurodegenerative disorders and diseases. As such, NeuroEM Therapeutics is collaborating with leading institutions in the Phoenix area such as Banner Sun Health Research Institute, Banner Alzheimer's Institute, and Arizona State University. For more information about NeuroEM Therapeutics, go to [www.neuroem.com](http://www.neuroem.com).

### **Forward-Looking Statements**

This communication contains certain forward-looking statements under the Private Securities Litigation Reform Act of 1995. These forward-looking statements, which may include, but are not limited to, statements concerning the projections, financial condition, results of operations and businesses of NeuroEM Therapeutics, are based on management's current expectations and estimates and involve risks and uncertainties that could cause actual results or outcomes to differ materially from those contemplated by the forward-looking statements.