NeuroStar TMS therapy shows favorable outcomes compared to antidepressants for depression

NEW YORK, May 6, 2014 – Neuronetics, Inc. announced today a new analysis of data at the annual meeting of the American Psychiatric Association that shows Transcranial Magnetic Stimulation (TMS) administered with the NeuroStar TMS Therapy System resulted in greater symptom improvement than next-choice conventional antidepressant medication among patients with Major Depressive Disorder (MDD) who failed to benefit from prior antidepressant medication. In a propensity-score matched analysis of data from two independent studies, patient-reported symptom outcomes measured by the Quick Inventory of Depressive Symptomatology-Self Report (QIDS-SR), showed that after 6 weeks of acute phase treatment, 53 percent of patients treated with NeuroStar TMS Therapy reported no or mild depression. In contrast, the propensity-score matched population of patients treated with next-choice antidepressant medication showed improvement among 38 percent of patients (P<0.0001 for the contrast between the two groups, favoring NeuroStar TMS Therapy).

"This comparative, propensity-score matched analysis is important because it demonstrates that a higher proportion of patients with major depressive disorder are likely to achieve greater symptom relief by six weeks with NeuroStar TMS Therapy when compared to the improvement seen with the conventional next-choice approach with oral antidepressants," said Mark A. Demitrack M.D., Vice President and Chief Medical Officer, Neuronetics. "As successive medication attempts fail to produce relief for a patient, later treatments are increasingly associated with poorer tolerability, further complicating the course of this disabling illness. This latest data analysis is very encouraging and consistent with previous studies that show NeuroStar TMS Therapy is a safe and effective non-drug treatment option that offers relief and possible remission for patients."

In this report, researchers used a rigorous statistical analysis called propensity score matching to create a comparison population in order to analyze the differences across two independent studies: the TMS Outcomes Study and the Sequenced Treatment Alternatives to Relieve Depression (STAR*D) Study. The STAR*D Study is a landmark report, and remains among the largest and longest studies ever conducted to evaluate depression treatment outcomes using medication and was independently sponsored by the National Institute of Mental Health. Comparison between the groups was based on categorical outcomes using the QIDS-SR definitions for remission (0-5), mildly ill (6-10), moderately ill (11-15) or severely to very severely ill (16-27) depression and showed that the TMS group experienced a greater clinical improvement at six weeks (P<0.0001) compared to the STAR*D study population.

A companion study also presented today found that NeuroStar TMS Therapy is cost-effective for patients who fail to benefit from prior antidepressant medication, with mean annual costs of $11,886 and $10,888 for TMS and STAR*D patients, respectively. Based on these data, researchers estimated that the per member-per month (PMPM) cost to payors of including TMS as a covered benefit range from $0.17 - $0.24, suggesting that the clinical outcome provided by TMS Therapy represents a good value for money in health economic terms.

"NeuroStar TMS Therapy is cost effective compared to standard drug treatment for MDD. This economic advantage of TMS over standard drug therapy is due to the substantially larger proportion of patients who get better with TMS during acute treatment and who maintain those results long-term," said Kit Simpson, Dr. P.H., Professor of Health and Science Research, Medical University of South Carolina. "NeuroStar TMS Therapy is non-systemic, so it doesn't have the side effects associated with pharmacotherapy; therefore, it is well-tolerated by patients, which promotes treatment adherence."

Source: Tonic Life Communications USA