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Novel device shows promise for early identification of serious strokes

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The results of the study, VITALdemonstrate that Cerebrotech's non-invasive, visor-like neurological device can identify those patients with large vessel occlusion (LVO) strokes and large hemorrhagic strokes versus those with less urgent strokes, allowing for earlier intervention to prevent further brain damage.



Singapore - Cerebrotech Medical Systems, an innovative medical device company focused on the development of portable neurotechnology solutions, reported results from a new study evaluating its proprietary VIPS technology for emergency stroke patients. The results of the study, VITAL, which are being presented at the 14th Annual Meeting of The Society of NeuroInterventional Surgery in Colorado Springs, CO, demonstrate that Cerebrotech's non-invasive, visor-like neurological device can identify those patients with large vessel occlusion (LVO) strokes and large hemorrhagic strokes versus those with less urgent strokes, allowing for earlier intervention to prevent further brain damage.

"This multi-center clinical trial shows the viability of a non-invasive technology that can quickly identify treatable devastating strokes in ambulances or emergency rooms to enable rapid triage those patients to specialized, capable treatment centers, thereby saving lives," said Christopher P. Kellner, M.D., Director of the Intracerebral Hemorrhage Program at Mount Sinai and Assistant Professor of Neurosurgery at the Icahn School of Medicine at Mount Sinai. "This trial demonstrates that Cerebrotech's device has the potential to do for stroke what EKG has done for heart attack."

Cerebrotech's technology, Volumetric Integral Phase-shift Spectroscopy (VIPS), passes low-energy electromagnetic waves through the brain, detecting small changes to the brain's electrical properties. These electrical characteristics, called bioimpedance, are related to brain tissue and fluid status, and asymmetries can be indicative of clinical problems. Quantitative results provided by the device can be obtained in seconds by medical professionals after minimal training, and the simple device design allows results to be obtained without interfering with any aspect of patient care. The device holds a CE mark, but is not yet cleared for sale in the U.S.

The Society of NeuroInterventional Surgery (SNIS), a worldwide scientific and educational association, is dedicated to excellence in comprehensive, minimally-invasive care of patients with stroke, brain aneurysms, and other diseases in the head, neck and spine. SNIS draws its membership from three areas - interventional neuroradiology, endovascular neurosurgery and interventional neurology.