UNIVERSITY OF CHICAGO HOSPITALS’ STUDY SHOWS MONITORING THE BRAIN FOR CEREBRAL OXYGENATION CAN SERVE AS AN ALTERNATIVE OR ADJUNCT TO EEG DURING CAROTID ENDARTERECTOMY SURGERY

TROY, Mich. -- May 12, 1999 -- Somanetics Corporation (Nasdaq: SMTS) announced today that a study from the University of Chicago Hospitals indicates that monitoring the brain’s regional blood oxygen saturation with Somanetics’ INVOS® Cerebral Oximeter patient monitoring system can reliably detect low brain perfusion and can serve as an alternative or adjunct to EEG during carotid endarterectomy surgery.

The patients were monitored with the INVOS Cerebral Oximeter, the only FDA-cleared and commercially-available patient monitoring system which noninvasively and continuously monitors changes in the regional oxygen saturation of the blood in the brain, EEG and jugular venous oximetry.

“Our data shows that cerebral oximetry monitoring can reliably detect cerebral hypoperfusion and can serve as an alternative or adjunct to processed electroencephalography (EEG) and as a monitor to determine if a shunt is correctly placed and flowing properly,” said James F. McKinsey, M.D., Assistant Professor of Surgery, Vascular Surgery, the University of Chicago.

“Cerebral oximetry offers certain advantages over EEG such as its ease of use and low cost,” said Dr. McKinsey. “EEG requires trained technical support and may be influenced by anesthetic agents and patient temperature. Cerebral oximetry is a reliable, economical and a less subjective detector of cerebral hypoperfusion,” he said.

The study results are being presented Thursday, May 13, 1999 at the 4th Annual Chicago Vascular Research Forum in Chicago. A presentation of the study also will be made on Saturday, June 5, 1999 at the 24th Annual Spring Meeting of the Peripheral Vascular Surgical Society in Washington, D.C.

“EEG has been considered by many to be the “gold standard” for neurological monitoring during carotid endarterectomies,” said Bruce Barrett, Somanetics’ president and chief executive officer. “This research from the University of Chicago demonstrates the potential for cerebral oximetry to gain acceptance in this very important market segment,” he said.

Approximately 130,000 carotid endarterectomy procedures (the removal of plaque or a blood clot from either of the two main arteries that supply blood to the brain) were performed in more than 2,000 hospitals in the U.S. in 1996, and the number of cases performed annually is increasing.

“The ability to immediately and reliably detect periods of low brain perfusion has widespread applicability in the operating room, intensive care unit and emergency department settings,” said Mr. Barrett. “Periods of low brain perfusion are associated with neurologic injury that may be avoided by use of cerebral oximetry,” he said.

The INVOS Cerebral Oximeter, developed and marketed by Somanetics Corporation, headquartered in Troy, Mich., provides information by noninvasively transmitting and detecting near-infrared light through SomaSensors®, single-use sensors that are placed on both sides of a patient’s forehead. Use of the patient monitoring system can help medical professionals identify low regional brain blood oxygen saturation and take corrective action. Such action can potentially prevent or reduce neurological injuries related to surgery and reduce the associated cost of care.
Somanetics' Common Shares are traded on the Nasdaq SmallCap Market under the symbol SMTS.

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