LITT Treatment of Glioblastoma with CLS Non-Cooled Laser System shows Promising Results

Clinical Laserthermia Systems AB (publ) ("CLS") or the ("Company"), today comments on the conclusion that laser thermal therapy treatment of brain tumors with the Company's proprietary non-cooled laser applicators (laser fibers) is user-friendly and safe. This is shown by the first clinical study conducted with the Clearpoint PRISM system developed by CLS AB.

The study included 14 patients; eleven with recurrent and three with newly diagnosed glioblastoma or astrocytoma grade 4, all of whom were treated with MR-guided laser interstitial thermal therapy (MRgLITT). These are very aggressive tumors that almost always recur and where the median survival despite standard treatment such as surgery, radiation and chemotherapy is only about nine months. Long-term data for the patients in the study are monitored continuously.

"The preliminary results suggests that MRgLITT is at least as effective as open surgery for recurrent glioblastoma, with a median survival of 14 months following MRgLITT treatment," says Peter Siesjö, neurosurgeon at Skåne University Hospital and principle investigator of the study.

All but one patient was able to be treated with more than 100% tumor coverage, which is more than in comparable studies where other MRI-guided LITT systems, all of which require complex cooling of their laser applicators, have been used.

The fact that the entire tumor can be removed has previously been associated with a longer time until the tumor recurs and to increased survival in patients with newly diagnosed glioma. The situation in patients with recurrent glioma is not as well known. In the patient in the study where the entire tumor could not be treated with LITT, it was too close to a sensitive structure in the brain that was to be protected from thermal damage.

Despite the large tumor coverage, most neurological complications were transient, and none were serious. The majority of patients were able to leave the hospital two days after treatment.

The authors of the article mention CLS's non-cooled laser technology as a possible explanation for the tumors being able to be LITT treated with more than 100% coverage. Other explanations mentioned are the exact placement of the laser applicator made possible by the patient lying in an MRI scanner or the PRISM system's thermometry software that makes it possible to follow the LITT treatment and the resulting ablation on a screen in real time.

The study was conducted at the Section of Neurosurgery at Skåne University Hospital in Lund, Sweden. The Clearpoint PRISM system is developed and manufactured by CLS AB in Lund, and is the only MRgLITT system that uses non-cooled laser applicators. Clearpoint PRISM is marketed by Clearpoint Neuro Inc. in the US.

The article is published in the November issue of the scientific journal Neuro-Oncology Advances. Read the full article here:

Laser thermal ablation with a non-cooled laser fiber-a phase 1 clinical trial in glioblastoma and astrocytoma grade 4 | Neuro-Oncology Advances | Oxford Academic

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About CLS

Clinical Laserthermia Systems AB (publ), develops and sells TRANBERG® Thermal Therapy System and ClearPoint Prism® Neuro Laser Therapy System with sterile disposables, for minimally invasive treatment of cancer tumors and drug-resistant epilepsy. The products are marketed and sold through partners for image-guided laser ablation. CLS is headquartered in Lund, Sweden, with subsidiaries in Germany, the United States and a marketing company in Singapore. CLS is listed on Nasdaq First North Growth Market under the symbol CLS B. Certified adviser (CA) is FNCA Sweden AB.

For more information about CLS, please visit the Company's website: www.clinicallaser.se