



FOR IMMEDIATE RELEASE

ImThera Medical Successfully Implants First Patients with Neurostimulation Device to Treat OSA

SAN DIEGO, CA, December 1, 2009 – [ImThera Medical, Inc.](#) today announced that two patients have been surgically implanted with ImThera's aura6000™ neurostimulation device for treating tongue-based Obstructive Sleep Apnea (OSA). Patients are being enrolled in ImThera's pilot clinical investigation in Belgium with the first results expected to be published in the first half of 2010.

The patients were implanted with the aura6000, during which the hypoglossal nerve was briefly stimulated to verify system and nerve integrity. One week post-surgery, the patients underwent an in-laboratory Polysomnography (PSG) titration process during which stimulation parameters were determined in order to maintain proper tongue position and to provide an open airway during sleep.

"The surgical procedures went smoothly, taking approximately 90 minutes to complete. There were no surgical complications; minor surgical issues were quickly resolved. At one week, patients were not disturbed by the implanted stimulator, lead or electrode," said Dr. Philippe Rombaux, Head of Otolaryngology Surgery at the Université Catholique de Louvain, Belgium.

"Speech, swallowing and tongue sensibility were not disturbed by surgery. Stimulation resulted in effective and painless tongue movement during wakefulness. During sleep, stimulation at sufficient levels was not perceived by the patients and did not interrupt sleep. Although this was not at all an outcome planned for the analysis at one week after surgery, sleep apnea severity was improved during electrical stimulation. Clinical benefit can only be appreciated in the future, therefore we are looking forward to the results of this pilot study," said Professor Dr. Daniel Rodenstein of the Université Catholique de Louvain, Belgium; and principal investigator of the European study.

The physicians observed substantial improvement in upper airway opening and flow measured by normal sleep and a reduced AHI during the post surgery PSG.

Dr. Terence Davidson, ImThera's Chief Medical Officer, was impressed with the ease of the surgery and the performance of the aura6000 components. "It is rare that an initial clinical trial proceeds so well and with such an impressive start."

More than 800,000 patients in the U.S. are diagnosed with OSA annually. While Continuous Positive Airway Pressure (CPAP) is the established therapy, studies

show that only 54 percent of patients comply with CPAP. The aura6000 is based on ImThera's Targeted Hypoglossal Neurostimulation (THN) Sleep Therapy™, delivering neurostimulation to the tongue during sleep.

"ImThera's mission is to provide a safe and effective alternative for OSA patients that will not or cannot comply with CPAP," said Marcelo G. Lima, Chairman, President and CEO of ImThera Medical. "With a simple implant procedure, patients are expected to sleep better, without obstructive apnea events, which will ultimately help them achieve a better quality of life, while reducing the effects of the many serious comorbid consequences of OSA. We are very pleased with the first successful implantations and we look forward to the early results from these trials."

CAUTION: The aura6000 is not for sale in the U.S.A.

About ImThera Medical, Inc (www.imtheramedical.com)

Based in San Diego, ImThera Medical is a privately funded, early-stage company developing a patent-pending, neurostimulation medical device for the treatment of Obstructive Sleep Apnea (OSA).

ImThera's Targeted Hypoglossal Neurostimulation (THN) Sleep Therapy delivers neurostimulation to the hypoglossal nerve to control certain muscles of the tongue. Using a multi-contact electrode and a programmable implantable pulse generator (IPG), the system delivers muscle tone to key tongue muscles to prevent the tongue from collapsing into the upper airway during sleep. This innovative technology is designed to increase airway flow, permitting normal and restful sleep for OSA patients.

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