New Orleans, LA, 10 November 2007 – Ellex Medical Lasers Limited (ASX:ELX), a global leader in the design and manufacture of ophthalmic laser and ultrasound systems, announced today initial clinical results of an ongoing study for non-thermal Retina Regeneration Therapy (Ellex 2RT™). Results demonstrate the therapy’s potential to improve and stabilize visual acuity and to reduce retinal edema in patients with diabetic maculopathy and macular edema without causing any damage to the photoreceptors.

Peter Hamilton, MD, FRCOph, the principal clinical investigator in the Ellex 2RT research program at St. Thomas Hospital, London, presented the initial clinical trial results today at the Retina Subspecialty Day of the annual meeting of the American Academy of Ophthalmology (AAO).

“The first phase clinical outcomes have confirmed Ellex 2RT’s ability to treat diabetic maculopathy without damaging the neuro-retina,” commented Professor John Marshall, principal investigator of the Ellex 2RT research program, “This means that Ellex 2RT may change the way diabetic maculopathy patients are treated and it shows potential for intervention in early stage Age-Related Macular Degeneration (AMD) before significant loss of vision has occurred”.

“We are encouraged by the first patient data presented today as it provides the assurance we were looking for to expand Ellex 2RT research,” commented Peter Falzon, Ellex CEO. “The next phase clinical trials will be essential in establishing Ellex 2RT’s potential as an early stage therapy for retinal diseases”.

ABOUT THE CLINICAL TRIAL

The clinical trials are conducted under the direction of Professor John Marshall, Ph.D., FRCPath, who is Frost Professor of Ophthalmology at the Rayne Institute and Head of the Academic Department of Ophthalmology at King’s College, University of London.

The prospective study, which includes 18 patients (29 eyes) was designed to evaluate the effectiveness of selective RPE treatment in diabetic maculopathy and macular edema. The duration of the study is 12 months with patient follow up at three, six and twelve months post-op. All patients received treatments with Ellex 2RT prototype lasers that were developed specifically for the Ellex 2RT research program by Ellex’s advanced research team in Adelaide, Australia. Ellex has international patents pending for the technology and the method.

At three months the majority of patients experienced improvement in visual acuity and central macular thickness (CMT) as measured by optical coherence tomography. Central macular thickness decreased in 55% of eyes and remained stable in 24%. An increase in central macular thickness was observed in only 20% of eyes. In addition, micro-perimetry confirmed that there was no evidence of laser damage to the photoreceptor cells.
ABOUT ELLEX 2RT RESEARCH

Ellex 2RT research is funded in part by an A$1.9 million, two-year Commercial Ready Grant awarded to Ellex by the Australian Government to support the development of a new and innovative laser therapy for the treatment of AMD and other retinal diseases. The grant was applied for in order to expand laboratory and clinical research in Australia based on proof-of-principle laboratory work conducted at St. Thomas’ Hospital in London under the direction of Professor Marshall. Ellex 2RT clinical trials will next commence in Australia, followed by multiple centers internationally over the next 12 months. These trials will provide data necessary to develop a commercial product based on the current prototype 2RT laser systems. The company estimates it will take six months to one year to design and release a product for sale once a decision is made to commercialize Ellex 2RT.

ABOUT AMD

AMD causes central visual loss and is the leading cause of blindness for people over the age of 60. The U.S. National Eye Institute estimates that there are 1.8 million people with AMD in the United States and that this prevalence will grow to 3 million by 2020. When AMD occurs it is categorized into dry or wet forms.

The dry form is associated with changes in Bruch’s membrane that lead to atrophic cell death of the central retina or macula, which is required for fine vision used for activities such as reading, driving or recognizing faces. The wet form is caused by growth of abnormal blood vessels under the macula, also known as choroidal neovascularization (CNV) or ocular angiogenesis. These vessels are of poor quality and tend to leak fluid and blood and cause scar tissue that destroys the central retina. This results in a deterioration of sight over time.

ABOUT DIABETIC RETINOPATHY

Diabetic retinopathy is the leading cause of blindness in American and European adults. It is caused by changes in the blood vessels of the retina. The U.S. Food and Drug Administration estimates that there are 17 million people with diabetes in the United States. During the first two decades of the disease, more than 60 percent of diabetes patients will develop retinopathy.

Blood vessels damaged from diabetic retinopathy can cause vision loss in two ways. First, fragile, abnormal blood vessels can develop and leak blood into the center of the eye, blurring vision. This is proliferative retinopathy and is the most advanced stage of the disease. Second, fluid can leak into the center of the macula, the part of the eye where sharp, straight-ahead vision occurs. The fluid makes the macula swell, blurring vision. This condition is called macular edema. It can occur at any stage of diabetic retinopathy, although it is more likely to occur as the disease progresses. About half of the people with proliferative retinopathy also have macular edema.

ABOUT ELLEX

Ellex Medical Lasers Limited (ASX:ELX) designs, manufactures and markets a complete line of lasers and diagnostic ultrasound systems used by ophthalmologists to diagnose and treat eye diseases. With more than 12,000 systems delivered to the market, Ellex has evolved since 1985 from a manufacturing company of primarily OEM products, to direct marketing of its own branded products through subsidiaries in the United States, Japan and Australia, and a network of distribution partners in more than 100 countries. In December 2006 Ellex acquired Innovative Imaging, a leading provider of diagnostic ultrasound devices for ophthalmology, initiating the expansion of its product line beyond lasers. Ellex maintains a strong emphasis on intellectual property and research into new and better treatments to manage and treat the leading causes of blindness.
For additional information about Ellex and its products, please visit www.ellex.com.

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