Ellex Medical Lasers Ltd (ASX:ELX), a global leader in the design and manufacture of ophthalmic laser and ultrasound systems, today announced major positive clinical results for its world leading laser Retina Regeneration Therapy (Ellex 2RT™) for the treatment of Age-related Macular Degeneration (AMD) and Diabetic Retinopathy (DR), two conditions that usually result in irreversible blindness for sufferers.

AMD is a progressive disease affecting the central area of the retina called the macula. Macular Degeneration is the leading cause of blindness in the developed world, responsible for 48% of vision loss in Australia. Around 15% of older Australians suffer from AMD, with around 17,700 new cases each year¹.

“This is a significant global technology that has the potential to reduce the onset of blindness with a gentle, non-invasive laser treatment,” said Simon Luscombe, CEO, Ellex Medical Lasers.

Ellex 2RT™ treatment involves a novel laser device designed and manufactured by Ellex which delivers a controlled nanosecond dose of laser energy into the eye.

Clinical trials of Ellex 2RT™ demonstrate the potential to reverse the degenerative processes caused by the disease AMD through the reduction of yellow deposits known as ‘drusen’, present in the retinal tissue of people suffering from AMD.

“Starting treatment for AMD earlier can potentially halt disease progression, saving functional vision before irreversible damage occurs,” said Mr. Luscombe.

Ellex 2RT offers the potential to treat AMD in its early stages, before vision is lost. Until now treatment has been restricted to targeting late-stage complications associated with the wet form of AMD, which only accounts for 10-15% of all people who suffer from AMD².

In addition to AMD, clinical trials of Ellex 2RT™ have shown that it is 500 times more laser energy efficient than prevailing methods in the treatment of Diabetic Retinopathy. Ellex 2RT™ produces no thermal damage to the retina, and can successfully treat affected areas near the fovea not possible with conventional treatment.

“These results provide a major step towards bringing this technology to market,” said Mr. Luscombe.

“Ellex is working on finalising the clinical trials and regulatory approvals for the Ellex 2RT product that will revolutionise the treatment of Age-related Macular Degeneration and Diabetic Retinopathy.”

¹ Data sourced from Macular Degeneration Foundation, Australia.
² Data sourced from Resident and Staff Physician; AMD: Clinical Features and Therapeutic Options.
AMD Study Results: Ellex 2RT for Treating Early AMD

Professor Robyn Guymer, MB, BS, PhD, FRANZCO, Head of Macular Research at the Centre for Eye Research Australia (CERA), presented the initial study results for the Ellex 2RT™ Early AMD Study during the Association for Research in Vision and Ophthalmology’s (ARVO) 2010 Annual Meeting in Fort Lauderdale.

The prospective study, which includes 14 patients at 6-months follow-up, is investigating the efficacy of Ellex 2RT™ for the treatment of patients with bilateral high-risk early AMD. The study is being conducted by CERA and Ellex R&D Pty Ltd at the Victorian Eye and Ear Hospital over a 12-month follow-up period. The research was partially funded by a $540,000 grant from Victoria’s Science Agenda Investment Fund.

At six months the majority of patients experienced improvement in visual function and drusen reduction. Drusen decreased in 70% of treated eyes and 56% of non-treated eyes. Central visual function improved in 50% of treated eyes and 36% of non-treated eyes. In addition, retinal imaging confirmed that there was no evidence of laser damage to the photoreceptor cells.

“The initial results suggest that the application of Ellex 2RT to the affected eye eliminates the yellow deposits known as ‘drusen’ which are present in the retinal tissue of people with AMD. By getting rid of the drusen from a patient’s retina, we hope to reverse the degenerative processes caused by the disease,” commented Professor Robyn Guymer.

DR Study Results: Ellex 2RT for Diabetic Retinopathy

Associate Professor Robert Casson, MB, BS (Hons), DPhil, FRANZCO, presented the completed 6-month clinical results for the Ellex 2RT™ Diabetic Retinopathy study during the ARVO 2010 Annual Meeting.

The prospective study, which includes 48 patients at 6-months follow-up, compares the efficacy of Ellex 2RT™ and retinal photocoagulation for the treatment of Diabetic Macular Edema (DME). The study is being conducted at the Royal Adelaide Hospital in partnership with Ellex R&D Pty Ltd over a 12-month follow-up period.

At six months Ellex 2RT™ has produced very similar reductions in macular edema as compared to conventional retinal photocoagulation, whilst using approximately 500 times less laser energy.

ABOUT ELLEX

Ellex Medical Lasers Limited (ASX:ELX) is a global leader in the design and manufacture of ophthalmic laser and ultrasound systems used by ophthalmologists to diagnose and treat eye disease. With more than 14,000 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, Germany 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 systems for ophthalmology, initiating the expansion of our product line beyond lasers.

For additional information about Ellex and its products, please visit www.ellex.com
ABOUT ELLEX 2RT™

Ellex 2RT™ is a non-damaging laser treatment that stimulates a therapeutic response to regenerate retinal tissue that has been compromised by disease or age. This breakthrough therapy is aimed at treating a range of degenerative diseases that ultimately result in blindness, including AMD. Early clinical trials have been conducted at St. Thomas’ Hospital in London, with further clinical trials currently underway in Australia to validate the efficacy of Ellex 2RT™ for a number of clinical indications.

For additional information about Ellex 2RT™, please visit www.ellex.com/2RT

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