

**ASX RELEASE**

**Ellex Medical Lasers Limited (ASX:ELX)**

**Adelaide, Australia**

**Date: 15 May 2014**

**Release: Immediate**

**Topic: Ellex announces further positive clinical and scientific results for  
2RT treatment of early AMD**

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**Key Findings:**

- 24-month follow up confirms continuation of drusen reduction evident in the 12-month data
- Important clinical and scientific data to assist 2RT commercialisation

**Adelaide, Australia, 15 May 2014** – Ellex Medical Lasers Limited (ASX:ELX), a pioneer in medical technologies for the diagnosis and treatment of eye disease, today announced the 24-month follow up of the pilot study to investigate the efficacy of the Company's proprietary Retinal Rejuvenation Therapy (2RT™) in the treatment of early Age-Related Macular Degeneration (AMD) has been released and published in a summary form at the recent Association for Research in Vision and Ophthalmology (ARVO) 2014 conference in Orlando, Florida.

This 24-month data, presented as a scientific poster on 9 May 2014 at ARVO by Associate Professor Erica L Fletcher MScOptom, PhD, Department of Anatomy and Neuroscience, The University of Melbourne, is a follow up to the 12-month data for the "2RT for Early AMD" pilot study (ACTRN 1260900E1056280) that was conducted over 2009 to 2011 at the Centre for Eye Research Australia (CERA) under Professor Robyn Guymer, MB, BS PhD, FRANZCO, Head of Macular Research at CERA.

In the pilot study, 51 patients with intermediate AMD received a single treatment to one eye with the 2RT laser. Drusen area in each eye was graded at baseline, 12 and 24 months later. Changes in drusen area in the treated eyes were compared with a natural history AMD cohort of similar age range and clinical AMD severity. Drusen are a key important risk factor for progression of AMD to its blinding end stage.

The 2RT laser treatment reduced drusen area in 35-40% of eyes following twelve and 24 months (compared to 5-11% of eyes in a natural history cohort). This is consistent with the outcome of the 12-month data.

Unlike currently marketed AMD treatments, which only address advanced or late-stage complications of the disease, Ellex's 2RT technology is designed to offer treatment earlier in the disease process, with the aim of slowing or reversing its progression.

Pre-clinical studies were also conducted by A/Professor Fletcher to validate a mouse model of AMD and compare it with human data. "This model will assist us in unlocking the mechanism action of 2RT, minimising the need for long term studies" stated Ellex CEO, Tom Spurling.

A/Professor Fletcher concluded that "2RT laser treatment thins Bruch's membrane via mechanisms involving altered extracellular matrix turnover. Similar mechanisms may also explain the reduction in drusen area observed in patients with intermediate AMD following nanosecond laser treatment."

Mr Spurling continued “Associate Professor Fletcher has augmented the pilot study data conducted by Professor Robyn Guymer with work to help understand the method of action of 2RT. This important data confirms the results of the 12-month data and provides additional information to assist in the controlled commercial rollout of 2RT”.

The full details of the work by A/Professor Fletcher are currently confidential as the work is being assessed for publication by a high impact factor peer reviewed journal.

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## **ABOUT AMD**

Age-Related Macular Degeneration (AMD) affects one in seven Australians over the age of 50 (Source: report prepared for Macular Disease Foundation, Access Economics). The economic impact and cost of AMD is high, and is estimated to directly cost the Australian community more than AU\$2.6 billion annually (Source: CERA). Current treatment options for AMD only address advanced or end-stage complications associated with the disease. In contrast, 2RT™ offers the potential to apply treatment earlier in the disease process, with the aim of slowing or reversing the process of degeneration, and hence delaying, or preventing, late stage disease.

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## **ABOUT 2RT**

Retinal Rejuvenation Therapy (2RT™) delivers nanosecond pulses of laser energy to stimulate a natural, biological healing response in the eye to stimulate a process of cellular rejuvenation to preserve and/or improve functional vision, reducing disease progression. These nanosecond pulses generate a response by retinal pigment epithelium (RPE) melanosomes, without causing heat to escape beyond the RPE cell walls. These pulses cause damage to the internal cell structure only: they do not break the cell’s outer membrane. This process of regeneration rejuvenates the entire transport mechanism of the retina, improving visual function and reducing disease progression. This breakthrough approach retains the therapeutic effect of laser therapy whilst eliminating the thermal tissue damage inherent in conventional retinal photocoagulation laser treatment.

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## **ABOUT ELLEX**

Ellex Medical Lasers Limited (ASX:ELX) is a pioneer in the development of medical technologies for the diagnosis and treatment of eye disease. With more than 20,000 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, France, Germany and Australia, and a network of distribution partners in more than 100 countries. In recent years, Ellex has diversified its product range beyond lasers and ultrasound equipment to include distribution of a number of complementary third-party ophthalmic products. Recently Ellex acquired the canaloplasty micro catheter glaucoma treatment, a recurring revenue stream, which Ellex manufactures at a plant in Menlo Park, California.

For additional information about Ellex and its products, please visit [www.ellex.com](http://www.ellex.com).

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