ASX RELEASE Ellex Medical Lasers Limited (ASX:ELX) Adelaide, Australia Date: 21 July 2017 Release: Immediate



Topic: Ellex Reflex Technology published in leading peer-reviewed journal

# **Highlights:**

- Publication paves way for wider adoption of Reflex Technology for eye floater treatment in a leading ophthalmic journal
- Underlines Ellex's unique opportunity to replace global YAG laser installed base of 28,000 lasers with Reflex Technology
- The potential revenue opportunity of US\$600m overtime

Adelaide, Australia, 21 July 2017 – Ellex Medical Lasers Limited (ASX:ELX), a global leader in medical devices for the diagnosis and treatment of eye disease, today announced the release results of a clinical trial in the leading peer-reviewed journal, JAMA Ophthalmology. This publication attests to the efficacy of the laser treatment of eye floaters and features Ellex's proprietary Reflex Technology<sup>™</sup> laser platform.

Conducted by Ophthalmic Consultants of Boston, Massachusetts, USA, the trial investigated if laser vitreolysis (the removal of eye floaters) with a YAG (see definition below) laser is safe and effective in the treatment of patients with symptomatic floaters. Dr. Chirag P. Shah, a retinal surgeon, performed laser vitreolysis using Ellex's proprietary Ultra Q Reflex<sup>™</sup> laser. Fifty-two (52) patients were enrolled in the trial and were randomly assigned to laser vitreolysis or sham (control). The results of the trial were very positive.

Commenting on the significance of the paper, Ellex CEO, Tom Spurling said: "The work by Dr. Shah has demonstrated that laser floater removal, performed with our proprietary Reflex Technology, is both clinically effective and safe in the treatment of floaters."

"With the release of this data, we expect a broader cross-section of ophthalmologists to adopt Reflex Technology in the treatment of patients suffering from symptomatic floaters which, hitherto, have not been considered candidates for treatment due to the significant risk profile associated with conventional surgical treatments."

"Given that 1 in 7 people are estimated to be affected by floaters, this offers a considerable opportunity for our business," added Mr. Spurling.

Since making its patented Reflex Technology<sup>™</sup> commercially available in 2014, the Ultra Q Reflex<sup>™</sup> has become one of Ellex's fastest growing product lines, and is expected to be a key growth driver over the coming financial year. Designed specifically for laser eye floater removal, it is the world's first laser optimized for such treatment.

Traditionally, such lasers have been used for the treatment of secondary cataracts only. The Reflex Technology<sup>™</sup> enables physicians to utilize the laser technology for eye floater

treatment as well. This materially improves the return on investment for doctors. According to an independent 2017 analysis by Market Scope, the global installed base of The Reflex Technology<sup>™</sup> lasers for secondary cataracts is 28,000. Ellex estimates that this has a potential future replacement value of approximately US\$600m that would be accessed over several years.

"We have a unique opportunity to replace the global installed bases of conventional secondary cataract lasers with our Ultra Q Reflex or Tango Reflex product lines – and thereby enable doctors to expand their scope of patient care from those that have secondary cataracts to patients suffering from secondary cataracts and/or symptomatic floaters."

# **ABOUT THE MANUSCRIPT & YAG LASERS**

Manuscript name: "Yttrium aluminum garnet vitreolysis for symptomatic vitreous floaters: a sham-controlled randomized clinical trial."

YAG is an acronym for Yttrium Aluminum Garnet. It describes a type of laser that generates a plasma force that is needed to vaporize tissue.

### **ABOUT FLOATERS**

Typically, many patients describe floaters as 'strands' or 'blobs' obstructing their line of vision. Some patients will also describe a relative scotoma effect, when a particular floater may obstruct characters on a page of small print. Floaters become more prevalent with age and occur in approximately 65% of patients by the age of 65. To date, surgical removal of the vitreous (vitrectomy) has been the standard approach to the treatment of floaters. Highly invasive, the surgical procedure carries a significant risk of complications, such as infection, retinal detachment, macular edema, anterior vitreous detachment and residual floaters. Laser vitreolysis, first introduced in the eighties but with varying degrees of success due to technical challenges, offers a minimally invasive office-based alternative to vitrectomy. For additional information on floaters please visit: <u>www.floater-LFR.com</u>

### **ABOUT LASER VITREOLYSIS**

Laser vitreolysis is a minimally invasive, in-office procedure that can provide much-needed relief from floaters. It can also delay or obviate the need for invasive surgery. The goal of laser vitreolysis is to achieve "functional improvement". That is, to allow the patient to resume eye normal day-to-day activities without the hindrance of floaters. Most patients experience an almost immediate improvement in visual function and, as an added benefit, they are able to return to normal day-to-day activities directly following treatment: there is no need for patches or anti-inflammatory medication. Laser vitreolysis involves the use of a specially designed

Nd:YAG laser to vaporize floaters. During the procedure, the laser emits a short 3 nanosecond (0.000000003 seconds) burst of energy. It is important to note that the laser energy does not simply break the floater into smaller pieces. Instead, the laser's high power density converts the collagen and hyaluronin molecules within the floater into a gas, which is then resorbed into the eye.

For additional information on laser vitreolysis please visit: www.floater-LFR.com

# **ABOUT ELLEX**

Ellex designs, develops, manufactures and sells innovative product that help eye surgeons around the world to effectively and efficiently treat eye disease. Ellex is a world leader in this field. Headquartered in Adelaide, Australia, Ellex has ophthalmic lasers and devices that treat glaucoma, retinal disease primarily caused by diabetes, secondary cataract and vitreous opacities, as well as age-related macular degeneration. Manufacturing is carried out in Adelaide, Australia and Fremont, California. Sales and service directly to eye surgeons is conducted via subsidiary offices in Minneapolis, Lyon, Berlin and Tokyo. A network of more than 50 distribution partners around the world services other markets.

# For additional information about Ellex and its products, please visit <u>www.ellex.com</u> For further information on Ellex please contact:

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