

ASX and Media Release 23 November 2017

Opthea Chairman's Address to the 2017 AGM

Melbourne, Australia; November 23 2017 – Opthea Limited (ASX:OPT)

We are delighted to report on a successful, in fact a transitional year, for Opthea.

We have made great progress in advancing our lead drug candidate, OPT-302, for the treatment of wet AMD. The data generated from our first in human clinical study with OPT-302 in patients with this chronic disease far exceeded our expectations. Our announcement of the outcomes from the Phase 1/2A clinical trial with OPT-302 was the first time clinical data with an inhibitor of VEGF-C and VEGF-D had been reported. We were pleased to demonstrate clear evidence of the biological activity of OPT-302 when administered on its own as a monotherapy and in combination with the current approved drug, Lucentis[®].

The outcomes of that study demonstrate that OPT-302 has the potential to meaningfully improve vision in patients with wet AMD.

Our approach, to use OPT-302 as a combination therapy with existing therapies that selectively target VEGF-A, results in greater inhibition of the signals and pathways that are involved in disease progression and that are implicated in mediating resistance to the existing standard of care agents.

We are truly excited to be advancing this novel therapy into a later stage and larger Phase 2B clinical trial; firstly because there remains a large unmet medical need for patients. Despite the availability of selective VEGF-A inhibitors, many patients respond sub-optimally or continue to deteriorate over time. Our approach, used in combination with existing therapies, has the potential to improve outcomes for patients, outcomes that directly impact the quality of life for patients. Secondly, there is huge commercial potential for novel agents in this space. Existing approved treatments for wet AMD, treatments that include Lucentis and Eylea, achieved combined annual sales of more than US\$8 billion in 2016. With one of the only combination approaches in development for retinal diseases, Opthea is advancing a truly differentiated asset and establishing itself as a key player in ophthalmology. We look forward to reporting further updates on our Phase 2B trial as we move forward with the study.

The successful Phase 1/2A clinical trial in wet AMD, that met its safety end points and showed promising efficacy, enabled Opthea to complete a well over-subscribed A\$45 million equity capital raising in April of this year. This financing was well supported by new and existing shareholders, with \$42 million raised from Australian, US and EU based institutional investors and \$3 million raised from Australian and New Zealand retail shareholders.

Now well funded, we are strongly positioned to execute on our clinical development plans. We are well advanced in our planning of the Phase 2B clinical trial. We sought thorough input into the planning of this study from our clinical advisory board and advisors in both the US and Europe and met with both the US FDA as well European regulatory agencies located in the United Kingdom and Sweden. The outcomes from those meetings were positive and provided a clear path forward. Our successful fundraising also enables us to diversify our program by investigating OPT-302 in diabetic macular edema or DME patients. We also intend to trigger a third Phase 2A trial early in 2018.

Opthea's CEO, Dr. Megan Baldwin will provide an update on our clinical development activities immediately following the formalities of today's AGM.

Finally, with a strong balance sheet sufficient to fund the company through 2020, including the Phase 2B and two Phase 2A studies, we look forward to delivering on our both our short and longer term milestones.

On behalf of myself, and my fellow directors Michael and Megan, thank you to our shareholders for your continued support, particularly in regards to this year's capital raising.

Thanks also go to our loyal and professional team at Opthea for another successful year and commitment to bringing OPT-302 to patients.

About OPT-302

OPT-302 is a soluble form of vascular endothelial growth factor receptor 3 (VEGFR-3) or 'Trap' molecule that blocks the activity of two proteins (VEGF-C and VEGF-D) that cause blood vessels to grow and leak, processes which contribute to the pathophysiology of retinal diseases. Opthea is developing OPT-302 for use in combination with inhibitors of VEGF-A (eg. Lucentis[®]/Eylea[®]). Combination therapy of OPT-302 and a VEGF-A inhibitor achieves more complete blockade of members of the VEGF family, blocks mechanisms contributing to sub-optimal response to selective VEGF-A inhibitors and has the potential to improve vision outcomes by more completely inhibiting the pathways involved in disease progression.

Opthea has completed a Phase 1/2A clinical trial in the US investigating OPT-302 wet AMD patients as a monotherapy and in combination with Lucentis[®]. The trial was conducted under an FDA approved IND at 14 US clinical sites. The purpose of the trial was to evaluate the safety, pharmacokinetics (PK) and pharmacodynamics of OPT-302 administered as monthly intravitreal injections for 3 months with and without Lucentis[®] in patients with wet age related macular degeneration (AMD). Of the 51 patients enrolled, 25 were treatment naïve and 26 had received prior intravitreal anti-VEGF-A therapy.

Further details on the Phase 1/2A trial can be found at: <u>www.clinicaltrials.gov</u>, Clinical trial identifier: NCT02543229. Details on the outcomes of the study can be found on the Opthea website: www.opthea.com

About Wet AMD

Wet (neovascular) age-related macular degeneration, or wet AMD, is a disease characterised by the loss of vision of the middle of the visual field caused by degeneration of the central portion of the retina (the macula). Abnormal growth of blood vessels below the retina, and the leakage of fluid and protein from the vessels, causes retinal degeneration and leads to severe and rapid loss of vision.

Wet AMD is the leading cause of blindness in the developed world in individuals aged 50 years or older. The prevalence of AMD is increasing annually as the population ages. Without treatment, wet AMD patients often experience a chronic, rapid decline in visual acuity and increase in retinal fluid. Sales of the drug Lucentis[®] (Roche/Novartis), which targets VEGF-A but not VEGF-C or VEGF-D, were over \$US3.2BN in 2016. Sales of EYLEA[®] (Regeneron/Bayer), which also targets VEGF-A but not VEGF-C/-D first marketed in November 2011 for the treatment of wet AMD, were over \$US5.4BN in 2016. Approximately half of the people receiving Lucentis[®]/EYLEA[®] are classified as non-responders or 'poor' responders and do not experience a significant gain in vision and/or have persistent retinal vascular leakage. There is great opportunity to improve patient responses by targeting more than one factor involved in disease progression. Existing therapies, such as Lucentis[®] and EYLEA[®], target VEGF-A that promotes blood vessel growth and leakage through its receptor VEGFR-2. VEGF-C can also induce angiogenesis and vessel leakage through the same receptor as well as through an independent pathway. Combined inhibition of VEGF-A and VEGF-C/-D, has the potential to improve patient response by more effective inhibition of the pathways involved in disease progression.

About Opthea Limited

Opthea (ASX:OPT) is a biologics drug developer focusing on ophthalmic disease therapies. It controls exclusive worldwide rights to a significant intellectual property portfolio around Vascular Endothelial Growth Factor (VEGF)-C, VEGF-D and VEGFR-3. Opthea's intellectual property is held within its wholly-owned subsidiary Vegenics Pty Ltd. The applications for the VEGF technology, which functions in regulating blood and lymphatic vessel growth, are substantial and broad. Opthea's product development programs are focused on developing OPT-302 (formerly VGX-300, soluble VEGFR-3) for 'back of the eye' disease such as wet age-related macular degeneration (wet AMD) and diabetic macular edema (DME).

Inherent risks of Investment in Biotechnology Companies

There are a number of inherent risks associated with the development of pharmaceutical products to a marketable stage. The lengthy clinical trial process is designed to assess the safety and efficacy of a drug prior to commercialisation and a significant proportion of drugs fail one or both of these criteria. Other risks include uncertainty of patent protection and proprietary rights, whether patent applications and issued patents will offer adequate protection to enable product development, the obtaining of necessary drug regulatory authority approvals and difficulties caused by the rapid advancements in technology. Companies such as Opthea are dependent on the success of their research and development projects cannot be assessed on the same fundamentals as trading and manufacturing enterprises. Thus investment in companies specialising in drug development must be regarded as highly speculative. Opthea strongly recommends that professional investment advice be sought prior to such investments.

Forward-looking statements

Certain statements in this ASX announcement may contain forward-looking statements regarding Company business and the therapeutic and commercial potential of its technologies and products in development. Any statement describing Company goals, expectations, intentions or beliefs is a forward-looking statement and should be considered an at-risk statement. Such statements are subject to certain risks and uncertainties, particularly those risks or uncertainties inherent in the process of developing technology and in the process of discovering, developing and commercialising drugs that can be proven to be safe and effective for use as human therapeutics, and in the endeavour of building a business around such products and services. Opthea undertakes no obligation to publicly update any forward-looking statement, whether as a result of new information, future events, or otherwise. Actual results could differ materially from those discussed in this ASX announcement.

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