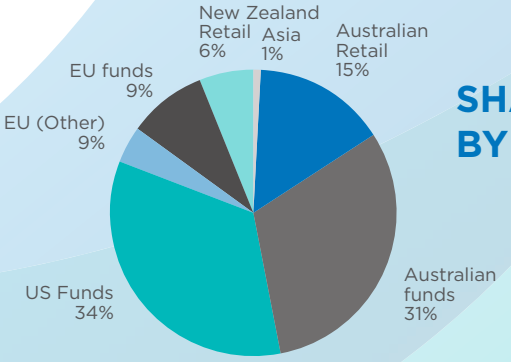
OPTHEA



SHAREHOLDERS BY REGION

ASX Code: OPT
OTCQX: CKDXY
Cash (30/11/15) $18.2M
Listed Investments $2m

INVESTOR HIGHLIGHTS

» Wet AMD is the leading cause of blindness in the western world in adults aged over 50

» Market Opportunity: world wide ~$10BN

» Significant unmet medical need

» Existing approved therapies target only one signal (VEGF-A) and do not significantly improve vision in the majority of patients

» OPT-302 has differentiated mechanism of action by targeting VEGF-C and VEGF-D

» Targets validated pathway involved in wet AMD progression

» Opthea raised A$17.4m in Nov 2014 (~twice its market cap) for OPT-302 clinical trials

» Financing supported by specialist institutional investors in the US, Europe and Australia

» Funded through end of 2017 and completion of Phase 1/2A and Phase 2B clinical studies in wet AMD

» Clinical studies conducted under FDA approved IND in the US

» Near term clinical milestones

OPT-302 Wet AMD Program Milstones	
IND Approval for OPT-302 June 2015	✓
Initiated Phase 1/2A clinical trial 30 June 2015	✓
Ph 1 Primary Data Analysis 1Q16	
Ph 2A Primary Data Anaysis 2H16	

COMPANY OVERVIEW

Opthea Limited (formerly Circadian Technologies) is a public Australian biotechnology company (ASX:OPT) developing a novel biologic therapy, OPT-302.

OPT-302 is a promising drug to treat wet age-related macular degeneration (wet AMD), a progressive disease of the eye that affects the centre of the visual field and is the leading cause of blindness in adults over the age of 50 in the western world. Wet AMD affects the vision required to drive, read, recognise faces and perform daily tasks. The disease is caused by abnormal growth of vessels at the back of the eye, and the leakage of fluid and protein from those vessels that leads to severe and rapid loss of vision.

OPT-302 acts as a 'trap' to block the activity of two signals, named VEGF-C and VEGF-D, which cause blood vessels to grow and leak. In animal models of wet AMD, OPT-302 effectively reduces disease burden by inhibiting the size of wet AMD lesions and vessel leakage.

Approved therapies for wet AMD include the blockbuster drugs Lucentis™ and Eylea™. These agents block the activity of VEGF-A, but not VEGF-C or VEGF-D.

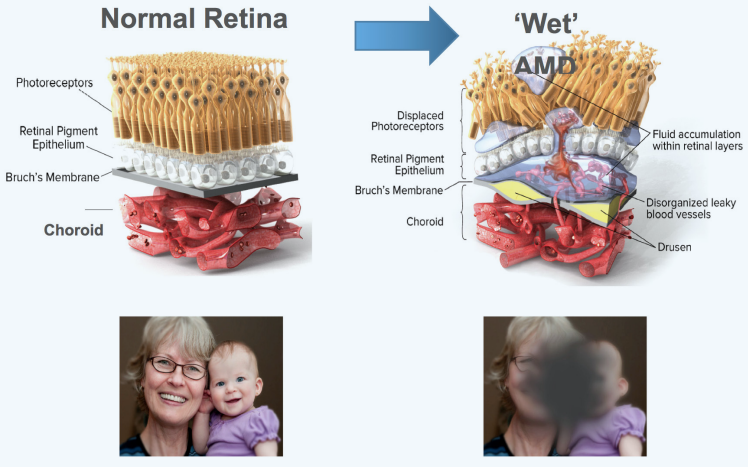
There remains a significant unmet medical need for wet AMD patients. Approximately 50% of people receiving Lucentis™/Eylea™ do not experience a significant gain in vision, and the majority (50-70%) continue to have fluid at the back of the eye.

In animal models of wet AMD, OPT-302 can reduce lesion size and leakage to a comparable extent as the marketed anti-VEGF-A agent Eylea™. Used together in the same model, the two therapies more effectively inhibit wet AMD lesions and leakage more effectively than using either agent alone. Combination therapy more completely blocks the VEGF family and also targets a key mechanism of resistance to therapies that only target VEGF-A.

The opportunity for OPT-302 is to:

- Increase the number of patients who experience a significant gain in vision
- Increase the magnitude of the vision gain
- Prolong response to therapy and prevent visual decline
- Explore the potential to reduce dosing frequency

NORMAL RETINA AND WET AMD



A COMPLEMENTARY TREATMENT

OPT-302 is being developed as a complementary medicine to be used in conjunction with existing drugs such as Eylea™ and Lucentis™ to provide a more complete blockade of the pathways involved in the progression of wet AMD. This is a multi-billion dollar market opportunity.

Sales of the drug Lucentis™ (Roche/Novartis), which targets VEGF-A but not VEGF-C, were over $US4billion in 2014.

Sales of Eylea™ (Regeneron/Bayer), which also targets VEGF-A but not VEGF-C, first marketed in November 2011 for the treatment of wet AMD, were over $US1.8billion in 2014.

BOARD OF DIRECTORS

Megan Baldwin PhD – Managing Director and Chief Executive Officer

Dr Megan Baldwin was appointed CEO and Managing Director in February 2014. Dr Baldwin brings over 19 years' experience focussing on angiogenesis and therapeutic strategies for cancer and ophthalmic indications. Dr Baldwin joined the company in 2008 and since then has held various positions, including Head of Preclinical R&D and Chief Executive Officer of Opthea Pty Ltd, the 100% owned subsidiary of Circadian, developing OPT-302 for the treatment of wet age-related macular degeneration. Prior to joining the company, she was employed at Genentech (now Roche), the world leader in the field of angiogenesis-based therapies and the company that developed Avastin™ and Lucentis™. Megan completed her PhD at the Ludwig Institute for Cancer Research where she studied the role of VEGF-D and was involved in the generation of intellectual property that is now owned by Opthea.

Geoffrey Kempler
B.Sc Grad. Dip. App. Soc. Psych,
Non-Executive Chairman

Michael Sistenich
MSc
Non-Executive Director

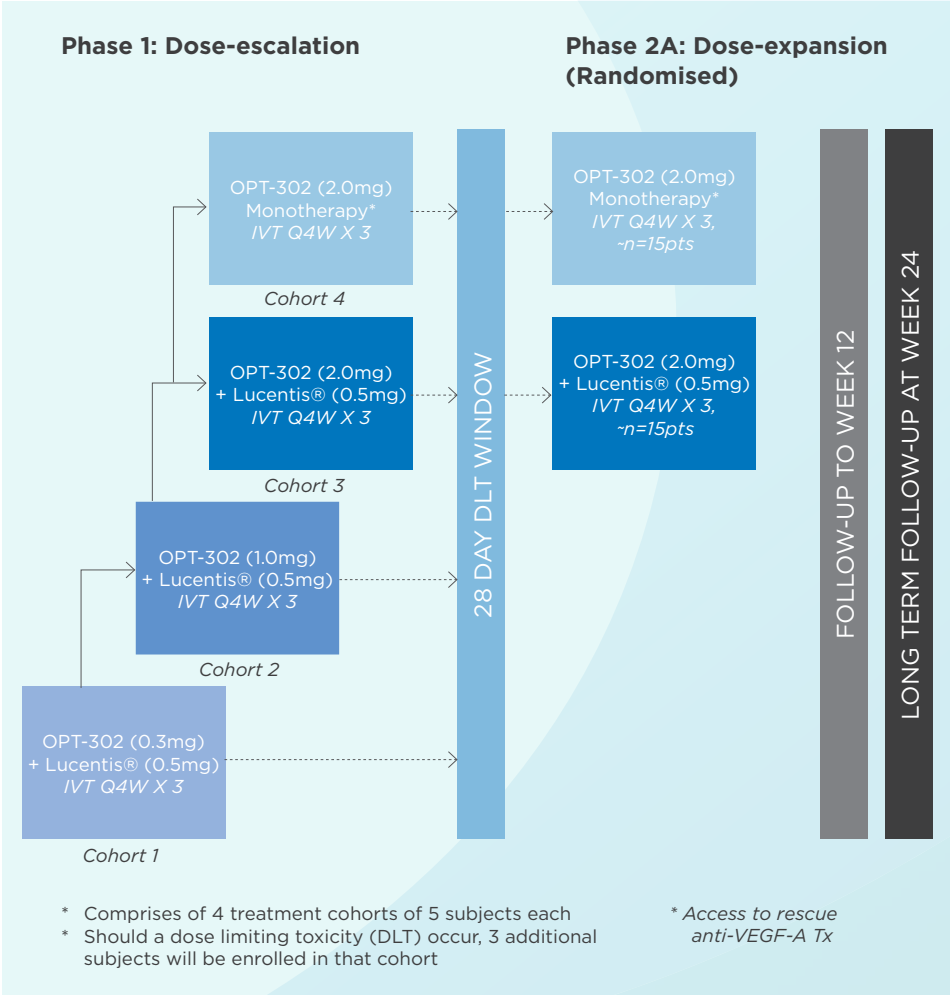
OPT-302 CLINICAL PROGRAM

A Phase 1/2A clinical trial of OPT-302 in patients with wet AMD is currently ongoing under an IND at leading US clinical sites. The first-in-human multi-centre dose-escalation and dose-expansion trial is investigating OPT-302 administered alone or in combination with Lucentis™ on a monthly basis for 3 months by ocular (intravitreal) injection. The trial is being conducted in wet AMD patients who have either not been treated previously (treatment naïve patients) or who have demonstrated a sub-optimal response to prior anti-VEGF-A therapy.

Endpoints of the study include assessment of the safety of OPT-302 and preliminary measures of clinical activity, including evaluation of visual acuity using eye charts as well as changes in wet AMD lesions, including fluid and thickness of the tissue at the back of the eye, using sophisticated imaging techniques.

Principle investigators on the Phase 1/2A clinical trial include David Boyer MD (Beverly Hills, CA), Michael Varenhorst MD (Wichita, KS), Joel Pearlman MD (Sacramento, CA), Patrick Higgins MD (New Jersey, NY) and Sunil Patel MD (Abilene, TX). Further information on the OPT-302 clinical trial can be found at: www.clinicaltrials.gov.

Opthea has also established a Clinical Advisory Board (CAB) of internationally recognised and experienced key opinion leaders from Australia and US that have extensive experience in development of novel and FDA approved therapeutics for wet AMD, including Eylea™ and Lucentis™. Opthea's CAB includes: Pravin Dugel MD (Retinal Consultants Arizona, Keck School of Medicine USC), Mark Gillies MD (Save Sight Institute, Sydney Uni.), Peter Campochiaro MD (Johns Hopkins, Wilmer Eye Institute) and Kameran Lashkari MD (Schepens Eye Research Inst., Mass.Eye & Ear).



OPTHEA