

## Investment Highlights

Actinogen Medical (ASX:ACW) is an ASX-listed biotechnology company developing an innovative treatment for Alzheimer's disease and the cognitive decline associated with neurodegenerative and metabolic diseases.

- ACW achieved a significant milestone, with patient recruitment and treatment commencing in May 2017 for XanADu – its 174-patient Phase II Clinical Trial of Xanamem™ in Alzheimer's disease.
- Xanamem, ACW's novel drug candidate, has been specifically designed to inhibit the production of the stress hormone cortisol in the brain. There is a growing body of research associating excess cortisol with the development and progression of Alzheimer's disease.
- Large unmet medical need particularly in Alzheimer's disease where new effective treatments are desperately needed.
- Strong market interest from international investors in drug development for Alzheimer's disease and cognitive impairment.
- Xanamem has more than one opportunity for success as it has the potential to treat multiple conditions.
- Very experienced management team that includes CEO Dr. Bill Ketelbey, who was involved in the development of a number of drugs including Aricept (current market-leading Alzheimer's treatment), and Chairman Dr. Geoff Brooke, founder of two high-profile venture capital firms (Medvest Inc and GBS Venture Partners).
- ACW is attractively priced when compared to its peer group and the discount is likely to narrow as the company progresses its Phase II clinical trial for Alzheimer's disease.
- Xanamem has a 15-year composition-of-matter patent term through to 2031 and potentially beyond, making it attractive to Big Pharma.
- The stock is approaching a number of catalysts and the company is well placed to achieve several milestones in the next 6-12 months.

## Top 10 Shareholders

Edinburgh Technology Fund	7.8%	Sunset Capital	3.2%
JK Nominees Pty Ltd	6.5%	Martin Rogers	3.2%
Henderson Family A/C	4.5%	Ben Dark Holdings	2.5%
Webinvest Pty Ltd	4.1%	Denlin Nominees Pty Ltd	2.5%
Sarl Warambi	3.5%	Oaktone Nominees Pty Ltd	2.4%

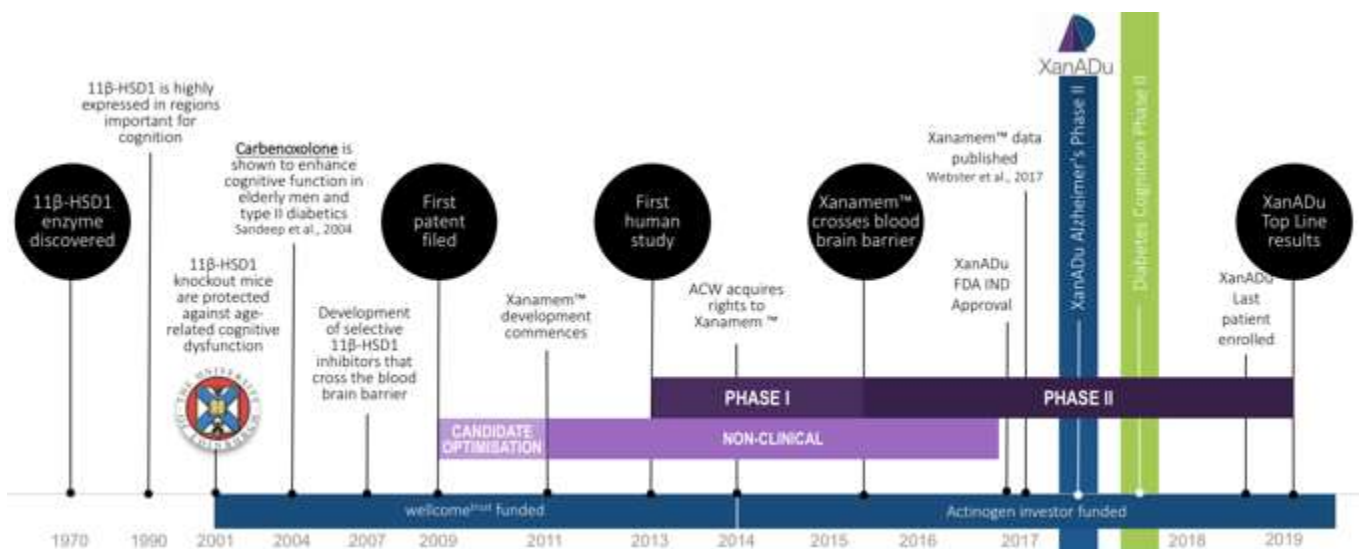
29 August 2017

ASX Code	ACW
Market Capitalisation	\$34.7m
Enterprise Value	\$30.7m
52-week High/Low	\$0.04-\$0.09
Top 20 Shareholdings	55%

## Financials (AUD)

- For the financial year 2017, Actinogen Medical received income in the form of an Australian Government R&D Tax Incentive rebate of \$2.8 million. This rebate related to work completed in FY2016.
- The company reported total expenditure of \$4.6 million during the financial year, down from the previous corresponding period of \$7.6 million. These costs were primarily driven by its R&D activities and the commencement of the XanADu trial.
- Actinogen Medical closed the financial year with \$4.0 million cash in the bank.

## Milestones



## What is Xanamem

- Actinogen Medical's drug candidate Xanamem has been specifically designed to inhibit the production of cortisol in the brain by blocking the activity of the enzyme, 11 $\beta$ -HSD1.
- Blocking this enzyme prevents conversion of the inactive cortisone into the active cortisol.
- Drugs that reduce cortisol in the brain offer a promising new approach to slowing the cognitive decline associated with Alzheimer's disease.
- Animal models of Alzheimer's disease have shown significant cognitive improvement with Xanamem after only 28 days' treatment.

## Cortisol and Alzheimer's

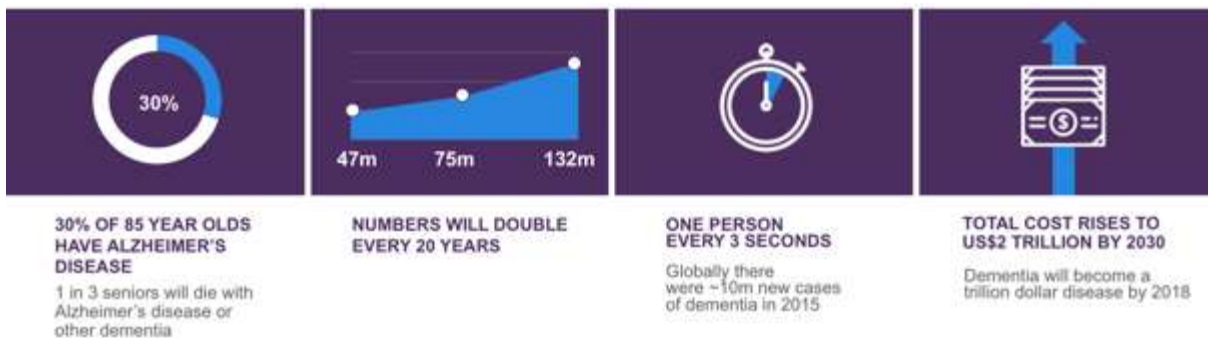
- Cortisol, more commonly known as the "stress hormone", is produced in times of physical and mental stress.
- If cortisol is persistently raised for long periods it can become toxic to the neurons (nerve cells) in the brain.
- Patients with raised cortisol include those with diabetes, depression and many with Alzheimer's disease. Interestingly, blood cortisol levels also tend to rise with normal ageing.
- Some of the most compelling evidence supporting the association between cortisol and Alzheimer's disease is provided by the Australian Imaging, Biomarker & Lifestyle Study of Ageing (AIBL) study recently published (Pietrzak et al., 2017).

## XanADu: Phase II Clinical Trial of Xanamem

- XanADu is a double-blind, 12-week, randomised, placebo-controlled study to assess the safety, tolerability and efficacy of Xanamem™ in subjects with mild dementia due to Alzheimer's disease.
- First patient enrolled into the trial in Australia in May 2017, closely followed by the first patients in the USA and the UK.
- All 20 study sites across the USA, the UK and Australia are now open for patient recruitment and as of the end of August 2017, 26 patients have been enrolled and treated.
- The trial will enrol a total of 174 patients across the 20 research sites across Australia, the UK and the USA.
- It is the largest global Alzheimer's dementia study conducted by an Australian biotech company.<sup>1</sup>
- Recruitment for the trial is expected to be complete by Q4 2018. Actinogen Medical anticipates reporting the initial results in early 2019.

## Alzheimer's Disease

- As the leading cause of death in the UK, and second only to heart disease in Australia, Alzheimer's disease is emerging as the most significant health challenge of our time.
- There are almost 50 million Alzheimer's disease sufferers world-wide and the number is set to double every 20 years.
- The incidence of Alzheimer's disease increases significantly with age, affecting 1-in-3 individuals over the age of 85 years.
- Of the top ten fatal illnesses, Alzheimer's disease remains the only one that cannot be prevented, treated or cured. More effective treatments for this devastating disease are urgently needed.



## Board of Directors



**Dr Geoff Brooke, Chairman:** A clinically trained physician turned venture capitalist with over 30 years' experience in healthcare investment. He was the founder and managing director of two venture capital firms, Medvest Inc and GBS Venture Partners, which are viewed as one of the Asia Pacific region's premier healthcare venture investors. Dr Brooke has been a major investor, chairman or director of companies in the healthcare sector with a combined realised value of \$1.5bn. He is a medical graduate of the University of Melbourne and has an MBA from IMEDE (now IMD), Lausanne Switzerland.



**Dr Bill Ketelbey, Chief Executive Officer:** A highly experienced and successful healthcare and pharmaceutical sector professional, with 30 years' experience, including senior roles with global pharmaceutical giant, Pfizer. He has a solid track record of product development over his years in the industry leading to the development of numerous market leading medicines. He is a Medical Graduate from South Africa, a Fellow of the Faculty of Pharmaceutical Physicians from the Royal College of Physicians in the United Kingdom and has an MBA from MGSM Australia.



**Dr Jason Loveridge, Non-Exec Director:** Has been working in the biomedical technology industry for over 20 years and has extensive experience in developing clinical stage biotechnology companies. As a venture investor with JAFCO Nomura, he participated and invested in the start-up of over 24 companies in Europe, the United States and Israel.

<sup>1</sup> Clinicaltrials.gov and Medtracker – accessed September 2016.