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FEBRUARY 2018



LETTER FROM THE CEO

DEAR SHAREHOLDERS

As we begin 2018 I would like to take a moment to reflect on your Company's achievements in 2017, which demonstrate that Bionomics continues to shine as one of Australia's most innovative and dynamic drug developers.

Amongst the significant achievements of 2017 was the initiation of a first clinical trial of a candidate therapy for the treatment of cognitive dysfunction associated with Alzheimer's disease by our collaborator Merck & Co (known as MSD outside the US and Canada).

The milestone achievement triggered a US\$10 million payment to Bionomics from MSD. This payment not only strengthened our balance sheet but further validates Bionomics' proprietary drug discovery technology and capabilities.

Our strong collaboration with MSD, one of the leading pharmaceutical companies in the world, is exemplified on multiple fronts. Of course, the research and license agreement signed in 2014 is an important element. To recap on the details of that agreement – Bionomics received an up

front payment of US\$20 million and is eligible to receive up to US\$506 million for reaching pre-defined research and clinical development milestones. In addition, our agreement includes eventual undisclosed royalties on product sales. The entry of the therapeutic candidate into a clinical trial is an important advance providing validation of our drug discovery platform to identify high quality therapeutic candidates as well as our strategic approach to partner selected assets within our robust pipeline.

The portfolio of products under our collaboration with MSD are designed to address cognitive dysfunction in a number of debilitating Central Nervous System (CNS) conditions, and Alzheimer's disease is of chief importance amongst these as there remains an urgent need for effective treatments.

In addition to our collaboration, MSD have been shareholders of Bionomics since October 2015, owning 4.5% of the Company.

Bionomics and MSD have partnered for the last five years to present an Annual Symposium covering new developments in neuroscience research. In 2017 the well attended Symposium covered topics under the theme of Feelings and Forgetting that included Post Traumatic Stress Disorder (PTSD), sleep and Alzheimer's Disease. In addition to live streaming and webcasting, the days' talks from a stellar group of Australian and overseas experts were covered by Bioshares.

The Bioshares report is available on Bionomics' website at www.bionomics.com.au/investors/analyst-coverage. We were delighted that Mr Ben Thorner, Senior Vice President of Business Development and Licensing, MSD was able to join us for the event.

2017 saw Bionomics internationally recognised for its expertise in ion channel drug discovery

with invitations to participate in key, global industry events that showcase our collaboration with MSD, BNC210 which is in development for the treatment of anxiety disorders, depression and PTSD and our strengths as a strategic partner. These included the PTSD State of the Science Summit hosted by the US Army Medical Research and Materiel Command in West Virginia.

BNC210 is Bionomics' proprietary, novel therapeutic candidate for the treatment of anxiety related disorders and PTSD. In seven completed clinical trials to date BNC210 has demonstrated that it has a rapid onset of action in patients suffering from Generalised Anxiety Disorder (GAD), is free of side-effects associated with benzodiazepines including sedation, reduces panic attack symptoms induced a peptide called CCK-4 and engages with its receptor target in the human brain.



Following positive Phase 2 clinical trial data evaluating the anxiolytic activity of BNC210 in patients with a chronic form of anxiety, Generalised Anxiety Disorder or GAD, Bionomics expanded the ongoing Phase 2 trial of BNC210 in patients with PTSD to 192 patients and added US clinical trial sites to those in Australia.

To enable the expansion of the trial into the US it was necessary for Bionomics to secure acceptance of an Investigational New Drug (IND) application specifically for the use of BNC210 in the treatment of PTSD from the US Food and Drug Administration (FDA) in addition to the active BNC210 IND for the treatment of anxiety disorders.

Even with the expansion of the trial recruitment is on track and top line results are anticipated in 2H, CY2018. The release of this data will be a pivotal moment in the history of Bionomics.

PTSD symptoms are extremely debilitating and the condition is highly prevalent in many communities. Roughly eight million Americans, or 3.5% of the US population, suffer from PTSD at

any given time. Similarly, an estimated one million Australians experience PTSD in any year and 12% of Australians will experience PTSD during their lifetimes. Despite these sobering statistics, treatment has been confined to a handful of anti-depressants which have a number of drawbacks. BNC210 might just be the first effective treatment for this devastating illness. Channel 9 recently produced a news story on BNC210 and its potential in the treatment of PTSD. The Channel 9 video is available on Bionomics' website (www.bionomics.com.au/investors/media) and on our social media platforms Twitter (@Bionomics1), Facebook and LinkedIn, so please check it out.

Bionomics has emerged from 2017 as a more focused and cost-efficient company after restructuring initiatives including closing our US operations and a formal monetisation process ongoing for both BNC101 and BNC105.

Finite resources mean it's not possible to pursue everything in our rich pipeline and we have entered a formal process to monetise our cancer stem cell targeting humanised monoclonal antibody BNC101, and BNC105, which attacks cancer cells through a multi-pronged approach involving direct cytotoxic action, immunomodulatory and vascular targeting mechanisms. The decision, consistent with our selected, strategic partnering approach, has sharpened focus on our core 'ion channel' expertise. In essence, our technology focuses on synthetic molecules to modulate these ion channels, protein 'tunnels' in the body that are critical for communication in the nervous system amongst other functions. Disruption of these channels can result in a wide range of conditions including epilepsy, chronic pain, stroke, Parkinson's disease, cancer and depression.

In October initial data from the Phase 1 clinical trial of BNC101 in patients with metastatic colon cancer became available. The data are very encouraging and strongly supportive of the ongoing monetisation process. Both Bell Potter and Shaw & Partners analysts produced updated reports following the results release and the Shaw & Partners research report is available on our website (www.bionomics.com.au/investors/analyst-coverage). The monetisation of BNC101 and BNC105 are corporate objectives for 2018 and I look forward to reporting further over the coming months.

For investors, there's plenty of news flow in 2018, including from the Phase 2 PTSD trial and from the BNC101 and BNC105 monetisation processes. As always, we will keep you posted on developments and you are welcome to contact me with any questions.

Dr Deborah Rathjen
CEO & Managing Director



PTSD: A MAJOR MARKET OPPORTUNITY FOR BNC210

Bionomics is making solid progress in its Phase 2 clinical trial of BNC210 in patients suffering from PTSD, which alone affects around eight million Americans and many millions more globally.

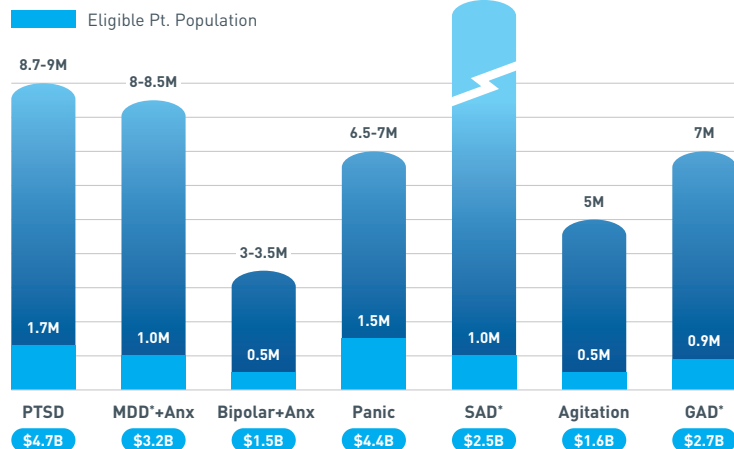
The profile of BNC210 suggests it will be an effective treatment for PTSD sufferers, creating a paradigm change for the treatment of PTSD. If the trial delivers compelling data, then this therapeutic candidate will become extremely attractive for potential partners and provide substantial upside for shareholders.

PTSD patients have few treatment options and they need:

- More effective treatments
- Treatments without side effects since side effects are one of the reasons people fail to adhere to their medications and treatment plans
- Treatments that are both non-addictive and without the potential to be abused
- Treatments that are safe to give with other drugs commonly prescribed for the disorder

THE POTENTIAL MARKET VALUE OF BNC210

US Prevalence and Revenue Potential



Eligible Patient US Market Potential

Assume 5% premium to Trintellix 2016 AWP for 30-day supply of \$380 — Compliance Adjusted

¹ 3.4-4% prevalence >18yrs., ~25% of patients diagnosed and treated

² 6.7% prevalence, ~50% co-morbid anxiety, ~50% diagnosed and treated

³ 2.9% prevalence, 50% co-morbid anxiety (range in literature 25 to 75%), ~50% diagnosed and treated

⁴ 2.7% prevalence, ~50% diagnosed and treated

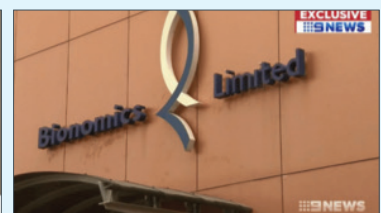
⁵ ~6.8% prevalence, 15-20% diagnosed and treated

⁶ ~3.1% dementia prevalence >40yrs., ~9% agitation patients diagnosed and treated

⁷ 3.1% CAD prevalence, assumes ~25% diagnosed and treated, ~50% of SSRI patients treated are partial responders or relapsers

MDD* = Major Depressive Disorder, SAD* = Social Anxiety Disorder, GAD* = Generalised Anxiety Disorder

US market research by Bluestar BioAdvisors (formerly known as Torrey Insights) commissioned by Bionomics, highlights the considerable market potential for BNC210. The research, which involved the input of some 30 clinical key opinion leaders and up to seven health insurers, puts the US market opportunity for generalised anxiety disorder at US\$2.7 billion, PTSD at US\$4.7 billion and panic disorder at US\$4.4B.



BIONOMICS' BNC210 FEATURES EXCLUSIVELY ON CHANNEL NINE NEWS

We were thrilled that Channel Nine News recently covered BNC210 and its potential to treat PTSD and anxiety without significant side effects.

We thank Professor Malcolm Hopwood from University of Melbourne, whose expertise was featured in this segment, and Mr Wayne Clarke from Gawler RSL, who shared his experiences as a PTSD sufferer for their contributions.

Watch the full news story here <http://www.bionomics.com.au/investors/media> or via our social media on Twitter (@Bionomics1), Facebook and LinkedIn.

ANALYST RESEARCH HIGHLIGHTS

Bionomics has attracted strong validation from local and global analysts, with three brokers ascribing price targets well above our current share price.

Following the release of our progress with BNC101, including pharmacodynamic data and completion of patient recruitment for our Phase 1 clinical trial, Shaw & Partners and Bell Potter have reiterated their BUY rating.

Darren Vincent from Shaw & Partners notes a recent report from KPMG, confirming that oncology continues to be one of the top therapeutic areas for pharmaceutical transactions.

**SHAW & PARTNERS
HIGHLIGHTS THE VALUE
OF PARTNERING
OPPORTUNITIES FOR
BNC101 AND ALL
CLINICAL PROGRAMS**

**BELL POTTER
RESEARCH REITERATES
BUY RATING WITH
EARLY POSITIVE DATA
FROM BNC101 TRIAL**

**NY-BASED HC
WAINWRIGHT
INCREASED ITS PRICE
TARGET TO \$2.00**

"BNO continues to build value not only in its 101 program, but across all of its programmes and is moving towards the inflexion points at which this value will be recognised in its share price." – Darren Vincent. Shaw & Partners.

We encourage you to read the reports in full at: <http://www.bionomics.com.au/investors/analyst-coverage>



SEE BIONOMICS

Asian Investment Series

Hong Kong

13 March 2018

Shanghai

15 - 16 March 2018

American Association for Cancer Research Annual Meeting

14 - 18 April 2018



E-NEWSLETTER

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