

ABN 53 075 582 740

ASX ANNOUNCEMENT 17 December 2015

Dear Shareholder

The recent raising of US\$12 million in a placement to four specialist US institutional health care funds to fund the new Bionomics BNC210 post-traumatic stress disorder (PTSD) trial, has regrettably resulted in a drop in the Bionomics share price. Clearly the market has been disappointed with aspects of this issue, and we feel it is important to explain both the reasons for the capital raising and the benefits to the Company.

The Issue

The testing of BNC210 has so far concentrated on sufferers of generalised anxiety. We recently gained an opportunity to undertake a clinical trial to test the effectiveness of BNC210 in the treatment of Post Traumatic Stress Disorder (PTSD).

The decision was made to raise funds specifically for this clinical trial so as not to divert funds committed for existing trials of BNC210 and our other key programs.

At the same time we had an opportunity of raising capital in the US from specialist funds. Most Australian biotech companies covet investment from such funds as they are typically long term investors, they have specialist knowledge of competitors in each field of drug development so it provides comfort especially to retail investors and many institutions may typically add to holdings over time.

Including the fund raising of US\$12 million for the new PTSD trial, Bionomics is in a strong financial position.

In addition to the \$19.3 million cash as at 30 September, there have also been inflows of \$12.8 million from the Merck & Co (MSD) investment as well as \$8.5 million in R&D tax refunds. Total funds held now amount to approximately \$52 million.

With modest cash burn rates, Bionomics has one of the strongest balance sheets in the Australian biotech sector.

The Trial

The PTSD trial is expected to begin in Australia and New Zealand in the first half of 2016. BNC210 has already undergone six Phase 1 clinical trials; all successful.

BNC210 will be tested in up to 200 PTSD sufferers. The trial will be randomised, double-blinded, parallel, placebo-controlled, multi-centre one week placebo run-in, 12 week two-arm treatment phase (placebo and BNC210) with a six month follow up. Its primary objective is to determine whether BNC210 causes a decrease in PTSD symptoms.

If the PTSD trial succeeds, the value inflection for all shareholders has the potential to be very substantial.

Market Size

The global anxiety disorders and depression treatment market is expected to witness very substantial growth over coming years due to rising rates of depression and anxiety disorders, coupled with a growing geriatric population. In 2013 this market was valued at US\$22.5 billion.

Further Communication

We will soon lodge a further update on major recent Company news.

Yours faithfully

Deborah Rathjen

Allman J

Managing Director

Graeme Kaufman

Chairman

About Bionomics Limited

Bionomics (ASX: BNO) is a global, clinical stage biopharmaceutical company leveraging its proprietary platform technologies to discover and develop a deep pipeline of best in class, novel drug candidates focused on the treatment of serious central nervous system disorders and on the treatment of cancer. Bionomics' lead drug candidate BNC210, currently in Phase 2 for the treatment of generalized anxiety disorder, is a novel, proprietary negative allosteric modulator of the alpha-7 (α7) nicotinic acetylcholine receptor. The Company is also developing BNC101, its lead humanized monoclonal antibody targeting a key receptor on cancer stem cells that is overexpressed in metastatic colorectal cancer, metastatic pancreatic cancer and many other solid tumours; BNC101 is expected to enter clinical trials in the first quarter of 2016. Bionomics has strategic partnerships with Merck & Co., Inc (known as MSD outside the United States and Canada) in pain and cognition.

www.bionomics.com.au

Factors Affecting Future Performance

This announcement contains "forward-looking" statements within the meaning of the United States' Private Securities Litigation Reform Act of 1995. Any statements contained in this announcement that relate to prospective events or developments, including, without limitation, statements made regarding Bionomics' drug candidates (including BNC210 and BNC101), its licensing agreements with Merck & Co. and any milestone or royalty payments thereunder, drug discovery programs, ongoing and future clinical trials, and timing of the receipt of clinical data for our drug candidates are deemed to be forward-looking statements. Words such as "believes," "anticipates," "plans," "expects," "projects," "forecasts," "will" and similar expressions are intended to identify forward-looking statements.

There are a number of important factors that could cause actual results or events to differ materially from those indicated by these forward-looking statements, including unexpected safety or efficacy data, unexpected side effects observed in clinical trials, risks related to our available funds or existing funding arrangements, our failure to introduce new drug candidates or platform technologies or obtain regulatory approvals in a timely manner or at all, regulatory changes, inability to protect our intellectual property, risks related to our international operations, our inability to integrate acquired businesses and technologies into our existing business and to our competitive advantage, as well as other factors. Results of studies performed on our drug candidates and competitors' drugs and drug candidates may vary from those reported when tested in different settings.

Subject to the requirements of any applicable legislation or the listing rules of any stock exchange on which our securities are quoted, we disclaim any intention or obligation to update any forward-looking statements as a result of developments occurring after the date of this announcement.