

ASX ANNOUNCEMENT 16 November 2016

Bionomics to Present at Society for Neuroscience 2016 Annual Meeting

Bionomics Limited (ASX: BNO, OTCQX:BNOEF), a clinical stage biopharmaceutical company focused on the discovery and development of innovative therapeutics for the treatment of diseases of the central nervous system and cancer, today announced an upcoming BNC210 presentation at the Society for Neuroscience (SFN) 2016 Annual Meeting, taking place November 12-16, 2016 in San Diego, California.

"These data show significant activity of BNC210 in reducing the number and intensity of panic symptoms while also enhancing the subjects' recovery to baseline emotional status following a CCK-induced panic attack in healthy volunteers. The results are directly in-line with the preclinical data obtained from rodent models. We feel very encouraged by this translation in anti-anxiety activity," said Deborah Rathjen, CEO & Managing Director of Bionomics. "With these supporting data, we have progressed BNC210 to a Phase 2 clinical trial in post-traumatic stress disorder patients where co-morbid anxiety as well as deficits in fear extinction and avoidance behaviour are hallmark symptoms."

Details for the presentation by Dr Sue O'Connor, Bionomics' VP Neuroscience a Research, are as follows:

Date: Wednesday, November 16, 2016

Poster Presentation Time: 1:00 p.m. - 5:00 p.m. PT **Location:** Halls B-H, San Diego Convention Center

Poster Number: 821.02

Title: Anxiolytic activity and enhancement of fear extinction demonstrated by BNC210 in rodent models translates directly to the clinic in a CCK4-challenge model of panic attack in healthy

volunteers.

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About BNC210

BNC210 is a novel small molecule, orally-administered drug candidate being developed for anxiety and depression that we believe has similar efficacy but improved tolerability compared to currently available drugs such as benzodiazepines, selective serotonin reuptake inhibitors, or SSRIs, and serotonin-norepinephrine reuptake inhibitors, or SNRIs. BNC210 is a first-in-class highly-selective and specific negative allosteric modulator of the alpha-7 nicotinic acetylcholine (alpha-7) receptor. Acetylcholine and the alpha-7 receptor are increasingly implicated in the symptoms of anxiety and

depression. Furthermore, the alpha-7 receptor is highly expressed in the amygdala, which forms part of the emotional center of the brain. To date, BNC210 has been evaluated in seven completed clinical trials in over 200 subjects.

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 and for post-traumatic stress 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 entered 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.