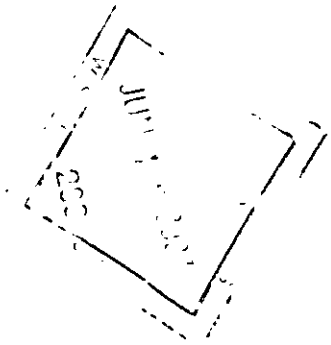
Bionomics Limited

12 June 2007

Securities and Exchange Commission
Judiciary Plaza,
450 Fifth Street,
Washington DC 20549

SUPPL



Re: Bionomics Limited - File number 82-34682

Please see attached provided pursuant to Section 12g3-2(b) file number 82-34682.

Yours sincerely

PROCESSED
JUL 09 2007
THOMSON
FINANCIAL

per

Stephen Birrell
CFO & Company Secretary

Bionomics Limited ABN 53 075 582 740
31 Dalgleish Street Thebarton SA Australia 5031 **Phone** 61 8 8354 6100 **Fax** 61 8 8354 6199 **Email** info@bionomics.com.au

BIONOMICS NOW

Meet Bionomics

June 2007
American Society of Clinical Oncology Meeting, Chicago US

July 2007
7th IBRO World Congress of Neuroscience, Melbourne, Australia

August 2007
12th European Behavioural Pharmacology Society Biennial Meeting Tuebingen, Germany

October 2007
Vascular Targeted Therapies in Oncology, October - Mandelieu, France

October 2007
23rd Congress of the European Committee for Treatment and Research in Multiple Sclerosis, Prague, Czech Republic

Contact Bionomics
31 Dalgleish Street
Thebarton, SA 5031
Australia

Tel: +61 8 8354 6101

Deborah Rathjen
CEO & Managing Director

drathjen@bionomics.com.au

CEO Report

Dear Shareholders,

It has again been a busy quarter for Bionomics. We have successfully completed the next stage of development for BNC105, having manufactured the compound in quantities sufficient for the conduct of our anticipated Phase I/II clinical trial and at a purity that more than satisfies the stringent regulatory requirements for drugs to be used in humans.

On 17 April, Dr Gabriel Kremmidiotis spread the Bionomics story to a wider scientific audience when he presented the latest exciting preclinical data for BNC105 in the American Association for Cancer Research (AACR) Conference.

Our strong confidence in vascular disrupting agents (VDAs) such as BNC105 was supported recently with the announcement by the UK biotechnology company, Antisoma plc of a US$890 million licensing deal with Novartis for accessing the intellectual property associated with AS1404, Antisoma's VDA.

Bionomics' plans for BNC105 are on target. BNC105 is expected to enter clinical trials before the end of 2007, following validation from the US regulatory authority (FDA) of the Investigational New Drug (IND) application to be filed in September 2007.

A highlight this quarter has been the selection of our second drug candidate, BNC210, for the treatment of psychiatric disorders - a market which has an estimated worth of $12 billion. Bionomics successfully applied its MultiCore® technology platform to discover BNC210.

BNC210 will follow our anti-cancer drug candidate BNC105 along the path of clinical development, which will include the submission of an IND application to the FDA and the commencement of clinical trials in Australia. ●

Dr Deborah Rathjen
Chief Executive Officer, Bionomics

Cancer experts excited by latest BNC105 data

Preclinical studies of BNC105 in mouse models of human cancer have continued to interest international researchers since the results were first presented toward the end of 2006.

The latest results on BNC105 preclinical pharmacology were presented by Dr Gabriel Kremmidiotis, Bionomics' Vice President of Discovery Research, to delegates at the prestigious Annual American Association for Cancer Research Conference held in mid-April.

Dr Kremmidiotis' poster presentation showed that 14 per cent of 64 mice carrying human breast solid tumours were completely cleared of their tumour burden after two cycles of BNC105 treatment and almost half the mice showed significant tumour growth suppression.

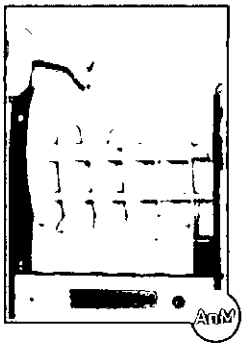
Before these studies, Bionomics had established that BNC105 was capable of stopping tumour growth, or causing a degree of regression. Optimisation of the dosing regime enabled BNC105 treatment to cause some tumours to disappear completely.

Research completed more recently has provided strong evidence that BNC105 is also active in disrupting the blood supply in models of human colon cancer and human prostate cancer. ●

BNC105 is a new type of drug called a Vascular Disruption Agent (VDA) that acts to rapidly shut down the blood supply within a tumour. It thereby "starves" the tumour of the oxygen and nutrients it needs to survive.

VDAs have significant clinical potential in the treatment of cancer, as they may potentially be applied across a very wide variety of cancer types, including colon, lung, breast and prostate cancers. The market potential for VDAs has been estimated at approximately US$5 billion annually (ASInsights, 2003). ●

Anxiety drug candidate, BNC210, selected for clinical development



Anxiety is one of the most common health problems in the world. The market for the often linked conditions of anxiety and depression is estimated to be about US$12 billion.

Bionomics' has reached another milestone this quarter with the selection of BNC210 as its second drug candidate - and the first for its CNS pipeline.

BNC210 is a novel member of an established class of drugs with a proven history of safe pharmaceutical use. The new drug candidate has shown anxiety-relieving activity in **animal models*** at the low dose of 0.1mg/kg. Bionomics successfully applied its patented MultiCore® technology platform to discover BNC210.

A potential advantage of BNC210 over anxiolytic drugs on the market is its lack of sedative effects - or other detectable side effects, such as impaired memory and motor co-ordination at doses as high as 100 mg/kg. Furthermore, BNC210 is rapidly acting and maintains activity over repeated administrations.

BNC210 is readily absorbed by the body and appropriate for formulation as tablets or capsules. In animal models, BNC210 is safe and well tolerated. Bionomics has filed a US provisional patent describing the structures of BNC210 and other related compounds, and their use in the treatment of anxiety and related conditions. ●

Dr Sue O'Connor, anxiety project leader

Dr Sue O'Connor* joined Bionomics drug discovery team four years ago to identify compounds for the treatment of anxiety and epilepsy. Dr O'Connor and her team identified BNC210, which Bionomics believes has considerable potential as a new treatment for mental disorders.

The concept for BNC210 came from a well documented public domain compound, which showed anti-anxiety activity. Dr O'Connor and the team used Bionomics' MultiCore® platform technology to modify and improve the original compound. They built a library of 42 novel compounds based on the original structure for evaluation in an extensive panel of animal models carried out by Bionomics' subsidiary Strasbourg-based Neurofit.

"We synthesised a number of compounds capable of reducing anxiety without side effects such as sedation, memory loss or poor motor co-ordination" she said. "BNC210 was the best of the compounds tested, satisfying all elements of the desired therapeutic product profile."

In animal model studies, BNC210 proved to be effective in reducing anxiety and did not cause the side effects seen with other drugs on the market. For example, the Rotarod test (in which mice run on a rotating wheel - mouse picture above) showed that the mice exhibited compromised motor co-ordination when treated with the commonly used drug diazepam. In contrast, mice treated with BNC210 showed no loss of motor co-ordination. Further preclinical data for BNC210 is contained in our announcement of 28 May 2007 and can be viewed on the Bionomics' website. ●

Completion of GMP manufacture of BNC105

Last October, Bionomics engaged SAFC Pharma, one of four operational units of the custom-manufacturing group of Sigma-Aldrich of St Louis, USA (NASDAQ:SIAL) to make 1.5 kg of BNC105 in its pro-drug format to the specifications required for human trials.

During April 2007, SAFC Pharma advised that the manufacturing process had been completed on budget and on time.

The point of scale-up manufacture from the drug quantities required for preclinical work in cells and laboratory animals to those needed for clinical trials is often where difficulties arise in drug development. In addition, the purity of the final compound must meet rigorous FDA-imposed standards before its use in humans.

The reported purity of the current batch is 99.98%, making it compliant with FDA specifications.

While we would have predicted this successful outcome for the synthesis of BNC105, because it was discovered using Bionomics' MultiCore® synthesis technology, it is always good to receive confirmation of such predictions as validation of our drug discovery platform.

An advantage of BNC105 is the relatively simple 6-reaction synthetic pathway, of which only reactions 4 to 6 must be performed under GMP conditions.

A small amount of the 1.5 kg yield is currently being used in toxicology testing and the remainder will be used in the first clinical trial. Bionomics remains on track to file the necessary IND application with the US FDA and to commence human trials of BNC105 late in 2007. ●

Factors Affecting Future Performance This publication contains "forward-looking" statements within the meaning of the United States' Private Securities Litigation Reform Act of 1995. Any statements contained in this publication that relate to prospective events or developments, including, without limitation, statements made regarding Bionomics' development candidate BNC105, its drug discovery programs and pending patent applications 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 risks related to our available funds or existing funding arrangements, a downturn in our customers' markets, our failure to introduce new products or technologies in a timely manner, regulatory changes, risks related to our international operations, our inability to integrate acquired businesses and technologies into our existing business and to our competitive advantages, as well as other factors. Results of studies performed on competitors products 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 publication.

END NOW