

ASX ANNOUNCEMENT
6 May 2010

Second BNC210 Phase I Clinical Trial Commences

- **BNC210 is being developed for the treatment of anxiety and depression**
- **This follow-on Phase I Trial will determine:**
 1. **The effect of food intake on blood levels of BNC210**
 2. **Doses for an expanded clinical evaluation of BNC210 due to commence Q3 2010**
 3. **The potential for serum cortisol as a marker of BNC210 induced anxiety relief.**

6 May 2010; Adelaide, Australia: Bionomics Limited (ASX: BNO) today announced it has commenced a second Phase I clinical trial with its anti-anxiety compound BNC210, to determine whether administration of BNC210 with food will alter blood levels of the drug. This trial, expected to be completed in June, is an important lead-in to Phase Ib clinical trials which are expected to commence shortly thereafter.

The trial will be conducted in a group of healthy male volunteers at the Pain and Anaesthesia Research Clinic (PARC) within the Royal Adelaide Hospital with Professor Paul Rolan as the Principal Investigator. Bionomics' first Phase I trial with BNC210 was also conducted at PARC.

Dr Deborah Rathjen CEO & Managing Director of Bionomics explained that as many orally administered drugs are taken either with food or following a meal, it is important to determine early in drug development how food intake affects blood levels of the drug. "Bionomics is able to quickly and cost-effectively undertake this trial to pharmaceutical industry standards and, in doing so, will add value to the licensing package for BNC210," she said.

Pharmacokinetic data from the initial Phase I trial of BNC210 reported on 3 March 2010 indicated that a plateau of absorption of BNC210 was observed at doses between 600mg and 1200mg. Once the effect of food intake on BNC210 levels in blood is determined, doses for an expanded clinical evaluation of BNC210 will be selected.

An assessment of the levels of serum cortisol will also be undertaken as part of this trial to further assess its potential as a marker of the central nervous system (CNS) effects of BNC210. This follows on from the initial findings in the first clinical trial of BNC210, in which subjects receiving BNC210 showed lower levels of cortisol, a stress hormone which increases in response to stress and anxiety.

Further details of the current trial are shown below in the Clinical Appendix.

The Phase Ib clinical trial is anticipated to commence shortly after completion of this clinical study. The expanded testing of BNC210 will include evaluating BNC210 effects in a setting involving the induction of anxiety in healthy subjects and also evaluation of BNC210 effects on the brain using electroencephalograph (EEG) measurements. The trial will continue to look at whether side-effects such as sedation or memory impairment, are associated with the administration of BNC210.

The first Phase I clinical trial of BNC210 indicated that BNC210 was extremely well tolerated at high doses and free of significant side-effects. These findings, if sustained, will be an important differentiator of BNC210 from many current treatments on the market for anxiety and depression, each of which has multibillion dollar sales annually.

Clinical Appendix

Trial Title: The effect of food on the pharmacokinetics, tolerability and pharmacodynamics of BNC210 in healthy male volunteers.

Protocol Abbreviated Name: BNC210.002

Primary Objective: To determine the effect of food on the pharmacokinetics of BNC210 and to determine the general clinical tolerability of potentially increased exposure to BNC210.

Secondary Objectives:

- If there is an effect of food intake on BNC210 blood levels, to identify doses to be used in the expanded Phase Ib evaluation of BNC210.
- To assess the levels of potential markers of BNC210 effects.

Method: The trial design will be a double-blind placebo-controlled 5-way crossover, ascending single doses in healthy volunteers.

It is planned that there will be four participants on the study, three randomised to receive drug and one to receive placebo.

The same four subjects will attend the clinic for a maximum number of five visits.

On the first visit, BNC210 will be administered to fasted subjects. On subsequent visits the subjects will receive escalating doses of BNC210 with food.

The drug will be given orally as a liquid suspension.

FOR FURTHER INFORMATION PLEASE CONTACT:

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About Bionomics Limited

Bionomics (ASX: BNO) is a leading international biotechnology company which discovers and develops innovative therapeutics for cancer and diseases of the central nervous system. Bionomics has small molecule product development programs in the areas of cancer, anxiety, epilepsy and multiple sclerosis. BNC105, which is undergoing clinical development for the treatment of cancer, is based upon the identification of a novel compound that potently and selectively restricts blood flow within tumours. A clinical program is also underway for the treatment of anxiety disorders based on BNC210 which exhibits strong anxiolytic activity without side effects in preclinical models. Both compounds offer blockbuster potential if successfully developed.

Bionomics' discovery and development activities are driven by its three technology platforms: Angene®, a drug discovery platform which incorporates a variety of genomics tools to identify and validate novel angiogenesis targets (involved in the formation of new blood vessels). MultiCore® is Bionomics' proprietary, diversity orientated chemistry platform for the discovery of small molecule drugs. ionX® is a set of novel technologies for the identification of drugs targeting ion channels for diseases of the central nervous system.

For more information about Bionomics, visit www.bionomics.com.au

Factors Affecting Future Performance

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