

ASX ANNOUNCEMENT
21 June 2010

Anti-anxiety Compound BNC210 Phase I Trial Successful: Establishes Four-fold Increase in Blood Drug Levels Following Food Intake

- *Results expand dosing range to be used in treatment of anxiety and depression*
- *Primary objective and safety profile established*
- *No significant side effects*

21 June 2010; Adelaide, Australia: Bionomics Limited (ASX: BNO) today announced it has completed its second Phase I clinical trial of its anti-anxiety compound BNC210. The aim of this trial was to determine whether administration of BNC210 with food alters blood levels of the drug.

Dr Deborah Rathjen Bionomics' CEO & Managing Director explained that "many common drugs are taken either with food or following a meal. The increased exposure seen when BNC210 is given with food expands the potential dosing range to be used in its continued development for the treatment of anxiety and depression. In particular it has allowed us to identify the doses to be used in the planned Phase Ib studies of BNC210. The data also suggests that lower doses of BNC210 may be effective when the drug is given with food".

"This latest data also confirms the results of the initial Phase I clinical trial of BNC210 which indicated that BNC210 was well tolerated at high doses and free of significant side-effects", she added.

The placebo controlled and blinded trial was conducted in healthy male volunteers at the Pain and Anaesthesia Research Clinic (PARC) within the Royal Adelaide Hospital and Professor Paul Rolan was the Principal Investigator.

Among the secondary objectives of this trial is the evaluation of potential biomarkers showing BNC210 effects. These include the determination of stress hormone levels. These tests are currently in progress with data anticipated to be available next quarter.

Two Phase Ib clinical trials of BNC210 are anticipated to commence next quarter. The first of the new trials will evaluate BNC210 effects when anxiety is induced in healthy subjects whilst the second trial will evaluate BNC210 effects on the brain using electroencephalograph (EEG) measurements. The trials will continue to look at whether side-effects such as sedation or memory impairment, are associated with the administration of BNC210.

To date BNC210 administration has not been associated with clinically significant side-effects.

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

FOR FURTHER INFORMATION PLEASE CONTACT:

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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 randomized 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.

Results (Figure 1) : Three fasted, healthy male subjects each received a dose of 300 mg of BNC210.

One week later, the same three subjects were dosed with 300 mg of BNC210 following the consumption of a meal.

The administration of 300mg of BNC210 with food produced a 4.1 fold increase in exposure of BNC210, as measured by blood/drug levels.

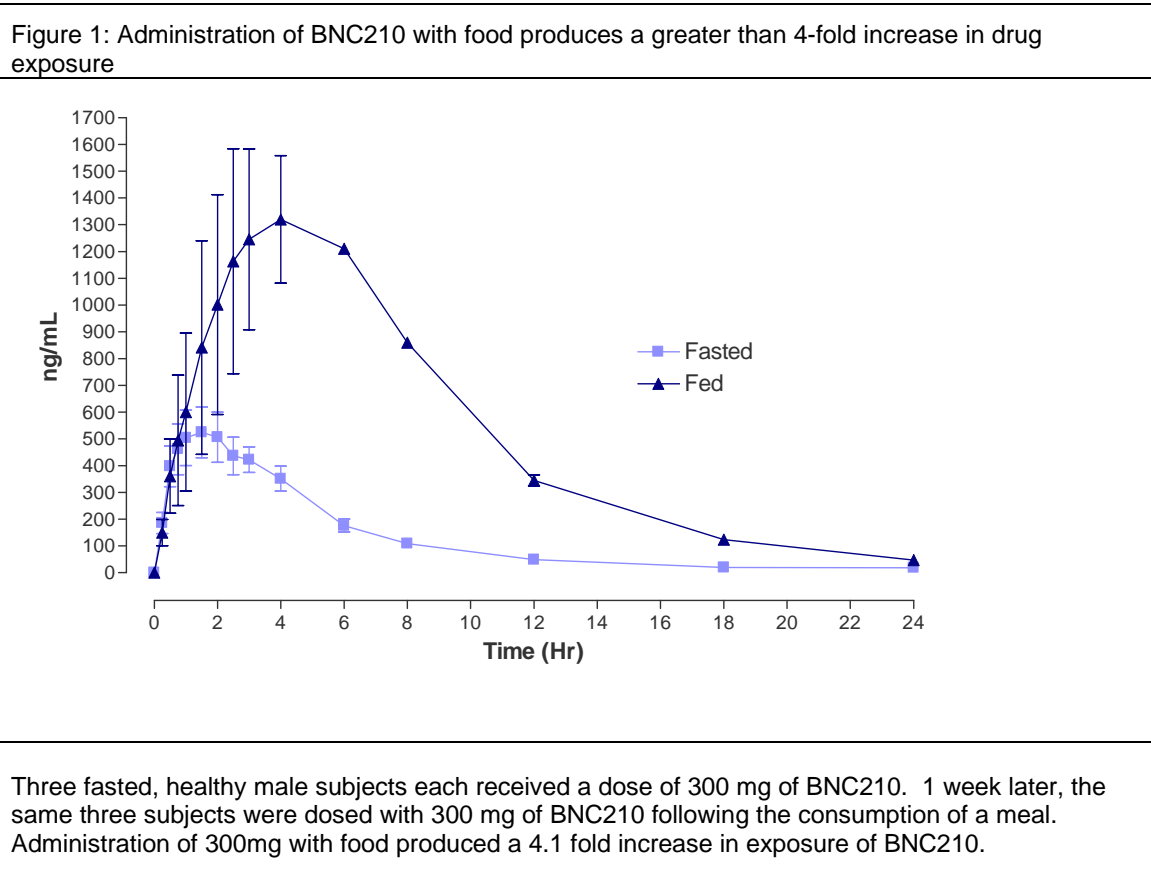
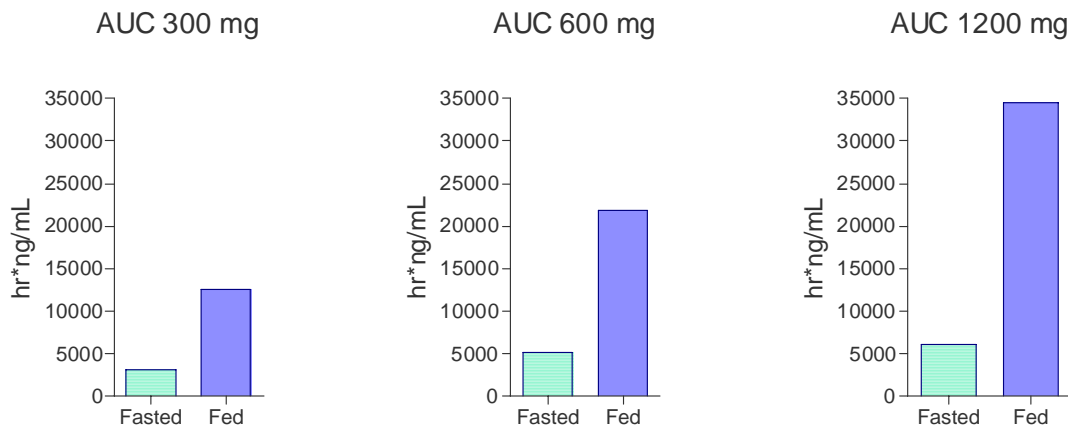


Figure 2: Administration of BNC210 with food produces a greater than 4-fold increase in drug exposure across dosing levels of 300mg to 1200mg.

Three healthy subjects received BNC210 at dose levels of 300, 600 and 1200mg either in the absence of food (fasted) or following food (fed).



About Bionomics Limited

Bionomics (ASX: BNO) is a leading international drug discovery and development company. It 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

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 press release that relate to prospective events or developments 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 the clinical evaluation of either BNC105 or BNC210, 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. 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 press release.