

ASX ANNOUNCEMENT
1 September 2008

BIONOMICS' COMPOUND BNC210 DECREASES ANXIETY IN ANIMAL MODELS
Latest Data Presented at European Conference

Key Points:

- Results show that BNC210 is effective in treating anxiety in three animal models
- BNC210 acts for longer than Valium (diazepam), the most commonly prescribed anxiety drug
- Preclinical safety studies confirm the suitability of oral delivery of BNC210 and show that BNC210 is safe even at doses 10,000 times higher than the minimal effective dose

Monday September 1, 2008, Adelaide, Australia and Barcelona, Spain: Bionomics Limited (ASX: BNO, US OTC: BMICY) today told an international congress that its anxiety lead BNC210 is effective in models of anxiety in three different animal species and that it is safe and well tolerated at doses 10,000 times the minimum effective dose.

Bionomics' new data were presented at the 2008 European College of Neuropsychopharmacology (ECNP) Congress in Barcelona, Spain.

The data were gained from experiments to test whether BNC210 could decrease the duration of distress-induced vocalizations from guinea pig pups on separation from their mothers. This model has been validated as a predictor of anxiolytic (anxiety-reducing) activity for a broad range of compound classes.

Previous findings had shown that BNC210 reduced anxiety in mice and rats exposed to stresses.

"Compared to untreated pups, those given BNC210 uttered distress calls for a shorter time, a clear demonstration of the anxiolytic activity of BNC210" said Dr Sue O'Connor, the project leader for BNC210. "We were pleased to be able to present our latest findings at such a high calibre scientific meeting."

The anxiolytic effect of a single dose of BNC210 lasted for at least 6 hours, whereas the same dose of diazepam was effective for about 3 hours. In addition, treatment with BNC210 did not cause the side effects of sedation, memory impairment and addiction that are associated with diazepam treatment.

Ongoing toxicology studies have already shown BNC210 to be safe in both rats and dogs at doses up to 1,000 mg/kg. Tests of repeated doses of BNC210 have commenced and the results will be included in a submission seeking regulatory approval for human trials of BNC210 next year.

The ECNP Congress is the largest European scientific meeting on neuropsychopharmacology and mental disorders. More than 6,500 international psychiatrists, neurologists, psychologists, and neuroscience researchers attend to discuss the latest research on disorders of the brain.

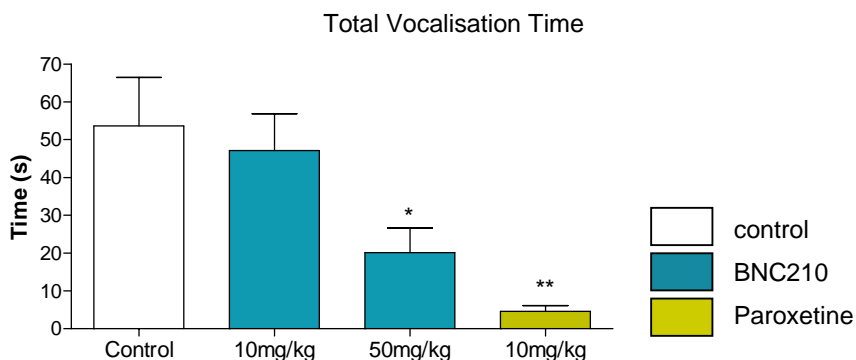
Appendix:

1. Rat Elevated Plus Maze



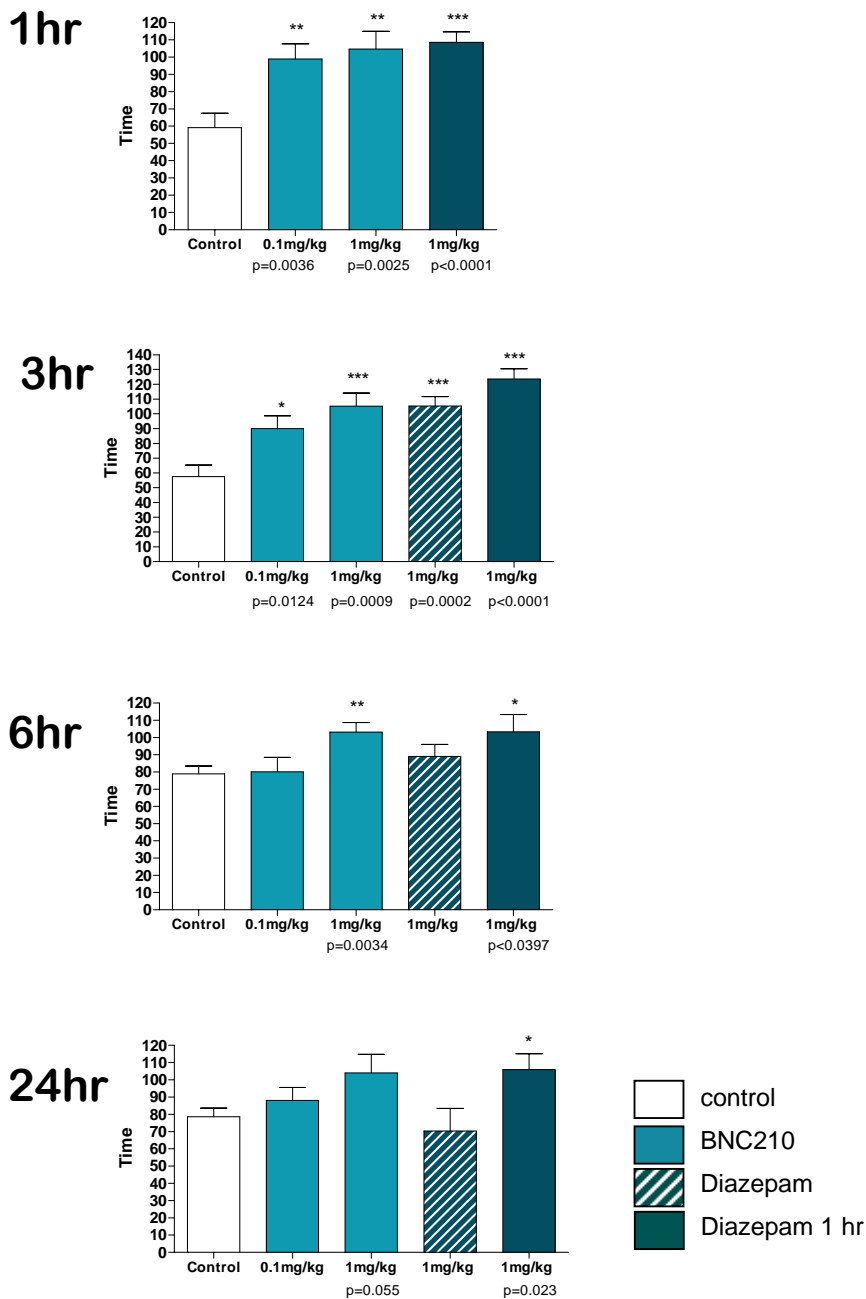
BNC210 was examined in the Rat Elevated Plus Maze at doses of 0.1 and 1mg/kg; PO. The number of entries into and time spent on the open arms of the maze was significantly increased by both doses. The minimum effective dose in this model was 0.1mg/ kg. Data represents mean \pm SEM. n=10 rats, p values calculated using Fisher's Protected Least Significant Difference test.

2. Guinea Pig Isolation Induced Vocalisations



BNC210 significantly reduced total vocalization time by guinea pig pups at 50mg/kg (IP). This result demonstrated that BNC210 is active in anxiety models from three species. The profile of BNC210 in this model correlates well with the profile of a non sedating anti-anxiety compound, differentiates it from other anxiolytic compounds and supports the concept that it has a novel mechanism of action. Data represents mean \pm SEM. n=10 guinea pig pups, *p<0.05, **p<0.01, Fishers Protected Least Significant Difference test.

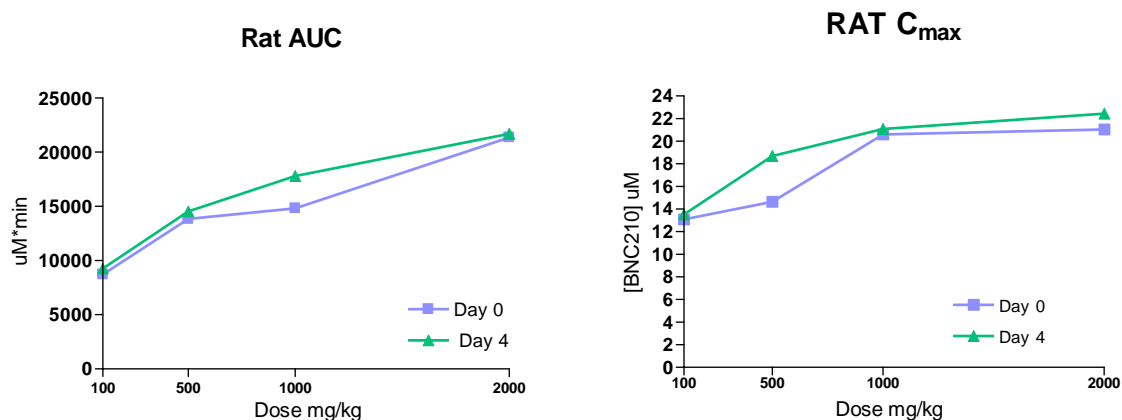
3. BNC210 Acts for Longer than Valium (diazepam) in the Mouse Light Dark Box



BNC210 and diazepam were assessed at 1, 3, 6 and 24 hours in the light dark box. At the 6 hour time point, mice treated with 1mg/kg (PO) of BNC210 still spent significantly more time in the lit area whereas the diazepam treated mice (1mg/kg; PO) were similar to control animals. Data represents mean \pm SEM. n=10 mice, p values calculated using Fisher's Protected Least Significant Difference test.

4. Preclinical Safety Studies Confirm the Suitability of Oral Delivery of BNC210 and Show that BNC210 is Safe Even at Doses 10,000 Times Higher than the Minimal Effective Dose

Rat and dog studies have been performed to assess the safety and tolerability of BNC210 with oral doses up to 2000mg/kg. There have been no BNC210 related effects seen at any dose. BNC210 achieves maximum plasma levels with doses of 1000mg/kg. As indicated in the Rat C_{MAX} and Area Under the Curve (AUC) graphs below, exposure increases only slightly between the 1000mg/kg and 2000mg/kg doses. The minimum effective dose required for an anxiolytic effect in rats and mice is 0.1mg/kg which represents a therapeutic window of >10,000.



FOR FURTHER INFORMATION PLEASE CONTACT:

Bionomics Limited

Dr Deborah Rathjen
CEO & Managing Director
+618 8354 6101 / 0418 160 425
drathjen@bionomics.com.au

Media Enquiries

Therese Minehan
Buchan Consulting
+612 9237 2800 / 0414 388 955
tminehan@bcq.com.au

About Bionomics Limited

Bionomics (ASX: BNO) 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. Bionomics' most advanced program, BNC105 for the treatment of cancer, is based upon the identification of a novel compound that potently and selectively restricts blood flow within tumours. Bionomics' discovery and development activities are driven by its three technology platforms: Angene®, the company's angiogenesis target and drug discovery platform, incorporates a variety of genomics tools to identify and validate novel angiogenesis targets. 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 BNC105, 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.