

ASX ANNOUNCEMENT
16 October 2012

ALPHA 7 PROGRAM TO BE SHOWCASED AT NEUROSCIENCE 2012

- ***Targets Alzheimer's disease and confirms Bionomics' focus on well differentiated drug candidates targeting large markets***
- ***Competitive advantages combine potency and selectivity with rapid action***
- ***Compounds outperform leading drug Donepezil***

Bionomics Limited (ASX: BNO) (ADR: BMICY) will present two poster presentations highlighting progress in its Alpha 7 ($\alpha 7$) program at the upcoming Neuroscience 2012 meeting in New Orleans. The presentations detail compounds, proprietary to Bionomics, which act as positive allosteric modulators (PAMs) of the $\alpha 7$ nicotinic acetylcholine receptor that restore memory in preclinical animal models.

In preclinical testing Bionomics' $\alpha 7$ compounds outperform benchmark compounds including Donepezil, a Pfizer product marketed as Aricept that reported US\$2.5 billion global sales in 2011.

The $\alpha 7$ PAMs have a number of clear competitive advantages including:

- Greater potency combined with selectivity
- Rapid onset of action
- Positive allosteric modulation allows greater efficacy without increasing side-effects or causing receptor desensitisation
- Preserves the normal signalling patterns of the receptor
- No potential for development of tolerance

Characteristic	Bionomics PAMs	Competing Agonist Compounds
Potent	√	×
Acute efficacy, indicative of rapid onset of action	√	×
Produce greater response than maximum concentrations of other ligands eg acetylcholine & nicotine	√	×
Preserve normal signalling patterns of the receptor	√	×
Do not cause receptor desensitisation	√	×
No potential for development of tolerance	√	×
Selectivity over other nicotinic receptors	√	√

The $\alpha 7$ program is expected to reach drug candidate selection in the near term, triggering GMP manufacture and IND enabling studies leading to clinical trials. In February 2012 Bionomics announced that a patent application covering several of its $\alpha 7$ compounds had entered the international phase.

Bionomics' CEO Dr Deborah Rathjen commented, "the $\alpha 7$ nicotinic acetylcholine receptor (nAChR) is a highly promising target for treatment of memory impairment associated with Alzheimer's disease, which contrasts with the historical focus on β -amyloid in the search for new therapies. Bionomics is now at the forefront of new therapeutic approaches in the treatment of Alzheimer's disease with a growing data package to support future partnering of the program."

"Positive allosteric modulation of the receptor offers a sound therapeutic strategy for the improvement of memory because it has the advantage of only activating nAChR receptors in tune with the natural rhythm of brain signalling", Dr Rathjen added.

The estimated worldwide costs of dementia, including direct and indirect costs of care, were \$604 billion with an estimated 35.6 million people worldwide affected by dementia in 2010. This number is anticipated to double every 20 years reaching 65.7 million in 2030 and 115.4 million in 2050. In the US alone an estimated 5.3 million people have Alzheimer's disease including 14% of people over 71 years of age (*Source: Business Insights, May 2011, Advances in Alzheimer's Disease Drug Discovery: Innovations, challenges, and future directions*).

This program, which targets Alzheimer's disease and other neurodegenerative disorders, confirms Bionomics' focus on the discovery of well differentiated drug candidates with potential in the treatment of serious conditions. These have significant unmet clinical needs for which large market opportunities exist. This is an important addition to Bionomics' innovative drug pipeline.

Neuroscience 2012 is the annual meeting of the Society for Neuroscience, a not-for-profit membership organisation of scientists and physicians studying the brain and central nervous system. It will run between 13-17 October and is expected to attract over 30,000 attendees.

Key poster information:

Poster 1:

Tue, Oct 16, 1 - 5:00 PM

640.24/C54

Three novel Type II positive allosteric modulators of the $\alpha 7$ nicotinic acetylcholine receptor demonstrate safe, effective cognitive enhancement.

Poster 2:

Wed, Oct 17, 8-12 AM

810.03/EEE41

Characterization of novel type I positive allosteric modulators of the $\alpha 7$ nicotinic acetylcholine receptor.

FOR FURTHER INFORMATION PLEASE CONTACT:

Bionomics Limited

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

Monsoon Communications

Rudi Michelson
+613 9620 3333
rudim@monsoon.com.au

The Trout Group

Lauren Glaser
+1 646 378 2972
lglaser@troutgroup.com

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. BNC105 offers blockbuster potential if successfully developed. A clinical program is also underway for the treatment of anxiety disorders and depression based on BNC210, a novel compound which stimulates neurite outgrowth. BNC210 is partnered with Ironwood Pharmaceuticals.

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. These platforms underpin Bionomics' established business strategy and Bionomics is committed to securing partners for its key compounds.

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 announcement that relate to prospective events or developments, including, without limitation, statements made regarding Bionomics' development candidates BNC105, BNC210, and ET101, its licensing deal with Ironwood Pharmaceuticals, its acquisition of Eclipse Therapeutics, 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 announcement .