

ASX ANNOUNCEMENT
23 March 2012

BNC105 OVARIAN CANCER TRIAL APPROVED

- **Phase I/II BNC105 clinical trial in women with ovarian cancer approved; advanced preparations for trial.**

Bionomics Limited (ASX: BNO) (ADR: BMICY) has gained approval to proceed with its clinical trial of BNC105 in women with ovarian cancer. In anticipation of approval, preparations for the initiation of the trial are well advanced.

Bionomics CEO & Managing Director Dr Deborah Rathjen commented, "This Phase I/II ovarian cancer trial, which has received approval to commence, will evaluate BNC105 in combination with carboplatin and gemcitabine in a multi-centre trial in Australia and the US."

"Bionomics anticipates that the trial will be initiated next quarter. The trial design is based on robust preclinical data which demonstrates synergy between BNC105 and platinum-based therapies in improving survival rates of animals bearing solid tumours."

Further details of the trial will be provided upon initiation. Please see the Data Appendix below for details of the preclinical data referred to in this announcement.

Despite modest improvements in patient outcomes as a result of surgery or platinum-based chemotherapy, the majority of ovarian cancer patients relapse and die of their disease. There is a clear unmet medical need for more effective systemic therapy.

Ovarian cancer is the seventh leading cause of cancer-related death among Australian women. It is often diagnosed at an advanced stage after the cancer has spread beyond the ovary. In 2008 in Australia 1,272 ovarian cancer cases were diagnosed. The number of ovarian cancer cases in Australia increased by 47% between 1982 and 2006. It is anticipated that the number of new cases will continue to increase, with an estimated 1,488 women expected to be diagnosed with ovarian cancer in 2015.

In 2010 there were an estimated 21,880 new cases and 13,850 deaths from ovarian cancer in the US. It is estimated that approximately \$2.2 billion is spent in the US each year on treating ovarian cancer.

Drugs used to treat ovarian cancer had reported sales over US\$2 billion in 2011.

As a Vascular Disruption Agent (VDA), BNC105 rapidly shuts down existing and new tumour blood vessels with no effect on normal blood vessels. Preclinical data has indicated that all solid tumour types, including breast, prostate and lung cancers, are susceptible to the VDA effect of BNC105 and that BNC105 also potently inhibits the growth of a broad range of cancer cells in culture.

In addition to the planned Phase I/II ovarian cancer trial, BNC105 is currently under evaluation, in combination with the mTOR inhibitor Everolimus (Afinitor), in a US multi-centre Phase II clinical trial in patients with metastatic renal cell carcinoma (RCC, a form of kidney cancer). More than 21 US-based clinical trial sites have been activated to date and the combination of BNC105 and

Afinitor has been shown to be safe and well tolerated. Enrolment in the RCC trial is due for completion at the end of the year.

The conduct of the RCC and ovarian clinical trials is aligned with Bionomics' Phase II partnership strategy for BNC105. Data from the RCC trial and the soon to be initiated clinical trial of BNC105 in women with ovarian cancer may enable consideration by the FDA of fast track designation for BNC105 adding substantial value to the BNC105 licensing package. The combination therapies used in Bionomics' clinical trials of BNC105 are used to treat many solid tumour types including breast, prostate, pancreatic, gastric and lung cancers as well as mesothelioma.

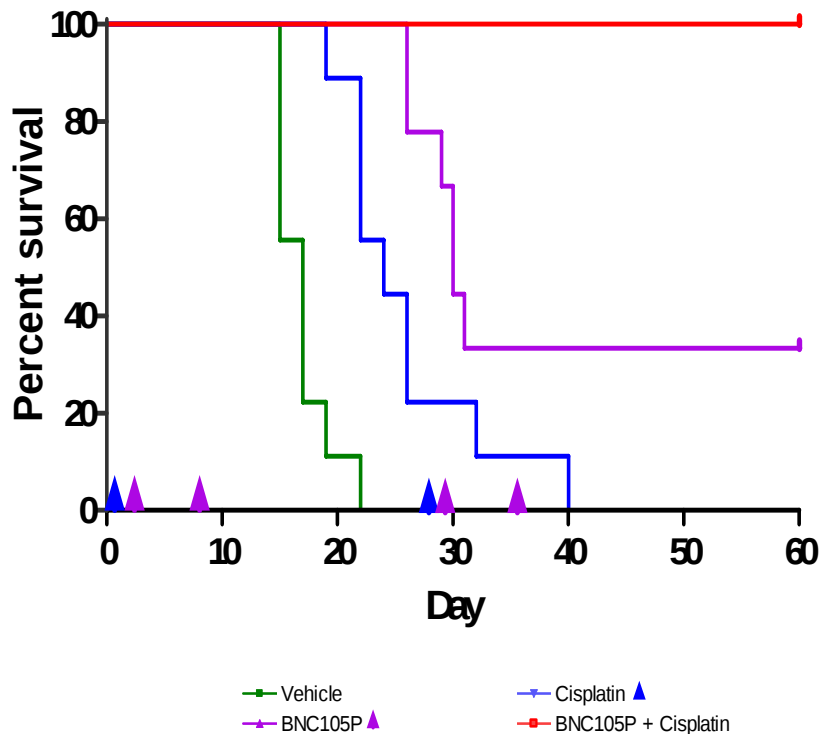
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Data Appendix



Percent survival curves of Balb/c nu/nu mice bearing Calu-6 (human lung, carcinoma, anaplastic) tumours. Mice were treated with BNC105P (32mg/kg) on days 2 and 9 of a 28 day cycle, Cisplatin (4mg/kg) on day 1 of 28 day cycle, or BNC105P + Cisplatin as described for the monotherapies.

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 has a partnered program with Merck Serono for new treatments for multiple sclerosis and other autoimmune disorders.

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 presentation that relate to prospective events or developments, including, without limitation, statements made regarding Bionomics' development candidates BNC105, BNC210, its Merck Serono alliance, its licensing deal with Ironwood Pharmaceuticals, 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.

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