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ASX ANNOUNCEMENT
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BIONOMICS SHOWCASES ONCOLOGY DRUG DEVELOPMENT PROGRAMS AT 2015 AACR ANNUAL MEETING

Bionomics Limited (ASX: BNO, OTCQX: BNOEF), a biopharmaceutical company focused on the discovery and development of innovative therapeutics for the treatment of cancer and diseases of the central nervous system, today announced the presentation of data from three of its most advanced oncology programs at the upcoming American Association for Cancer Research (AACR) 106th Annual Meeting being held from April 18-22, 2015 in Philadelphia, PA USA.

The presentation on the BNC105 program describes biomarker data obtained from clinical trials in three indications including renal cancer, ovarian cancer and mesothelioma. The composite analysis identified biomarkers that consistently change following BNC105 administration as a monotherapy or in combination with standard of care (SOC), and included ferritin, IL8, IL16, MCP1, MIP-1b, MMP9 and TNFR2. Notably, there was correlation of these biomarkers to progression-free survival (PFS) at six months. Particular emphasis is drawn on the application of these biomarkers in defining responder patients in the Phase II renal cancer trial. A scientific publication describing the biomarker data obtained in the BNC105 renal cancer trial was accepted for publication in the peer reviewed journal ***Clinical Cancer Research*** and is available online (*OnlineFirst March 18, 2015; doi: 10.1158/1078-0432.CCR-14-3370*).

Two posters will show data supporting further biomarker-driven clinical development of BNC101 in pancreatic cancer and solid tumours. BNC101 is a therapeutic antibody targeting cancer stem cells (CSC) implicated in chemotherapy resistance and tumour recurrence. BNC101 targets LGR5, a unique and selective CSC receptor overexpressed in colorectal cancer, pancreatic cancer and a number of other solid tumours. This program has successfully completed IND-enabling studies in preparation for Phase I clinical studies in 2015. The data to be presented at AACR demonstrate that BNC101 combined with SOC chemotherapy successfully delayed or prevented tumour recurrence in mCRC and pancreatic patient-derived xenograft (PDX) models designed to mimic a relapse setting following first-line chemotherapy. Importantly, post-study analysis of BNC101-treated tumours identified a number of pharmacodynamic biomarkers including LGR5+ circulating tumour cells and Wnt genes. These biomarkers will be used to evaluate BNC101 anti-tumour and anti-CSC activity in mCRC and pancreatic patients in the upcoming Phase I clinical trial.

Bionomics will also present a poster on BNC420, a novel small molecule inhibitor of VEGFR3 phosphorylation being developed initially in melanoma models as an inhibitor of tumour metastasis. VEGFR3 is a receptor involved in the formation of tumour lymphatic vessels, which can act as conduits for tumour dissemination to lymph nodes and play a key role in metastasis. One key differentiator of BNC420 is that it displays significant selectivity to VEGFR3 over related VEGFR receptors, while other competitive inhibitors of the VEGFR receptors (e.g. sunitinib) do not exhibit such selectivity for VEGFR3. The data presented at AACR demonstrate that BNC420 significantly outperforms first-line treatment sunitinib in inhibiting tumour metastasis. In a murine model of melanoma, BNC420 suppressed the development of tumour lymphatics, the growth of regional metastatic lesions and the spread of metastasis to the draining lymph nodes. In contrast, sunitinib failed to suppress lymph node metastasis and appeared to enhance formation of regional metastatic lesions.

Details on the poster presentations are as follows:

BNC105

Abstract Number: 1551

Title: Identification of plasma biomarker concentration changes resulting from the administration of the Vascular Disrupting Agent BNC105 across 3 clinical trials in mesothelioma, ovarian and renal cancer

Presentation date and time: Monday, Apr 20, 2015, 8:00 AM -12:00 PM

Location: Section 20 (Pennsylvania Convention Center)

Poster Board Number: 20

BNC101

Poster 1

Abstract Number: 2315

Title: The LGR5 monoclonal antibody BNC101 has anti-tumour and anti-cancer stem cell activity in pancreatic cancer

Presentation date and time: Monday, Apr 20, 2015, 1:00 PM - 5:00 PM

Location: Section 17 (Pennsylvania Convention Center)

Poster Board Number: 6

Poster 2

Abstract Number: 2639

Title: Preclinical evaluation and biomarker identification for the anti-LGR5 mAb BNC101 in K-Ras mutant CRC and other solid tumour indications

Presentation date and time: Monday, Apr 20, 2015, 1:00 PM - 5:00 PM

Location: Section 31 (Pennsylvania Convention Center)

Poster Board Number: 10

BNC420

Abstract Number: 4115

Title: BNC420 is a novel VEGFR3 selective inhibitor, which unlike the pan-VEGFR inhibitor Sunitinib, suppresses lymphatic metastasis in a model of metastatic melanoma

Presentation date and time: Tuesday, Apr 21, 2015, 1:00 PM - 5:00 PM

Location: Section 17 (Pennsylvania Convention Center)

Poster Board Number: 6

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About Bionomics Limited

Bionomics (ASX: BNO) is biopharmaceutical 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, memory loss and pain. Its oncology approach includes cancer stem cell therapeutics.

Bionomics' discovery and development activities are driven by its four proprietary technology platforms: MultiCore®, a diversity orientated chemistry platform for the discovery of small molecule drugs; ionX®, a set of novel technologies for the identification of drugs targeting ion channels for diseases of the central nervous system; 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); and CSC Rx Discovery™, which identifies antibody and small molecule therapeutics that inhibit the growth of cancer stem cells. These platforms drive Bionomics' pipeline and underpin its established business strategy of securing partners for its key compounds. Bionomics partners include Merck & Co.

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, BNC101 and BNC420, our acquisitions of Eclipse Therapeutics and Prestwick Chemicals and ability to develop products from their platforms, its licensing deals with Merck & Co, 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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