

ASX ANNOUNCEMENT 11 November 2010

Invitation to Tender for the Purchase of Bionomics Shares

11 November 2010; Adelaide, Australia

The Board of Directors of Bionomics note that a major shareholder, Start-up Australia Ventures Pty Ltd, has lodged with the ASX an invitation to tender for the acquisition of their entire 27.76% shareholding in Bionomics, in accordance with ASIC Regulatory Guidance 102.

The tender process is scheduled to close on 31 March 2011, although Start-up Australia reserves the right to amend this timetable.

The Directors also note that a successful Tenderer will be required to make a takeover bid for all the shares in Bionomics.

The Directors will assess the implications of the tender process and any resulting takeover bid and will keep shareholders of Bionomics informed of developments.

Shareholders need take no action at this time.

The Directors and management will continue to work in the best interests of all shareholders to develop the value of Bionomics' assets. As shareholders are aware, Bionomics has significant clinical programs in Cancer, Anxiety and Depression, in addition to a highly valued partnership with Merck Serono on its Multiple Sclerosis program.

BNC105, the leading vascular disruption agent for the treatment of solid tumours, is in Phase II clinical trials in patients with renal cell cancer and in patients with mesothelioma. These clinical trials are anticipated to report interim data in the first quarter and the first half of calendar year 2011 respectively.

BNC210, which is being developed for the treatment of anxiety and depression, is in Phase Ib clinical trials in Europe. These clinical trials are anticipated to report data in the first quarter of calendar year 2011.

FOR FURTHER INFORMATION PLEASE CONTACT:

Bionomics Limited

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

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. 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.