



ASX and Media release

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## **Circadian grants world-wide licence to Bio-Rad to market research products**

Circadian Technologies Limited (ASX:CIR, OTCQX:CKDXY) announces that its wholly owned subsidiary, Vegenix Pty Ltd, has entered into a non-exclusive worldwide licence agreement with one of the world's leading providers of life science research and clinical diagnostics products, Bio-Rad Laboratories, Inc., (NYSE: BIO and BIOb), to market research assays for the detection of VEGF-C and/or VEGF-D in biological fluids.

Circadian owns extensive intellectual property rights for the use of VEGF-C and VEGF-D for diverse therapeutic applications and diagnosis. Circadian's internal product programs are focused on the development of novel therapeutics for cancer and eye disease.

Robert Klupacs, CEO of Circadian commented, "We are committed to maximising the potential of our intellectual property through collaborative relationships with leaders in their field. Bio-Rad, a world leading provider of products to the cancer and angiogenesis research markets, has recognized the importance of providing improved tools, and has identified the increasing importance of VEGF-C and VEGF-D as key angiogenic proteins in the international research and drug discovery community. This partnership is also another example of the diverse range of commercial opportunities and value of our VEGF intellectual property."

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## **About Circadian Technologies Limited**

Circadian (ASX:CIR; OTCQX:CKDXY) is a biologics drug developer focusing on cancer and ophthalmological disease therapies. It controls exclusive worldwide rights to a significant intellectual property portfolio around Vascular Endothelial Growth Factor (VEGF)-C and -D. The applications for the VEGF technology, which functions in regulating blood and lymphatic vessel growth, are substantial and broad. Circadian's internal product development programs are primarily focussed on developing VGX-100 (a human antibody against VEGF-C) as a treatment for solid tumours, in particular glioblastoma and colorectal cancer, as well as for ophthalmological diseases such as age-related macular degeneration, corneal neovascularisation and/or dry eye disease applications. Circadian has also licensed rights to some parts of its intellectual property portfolio for the development of other products to ImClone Systems, a wholly-owned subsidiary of Eli Lilly and Company, including the anti-lymphatic antibody-based drug IMC-3C5 targeting VEGFR-3.

## **About Bio-Rad**

Bio-Rad Laboratories, Inc. (NYSE: BIO and BIOb) has remained at the center of scientific discovery for more than 50 years, manufacturing and distributing a broad range of products for the life science research and clinical diagnostic markets. The company is renowned worldwide among hospitals, universities, major research institutions, as well as biotechnology and pharmaceutical companies for its commitment to quality and customer service. Founded in 1952, Bio-Rad is headquartered in Hercules, California, and serves more than 100,000 research and industry customers worldwide through its global network of operations. The company employs over 7,100 people globally and had revenues exceeding \$2 billion in 2011. For more information, visit [www.bio-rad.com](http://www.bio-rad.com).

## **About Circadian's pipeline of treatments for cancer**

The clinical and commercial success of Avastin®, an antibody that blocks the activity of VEGF-A, clinically validated anti-angiogenic drugs as an effective means of inhibiting solid tumour growth. By blocking the interaction of VEGF-A with its receptors, primarily VEGFR-2, the multi-billion dollar cancer therapeutic slows tumour growth by inhibiting blood vessel recruitment into the tumour, effectively starving tumours of essential nutrients and oxygen required for growth. However after a short period of time tumours can begin to grow again in the presence of Avastin®. Avastin® is approved by the US FDA in the following indications: metastatic colorectal cancer, non-squamous-cell lung cancer, glioblastoma, and metastatic renal cell carcinoma.

The angiogenic receptor VEGFR-2 can be stimulated by VEGF-A and VEGF-C. As such, VGX-100 has the potential to block blood vessel growth in tumours which grow in the presence of the VEGF-A inhibitor, Avastin®. Combined administration of Avastin® and VGX-100 more completely shuts down angiogenesis (the growth of blood vessels) mediated by VEGFR-2.

VEGF-C along with the molecule VEGF-D are also the only known proteins to bind and activate VEGFR-3 which drives lymphatic vessel and tumour-associated blood vessel growth. Inhibitors of VEGF-C thus have therapeutic potential to inhibit not only primary tumour growth through their anti-angiogenic activities, but to also inhibit tumour spread or metastasis via the lymphatic vessels - a mechanism of tumour dissemination that is often the deadliest aspect of many tumour types and a mechanism that is not effectively blocked by anti-VEGF-A or anti-VEGFR-2 therapeutics.

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## **Inherent risks of Investment in Biotechnology Companies**

There are a number of inherent risks associated with the development of pharmaceutical products to a marketable stage. The lengthy clinical trial process is designed to assess the safety and efficacy of a drug prior to commercialisation and a significant proportion of drugs fail one or both of these criteria. Other risks include uncertainty of patent protection and proprietary rights, whether patent applications and issued patents will offer adequate protection to enable product development, the obtaining of necessary drug regulatory authority approvals and difficulties caused by the rapid advancements in technology. Companies such as Circadian are dependent on the success of their research and development projects and on the ability to attract funding to support these activities. Investment in research and development projects cannot be assessed on the same fundamentals as trading and manufacturing enterprises. Thus investment in companies specialising in drug development must be regarded as highly speculative. Circadian strongly recommends that professional investment advice be sought prior to such investments.

## **Forward-looking statements**

Certain statements in this ASX announcement may contain forward-looking statements regarding Company business and the therapeutic and commercial potential of its technologies and products in development. Any statement describing Company goals, expectations, intentions or beliefs is a forward-looking statement and should be considered an at-risk statement. Such statements are subject to certain risks and uncertainties, particularly those risks or uncertainties inherent in the process of developing technology and in the process of discovering, developing and commercialising drugs that can be proven to be safe and effective for use as human therapeutics, and in the endeavour of building a business around such products and services. Circadian undertakes no obligation to publicly update any forward-looking statement, whether as a result of new information, future events, or otherwise. Actual results could differ materially from those discussed in this ASX announcement.