

Circadian granted key strategic VEGF-D patent in USA for diagnostic applications

- **Patent grants exclusive rights to diagnostic kits measuring VEGF-D in human samples**

Circadian Technologies Limited (ASX:CIR) announced today that its subsidiary company, Vegenics Limited, has been granted US Patent 7785803 claiming diagnostic kits for the detection of VEGF-D in human samples such as blood.

VEGF-D, a major novel target for cancer and other diseases, has been shown to be a prognostic indicator of survival or disease progression in a number of different cancer types as well as a biomarker for various respiratory diseases.

Circadian is currently undertaking collaborative studies with a number of groups worldwide as part of its development of VEGF-D diagnostics.

Robert Klupacs, CEO of Circadian said: "The use of targeted therapies in human healthcare is becoming more prevalent. In line with this trend, regulatory bodies and clinicians are increasingly in need of validated diagnostic tests to identify selected biomarkers and therefore assess a patient's likelihood to respond to these therapies.

"VEGF-D's role as a biomarker in cancer and other diseases is becoming more widely recognised. As such, the development and availability of a VEGF-D diagnostic test could have many important applications in improving the effectiveness of a wide array of potential targeted approaches, including Circadian's own treatments in development."

"This patent adds to our considerable estate of intellectual property covering VEGF family members, in particular building on the US patent granted to us last year covering VEGF-D antibodies. It is an important protection for our internal programs and represents a major asset for commercial partnerships with other companies seeking to pursue the use of VEGF-D as a biomarker."

Vegenics owns worldwide rights to an extensive intellectual property portfolio covering angiogenesis targets VEGF-D, VEGF-C and the receptor protein VEGFR-3.

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About Circadian Technologies Limited

Circadian (ASX:CIR) is a biologics drug developer focusing on cancer 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 supply, are substantial and broad. Circadian's internal product development programs are focussed on novel anti-cancer therapeutics for large unmet needs. 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 & Company - NYSE: LLY). ImClone Systems is currently developing an antibody-based drug targeting VEGFR-3 for the treatment of solid tumours.

About Circadian's pipeline of treatments for cancer

The clinical and outstanding commercial success of Avastin, an antibody that blocks the activity of VEGF-A, has 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. Avastin, which is sold by Genentech, now part of Roche, had U.S. sales in 2009 of US\$5.7 billion and worldwide sales in excess of US\$8.6 billion. Avastin is approved by the US FDA in the following indications: metastatic colorectal cancer, non-squamous-cell lung cancer, metastatic breast cancer, glioblastoma, metastatic renal cell carcinoma.

The VEGF-C inhibitor, VGX-100, a key therapeutic in Circadian's portfolio, block this alternative stimulator for VEGFR-2. As such, it has the potential to block blood vessel growth in tumours resistant to anti-VEGF-A therapy and, when used in combination with drugs like Avastin, may completely shut down angiogenesis (the growth of blood vessels) mediated by VEGFR-2, resulting in greater clinical efficacy.

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 and/or VEGF-D 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.

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 statement

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 endeavor 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.