

PRESS RELEASE

Lund, Sweden, December 13, 2016

Study demonstrates the feasibility of targeting human kallikreinrelated peptidase 2 (hK2) for detection and monitoring of prostate cancer

A new publication in *Science Translational Medicine* demonstrates that *in vivo* targeting of the enzyme human kallikrein-related peptidase 2 (hK2) is a powerful tool that can be used for detection of prostate cancer and monitoring treatment by quantifying the activity of the androgen receptor pathway.

The authors of the article "Internalization of secreted antigen–targeted antibodies by the neonatal Fc receptor for precision imaging of the androgen receptor axis" (Thorek *et al.*, <u>Sci</u> <u>Transl Med.</u> 2016 Nov 30;8(367))" hK2 in mouse models and human tissues to accurately detect prostate cancer lesions, including bone and liver metastases.

Disseminated prostate cancer is typically treated by targeting the androgen receptor, but so far there has been no convenient way to monitor the efficacy of these drugs or to determine when a tumor is becoming resistant to treatment. The new publication by Thorek *et al.* shows that imaging hK2, using the antibody 11B6, can be applied as a robust method to efficiently monitor androgen receptor activity in real time.

The exciting finding that these labelled highly specific antibodies are internalized opens up the possibility for an efficient radio immuno-therapy of prostate cancer.

"This is an important scientific proof for us at Diaprost, as our pipeline covers humanized antibodies for both diagnostics and therapeutics targeting the hK2 antigen. It's a wellestablished fact that the currently used *in vitro* tests for PSA levels are not giving results of sufficient clinical value. We believe that using real time non-invasive detection and monitoring of hK2 will increase both the effectiveness and the efficiency of prostate cancer care," says Johan Drott, CEO of Diaprost. You can access the article at http://stm.sciencemag.org/content/8/367/367ra167.

For more information, please contact: Johan Drott, CEO, Diaprost AB +46 709 224 140 johan.drott@diaprost.com

Our Mission

Diaprost's mission is to be the leading biotechnology company discovering and optimizing targeted, high specificity, medicines to provide personalized care for prostate cancer patients. We aim to establish and commercialize an antibody platform, based on the anti-hK2 antibody 11B6, for both *in vivo* diagnostic and targeted therapy applications. Our goal is to validate the use of this novel technology, and deliver innovative breakthroughs to improve the lives of patients.

About Diaprost

Diaprost was founded in 2005 based on the idea that the transformative success of the PSA assay for detection of prostate cancer could be leveraged as a personalized theranostic (therapy and diagnostic) platform. The technology and patent applications were pursued by researchers at Lund University in Sweden. Diaprost is collaborating with leading international experts in the fields of molecular medicine, biotechnology, immunology, radiology, radiation physics, laboratory medicine, and oncology. Our scientists are active at some of the world's most prominent centers in cancer research. The Diaprost pipeline covers humanized antibodies for both diagnostics and therapeutics targeting the hK2 antigen, as well as therapy targeting the PSA antigen. Diaprost AB is a Swedish privately held company based in Lund, Sweden. For more information, please visit <u>www.diaprost.com</u>.

About prostate cancer

Prostate cancer is the most common type of cancer among men, with over 1 million new cases diagnosed annually (Cancer Research UK 2012). It is also the second leading cause of death from cancer in men. Prostate cancer often has no indicative symptoms that enable early diagnosis. Critically, differentiating aggressive from benign or low-risk disease, with significantly different treatment options and outcomes is often very difficult. New agents that detect, define and direct therapy may have a significant role in future management of this disease.