

Prostate cancer early warning protein detected

May 31 2012



Professor Foster: "We now need to define the role this protein is playing in prostate cancer"

(Medical Xpress) -- Scientists at the University have discovered a protein, only present in prostate cancer cells, that could be used as a marker to detect early signs of the disease.

Published in the [British Journal of Cancer](#), the research examines a unique sequence of a gene that produces a [protein](#) in [prostate cancer cells](#), which may be linked to aggressive forms of the disease. The findings could contribute to future drug development programmes for those patients who are currently untreatable.

Professor Chris Foster, from the University's Institute of Translational Medicine, had previously shown that the gene, called PRKCZ, controls

the aggressive behaviour of [prostate cancer](#) cells. He has now discovered that this gene changes its expression in prostate [cancer cells](#) and produces a protein that could be responsible for changing the behaviour of the cells. This means that the protein could be used as a potential marker for the disease, indicating which patients are at risk of developing a more aggressive type of cancer.

Reducing effect of cancer cells

Professor Foster said: “We know that the protein produced by the altered gene contains a unique active region. We now need to define the role that this protein is playing in prostate cancer. If it encourages aggressiveness in prostate cancers then we may be able to develop new drugs that reduce its effects in the cancer cells.”

Prostate cancer is the most common cancer in men. Each year approximately 40,800 men are diagnosed with prostate cancer in the UK and around 10,700 die from the disease. The findings of this study may provide a biological approach to treating men with aggressive forms of prostate cancer and for whom no specific therapy is currently available.

The study is supported by Cancer Research UK and the North West Cancer Research Fund.

Provided by University of Liverpool

Citation: Prostate cancer early warning protein detected (2012, May 31) retrieved 17 April 2024 from <https://medicalxpress.com/news/2012-05-prostate-cancer-early-protein.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--