

## PRESS RELEASE

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### PROSTATE CANCER TEST CAN SPOT THE DIFFERENCE BETWEEN AGGRESSIVE AND SLOW-GROWING TUMOURS

A NEW test may overcome one of the biggest problems in prostate cancer treatment – telling slow-growing tumours from aggressive ones – according to research presented at the National Cancer Research Institute (NCRI) Cancer Conference in Liverpool today (Tuesday).

The test\*, which has been developed by an international team of researchers, measures the levels of activity of genes that drive cell division, known as cell cycle genes. This gives a measure of how active the cells are, which is used to generate a Cell Cycle Progression (CCP) score.

Their research shows that the CCP score is an accurate way of distinguishing slow-growing tumours from aggressive ones – a challenge that existing tests have been unable to overcome.

After looking at the results from a number of different studies on biopsy tissue, the researchers have shown that CCP scores correlate with the severity of the cancer – so might be a useful way to predict which men need more urgent treatment.

Men with slow-growing prostate cancer detected through PSA testing\*\* may never experience any symptoms or require any treatment in their lifetime, and can be monitored to see if anything changes. This is known as ‘active surveillance’. The problem is finding a way to accurately tell apart these cancers that can safely be monitored from those needing immediate treatment.

The researchers were funded by Cancer Research UK, Queen Mary University of London, Orchid Appeal, US National Institutes of Health and the Koch Foundation.

Professor Jack Cuzick, study author and Cancer Research UK scientist based at Queen Mary University of London, said: “Overtreatment of prostate cancer is a serious issue so it’s essential that we have an accurate way of spotting those cancers that pose an immediate risk. For patients with slow-growing tumours, it’s far safer and kinder to watch and wait – only acting if the situation starts to change.

“We’ve shown this test is accurate at telling apart these two different tumour types at many different stages of treatment. But we still need to work out how best to use this test to help patients. We want to try and shorten the time it takes to get the results and establish how frequently the test needs to be done in order to be most effective at spotting any changes.”

Dr Harpal Kumar, chief executive of Cancer Research UK and chair of the NCRI, said: “As we’ve learnt from breast cancer, you often have to balance the potential harms and benefits of screening. Some countries use PSA testing, which uses a blood test to look for increased levels of a hormone associated with prostate cancer. But this doesn’t tell you whether the tumour is aggressive or not.

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“Being able to tell apart aggressive and slow-growing tumours would help us take a major step forward in prostate cancer treatment. Understanding more about the nature of a patient’s tumour could spare thousands of men from unnecessary treatment and the resulting side effects.”

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**ENDS**

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**Notes to editors**

View the conference abstract here:

<http://conference.ncri.org.uk/abstracts/2013/abstracts/LB4.htm>

\*The Prolaris test looks at the expression levels of 46 genes involved in prostate cancer progression, with high levels of expression suggestive of an aggressive tumour.

\*\* The PSA test is a blood test that detects levels of a protein called Prostate Specific Antigen (PSA), produced by the prostate. High levels of PSA can indicate that a man might have prostate cancer, and has lead to a rise in incidence. But the test cannot tell how aggressive the disease is likely to be, leading to some men receiving treatment for a cancer that would never have caused a problem in their lifetime.

**About the NCRI Cancer Conference**

The National Cancer Research Institute (NCRI) Cancer Conference is the UK’s major forum for showcasing the best British and international cancer research. The Conference offers unique opportunities for networking and sharing knowledge by bringing together world-leading experts from all cancer research disciplines. The ninth annual NCRI Cancer Conference is taking place from 3–6 November 2013 at the BT Convention Centre in Liverpool. Roche is the principal sponsor of the 2013 NCRI Cancer Conference.

For more information visit [conference.ncri.org.uk](http://conference.ncri.org.uk)

**About the NCRI**

The National Cancer Research Institute (NCRI) was established in 2001. It is a UK-wide partnership between the government, charity and industry which promotes cooperation in cancer research.

NCRI members are: the Association of the British Pharmaceutical Industry (ABPI); Association for International Cancer Research; Biotechnology and Biological Sciences Research Council; Breakthrough Breast Cancer; Breast Cancer Campaign; Cancer Research UK; Children with Cancer UK; Department of Health; Economic and Social Research Council; Leukaemia & Lymphoma Research; Ludwig Institute for Cancer Research; Macmillan Cancer Support; Marie Curie Cancer Care; Medical Research Council; Northern Ireland Health and Social Care (Research & Development Office); Prostate Cancer UK; Roy Castle Lung Cancer Foundation; Scottish Government Health Directorates (Chief Scientist Office); Tenovus; Welsh Government (National Institute for Social Care and Health Research); The Wellcome Trust; and Yorkshire Cancer Research.

For more information visit [www.ncri.org.uk](http://www.ncri.org.uk)

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