

# Prostate cancer test can spot the difference between aggressive and slow-growing tumours

November 5 2013

---



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 Prolaris [test](#), which has been evaluated 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 that are more aggressive and need 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.

"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, whilst also meaning that those who do need [treatment](#) receive it rapidly."

**More information:** [conference.ncri.org.uk/abstrac ...  
13/abstracts/LB4.htm](https://www.conference.ncri.org.uk/abstracts/2013/abstracts/LB4.htm)

Provided by Cancer Research UK

Citation: Prostate cancer test can spot the difference between aggressive and slow-growing tumours (2013, November 5) retrieved 23 April 2024 from <https://medicalxpress.com/news/2013-11-prostate-cancer-difference-aggressive-slow-growing.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>
--