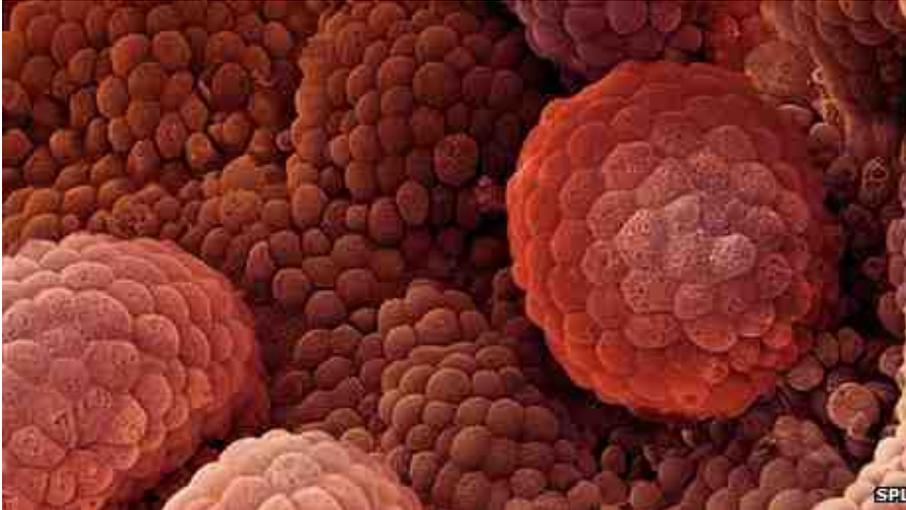


5 November 2013 Last updated at 00:00 GMT

# Prostate cancer aggression test 'may avoid needless ops'

By James Gallagher Health and science reporter, BBC News



Prostate tumour: The challenge is spotting which ones need to be removed

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A prostate cancer test, which predicts how aggressive a tumour is, could spare men unnecessary operations, researchers suggest.

Early data, [presented at the National Cancer Research Institute conference](#), suggests a genetic test can tell apart aggressive and slow-growing tumours.

A big challenge in treating the cancer is knowing whether surgery to remove the gland is needed.

Cancer charities said a successful test would be a "game-changer".

Prostate cancer is the most common male cancer in the UK. There are more than 40,000 new cases diagnosed and 10,000 deaths each year.

Tough choice

The decision to remove the prostate is based on an examination of a tumour sample under the microscope.

However, the procedure has significant side-effects such as infertility, difficulty maintaining

and keeping an erection and uncontrolled urinating.

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## “Start Quote

We need to validate it and we're not there yet, but it is the strongest test we've had so far”

Prof Dan Berney Queen Mary University of London

One of the researchers, Prof Dan Berney, from Queen Mary University of London, told the BBC: "We need a better test as we are over-treating many men; most will die with, not of, prostate cancer.

"We need to discriminate between the aggressive forms and those that will grumble along and just need monitoring."

The commercial test, developed by Myriad Genetics but independently assessed by Queen Mary University of London, looks at the activity level of genes inside a sample of the tumour.

If 31 genes involved in controlling how cells divide are highly active, it indicates the cancer is aggressive.

Prof Berney said such information could "substantially change" decisions made by doctors and patients but the costs were "huge" and it was certainly not going to be offered on the NHS in the next few years.

"We need to validate it and we're not there yet, but it is the strongest test we've had so far," he added.

'Intriguing'

Dr Iain Frame, director of research at Prostate Cancer UK, said: "Developing an effective test to distinguish aggressive from non-aggressive prostate cancer could be a game-changer for those affected by the condition.

"We urgently need to reach a point where we can focus resources on saving more of the 10,000 men who lose their lives to this disease every year, whilst sparing the many others who needn't have concerns.

"The results of this study are certainly intriguing, and take us a step closer to the diagnostic process for prostate cancer that men deserve. We will watch with great interest developments in this area."

Dr Harpal Kumar, the chief executive of Cancer Research UK, said: "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."

1 April 2011 Last updated at 13:26 GMT

# Prostate screening has no benefit

By James Gallagher Health reporter, BBC News



Radiotherapy is used to treat prostate cancer

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Prostate cancer screening does not save lives, according to a 20-year study, published in the [British Medical Journal](#).

One in four newly diagnosed cancers in UK men is prostate cancer.

Last year, the body which regulates screening in the UK advised against routine screening.

The UK National Screening Committee said this study provided further evidence that the harms outweigh the benefits.

Prostate cancer kills 10,000 people in the UK every year.

While there is no screening programme, men over 50 may still request a test.

### Screening

This latest study was carried out in Norrköping in Sweden. It followed 9,026 men who were in their 50s or 60s in 1987.

"The potential harms significantly outweigh the benefits of screening"

Dr Anne Mackie UK National Screening Committee

Nearly 1,500 men were randomly chosen to be screened every three years between 1987 and 1996. The first two tests were performed by digital rectal examination and then by prostate specific antigen testing.

The report concludes: "After 20 years of follow-up, the rate of death from prostate cancer did

not differ significantly between men in the screening group and those in the control group."

The favoured method of screening is the prostate specific antigen (PSA) test.

However, around 15% of men with normal PSA levels will have prostate cancer and two-thirds of men with high levels of PSA do not in fact have prostate cancer.

[One study has suggested](#) that to prevent one death from prostate cancer you would have to screen 1,410 men and treat 48 of them.

Dr Anne Mackie, programmes director of the UK National Screening Committee, said: "This evidence provides further support for the recommendation the Committee made in November not to screen for prostate cancer at this time.

"At the moment the potential harms significantly outweigh the benefits of screening. We will re-assess the evidence for prostate cancer screening against our criteria again in three years, or earlier if new evidence warrants it."

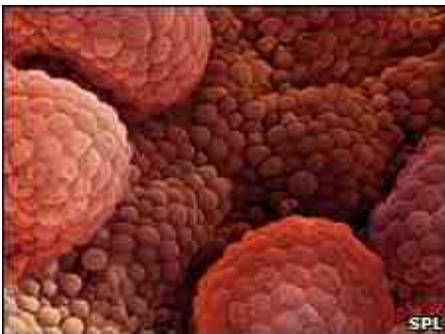
Dr Sarah Cant, head of policy and campaigns for The Prostate Cancer Charity, said: "Whilst this research suggests that screening men for prostate cancer doesn't reduce the number of men dying from the disease, this was a relatively small study and not all the screening rounds used the PSA test, which is the most effective test we have at the moment to indicate prostate problems that might be cancer.

"We know from another larger study that screening using the PSA test can reduce mortality rates.

"However, this previous trial showed that screening can lead to many men undergoing unnecessary treatment for a harmless prostate cancer. The Prostate Cancer Charity therefore doesn't believe there is enough evidence yet to support a screening programme."

Page last updated at 00:03 GMT, Monday, 11 January 2010

## 'False positive' concern over prostate cancer test



Prostate cancer is a major killer

**One in eight men screened for prostate cancer will test positive when they do not have the disease, a major European trial has shown.**

A positive result can mean undergoing invasive tests such as biopsy as well as potentially unnecessary treatment.

Screening with prostate specific antigen (PSA) is not routinely offered in the UK but government experts are reviewing evidence from the study.

Cancer Research UK said men should talk about the pros and cons with their GP.

Early data from the European Randomised Study of Screening for Prostate Cancer, which is being conducted in seven countries, showed in March 2009 that deaths could be cut by 20%.

**“ It is important that men in their 50s and 60s can talk to their doctor about the pros and cons of having a PSA test and only have the test if they feel it is right for them ”**

Professor Peter Johnson  
Cancer Research UK

But other recent evidence has cast doubt on the long-term benefits of screening, suggesting some men may end up being "over-treated" for slow-growing disease that would never cause a problem in their lifetime.

Now data from the Finnish part of the European trial has shown that for every eight men screened - tests are being done on a four-yearly basis - one ended up with a false positive result, even with a fairly high PSA threshold.

Those men who tested positive but were later found not to have cancer were twice as likely not to agree to screening in the future even though they were at risk of developing the disease later, the British Journal of Cancer reported.

### **'Adverse effects'**

The researchers have said more research is needed to make screening more accurate and to help pick out those who are most likely to have a true positive result.

#### **SIGNS OF PROSTATE CANCER**

Having to rush to the toilet to pass urine

Difficulty in passing urine

Passing urine more often than usual

Pain on passing urine

Blood in the urine or semen

Study leader, Dr Tuomas Kilpelainen, said: "I don't think routine screening should be advised until more is known on the adverse effects and costs of screening.

"If a man has urinary tract symptoms and is concerned he could have prostate cancer, the most important thing is to consult a GP or a urologist."

There is currently no organised screening programme for prostate cancer in the UK but men can request a PSA test if they want and demand is increasing.

Professor Julietta Patnick, director of the NHS Cancer Screening Programmes, said: "While the European trial, of which this Finnish study is a part, showed for the first time that prostate screening with PSA can save lives, it also suggested that 49 men would have to be treated in

screening with PSA can save lives, it also suggested that 48 men would have to be treated in order to save one life.

"False positives are an issue for any screening programme, and this Finnish paper is very helpful at gaining an understanding of how they might figure in the context of prostate screening."

Results from both the European trial and a large study being carried out in the US are due this year, Cancer Research UK said.

Professor Peter Johnson, Cancer Research UK's chief clinician, said the paper showed there were "two sides" to using PSA for prostate cancer screening.

"Although for some men detecting prostate cancer early through screening can be life-saving, on the other hand the test will be abnormal for around one man in eight without cancer being detectable at that time.

"For this reason, it is important that men in their 50s and 60s can talk to their doctor about the pros and cons of having a PSA test and only have the test if they feel it is right for them."