

## **HPV TEST FOR ORAL CANCERS MAY IMPROVE PATIENT OUTCOMES AND TREATMENTS**

A new test designed to classify tonsil and throat cancers into one of two groups should help deliver the right treatment to the right patients, according to research being presented at the NCRI Cancer Conference in Liverpool next week.

The RNAscope\* test can be carried out in hospitals and looks for the presence of the Human papillomavirus (HPV) in oropharyngeal cancers\*\*. Doctors will be able to use the results to classify these cancers as HPV positive or negative and offer treatment accordingly.

Researchers at Liverpool and Newcastle universities analysed 79 oropharyngeal tumour samples for HPV using different techniques. They found that the accuracy of classification in the RNAscope test was similar to that of more complex laboratory results.

Previous research has found the risk of death from HPV positive oropharyngeal cancer to be between 50-80 per cent lower than HPV negative tumours but patients are usually younger so may face a lifetime of treatment-related side effects. The researchers hope that, by classifying the HPV status of the cancer, clinicians can offer eligible patients less intensive treatment with reduced side-effects.

They also believe that it will make it easier to recruit patients for clinical trials as they can specifically screen patients for HPV positive or negative cancers. The HPV testing used in clinical trials is not always accurate and no uniform testing standard exists within the NHS. This research has the potential to solve the problem for NHS practice and clinical trials.

Oropharyngeal cancers linked to HPV are on the rise and previous research has shown HPV-related cancers to be biologically different from other head and neck cancers, leading to new avenues of treatment.

Andrew Schache, study author based at the University of Liverpool, said: "Testing the HPV status of cancers will allow us to pick the most appropriate patients for clinical trials and hopefully help to develop new medicines based on a better understanding of these cancers.

"We've shown that the new test, which can easily be carried out in an NHS Pathology laboratory, has the same accuracy and reliability as more complex research laboratory testing. It has the potential to benefit NHS patients because it will help to ensure that they get the most appropriate treatment for their cancer."

Mr Schache, whose research was funded by the Wellcome Trust and Royal College of Surgeons, has been awarded a Richard Hambro prize\*\*\* for this work.

Dr Jane Cope, director of the NCRI, said: "The study was carried out on only a small number of patients so it's important for further work to be done to ensure the reliability of such a test. Until further research confirms these results, the risk would be that the wrong treatment was offered to a patient based on the outcome of the test.

"But the accuracy so far is proving to be very promising and this work will help us to target patients in the most effective way possible, which is essential if we are to improve survival and reduce side effects in treatment."

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### **ENDS**

**For media enquiries please contact Greg Jones in the NCRI press office on 020 3469 8300 or, out-of-hours, the duty press officer on 07050 264 059.**

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### **Notes to Editors**

**View the conference abstract here: <http://www.ncri.org.uk/ncriconference/2012abstracts/abstracts/RH1.html>**

**\*The RNAscope test has been developed by Advanced Cell Diagnostics, California.**

**\*\*Pharynx is the medical name for the throat. The pharynx is divided into 3 parts. The oropharynx is the part of the throat just behind the mouth, including the tonsils and the back of the tongue. Cancers that start in this area are called oropharyngeal cancers.**

**\*\*\*The Richard Hambro prizes are bursaries awarded to UK PhD students by Cancer Research UK and supported by a donation from the Joint British Cancer Charities.**

**For more information on mouth cancers, please visit:**

**<http://cancerhelp.cancerresearchuk.org/type/mouth-cancer/about/>**

**[www.ncri.org.uk/ncriconference](http://www.ncri.org.uk/ncriconference)**

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### **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 eighth annual NCRI Cancer Conference is taking place from 4–7 November 2012 at the BT Convention Centre in Liverpool. For more information visit [www.ncri.org.uk/ncriconference](http://www.ncri.org.uk/ncriconference)

### **About the NCRI**

The National Cancer Research Institute (NCRI) was established in April 2001. It is a UK-wide partnership between the government, charity and industry which promotes co-operation in cancer research among the 22 member organisations for the benefit of patients, the public and the scientific community. For more information visit [www.ncri.org.uk](http://www.ncri.org.uk)

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; The Wellcome Trust; Welsh Government (National Institute for Social Care and Health Research); and Yorkshire Cancer Research.

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