

A new pathway for cancer gene testing successfully completes pilot

Press release

Embargoed until 2.30pm on Wednesday 22nd January 2014

The Royal Marsden NHS Foundation Trust has completed a six-month pilot of a new 'oncogenetic' gene testing pathway which is much faster and less costly than standard gene testing pathways.

More than 100 Royal Marsden cancer patients have now benefitted from *BRCA1* and *BRCA2* gene tests through the new pathway since the pilot began in July 2013.

The 'oncogenetic' pathway brings gene testing directly to the patient through their existing oncology appointments. Previously, patients could only have a gene test via referral to genetics departments.

The 'oncogenetic' pathway allows members of the cancer team who have completed online training to order gene tests for eligible patients directly, but retains the flexibility to refer patients to genetics if more detailed discussions will be helpful. Any patient found to have a gene mutation is seen by a geneticist. Those with normal results can be referred in the standard manner, if required. This represents a more patient-centred, flexible gene testing service. It also allows more people to have access to gene testing.

The gene testing was performed by TGLclinical, a laboratory established with funding from The Royal Marsden Cancer Charity and The Institute of Cancer Research, London.

TGLclinical has state-of-the-art gene sequencing equipment which can do many more tests, much faster and at much lower cost than traditional testing methods.

Professor Nazneen Rahman, Head of the Cancer Genetics Clinical Unit at The Royal Marsden and Head of Genetics at The Institute of Cancer Research (ICR), said:

"Using new sequencing technologies and the 'oncogenetic' testing pathway we can make gene testing accessible to many more people. We are delighted that the feedback from patients and clinicians in the pilot has been overwhelmingly positive.

In 2013 NICE recommended people with >10% chance of having a mutation in either the *BRCA1* or *BRCA2* gene should be offered testing. This includes >10,000 cancer patients per year. However, limited capacity and high costs of traditional gene testing pathways limits the *BRCA1* and *BRCA2* testing doctors are currently able to provide for their patients.

"The oncogenetic gene testing pathway could be used to deliver the NICE recommendations cost-effectively" said Professor Rahman.

Professor Martin Gore, Medical Director of the Royal Marsden NHS Foundation Trust and one of the oncologists who participated in the pilot, said:

“Knowing whether or not a patient has a gene mutation is an important part of making personalised treatment plans. Patients are also increasingly aware of the value of gene testing and more and more patients are requesting testing. The ‘oncogenetic’ pathway makes gene testing quicker and simpler but still provides input from genetics when we need it. Many of our patients have already benefitted as a result of being able to have a gene test. The Royal Marsden is delighted we can offer this testing to our patients.”

The new laboratory test and clinical testing pathway are now ready for roll-out to other hospitals and a second pilot involving more centres is in planning.

“Ultimately we hope that the clinical and technological advancements we are developing will be able to benefit patients anywhere in the NHS” said Professor Rahman.

- Ends -

Contact

Belinda Lock
Senior Press Officer
The Royal Marsden
belinda.lock@rmh.nhs.uk
020 7808 2605

Notes to editors

The set-up of the TGLclinical laboratory was funded by The Royal Marsden Cancer Charity and the Institute of Cancer Research, London. The oncogenetic pathway pilot study was funded by The Royal Marsden Cancer Charity and The Royal Marsden/ICR NIHR Biomedical Research Centre. The new gene test and oncogenetic clinical pathway were developed by the Mainstreaming Cancer Genetics programme (www.mcgprogramme.com) which is funded by the Wellcome Trust.

About The Royal Marsden

[The Royal Marsden](http://www.royalmarsden.nhs.uk) opened its doors in 1851 as the world’s first hospital dedicated to cancer diagnosis, treatment, research and education.

Today, together with its academic partner, The Institute of Cancer Research (ICR), it is the largest and most comprehensive cancer centre in Europe treating over 50,000 patients every year. It is a centre of excellence with an international reputation for groundbreaking research and pioneering the very latest in cancer treatments and technologies. The Royal Marsden also provides community services in the London boroughs of Sutton and Merton and in June 2010, along with the ICR, the Trust launched a new academic partnership with Mount Vernon Cancer Centre in Middlesex.

Since 2004, the hospital’s charity, The Royal Marsden Cancer Charity, has helped raise over £100 million to build theatres, diagnostic centres, and drug development units.

Prince William became President of The Royal Marsden in 2007, following a long royal connection with the hospital.

www.royalmarsden.nhs.uk

About The Institute of Cancer Research, London

[The Institute of Cancer Research](https://www.icr.ac.uk), London, is one of the world's most influential cancer research institutes.

Scientists and clinicians at The Institute of Cancer Research (ICR) are working every day to make a real impact on cancer patients' lives. Through its unique partnership with The Royal Marsden NHS Foundation Trust and 'bench-to-bedside' approach, the ICR is able to create and deliver results in a way that other institutions cannot. Together the two organisations are rated in the top four cancer centres globally.

The ICR has an outstanding record of achievement dating back more than 100 years. It provided the first convincing evidence that DNA damage is the basic cause of cancer, laying the foundation for the now universally accepted idea that cancer is a genetic disease. Today it leads the world at isolating cancer-related genes and discovering new targeted drugs for personalised cancer treatment.

As a college of the University of London, the ICR provides postgraduate higher education of international distinction. It has charitable status and relies on support from partner organisations, charities and the general public.

The ICR's mission is to make the discoveries that defeat cancer.

www.icr.ac.uk

About the Wellcome Trust

The Wellcome Trust is a global charitable foundation dedicated to achieving extraordinary improvements in human and animal health. It supports the brightest minds in biomedical research and the medical humanities. The Trust's breadth of support includes public engagement, education and the application of research to improve health. It is independent of both political and commercial interests.

www.wellcome.ac.uk