

PRESS RELEASE

Friday 4 November 2016

TUMOUR CELLS IN BLOOD SAMPLES COULD PREDICT PROSTATE CANCER SPREAD

RESEARCHERS have found a group of circulating tumour cells in prostate cancer patient blood samples which are linked to the spread of the disease, according to new research* presented at the National Cancer Research Institute (NCRI) Cancer Conference in Liverpool.

This is the first time these cell types have been shown to be a promising marker for prostate cancer spread.

In a study of around 80 samples from men with prostate cancer, scientists at the Barts Cancer Institute at Queen Mary University looked for cells that were gaining the ability to migrate and invade through the body.**

Samples with more of these cells were more likely to come from patients whose cancer had spread or was more aggressive.

This means that, in the future, these particular cells could potentially be used as a marker to monitor prostate cancer patients and predict if the disease is going to spread – alongside other monitoring techniques.

There are around 46,500 new cases of prostate cancer each year in the UK, and around 11,000 people die from the disease each year.

Dr Yong-Jie Lu, lead author from QMUL's Barts Cancer Institute, said: "Our research shows that the number of these specific cells in a patient's sample is a good indicator of prostate cancer spreading. By identifying these cells, which have gained the ability to move through the body, we have found a potential new way to monitor the disease.

"If we're able to replicate these studies in larger groups of people, we may be able to one day predict the risk of someone's cancer spreading so they can make more informed treatment decisions."

Dr Chris Parker, Chair of the NCRI's Prostate Cancer Clinical Studies Group, said: "There's a need to develop better tests to identify and monitor men with aggressive prostate cancer. This research has found a promising new marker that could one day make it to the clinic to guide treatment decisions."

This research was funded by Orchid Cancer Appeal, ANGLE plc and Chinese Scholarship Council. The scientists used a highly innovative cell separation technology Parsortix™, developed by UK company ANGLE plc that is able to capture the circulating tumour cells.

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Notes to editor:

* Abstract: Capture of circulating tumour cells with epithelial and mesenchymal features for prostate cancer prognosis

<http://abstracts.ncri.org.uk/abstract/capture-of-circulating-tumour-cells-with-epithelial-and-mesenchymal-features-for-prostate-cancer-prognosis/>

** This is known as epithelial to mesenchymal transition (EMT).

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About the NCRI

The National Cancer Research Institute (NCRI) is a UK-wide partnership of cancer research funders, established in 2001. Its 19 member organisations work together to accelerate progress in cancer-related research through collaboration, to improve health and quality of life.

NCRI works to coordinate research related to cancer, to improve the quality and relevance of the research and to accelerate translation of the research into clinical practice for the benefit of patients.

NCRI Partners are: Biotechnology and Biological Sciences Research Council; Bloodwise; Breast Cancer Now; Cancer Research UK; Children with Cancer UK, Department of Health; Economic and Social Research Council (ESRC); Macmillan Cancer Support; Marie Curie; Medical Research Council (MRC); Northern Ireland Health and Social Care Public Health Agency (Research & Development Department); Pancreatic Cancer Research Fund; Prostate Cancer UK; Roy Castle Lung Cancer Foundation; Scottish Government Health Directorates (Chief Scientist Office); Tenovus Cancer Care; The Wellcome Trust; Welsh Assembly Government (Health and Care Research Wales); and Worldwide Cancer Research.

For more information visit www.ncri.org.uk

About the NCRI Cancer Conference

The NCRI Cancer Conference is the UK's largest cancer research forum for showcasing the latest advances in British and international oncological research spanning basic and translational studies to clinical trials and patient involvement.

- The conference offers unique opportunities to network and share knowledge by bringing together world-leading experts from all cancer research disciplines.
- The NCRI Cancer Conference is taking place from 6-9 November 2016 at the BT Convention Centre in Liverpool.
- For more information visit conference.ncri.org.uk; Twitter @NCRI_Partners; #NCRI2016

About Queen Mary University of London

Queen Mary University of London (QMUL) is one of the UK's leading universities, and one of the largest institutions in the University of London, with 21,187 students from more than 155 countries.

A member of the Russell Group, we work across the humanities and social sciences, medicine and dentistry, and science and engineering, with inspirational teaching directly informed by our research. In the most recent national assessment of the quality of research, we were placed ninth in the UK (REF 2014).

As well as our main site at Mile End – which is home to one of the largest self-contained residential campuses in London – we have campuses at Whitechapel, Charterhouse Square, and West Smithfield dedicated to the study of medicine, and a base for legal studies at Lincoln's Inn Fields.

We have a rich history in London with roots in Europe's first public hospital, St Barts; England's first medical school, The London; one of the first colleges to provide higher education to women, Westfield College; and the Victorian philanthropic project, the People's Palace at Mile End.

Today, as well as retaining these close connections to our local community, we are known for our international collaborations in both teaching and research.

QMUL has an annual turnover of £350m, a research income worth £125m (2014/15), and generates employment and output worth £700m to the UK economy each year.

About Orchid Cancer Appeal

Orchid Cancer Appeal is one of the UK's leading charities working in the area of prostate, testicular and penile cancers.

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these cancers through funding a world-class research programme, awareness and education campaigns and a range of vital support services.

About ANGLE plc
www.angleplc.com

ANGLE is a specialist medtech company commercialising a disruptive platform technology that can capture cells circulating in blood, such as cancer cells, even when they are as rare in number as one cell in one billion blood cells, and harvest the cells for analysis.

ANGLE's cell separation technology is called the Parsortix™ system and it enables a liquid biopsy (simple blood test) to be used to provide the cells of interest. Parsortix is the subject of granted patents in Europe, the United States, Canada, China and Australia and three extensive families of patents are being progressed worldwide. The system is based on a microfluidic device that captures live cells based on a combination of their size and compressibility. Parsortix has a CE Mark for Europe and FDA authorisation is in process for the United States.

ANGLE has established formal collaborations with world-class cancer centres. These Key Opinion Leaders are working to identify applications with medical utility (clear benefit to patients), and to secure clinical data that demonstrates that utility in patient studies. Details are available here <http://www.angleplc.com/the-company/collaborators/>

The analysis of the cells that can be harvested from patient blood with ANGLE's Parsortix system has the potential to help deliver personalised cancer care offering profound improvements in clinical and health economic outcomes in the treatment and diagnosis of various forms of cancer.

The global increase in cancer to a 1 in 3 lifetime incidence is set to drive a multi-billion dollar clinical market. The Parsortix system is designed to be compatible with existing major medtech analytical platforms and to act as a companion diagnostic for major pharma in helping to identify patients that will benefit from a particular drug and then monitoring the drug's effectiveness.

As well as cancer, the Parsortix technology has the potential for deployment with several other important cell types in the future.

ANGLE stock trades on the AIM market of the London Stock Exchange under the ticker symbol AGL and in New York on the OTC-QX under the ticker symbol ANPCY. For further information please visit: www.angleplc.com

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