Tumor cells in blood samples could predict prostate cancer spread

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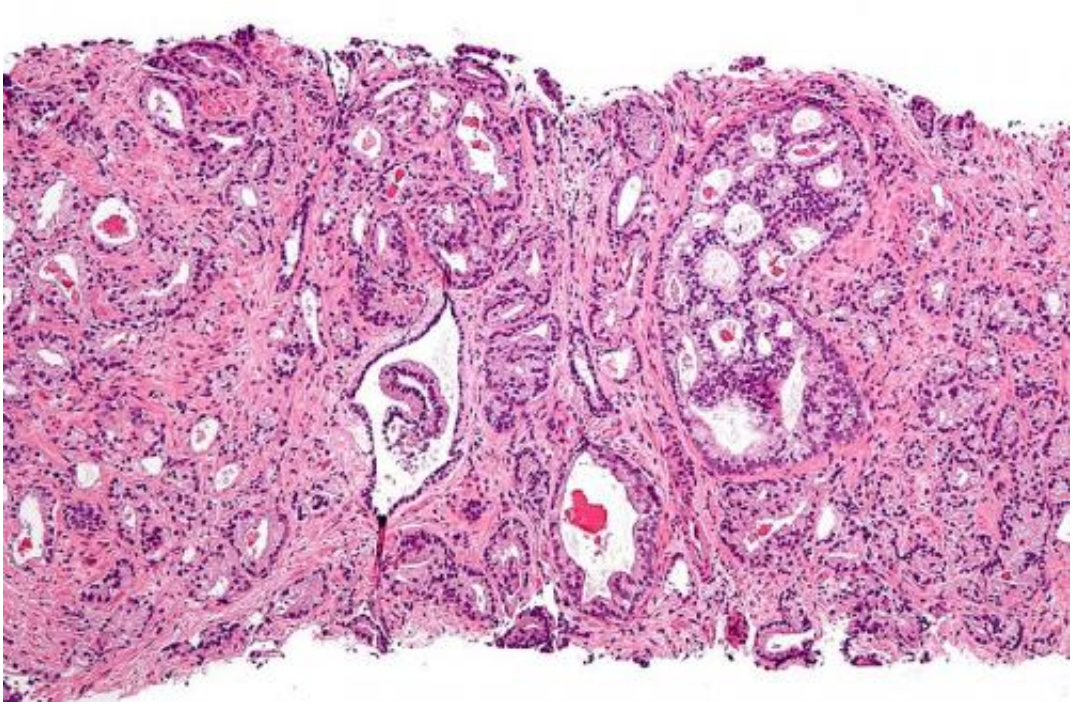

Micrograph showing prostatic acinar adenocarcinoma (the most common form of prostate cancer) Credit: Wikipedia, CC BY-SA 3.0

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.

More information: Abstract: Capture of circulating tumour cells with epithelial and mesenchymal features for prostate cancer prognosis, abstracts.ncri.org.uk/abstract … te-cancer-prognosis/

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