

New technology aids in prostate cancer treatment

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Researchers at Queen's University have developed a new way of performing lab tests that could improve the way doctors manage prostate cancer treatment. It will allow them to identify with unprecedented accuracy losses of a gene called PTEN that is associated with an aggressive group of prostate cancers.

The improved Fluorescence In-Situ Hybridization (FISH) platform uses DNA probes to analyze the three-dimensional space cancer cells occupy in routine clinical microscopic analysis of tissue sections of tumors. It will provide a more accurate way of identifying PTEN loss in biopsies and tissue sections so doctors can better match the type and amount of treatment to the aggressiveness of a tumor.

"The idea is that this test could be used in new cases of <u>prostate cancer</u> to help decide which of the many options is best suited for more aggressive cancers " says Jeremy Squire, who worked with a team of researchers in the Department of Pathology and <u>Molecular Medicine</u>."

The patient treatment from the get-go will be more appropriately planned."

PTEN is found in the nucleus of <u>cancer cells</u> and is considered one of the most important cancer-causing tumor-suppressor genes. If there is loss in the PTEN, it can inhibit the patient's ability to fight the cancer. It plays a critical role in a variety of cancers including prostate, breast, and lung cancers.



PARTEQ Innovations, the technology transfer office of Queen's University has licensed the technology to Cymogen Dx. The company expects to make the technology available to research and clinical markets in the near future.

Provided by Queen's University

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