Will my prostate cancer reoccur? Genetic testing has the answer.

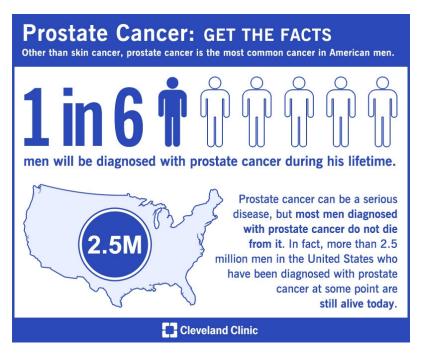
Ghost Written; Published Nov 2014 @ Cancer Answers 123

Genetic testing offers the highest level of personalized results possible, and more and more people are willing to pay top dollar to find out what their genetic code says about them. We have seen many genetic tests come on the market this year to assess an individual's cancer risk.

We know there is a gene that protects some Latin Americans from getting breast cancer. We also know that a man or woman can inherit the HER2 gene, and with it comes a higher risk of getting HER2 breast cancer. Now, a genetic test can be done to identify which men are at risk for a reoccurrence of prostate cancer after having treatment.

The research was published this November in Lancet Oncology. The researchers hope that this advancement will provide a quick and easy-to-use diagnostic tool for prostate cancer. Doctors will be able to identify which men will do well with conservative treatment, like surgery or radiation therapy, and which men will likely need chemotherapy or hormone therapy to resolve prostate cancer.

According to one of the scientists, Dr. Robert Bristow (Princess Margaret Cancer Centre), prostate cancer is "an aggressive disease that will recur 30% to 50% of men due to a hidden microscopic disease." Dr. Bristow talks about the science on YouTube.



The test is performed via biopsy. Tissues are analyzed for DNA abnormalities and oxygen content, and results are available in about 3 days. A high oxygen value is a contributing factor in the spread of prostate cancer, which means extra treatment may be necessary for the patient.

The study found that men who have the lowest risk for prostate cancer recurrence (7%) received image-guided radiation therapy (IGRT) and had low oxygen content and minimal DNA changes. Alternatively, men with high oxygen and more DNA changes after IGRT had the highest risk of recurrence (more than 50%). These men will benefit most from a genetic test for prostate recurrence because the doctor can personalize their care sooner to include more intense cancer treatment.

The test is not yet readily available in clinics worldwide, but the doctors hope to complete the next stage of validation within 3 to 5 years.

Learn more about <u>prostate cancer</u> in our patient library.