Wake Forest University Health Sciences

Office of Technology Asset Management

http://www1.wfubmc.edu/otam/

Featured Technology

Five Unique Genetic Variants that Predict Prostate Cancer Risk

TECHNOLOGY DESCRIPTION:

Researchers from Wake Forest University, Johns Hopkins University and Karolinska Institute have discovered five unique single nucleotide polymorphisms (SNP) that when combined can predict Prostate cancer risk in men.

Prostate cancer is the most frequently diagnosed malignancy in men and the second-leading cause of cancer death. More than 650,000 men are diagnosed with prostate cancer worldwide every year . The Prostate Specific Antigen test is the only current test used to predict prostate cancer. The accuracy of PSA testing is debatable since 50% of patients who test positive undergo unnecessary prostatectomy surgery. The use of genetic markers to predict prostate cancer risk along with PSA values will significantly reduce the number of surgeries and improve the quality of life of patients.

WAKE FOREST UNIVERSITY HEALTH SCIENCES

DIAGNOSTIC APPLICATIONS:

- First unique 5 SNP panel that predicts prostate cancer risk
- Men who have five or more of the six factors associated with prostate cancer (specific genotypes at five SNPs and a positive family history for the disease) have an odds ratio of 9.46 for prostate cancer
- SNP's have been validated in multiple population from Sweden and the United States
- This will be the first test of its kind that can identify men at an elevated risk for Prostate Cancer

ADDITIONAL INFORMATION:

N ENGL J MED. 2008; 358:910-9

MISSION

To maximize the value of Wake Forest University's intellectual assets through the creation of novel and effective models for commercializing technology.

Licensing Contact:

Dean Stell

Email: dstell@wfubmc.edu
Phone: (336) 716-3729

Inventors : Dr Jianfeng Xu , Dr William B Isaacs and Dr Henrik Gronberg