

SNPs linked with prostate cancer confirmed in Japanese men too

September 2 2009

A third of the previously identified single-nucleotide polymorphisms, or SNPs, associated with prostate cancer in men of European or African ancestry were also associated with prostate cancer in a Japanese population, according to a new study published online September 2 in the *Journal of the National Cancer Institute*.

Genome-wide association studies have primarily been performed in populations of <u>European ancestry</u>, but little is known if the associations discovered in one population are relevant for other populations.

In this study, Matthew L. Freedman, M.D., of the Department of Medical Oncology at the Dana-Farber Cancer Institute in Boston, and colleagues evaluated 23 SNPs previously reported to be associated with prostate cancer risk and clinical covariates (tumor aggressiveness and age at diagnosis, for example) in almost 1350 Japanese men (311 case subjects and 1035 control subjects).

A total of seven SNPs were associated with increased risk of prostate cancer in this study population, but no associations were found with disease aggressiveness or age at diagnosis. Men with six or more risk alleles had substantially higher risk for prostate cancer than men with two or fewer alleles.

"This study supports previous evidence showing that risk estimates for some variants can differ across populations," the authors write.

"Examining variants (and their interactions with other variables) within



and between populations will likely provide insight into the dramatically different incidence rates of prostate cancer."

In an accompanying editorial, John P.A. Ioannidis, M.D., of the Department of Hygiene and Epidemiology, University of Ioannina School of Medicine in Greece, said that these data reinforce the idea that discovered variants are often simply population-specific markers that need far more study to confirm as functional culprits.

However, the editorialist points out, population diversity could have implications about the use of information from these studies for predictive purposes. "...this is just the beginning," the editorialist writes. "The findings need to be replicated again and then again validated."

Source: <u>Journal of the National Cancer Institute</u> (<u>news</u>: <u>web</u>)

Citation: SNPs linked with prostate cancer confirmed in Japanese men too (2009, September 2) retrieved 20 May 2023 from https://medicalxpress.com/news/2009-09-snps-linked-prostate-cancer-japanese.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.