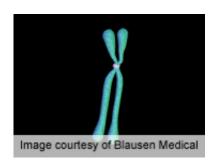


## Polygenic risk score helpful for women with familial breast CA

18 December 2012



For women affected by familial breast cancer, a polygenic risk score based on 22 genomic variants can identify women at high-risk of breast cancer, according to a study published in the Dec. 10 issue of the *Journal of Clinical Oncology*.

carriers in the top quartile of polygenic risk were significantly more likely to have had early-onset breast cancer (before age 30: odds ratio, 3.37) and had a higher rate of second breast cancer (odds ratio, 1.96).

"Genetic testing for common risk variants in women undergoing assessment for familial breast cancer may identify a distinct group of high-risk women in whom the role of risk-reducing interventions should be explored," the authors write.

More information: Abstract
Full Text (subscription or payment may be required)
Editorial

(HealthDay)—For women affected by familial breast cancer, a polygenic risk score based on 22 genomic variants can identify women at high-risk of breast cancer, according to a study published in the Dec. 10 issue of the *Journal of Clinical Oncology*.

Sarah Sawyer, M.D., of the Peter MacCallum Cancer Centre in Melbourne, Australia, and colleagues identified 1,143 women with breast cancer from a larger screening of women at high risk for hereditary breast cancer who underwent *BRCA1* and *BRCA2* mutation screening. Genotyping was performed for 22 breast cancerassociated genetic variants, and a polygenetic risk score was calculated as the sum of the log odds ratios for each allele. Scores were compared with those of 892 controls.

The researchers found that, compared with controls, women with a family history of breast cancer had a highly significant increase of risk alleles. Compared with *BRCA*-mutation carriers, women who were *BRCA1*- or *BRCA2*-negative had a significantly increased polygenic risk. Compared with women with low polygenic risk, non-*BRCA1/2* 

Copyright © 2012 HealthDay. All rights reserved.



APA citation: Polygenic risk score helpful for women with familial breast CA (2012, December 18) retrieved 24 July 2022 from <a href="https://medicalxpress.com/news/2012-12-polygenic-score-women-familial-breast.html">https://medicalxpress.com/news/2012-12-polygenic-score-women-familial-breast.html</a>

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.