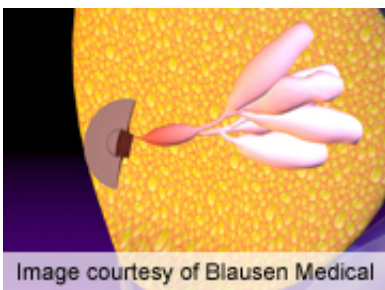


Automated variation measure indicates risk of breast cancer

July 6 2012



A variation measure, estimated from an automated algorithm of the grayscale variation within a mammogram, correlates with the risk of breast cancer as strongly or more so than percent density, according to a study published online July 3 in the *Journal of the National Cancer Institute*.

(HealthDay) -- A variation measure, estimated from an automated algorithm of the grayscale variation within a mammogram, correlates with the risk of breast cancer as strongly or more so than percent density (PD), according to a study published online July 3 in the *Journal of the National Cancer Institute*.

John J. Heine, Ph.D., from the H. Lee Moffitt Cancer Center & Research Institute in Tampa, Fla., and colleagues developed an automated, objective measure of grayscale value variation within a mammogram, examined its correlation with breast cancer, and compared its performance with PD. Data were utilized from three studies: a case-cohort study involving 217 cases and 2,094 non-case individuals, and

two case-control studies involving 928 and 246 cases matched with 1,039 and 516 controls, respectively.

The researchers found that, in all three studies, the variation measure correlated significantly with the risk of breast cancer (highest versus lowest quartile: hazard ratio, 7.0; odds ratio, 10.7; odds ratio, 2.6; all P_{trend} breast cancer (highest versus lowest quartile: relative risk, 3.6 and 2.3, respectively).

"These results suggest that the variation measure is a viable automated mammographic [density](#) measure that is consistent across film and digital imaging platforms and may be useful in the clinical setting for risk assessment," the authors write.

More information: [Abstract](#)
[Full Text \(subscription or payment may be required\)](#)

Copyright © 2012 [HealthDay](#). All rights reserved.

Citation: Automated variation measure indicates risk of breast cancer (2012, July 6) retrieved 26 April 2024 from
<https://medicalxpress.com/news/2012-07-automated-variation-breast-cancer.html>

| |
|--|
| <p>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.</p> |
|--|