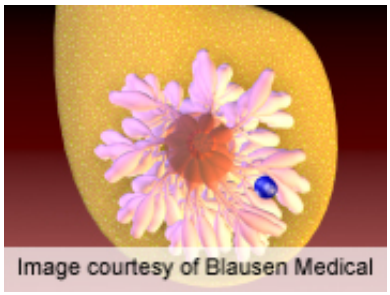
Intrinsic imaging phenotypes ID breast cancer recurrence

5 August 2014



One author disclosed financial ties to Hologic.

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

(HealthDay)—Computer-extracted morphologic, kinetic, and tumor heterogeneity dynamic contrast material-enhanced (DCE) magnetic resonance (MR) imaging features can help predict the likelihood of breast cancer recurrence, according to a study published in the August issue of *Radiology*.

Ahmed Bilal Ashraf, Ph.D., from the University of Pennsylvania Perelman School of Medicine in Philadelphia, and colleagues retrospectively analyzed DCE MR images of the breast in 56 women (mean age, 55.6 years) diagnosed with estrogen receptor-positive breast cancer between 2005 and 2010. A gene expression assay was used to score the likelihood of recurrence of primary tumors. For each tumor, a multiparametric imaging phenotype vector was extracted using quantitative morphologic, kinetic, and spatial heterogeneity features.

The researchers observed a moderate correlation (P recurrence score. Recurrence risk was predicted by DCE MR imaging features as determined by the surrogate assay, with an area under the receiver operating characteristic curve of 0.77 (P

"These imaging biomarkers could ultimately help guide treatment decisions," the authors write.