

# Gene-based test identifies poor-prognosis colon cancers

9 March 2012



population of *BRAF* mutated-like *KRAS* mutants and double wild-type patients with similarly [poor prognosis](#)," the authors write. "This suggests a common biology between these tumors and provides a novel classification tool for cancers, adding prognostic and biologic information that is not captured by the mutation status alone."

Several authors disclosed financial relationships with Pfizer.

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

(HealthDay) -- A sensitive and specific gene-based classifier can be used to identify *BRAF* mutant colon cancer tumors and a subpopulation of *BRAF* wild-type tumors with poor prognosis, according to a study published March 5 in the *Journal of Clinical Oncology*.

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

In an effort to develop a gene expression-based classifier to identify *BRAF* mutants with high sensitivity, Vlad Popovici, M.D., of the Swiss Institute of Bioinformatics in Lausanne, and colleagues evaluated differential gene expression between *BRAF* mutant and non-*BRAF*, non-*KRAS* mutant cancers from 668 stage II and III [colon cancer](#) samples.

The researchers developed a 64 gene-based classifier which identified *BRAF* mutant tumors with 96 percent sensitivity and 86 percent specificity. A subpopulation of patients who were *BRAF* wild type (30 percent of *KRAS* mutants, 13 percent of double wild type) were found to have poor overall survival and poor survival after relapse, similar to that seen in patients with *BRAF* mutations.

"A characteristic pattern of gene expression is associated with and accurately predicts *BRAF* mutation status and, in addition, identifies a

APA citation: Gene-based test identifies poor-prognosis colon cancers (2012, March 9) retrieved 20 September 2020 from <https://medicalxpress.com/news/2012-03-gene-based-poor-prognosis-colon-cancers.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.*