

New potential therapeutic target for breast cancer

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Journal of Interferon & Cytokine Research, the Official Journal of the ISICR, is the authoritative peer-reviewed journal published monthly in print and online that covers all aspects of interferons and cytokines from basic science to clinical applications. Credit: Copyright 2011, Mary Ann Liebert, Inc., publishers

A possible new target for breast cancer therapy comes from the discovery that the Tyk2 protein helps suppress the growth and metastasis of breast tumors, as reported in *Journal of Interferon & Cytokine Research*, a peer-reviewed journal published by Mary Ann Liebert, Inc.

Qifang Zhang and Andrew Larner, Virginia Commonwealth University (Richmond, VA), and colleagues from VCU, Temple University School

of Medicine (Philadelphia, PA), Jagiellonian University (Krakow, Poland), and Miyazaki University (Japan), present data demonstrating that mice lacking Tyk2 tyrosine kinase that are injected with breast cancer cells exhibit enhanced breast tumor growth and [metastasis](#) compared to mice with normal Tyk2 protein expression.

The authors conclude that altered Tyk2 expression affects the ability of the animals' immune systems to respond to the tumor challenge. They present the evidence in the article entitled, "The Role of Tyk2 in Regulation of [Breast Cancer](#) Growth," and they describe the role of Tyk2 in immunity-related biochemical signaling pathways.

"This study suggests that boosting Tyk2 activity may be beneficial for arresting breast tumor growth," says Ganes C. Sen, PhD, Chairman, Department of Molecular Genetics, Cleveland Clinic Foundation and Co-Editor-in-Chief of *Journal of Interferon & Cytokine Research*.

More information: The article is available free online for the next week at <http://www.liebertpub.com/jir>.

Provided by Mary Ann Liebert, Inc.

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