

# Pattern recognition receptors may be potent new drug targets for immune-mediated diseases

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Chronic inflammation caused by activation of the human immune system contributes to a large and rapidly growing list of diseases including some cancers, cardiovascular disease, metabolic disorders, and autoimmune diseases. Significant advances in understanding the role that the cytokine-mediated JAK/STAT signaling network and pattern recognition receptors (PRRs) play in regulating immune responses and their potential as novel targets for developing potent new therapies are presented in a Review article in *Journal of Interferon & Cytokine Research* (JICR).

Brendan John Jenkins, MIMR-PHI Institute of Medical Research (Clayton, Victoria, Australia), reviews the latest research and highlights key findings that help explain how cross-talk between cell signaling networks mediated by cytokines and PRRs can impact the development of a variety of disease processes. The authors describe the potential therapeutic implications of targeting these critical networks in the article "Transcriptional Regulation of Pattern Recognition Receptors by JAK/STAT Signaling, and the Implications for Disease Pathogenesis."

"Dr. Jenkins provides an important new perspective on the role of pattern recognition receptors in disease pathogenesis," says JICR Co-Editor-in-Chief Thomas A. Hamilton, PhD, Chairman, Department of Immunology, Cleveland Clinic Foundation, Ohio.

The article is available free on the *Journal of Interferon & Cytokine Research* website until November 15, 2014.

**More information:** Jenkins Brendan John. *Journal of Interferon & Cytokine Research*. October 2014, 34(10): 750-758. [DOI: 10.1089/jir.2014.0081](https://doi.org/10.1089/jir.2014.0081).

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