New approaches to maximize the antitumor activity of interferon

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Interferons have antitumor activity and have been used to treat a variety of malignancies, including colorectal and ovarian cancers. However, their effectiveness varies. A clearer understanding of the role of interferon in immune-mediated tumor cell death and how its antitumor

effects could be optimized are presented in a comprehensive Review article published in *Journal of Interferon & Cytokine Research*.

In the article "Immunomodulatory Effects of Interferons in Malignancies," Joseph Bekisz, Yuki Sato, Chase Johnson, Syed Husain, Raj Puri, and Kathryn Zoon, from the National Institutes of Health and the U.S. Food and Drug Administration, Bethesda, MD, discuss the implications of recent study results using interferons to treat cancer. They explore the mechanisms of interferon signaling that lead to tumor cell death and propose strategies for enhancing the therapeutic, anti-cancer effects of interferon. The authors also suggest directions for future research, including alternative methods of delivering interferon-activated immune cells.

"Interferon has long been used to treat certain types of cancer, but the mechanistic basis of successful therapy has remained elusive," says Co-Editor-in-Chief Ganes C. Sen, PhD, Chairman, Department of Molecular Genetics, Cleveland Clinic Foundation. "Here, the authors summarize results from a number of new investigations, helping to clarify our knowledge."

More information: The article is available free online on the *Journal of Interferon & Cytokine Research* website.

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