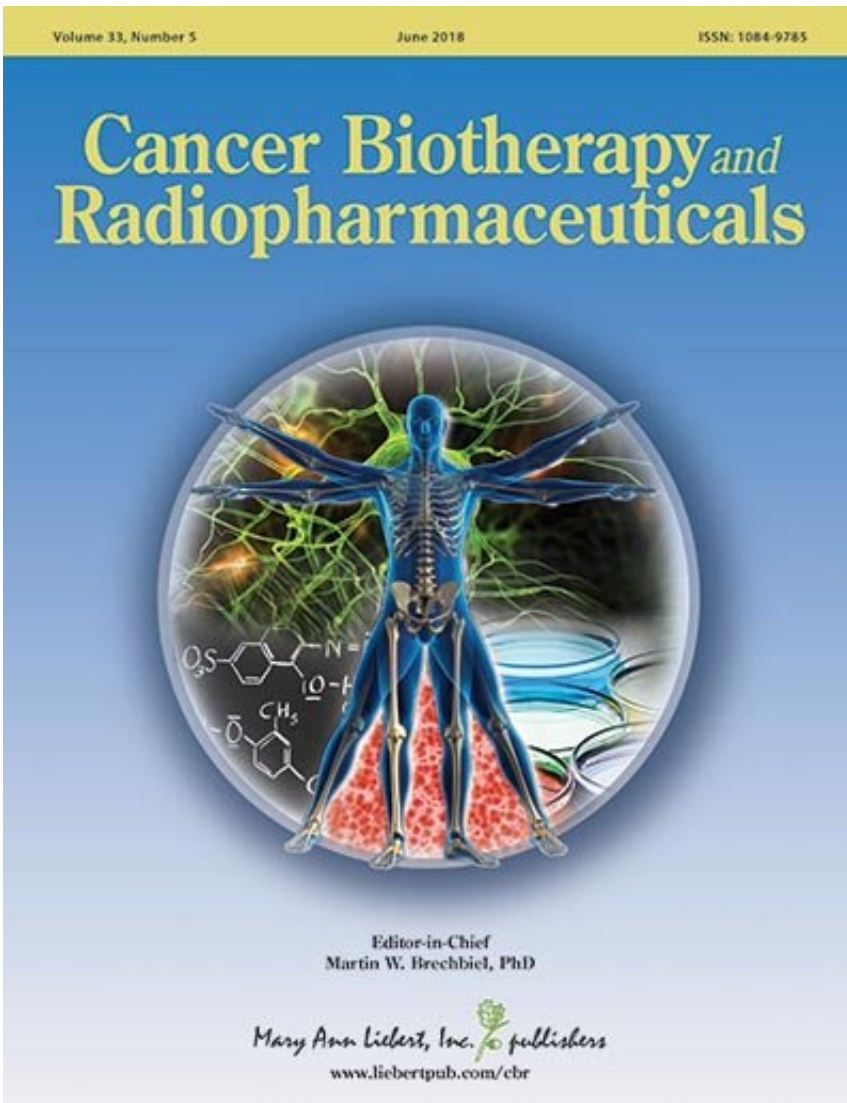


What role do inflammatory cytokines play in creating T cell exhaustion in cancer?

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A better understanding of the role secreted inflammatory cytokines play in the tumor microenvironment that results in the differentiation of effector T cells into exhausted T cells points to possible approaches to improve the antitumor activity of T cells and to intervene in T cell exhaustion. A new article exploring the expression patterns of inflammatory cytokines in tumor tissues and the blood of cancer patients and seeking to understand how exhausted T cells lose their antitumor properties is published in *Cancer Biotherapy and Radiopharmaceuticals*.

In the review article, "The Role of Inflammatory Cytokines in Creating T Cell Exhaustion in Cancer," Hedayatollah Shirzad and colleagues from Shahrekord University, Shahrekord, Iran report on multiple studies that illustrate a direct role for [inflammatory cytokines](#) in the creation of [cell exhaustion](#) through multiple pathways. The researchers recommend a greater focus on efforts to reprogram exhausted T cells in the early stages and alternatively, therapeutic interventions such as anti-inflammation therapy.

"Clearly there is room and need for further understanding of the role and functional consequences of exhausted T cells as they relate to impacting on the immune system, how that interplays with outcomes in cancer therapies, and how advantages might be taken to improve existing therapeutic strategies," says *Cancer Biotherapy and Radiopharmaceuticals* Editor-in-Chief Martin W. Brechbiel, Ph.D.

More information: Milad Sabzevary-Ghahfarokhi et al, The Role of Inflammatory Cytokines in Creating T Cell Exhaustion in Cancer, *Cancer Biotherapy and Radiopharmaceuticals* (2018). [DOI: 10.1089/cbr.2018.2449](#)

Provided by Mary Ann Liebert, Inc

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