Special Issue

NK Cell-Mediated Immune Responses and Tumor Defense

Message from the Guest Editors

Natural killer (NK) cells are crucial for innate immunity as they combat cancer. They can identify and destroy earlystage cancer cells without exposure, lacking MHC class I molecules. Additionally, NK cells modify the tumor microenvironment by attracting other immune cells and boosting the immune response by activating CD8 T cells and antigen-presenting cells. Their potential to complement immunotherapy is immense, offering promising applications across multiple cancer types and addressing metastases. Exploring methods to enhance their ability to kill cancers, activate CD8 T cells and develop new therapeutic approaches is crucial. A thorough understanding of this process is vital for creating innovative therapeutic strategies, such as using specific cytokines to activate NK cells or engineering them with chimeric antigen receptors (CARs). We encourage the submission of emerging strategies related to NK cell engagers, signaling, memory, cancer immunotherapy and improving their effectiveness against tumor growth and metastasis. We also welcome the submission of review articles on these critical topics for inclusion in this Special Issue.

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Vaccines (ISSN 2076-393X) has had a 6-year history of publishing peer-reviewed state of the art research that advances the knowledge of immunology in human disease protection. Immunotherapeutics, prophylactic vaccines, immunomodulators, adjuvants and the global differences in regulatory affairs are some of the highlights of the research published that have shaped global health. Our open access policy allows all researchers and interested parties to immediately scrutinize the rigorous evidence our publications have to offer. We are proud to present the work and perspectives of many to contribute to future decisions concerning human health.

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