Special Issue

Recent Prospectives in CAR Tbased Therapy for Solid and Hematological Malignancies

Message from the Guest Editors

CAR T-cell therapy has been demonstrated to be effective in CD19-positive blood cancers; thus, this offers great hope for a wide range of aggressive tumors. Despite the great promise of CAR T-cell-based therapy, several challenges still exist such as cancer cells heterogeneity, abnormal signaling pathways involved in tumor progression, antigen escape, the hostile inhibitory tumor microenvironment, and T cells' dvsfunction/exhaustion. All of these issues must be addressed before a full clinical application can begin. More recently, another T-cell therapy has taken hold. and we hope in this Special issue can provide advances in T cells engineered with Fc\(\mathbb{Z}\)-chimeric receptors (CRs) redirected against solid tumors and blood malignancies. We also intend to highlight the most recent clinical trials with a focus on the rationale for using different types of CAR T cells, emphasizing the various ways in which such trials are designed to overcome specific hurdles, as well as how outcomes are reflected in improving therapeutic arsenals against various cancer types.

- CAR
- Fc⊠-CR
- T cells
- solid tumors
- blood malignancies

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Biomedicines (ISSN 2227-9059) is an open access iournal devoted to all aspects of research on human health and disease, the discovery and characterization of new therapeutic targets, therapeutic strategies, and research of naturally driven biomedicines, pharmaceuticals, and biopharmaceutical products. Topics include pathogenesis mechanisms of diseases, translational medical research, biomaterial in biomedical research, natural bioactive molecules, biologics, vaccines, gene therapies, cell-based therapies, targeted specific antibodies, recombinant therapeutic proteins, nanobiotechnology driven products, targeted therapy, bioimaging, biosensors, biomarkers, and biosimilars. The journal is open for publication of studies conducted at the basic science and preclinical research levels. We invite you to consider submitting your work to Biomedicines, be it original research, review articles, or developing Special Issues of current key topics.

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