Special Issue

CAR-T Cell Therapy in Hematological Malignancies

Message from the Guest Editor

Chimeric Antigen Receptor T-cell (CAR-T) therapy has yielded significant success in treating hematological malignancies, marking a transformative advancement in B-lineage malignancies. The key focus to advance CAR-T cell therapy in B-lineage-derived cancers lies in improving the product quality, duration of engraftment and combinatorial targeting as well as the incorporation of complementary therapies to successfully treat patients with CD19- and BCMA antigen loss. These strategies aim to address challenges such as antigen escape and tumor heterogeneity, which contribute to treatment resistance. Novel technological innovations are required to refine the effectiveness of CAR-T cells, potentially overcoming the main reasons for CAR treatment failure. Ongoing efforts are directed towards strategies and technologies that can overcome these limitations and pave the way for its broader and more potent application in the realm of cancer therapeutics. In this Special Issue, we aim to showcase new advancements in CAR-T cell therapy for the treatment of hematological cancers, and especially want to highlight translational work in lymphoid and myeloid diseases.

Guest Editor

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