

Special Issue

Resistance of Hematological Malignancies to CAR T Cell Therapy

Message from the Guest Editor

Remarkable clinical responses have been observed in patients with hematological malignancies such as non-Hodgkin's lymphoma (NHL), Acute Lymphoblastic Leukemia (ALL), and Multiple Myeloma (MM) using modern immune-based approaches such as CD19CAR redirected adoptive T cell therapy (CAR T cell). Although very effective, innovative strategies are needed to improve CD19CAR T cell therapy, both in responding patients and in instances where tumors may have varying degrees of preexisting or acquired resistance to T cell-delivered apoptotic death signals. Understanding these mechanisms and obtaining strategies to render tumor cells more receptive to T cell killing could result in better response rates, reducing the intensity of the conditioning regimen or even the number of infused CAR T cells needed. This Special Issue focuses on the inherent or acquired resistance mechanisms of tumor cells which render them unresponsive to tumor-specific and highly effective CAR T cells and the design of novel strategies to render tumors sensitive to apoptotic death signals delivered by CAR T cells, thus creating a proapoptotic tumor microenvironment (immune-sensitization).

Guest Editor

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About the Journal

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Cells has become a solid international scientific journal that is now indexed on SCIE and in other databases. We have successfully introduced a special issues format so that these issues serve as mini-forums in specific areas of cell science. *Cells* encourages researchers to suggest new special issues, serve as special issues editors, and volunteer to be reviewers. Our main focus will remain on cell anatomy and physiology, the structure and function of organelles, cell adhesion and motility, and the regulation of intracellular signaling, growth, differentiation, and aging. We are open to both original research papers and reviews.

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