Special Issue

Similarities and Differences between Chimeric Antigen Receptor and T Cell Receptor Signaling

Message from the Guest Editor

T cell-based immunotherapy has revolutionized the treatment of malignant B hemopathies, and its future advances could lead to effects on solid cancers. Its optimization requires a deep knowledge of the molecular mechanisms that regulate the signaling of engineered antigen T cell receptors, which are either synthetic antigen T cell receptors (TCRs) or chimeric antigen receptors (CARs). Several recent studies have highlighted the similarities and differences between the signaling of these two types of receptors. In addition, we are going through a period of fascinating discoveries in the field of CAR signaling, learning that costimulatory domain, the transmembrane region or the length of the linkers have a major impact on CAR efficiency, probably by changing the trafficking and signaling of the receptor. We are pleased to invite you to participate in this Special Issue that will improve our understanding of molecular mechanisms that govern TCR and various CARs trafficking and signaling. This Special Issue includes original experimental data, literature reviews, and comments on recent developments in the field.

Guest Editor

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Message from the Editor-in-Chief

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