

Special Issue

Metabolic Reprogramming of Immune Cells in Tumor Microenvironment

Message from the Guest Editor

Recent advances over the last decade in understanding cellular metabolism has brought the field of immunometabolism to the forefront. The complex nature of tumor microenvironment is characterized by low pH, hypoxic conditions, as well as the depletion of crucial nutrients (such as glucose, glutamine, amino acids and fatty acids). This results in a tug-of-war for the available nutrients between immune and cancer cells and a state of “metabolic competition”. These metabolic adaptations in tumor and immune cells may induce new physiological links and potential immunoregulatory pathways. Moreover, current research in this field has helped to tune metabolic pathways, in both cancer cells and immune cells, representing an indispensable determinant of the cell's decision towards its viability, differentiation, function, and even fate. In this Special Issue, we invite researchers to contribute their valuable work on this exciting and intriguing field “immunometabolism”. We seek interesting research on the role of metabolic pathways and cellular metabolites, in relation to immune cells that are integral part of anti- or pro-tumor responses.

Guest Editor

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