Special Issue

CD8⁺ T Cells in the Cancer Immunity Cycle: Mechanisms, Barriers, and Therapeutic Opportunities

Message from the Guest Editor

CD8+ T cells play a central role in the cancer immunity cycle by contributing to tumor immunosurveillance through their cytotoxic activity and the secretion of cytokines and chemokines. Despite their crucial function, the antitumor efficacy of CD8+ T cells is often compromised within the tumor microenvironment. This impairment is closely associated with T cell exhaustion and a decline in their metabolic fitness.

In this Special Issue, we review recent advances in T cell-based immunotherapy, focusing on the major steps of the cancer immunity cycle: recognition of tumor antigens, activation and expansion of T cells, trafficking and infiltration into the tumor site, and the execution of cytotoxic functions. We also examine the key intrinsic and extrinsic factors that influence CD8+ T cell differentiation and function.

Guest Editor

Dr. Wael Traboulsi

Laboratory for Immuno-Oncology, Lombardi Comprehensive Cancer Center, Georgetown University Medical Center, Washington, DC 2005, USA

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Message from the Editor-in-Chief

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Editor-in-Chief

Prof. Dr. Maurizio Battino

Department of Odontostomatologic and Specialized Clinical Sciences, Sez-Biochimica, Faculty of Medicine, Università Politecnica delle Marche, Via Ranieri 65, 60100 Ancona, Italy

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