

Special Issue on
Immunotherapy Resistance: Cofounders and Mechanisms

CALL FOR PAPERS

Immunotherapy is widely employed to extend the lifespan in multiple malignancies and is an active area of research. Immunotherapy involves reinvigoration of cytotoxic T cells, which otherwise are inactive and have lost the potential to frame a cytotoxic attack against tumor cells.

However, after the initial cytotoxic effect, tumor cells gain resistance leading to poor survival outcomes. The immunotherapy resistance could arise in the tumor either intrinsically or extrinsically. In an intrinsic way, certain tumor cells evade the T cell attack due to an altered metabolism. Tumor extrinsic resistance could arise due to multiple ways, for instance, poor infiltration by cytotoxic T cells, the presence of immune suppressive cells in the microenvironment, or due to metabolites secreted either by tumor cells or bacteria. On the therapeutic forefront, generally attention is given to tumor extrinsic factors. For instance, the presence of Treg cells in the immune microenvironment suppresses the cytotoxic T cells and thus hampers tumor clearance. On another hand, tumor intrinsic events are relatively less explored.

It remains very essential on the clinical front to identify biomarkers for immunotherapy effectiveness and to identify targets with synergistic effects when combined with immunotherapy. This Special Issue welcomes original research and review articles that highlight recent developments in the area of immunotherapy resistance in solid tumors.

Potential topics include but are not limited to the following:

- ▶ Tumor cell-intrinsic metabolic changes leading to modulation of T cell-mediated killing
- ▶ Metabolite signaling between tumor and T cells
- ▶ Targets for immunotherapy resistance: tumor intrinsic kinase and phosphatase
- ▶ Targeting lipid metabolism to improve immunotherapy efficacy
- ▶ Obesity and immunotherapy efficacy: mechanisms and challenges
- ▶ Methods of in vitro tumor T cell co-culture
- ▶ Synthetic lethal screens to enhance immunotherapy efficacy
- ▶ Influence of metabolites secreted by commensal microbes in shaping the immune landscape of tumors
- ▶ Radiotherapy and immunotherapy: when and where to select
- ▶ Role of long and small noncoding RNAs in immunotherapy
- ▶ Hot and cold tumor microenvironment and immunotherapy efficacy
- ▶ Cancer stem cells and immunotherapy resistance

Authors can submit their manuscripts through the Manuscript Tracking System at <https://review.hindawi.com/submit?specialIssue=487298>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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