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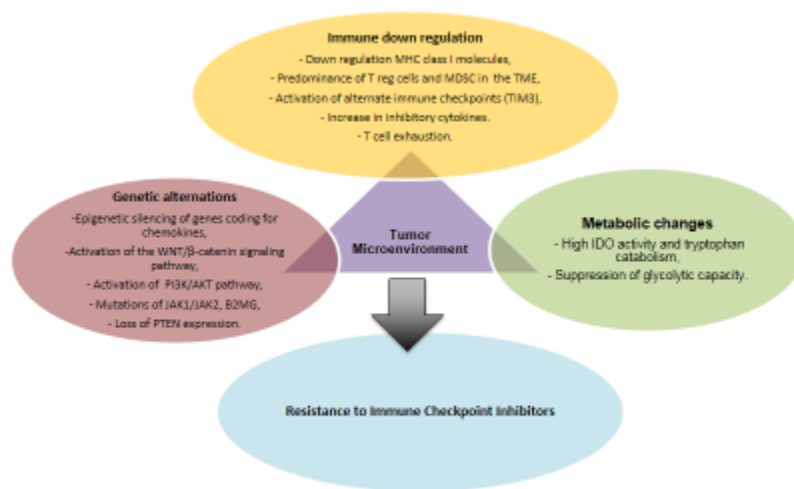
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# Tumor Microenvironment Changes Leading to Resistance of Immune Checkpoint Inhibitors in Metastatic Melanoma and Strategies to Overcome Resistance.

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## Graphical abstract



### Mechanisms of Resistance to Immune Checkpoint Inhibitors

Abbreviations: MHC I – Major histocompatibility complex I; T reg – Regulator T cells, MDSC- Myeloid derived suppressor cells; IDO – Indoleamine 2,3-dioxygenase.

## Abstract

Immunotherapy with checkpoint inhibitors targeting CTLA-4 and/or PD-1 receptors independent of the BRAF mutational status and targeted therapy with BRAF and MEK inhibitors in BRAF V600 mutated patients have taken the forefront of advanced melanoma treatment.

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