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Targeting amino acid metabolism in cancer growth and anti-tumor immune response

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**Abstract**

Recent advances in amino acid metabolism have revealed that targeting amino acid metabolic enzymes in cancer therapy is a promising strategy for the development of novel therapeutic agents. There are currently several drugs in clinical trials that specifically target amino acid metabolic pathways in tumor cells. In the context of the tumor microenvironment, however, tumor cells form metabolic relationships with immune cells, and they often compete for common nutrients. Many tumors evolved to escape immune surveillance by taking advantage of their metabolic flexibility and redirecting nutrients for their own advantage. This review outlines the most recent advances in targeting amino acid metabolic pathways in cancer therapy while giving consideration to the impact these pathways may have on the anti-tumor immune response.

**Key words:** Amino acid metabolism; Tumor microenvironment; T cells; Anti-tumor immune response; Cancer therapy**Match Overview**

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