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## Optimizing CAR-T Therapy for Glioblastoma

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## Abstract

Chimeric antigen receptor T-cell therapies have transformed the management of hematologic malignancies but have not yet demonstrated consistent efficacy in solid tumors. Glioblastoma is the most common primary malignant brain tumor in adults and remains a major unmet medical need. Attempts at harnessing the potential of chimeric antigen receptor T-cell therapy for glioblastoma have resulted in glimpses of promise but have been met with substantial challenges. In this focused review, we discuss current and future strategies being developed to optimize chimeric antigen receptor T cells for efficacy in patients with glioblastoma, including the identification and characterization of new target antigens, reversal of T-cell dysfunction with novel chimeric antigen receptor constructs, regulatable platforms, and gene knockout strategies, and the use of combination therapies to overcome the immune-hostile microenvironment.

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