

Review Nat Biotechnol. 2024 Nov 12. doi: 10.1038/s41587-024-02446-2. Online ahead of print.

# Beyond the blood: expanding CAR T cell therapy to solid tumors

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PMID: 39533105 DOI: [10.1038/s41587-024-02446-2](https://doi.org/10.1038/s41587-024-02446-2)

## Abstract

Chimeric antigen receptor (CAR) T cell therapy stands as a transformative advancement in immunotherapy, triumphing against hematological malignancies and, increasingly, autoimmune disorders. After a decade of relatively modest results for solid tumors, recent clinical trials and patient reports have also started to yield promising outcomes in glioblastoma and other challenging solid tumor entities. This Perspective seeks to explore the reasons behind these latest achievements and discusses how they can be sustained and expanded through different strategies involving CAR engineering and synthetic biology. Furthermore, we critically analyze how these breakthroughs can be leveraged to maintain momentum and broaden the therapeutic impact of CAR T cells across a variety of solid tumor landscapes.

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