POST-CAR-T RELAPSE IN DLBCL: REAL-WORLD SALVAGE THERAPY PATTERNS AND OUTCOMES AT A TERTIARY ACADEMIC CENTER

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INTRODUCTION

- Relapse after CD19-directed CAR-T therapy occurs in roughly half of patients with large B-cell lymphoma and carries a poor prognosis, with historical median overall survival of only a few months after failure.[1]
- Despite the introduction of bispecific antibodies and antibody-drug conjugates, real-world outcomes following CAR-T failure remain dismal and no standard salvage sequence has been established,[2] underscoring the need to characterize contemporary post–CAR-T treatment patterns and their outcomes.

AIM

To characterize the clinical features, salvage treatment patterns, and outcomes of patients with relapsed/refractory DLBCL who progress after CD19-directed CAR-T therapy, and to describe overall CAR-T efficacy and safety in this real-world single-center cohort.

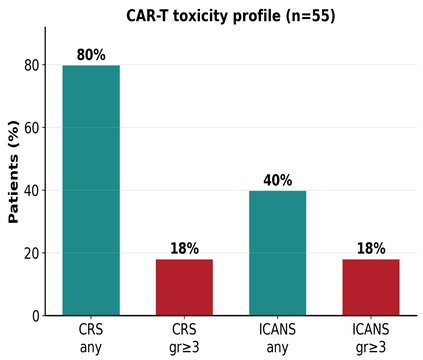
METHODS

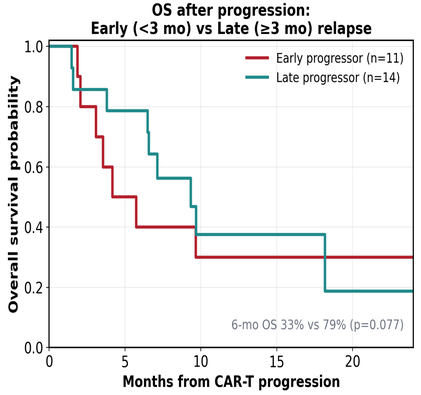
- We retrospectively identified all adults with relapsed/refractory DLBCL treated with CD19-directed CAR-T (axicabtagene ciloleucel, lisocabtagene maraleucel, or an institutional construct) at a single tertiary academic center between January 2018 and May 2026, excluding non-DLBCL indications, patients managed elsewhere without longitudinal follow-up, and incomplete records.
- Analyses included the full cohort (n=55) and a salvage cohort of 25 patients with post–CAR-T progression. Response was assessed by Lugano 2014 criteria and CRS/ICANS by ASTCT grading; endpoints were ORR, CR, DOR, and OS/PFS measured from both infusion and progression. Time-to-event outcomes were estimated by Kaplan–Meier (median follow-up by reverse Kaplan–Meier), response reported with 95% CIs, and subgroups compared by log-rank testing.

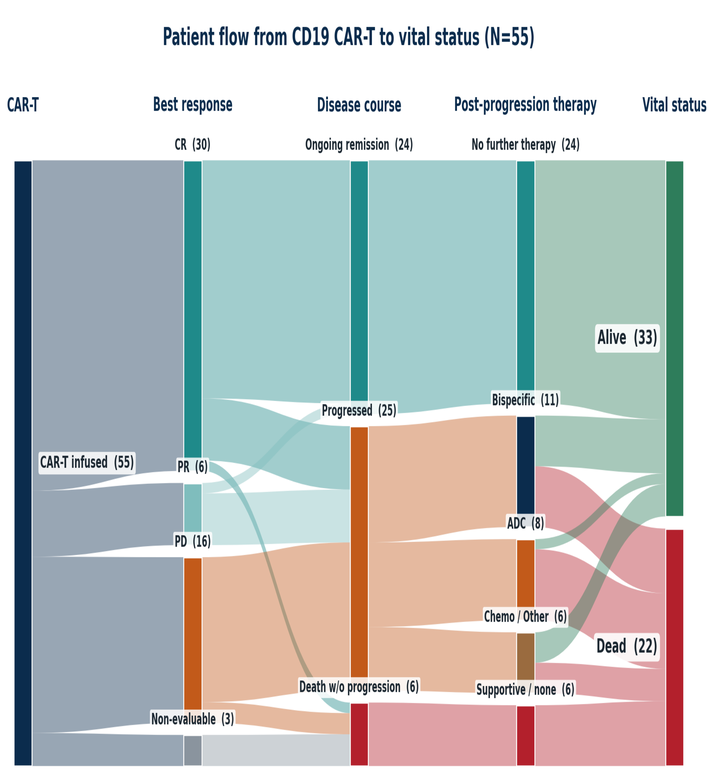
CONCLUSIONS

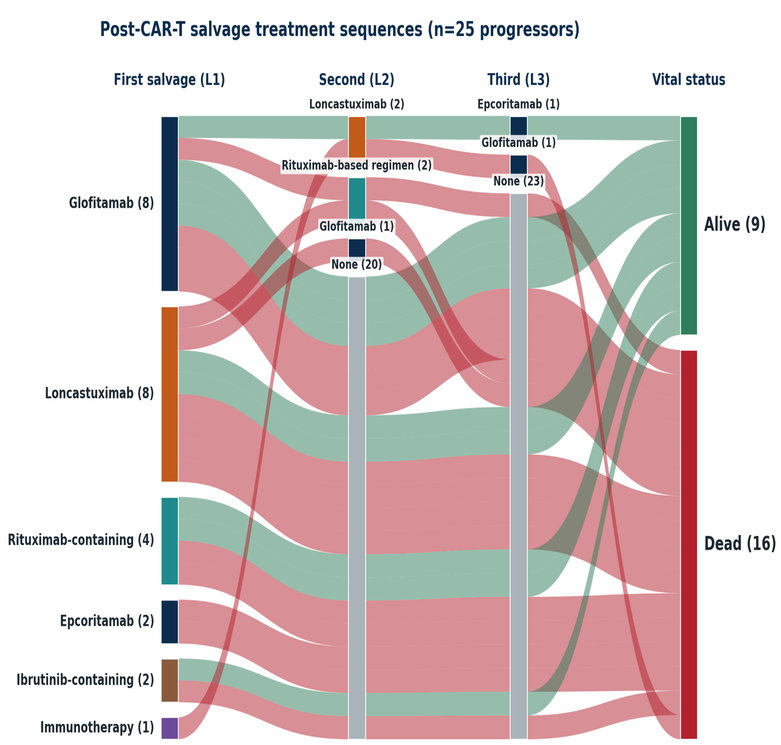
1. Relapse after CD19-directed CAR-T therapy in DLBCL carries poor outcomes, with a median overall survival of only 7.1 months from progression; salvage therapies—including bispecific antibodies and antibody-drug conjugates—showed limited durable activity, and few patients reached a second or third line, underscoring a persistent unmet need.
2. Early progression (<3 months from infusion) identified a particularly high-risk group with markedly inferior short-term survival, supporting time-to-progression as a simple, clinically useful prognostic marker for post–CAR-T patients.

RESULTS









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