Early experience with Glofitamab plus Polatuzumab vedotin as bridging therapy prior to CD19-directed CAR T-Cell therapy in R/R B-cell lymphoma

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INTRODUCTION

- Effective bridging therapy (BT) is critical to control disease while awaiting CAR-T infusion.
- Polatuzumab vedotin (Pola) and Glofitamab (Glofit), both active in R/R DLBCL, may offer synergistic benefit when combined.

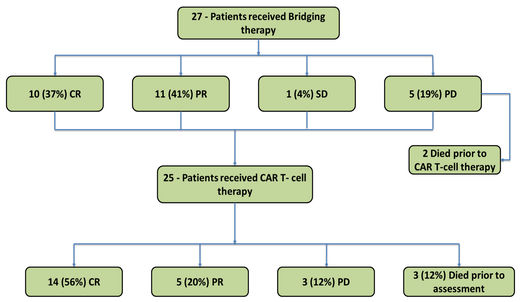
AIM

To evaluate the safety and efficacy of Glofit-Pola as BT in R/R BCL patients undergoing anti-CD19 CAR-T cell therapy.

METHOD

- Retrospective, single-center study
- Inclusion: Patients with R/R BCL, aged ≥15 years, who received Glofit-Pola as BT prior to Talicabtagene autoleucel (Tali-cel) infusion.
- Treatment regimen:
  Cycle 1: Obinutuzumab 1000 mg or Rituximab 375 mg/m² on Day 1; Pola 1.8 mg/kg on Day 2; Glofit 2.5 mg on Day 8 and 10 mg on Day 15 of a 21-day cycle. Cycle ≥2: Pola 1.8 mg/kg plus Glofit 10 mg on Day 1 of each 21-day cycle.
- Flu-Cy conditioning over 3 days prior to CAR-T infusion.
- CAR-T therapy: Single infusion of Tali-cel at a dose of ≥5 × 10^6 cells/kg.

Figure 1. Flow chart of patients



RESULTS

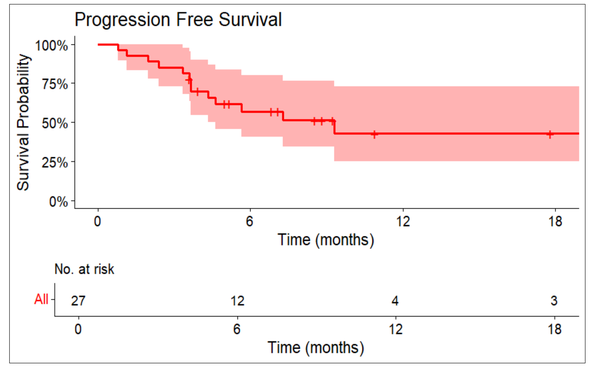
Table 1. Baseline characteristics of patients

Characteristic	Patients N=27
Median age, years (range)	52 (21-72)
Female, n %	13 (48%)
DLBCL	20 (74%)
PMBCL	3 (11%)
tFL	2 (7%)
HG B-NHL	1 (4%)
FL	1 (4%)
Prior lines of therapy, median (range)	2 (1-5)
Bulky disease, n (%)	14 (52%)
BM involvement, n (%)	6 (22%)
Extranodal involvement >1, n (%)	14 (52%)
LDH, median (range)	303 (164-2027)
BT cycles, median (range)	1 (1-3)
Vein-to-vein time, median days (range)	47 (32-118)

1-year PFS: 42.8% (95% CI: 25.0–73.1)
median PFS of 9.3 months (95% CI: 4.34–NR)

1-year OS: 60.2% (95% CI: 42.0–86.4)
median OS of 16.3 months (95% CI: 9.3–NR)

Figure 2. Survival outcomes of patients in this cohort



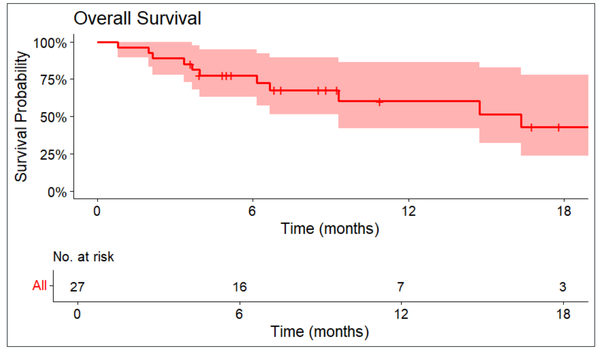


Figure 3. Pola-Glofit: Longitudinal Response, Relapse, Survival

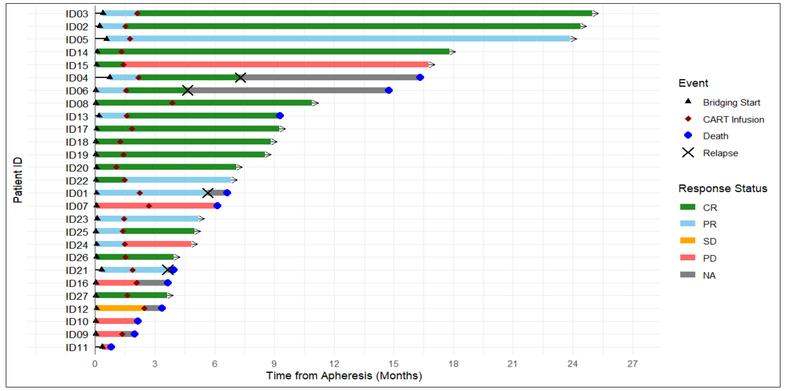
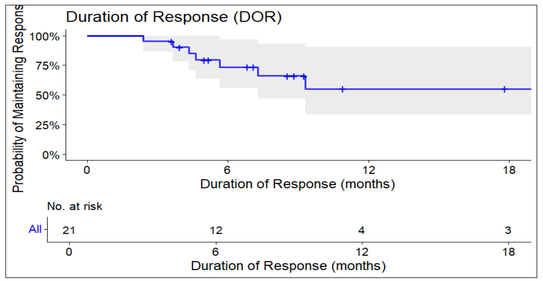


Figure 4. Duration of Response Among Patients Achieving CR or PR After BT

1-year DOR of 55.1% (33.6-90.5)

Median DOR: not reached (95% CI: 7.29–NR)



SAFETY OUTCOMES

Cytokine release storm occurred in 64% (16/25) of patients, including grade 1/2 in 60% (15/25) and grade 3 in 4% (1/25). Tocilizumab was administered in 48% (12/25) of patients.

Grade 2 **ICANS** was observed in 1 patient (4%).

IEC-HS occurred in 28% (7/25), and all affected patients received anakinra. Cytopenias were observed in all patients.

Hypogammaglobulinemia requiring IVIg replacement occurred in 44% (11/25).

At data cutoff, 14 patients remained disease-free, with ongoing B-cell aplasia in all but 1 patient.

CONCLUSIONS

Glofit+Pola as bridging therapy in R/R BCL demonstrated high response rates, even after a single cycle, with sustained responses following Tali-cel infusion.

The combination showed favourable safety profile with manageable toxicity.

REFERENCES

Hutchings M, et al. Efficacy and Safety of Glofitamab Plus Polatuzumab Vedotin in Relapsed/Refractory Large B-Cell Lymphoma Including High-Grade B-Cell Lymphoma: Results From a Phase Ib/II Trial. *J Clin Oncol*. 2025;43(36):3788-3798.

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