International Platform of Registered Systematic Review and Meta-analysis Protocols

INPLASY

Anti-CD3/CD20 bispecific antibodies as salvage therapy after CAR-T failure in relapsed/refractory large B-cell lymphoma: A systematic review and meta-analysis

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ADMINISTRATIVE INFORMATION

Support - 82103579.

Review Stage at time of this submission - Data analysis.

Conflicts of interest - None declared.

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Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 21 October 2025 and was last updated on 21 October 2025.

INTRODUCTION

Review question / Objective To evaluate the efficacy and safety of CD3×CD20 bispecific antibodies in patients with relapsed/refractory large B-cell lymphoma who relapsed after anti-CD19 CAR-T therapy, using pooled analysis of response rates, survival outcomes, and treatment-related toxicities.

Condition being studied Large B-cell lymphoma (LBCL) is an aggressive subtype of non-Hodgkin lymphoma with poor prognosis in relapsed or refractory (R/R) settings. Although CD19-directed chimeric antigen receptor T-cell (CAR-T) therapy has improved outcomes for patients with R/R LBCL, a substantial proportion of patients eventually relapse or fail to respond, resulting in limited treatment options and short survival. Bispecific antibodies (BsAbs) targeting CD3 and CD20 have emerged as a promising therapeutic approach for this difficult-to-treat population.

METHODS

Participant or population Patients with relapsed/refractory large B-cell lymphoma who relapsed after anti-CD19 CAR-T therapy.

Intervention Bispecific antibody therapy.

Comparator None.

Study designs to be included Single-arm research.

Eligibility criteria Eligible studies will include adult patients (≥18 years) with relapsed or refractory large B-cell lymphoma who have experienced progression following anti-CD19 CAR-T therapy. Interventions of interest are CD3×CD20 bispecific antibodies, including mosunetuzumab, glofitamab, epcoritamab, and odronextamab. Both monotherapy and combination regimens will be eligible. Studies must report at least one

predefined efficacy or safety endpoint. Excluded will be studies without prior CAR-T exposure, reviews, case reports, conference abstracts without sufficient data, preclinical or animal studies, and non-English publications.

Information sources Pubmed, WEB of science, Embase.

Main outcome(s) ORR, CR, OS.

Quality assessment / Risk of bias analysis JBI (Joanna Briggs Institute) .

Strategy of data synthesis Data analysis was performed using R software. A random-effects model was applied to pool effect sizes for single-arm studies, and subgroup analyses were conducted when heterogeneity exceeded 50%.

Subgroup analysis Prior treatment with CAR-T (yes or no); the interval between CAR-T relapse and bispecific antibody therapy (≤90 days, 91–180 days, 181 days–1 year); treatment regimen (monotherapy vs combination therapy); and route of administration (intravenous vs subcutaneous).

Sensitivity analysis Sensitivity analyses were performed using R software to assess the robustness of the results. This was done by examining the change in effect size after removing each individual study, reflecting the influence of that study on the overall results.

Country(ies) involved China.

Keywords CD3×CD20 bispecific antibodies (BsAbs), chimeric antigen receptor T-cell (CAR-T) , large B-cell lymphoma (LBCL), salvage therapy.

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