CD20×CD3 Bispecific Antibodies in Relapsed or Refractory Large B-Cell Lymphoma: A Systematic Review of Efficacy and Immune Toxicity

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INTRODUCTION

Patients with relapsed or refractory large B-cell lymphoma after multiple prior therapies, including CAR-T therapy, have limited treatment options. CD20×CD3 bispecific antibodies offer off-the-shelf T-cell engagement but require monitoring for cytokine release syndrome, neurotoxicity, and infections. This systematic review evaluated their efficacy and immune-related toxicity.

DESIGN & METHODS

A PRISMA-style systematic review identified primary clinical studies evaluating CD20×CD3 bispecific antibodies in relapsed or refractory large B-cell lymphoma. PubMed/MEDLINE, Embase, Web of Science, and the Cochrane Library were searched. Extracted outcomes included agent, route, sample size, overall and complete response, progression-free survival, cytokine release syndrome, neurotoxicity, infections, and grade ≥3 adverse events.

3 pivotal studies | 439 patients
Glofitamab: intravenous
Epcoritamab: subcutaneous
Odronextamab: intravenous

Agent	Route	n	ORR	CR	CRS
Glofitamab	IV	155	52.0%	39.0%	63.0%
Epcoritamab	SC	157	63.1%	40.1%	51.0%
Odronextamab	IV	127	52.0%	31.5%	55.1%

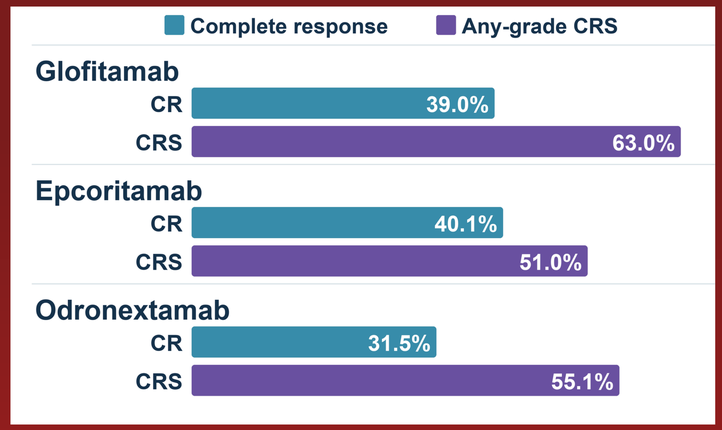
- **Glofitamab: 78% of complete responses ongoing at 12 months**
- **Epcoritamab: MRD negativity in 45.4% of evaluable patients**
- **Odronextamab: infections in 64.6%; grade ≥3 infections in 38.6%**

LIMITATIONS

Three non-head-to-head studies were included, with heterogeneous designs, follow-up, and safety reporting.

RESULTS

- All three agents produced meaningful complete responses in heavily pretreated large B-cell lymphoma.
- Cytokine release syndrome was common but predominantly low-grade; severe-event reporting varied across studies.



CONCLUSIONS

CD20×CD3 bispecific antibodies achieved meaningful responses in heavily pretreated large B-cell lymphoma, with cytokine release syndrome and infections requiring monitoring.

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