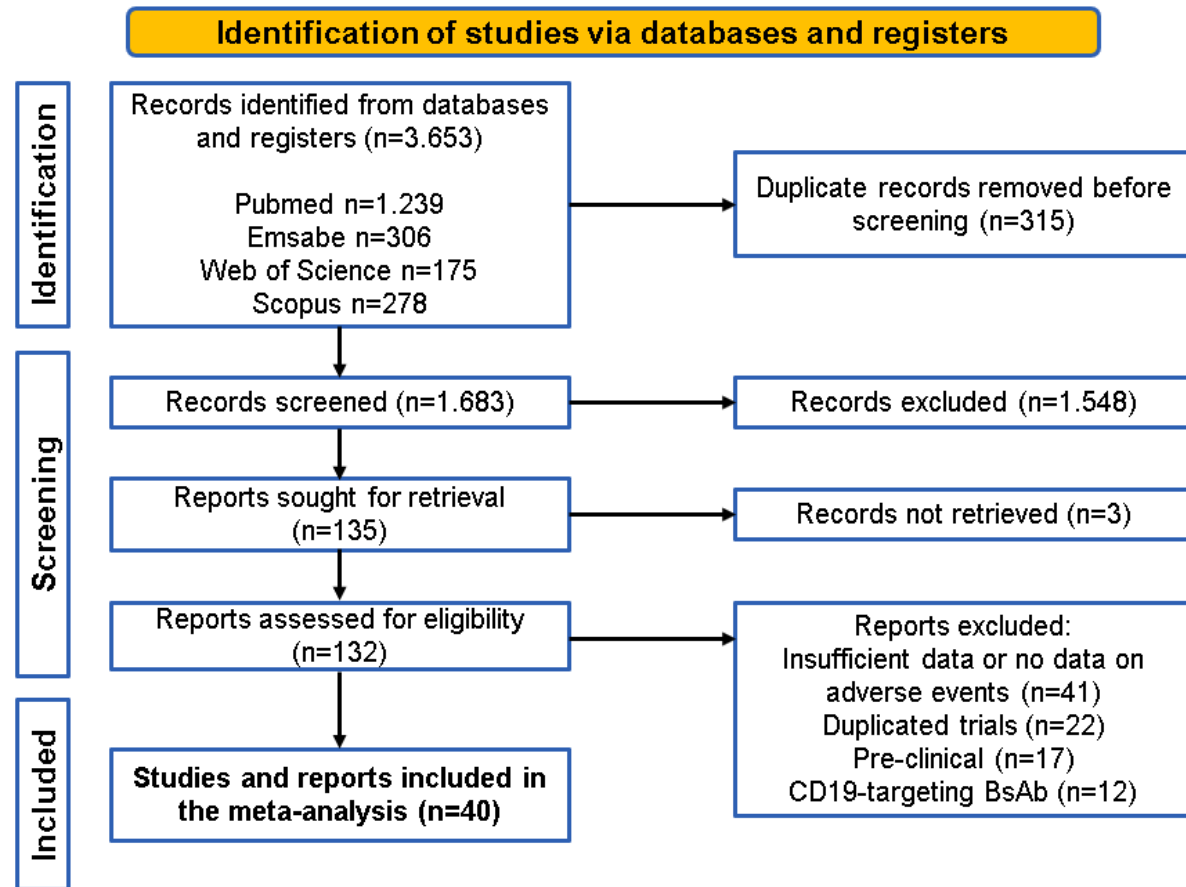


Supplementary Results

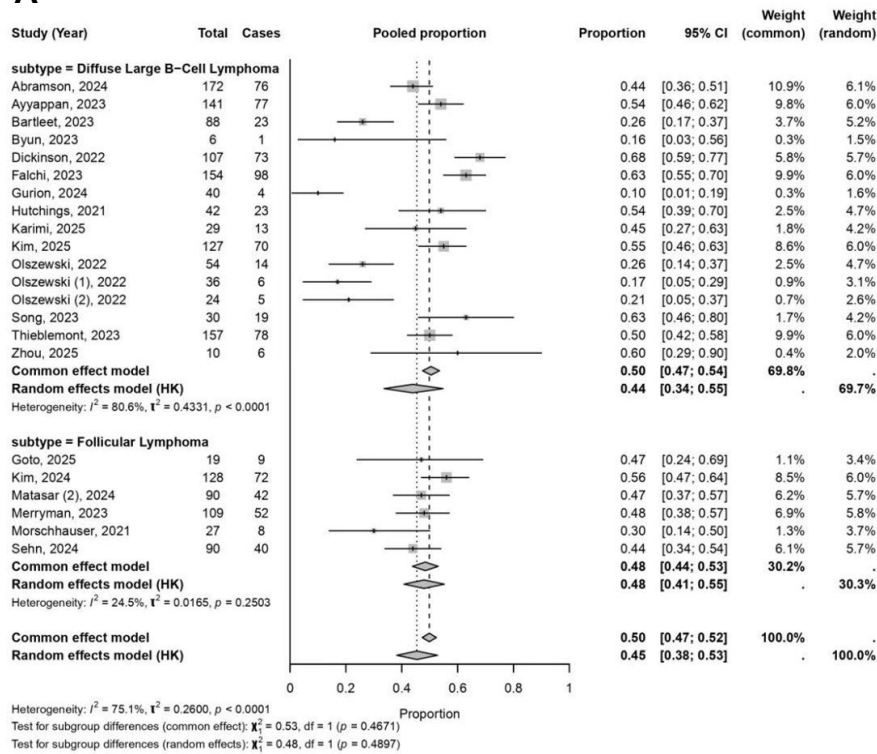
Database	Results	Duplicates	Remaining
<i>Pubmed</i>	1239	199	1040
<i>Web of Science</i>	175	43	132
<i>Scopus</i>	278	34	244
<i>Embase</i>	306	39	267
Total	1998	315	1683

Supplementary Table 1. Identification of scientific articles.

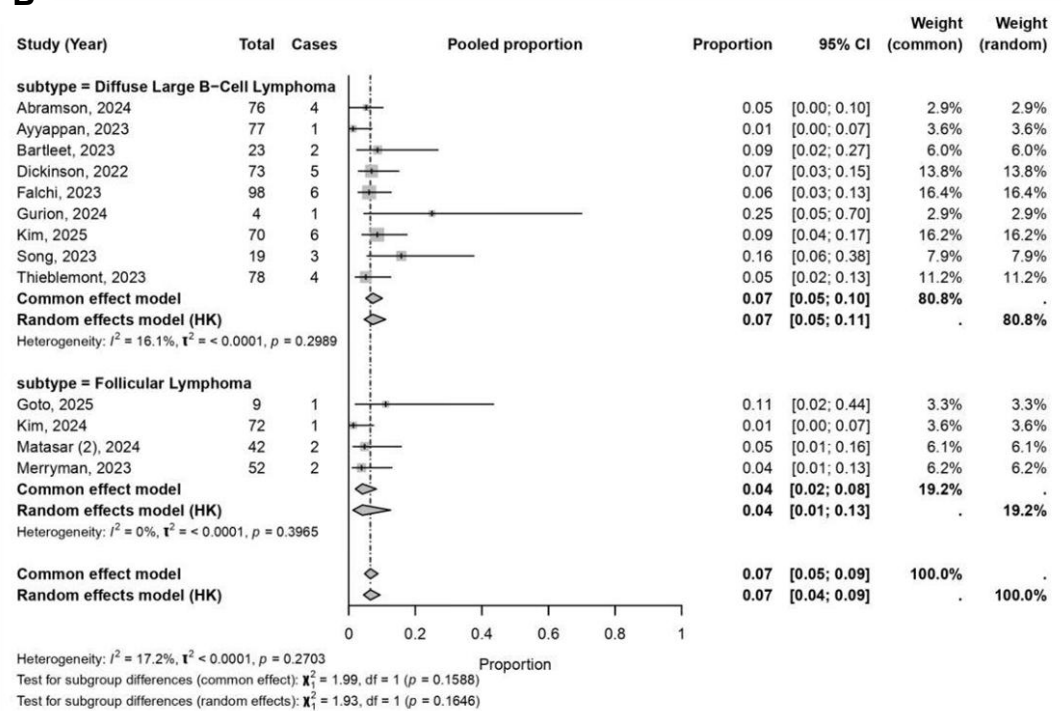


Supplementary Figure 1: The flowchart of the strategies for identifying and selecting the studies included in our meta-analysis.

A



B



Supplementary Figure 2: Meta-analysis of cytokine release syndrome (CRS) rates stratified by patients who received bispecific antibodies (BsAb) by non-Hodgkin lymphoma (NHL) subtype. Panels A and B represent the prevalence of CRS of all grades and grade ≥ 3 , respectively.

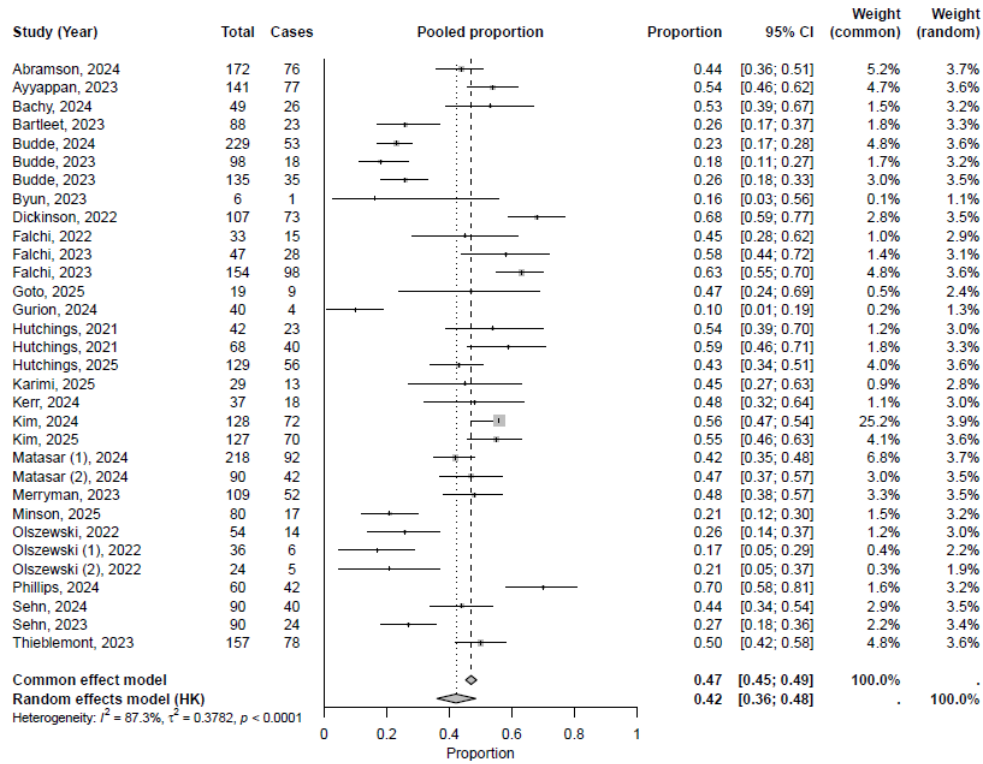
Supplementary Table 2. Assessment of the risk of bias in clinical trials.

Author and Year of Publication	Bispecific Antibody	Randomization Process	Deviations from Intended Interventions	Missing Outcome Data	Measurement of the Outcome	Selection of the Reported Result	Overall Risk of Bias
Abramson, 2024	Glofitamab	Low	Low	Low	Low	Low	Low
Ayyappan, 2023	Odronextamab	Low	Low	Low	Low	Some concerns	Some concerns
Bachy, 2024	Odronextamab	Low	Low	Low	Low	Low	Low
Bannerji, 2022	Odronextamab	Low	Low	Low	Low	Low	Low
Bartleet, 2023	Mosunetuzumab	Low	Low	Low	Low	Low	Low
Budde, 2021	Mosunetuzumab	Low	Low	Low	Low	Low	Low
Budde, 2024	Mosunetuzumab	Some concerns	Low	Low	Low	Low	Some concerns
Budde, 2023	Mosunetuzumab	Low	Low	Low	Low	Low	Low
Budde, 2023	Mosunetuzumab	Low	Low	Low	Low	Low	Low
Byun, 2023	Glofitamab	Low	Low	Low	Low	Low	Low
Dickinson, 2022	Glofitamab	Low	Low	Low	Low	Low	Low
Falchi, 2022	Epcoritamab	Low	Low	Low	Low	Low	Low
Falchi, 2023	Epcoritamab	Low	Low	Low	Low	Low	Low
Falchi, 2023	Glofitamab	Low	Low	Low	Low	Low	Low
Fedovora, 2023	Glofitamab	Low	Low	Low	Some concerns	Low	Some concerns

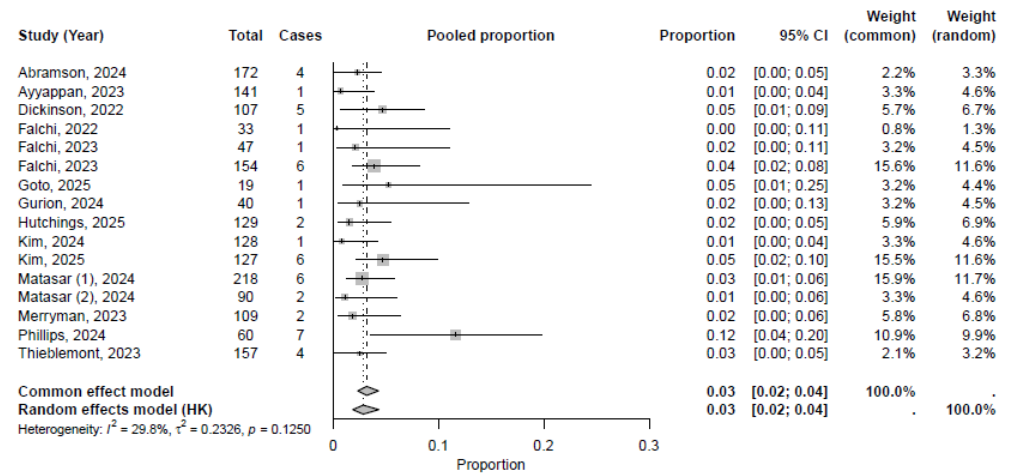
Goto, 2025	Mosunetuzumab	Low	Low	Low	Low	Low	Low
Gurion, 2024	Epcoritamab	Low	Low	Low	Low	Low	Low
Hutchings, 2021	Glofitamab	Low	Low	Low	Low	Low	Low
Hutchings, 2021	Epcoritamab	Low	Low	Low	Low	Some concerns	Some concerns
Hutchings, 2021	Glofitamab	Low	Low	Low	Low	Low	Low
Hutchings, 2025	Glofitamab	Low	Low	Low	Low	Low	Low
Hutchings, 2025	Glofitamab	Low	Low	Low	Low	Low	Low
Karimi, 2025	Epcoritamab	Low	Low	Low	Low	Low	Low
Kerr, 2024	Epcoritamab	Low	Low	Low	Low	Low	Low
Kim, 2024	Odronextamab	Low	Low	Low	Low	Low	Low
Kim, 2025	Odronextamab	Low	Low	Low	Low	Low	Low
Matasar (1), 2024	Mosunetuzumab	Low	Low	Low	Low	Low	Low
Matasar (2), 2024	Mosunetuzumab	Low	Low	Low	Low	Low	Low
Merryman, 2023	Epcoritamab	Low	Low	Low	Low	Low	Low
Minson, 2025	Glofitamab	Low	Low	Low	Low	Low	Low
Morschhauser, 2021	Mosunetuzumab	Low	Low	Low	Low	Low	Low
Munakata, 2023	Mosunetuzumab	Some concerns	Low	Low	Low	Low	Some concerns

Olszewski, 2022	Mosunetuzumab	Low	Low	Low	Low	Low	Low
Olszewski (1), 2022	Mosunetuzumab	Low	Low	Low	Low	Low	Low
Olszewski (2), 2022	Mosunetuzumab	Low	Low	Low	Low	Low	Low
Phillips, 2024	Glofitamab	Low	Low	Low	Low	Low	Low
Sehn, 2024	Mosunetuzumab	Low	Low	Low	Low	Low	Low
Sehn, 2023	Mosunetuzumab	Low	Low	Some concerns	Low	Low	Some concerns
Song, 2023	Glofitamab	Low	Low	Low	Low	Low	Low
Thieblemont, 2023	Epcoritamab	Low	Low	Low	Low	Low	Low
Topp, 2022	Glofitamab	Low	Low	Low	Some concerns	Low	Some concerns
Zhou, 2025	Glofitamab	Low	Low	Low	Low	Low	Low

A



B



Supplementary Figure 3. Sensitivity meta-analysis of cytokine release syndrome (CRS) rates after exclusion of phase 1 clinical trials. Panels A and B represent the pooled prevalence of CRS of any grade and grade ≥ 3 CRS, respectively.