Supplementary

Table S1 The detailed search strategy

Pubmed	(((((relapse*[Title/Abstract]) OR (refractory[Title/Abstract]))) AND (((large B-cell lymphoma[Title/Abstract]) OR (large b-cell lymphoma[Title/Abstract])) OR (LBCL[Title/Abstract]) OR (DLBCL[Title/Abstract]))) AND ((((((phase II[Title/Abstract]) OR (phase III[Title/Abstract])) OR (phase 2[Title/Abstract])) OR (phase 3[Title/Abstract])) OR (randomized[Title/Abstract])) OR (randomised[Title/Abstract]))
Embase	('large b-cell lymphoma':ti,ab,kw OR dlbcl:ti,ab,kw OR lbcl:ti,ab,kw) AND (relapse*:ti,ab,kw OR refractory:ti,ab,kw) AND ('phase ii':ti,ab,kw OR 'phase iii':ti,ab,kw OR 'phase 2':ti,ab,kw OR 'phase 3':ti,ab,kw OR randomized:ti,ab,kw OR randomised:ti,ab,kw)
Cochrane	#1 (phase II): ti,ab,kw OR (phase III): ti,ab,kw OR (phase 2): ti,ab,kw OR (phase 3): ti,ab,kw OR (random*): ti,ab,kw #2 (large B-cell lymphoma): ti,ab,kw OR (DLBCL): ti,ab,kw OR (LBCL): ti,ab,kw OR (diffuse large B-cell lymphoma): ti,ab,kw (Word variations have been searched) #3 (relapse*): ti,ab,kw OR (refractory): ti,ab,kw #4 #1 AND #2 #5 #3 AND #4

Table S2 Other important patient baseline characteristics

Type	First author	Year	NCT trial	Source	Reported outcomes
Transplant-eligible	Locke	2022	NCT03391466	Publicated article	EFS, PFS, OS, ORR, TEAE, grade ≥3 TEAE
Transplant-eligible	Kamdar	2025	NCT03435796	Publicated article	EFS, PFS, OS, ORR, TEAE, grade ≥3 TEAE
Transplant-eligible	Bishop	2022	NCT03570892	Publicated article	EFS, OS, ORR, TRAE, TEAE, grade ≥3 TRAE, grade≥3 TEAE
Transplant-eligible	Van	2017	NCT01014208	Publicated article	PFS, OS, ORR, AE causing dose interruption or delay
Transplant-eligible	Fayad	2015	NCT00529503	Publicated article	PFS, OS, ORR, grade ≥3 TEAE
Transplant-eligible	Stewart	2024	–	Publicated article	ORR
Transplant-ineligible	Budde	2025	NCT05171647	Publicated article	PFS, OS, ORR, TRAE, TEAE, grade ≥3 TRAE, grade ≥3 TEAE
Transplant-ineligible	Matthew	2025	NCT04182204	Conference abstract	PFS, OS, ORR, TEAE, grade ≥3 TEAE
Transplant-ineligible	Abramson	2024	NCT04408638	Publicated article	PFS, OS, ORR, TRAE, TEAE, grade ≥3 TRAE, grade ≥3 TEAE
Transplant-ineligible	Sehn	2022	NCT02257567	Publicated article	PFS, OS, ORR, TEAE
Transplant-ineligible	Held	2023	NCT03366272	Conference abstract	PFS
Transplant-ineligible	Kong	2023	NCT03579082	Publicated article	PFS, OS, ORR
Transplant-ineligible	Pettengell	2020	NCT01321541	Publicated article	PFS, OS, ORR, TEAE
Transplant-ineligible	Dang	2018	NCT01232556	Publicated article	PFS, OS, ORR, TEAE, grade ≥3 TEAE

NCT, national clinical trial; EFS, event-free survival; PFS, progression free survival; OS, overall survival; ORR, objective response rate; TEAE, treatment-emergent adverse events.

https://dx.doi.org/10.21037/tcr-2026-0678

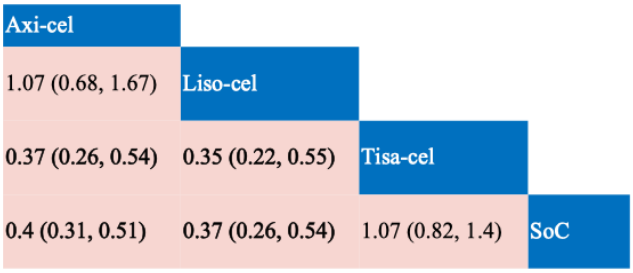

Figure S1 Pooled estimates of the network meta-analysis of event-free survival in the transplant-ineligible patients.

Table S3 The Bayesian ranking results based on surface under the cumulative ranking curve scores

Cohort	Treatment	Ranking first of possibility (%)					
		OS	PFS	EFS	ORR	TEAE	Grade ≥3 TEAE
Transplant-eligible	Axi-cel	0.23	0.28	0.39	0.19	0.14	0.6
	Liso-cel	0.23	0.72	0.61	0.79	0.8	0.27
	Tisa-cel	0.03	–	0	0	0.03	0
	Dace-R-ICE	0.49	0	–	0	–	0.14
	O-DHAP	0.02	0	–	0	0.01	–
	R-DICEP	–	–	–	0.02	–	–
	SoC	0	0	0	0	0.01	0
Transplant-ineligible	Glofit-GemOx	0.07	0.51	–	0.07	0.54	1
	Pola-BR	0.72	0.2	–	0.62	0	–
	Pola-R-GemOx	0.08	0.16	–	0.12	0	0
	Mosun-Pola	0.01	0.07	–	0.16	0	0
	Decitabine-RDHAP	0.12	0.06	–	0.02	0	0
	R-PIX	0	0	–	0	0.46	–
	R-InO	0	0	–	0	0	0
	Nivo-R-GemOx	–	0	–	–	–	–
	R-Chemo	0	0	–	0	0	0

EFS, event-free survival; PFS, progression free survival; OS, overall survival; ORR, objective response rate; TEAE, treatment-emergent adverse events; Axi-cel, axicabtagene ciloleucel; Liso-cel, lisocabtagene maraleucel; tisa-cel, tisagenlecleucel; Dace-R-ICE, Dacetuzumab plus rituximab, ifosfamide, carboplatin and etoposide; Decitabine-RDHAP, decitabine plus rituximab, cisplatin, cytarabine, and dexamethasone; O-DHAP, ofatumumab plus cisplatin, cytarabine, and dexamethasone; R-DICEP, rituximab plus dose-intensive cyclophosphamide, etoposide, cisplatin; R-Chemo, rituximab plus chemotherapy; Glofit-GemOx, glofitamab plus gemcitabine and oxaliplatin; pola-BR, polatuzumab vedotin plus bendamustine and rituximab; pola-R-GemOx, polatuzumab vedotin plus rituximab, gemcitabine and oxaliplatin; Mosun-Pola, mosunetuzumab plus polatuzumab vedotin; R-InO, rituximab plus inotuzumab ozogamicin; R-PIX, rituximab plus pixantrone; Nivo-R-GemOx, Nivolumab plus R-GemOx; SoC, standard of care.

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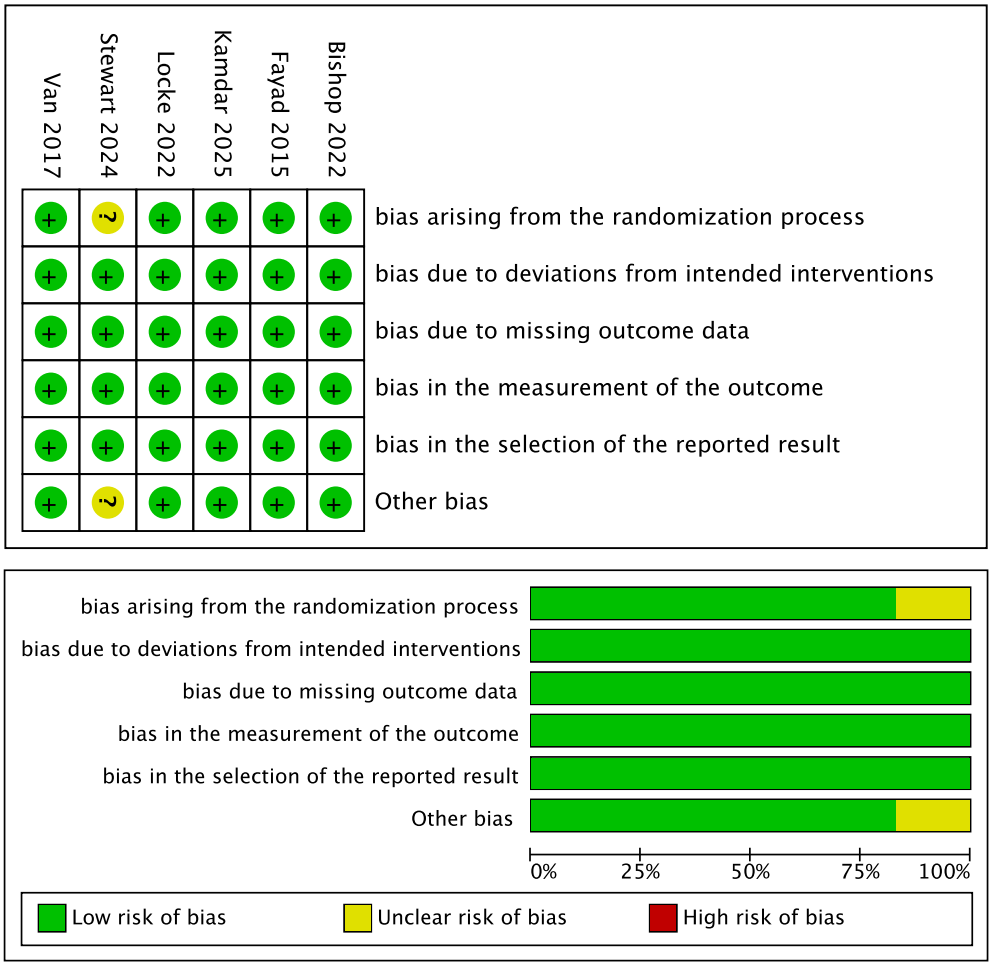

Figure S2 The summary of the risk of bias assessment in the transplant-eligible cohort.

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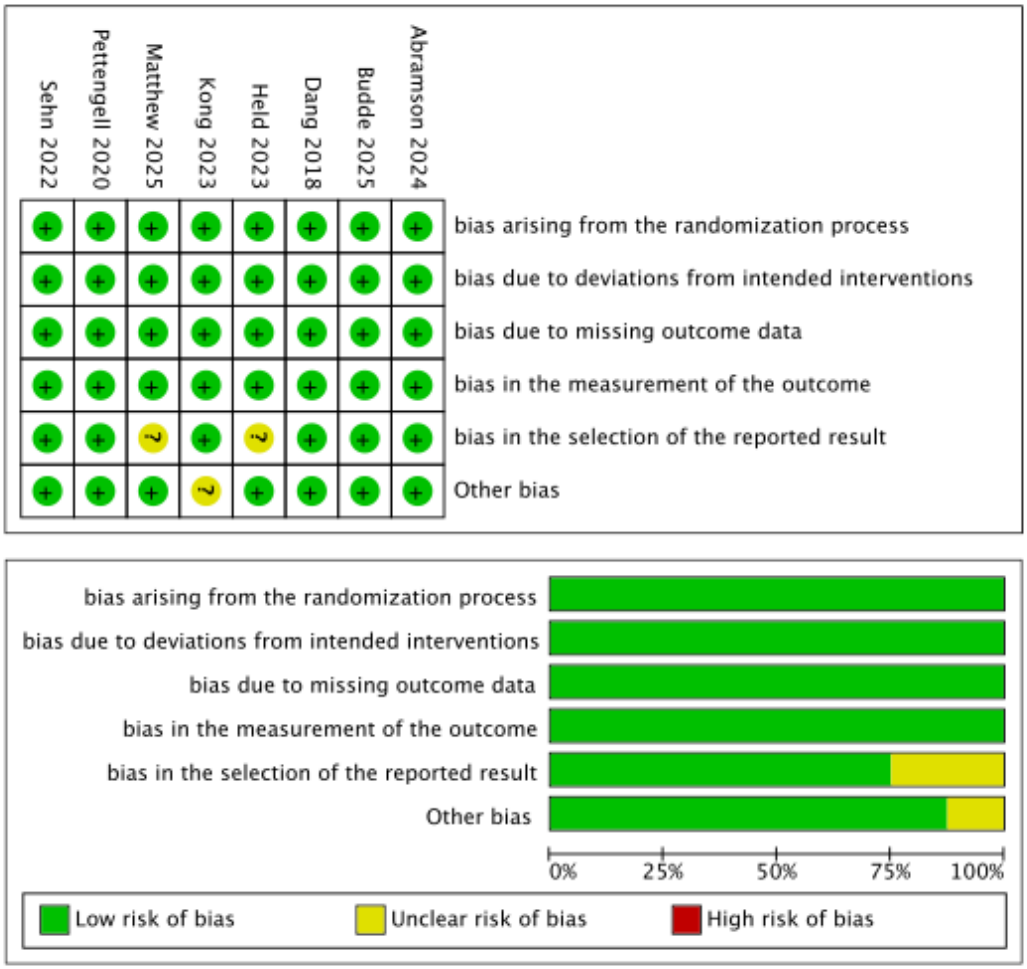

Figure S3 The summary of the risk of bias assessment in the transplant-ineligible cohort.

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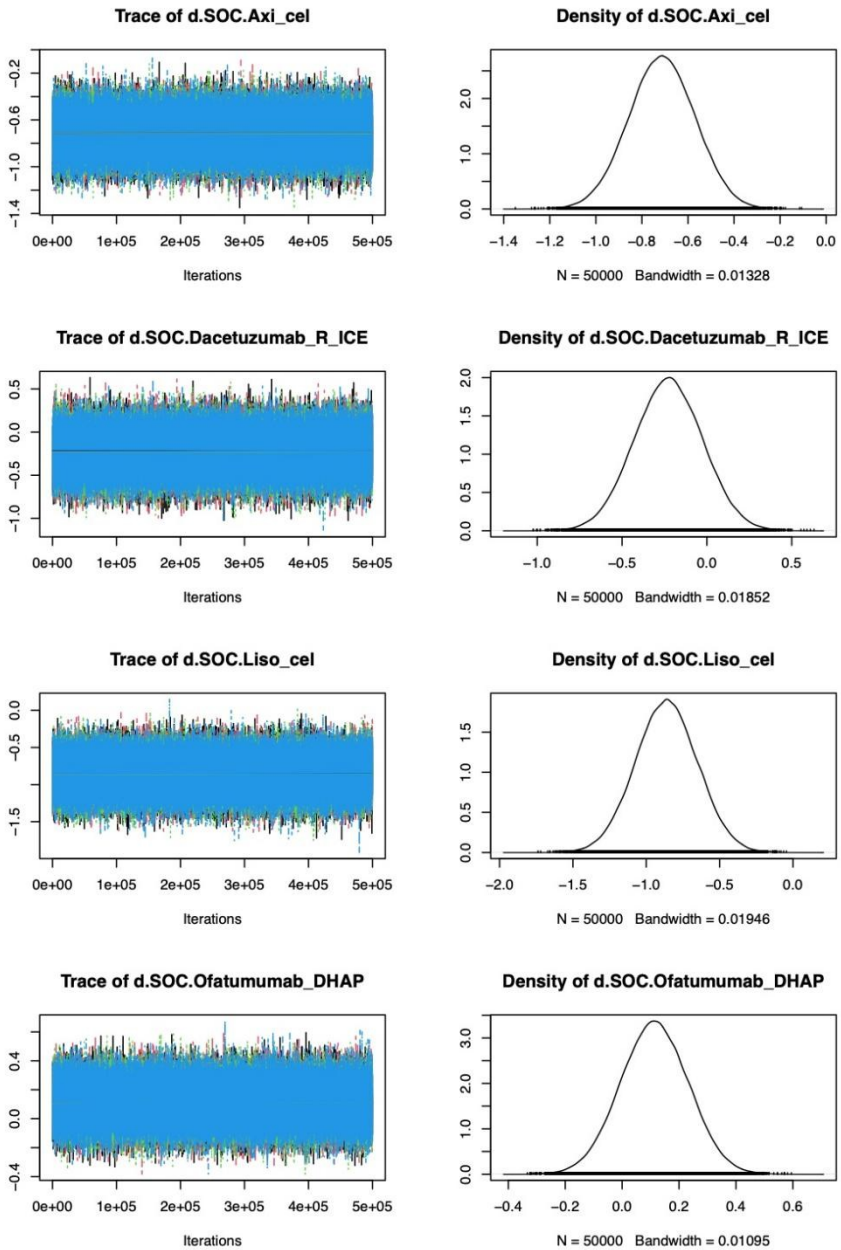

Figure S4 Convergence of the three chains established by inspection of the history feature and the Brooks-Gelman-Rubin diagnostic for progression-free survival in the transplant-eligible cohort.

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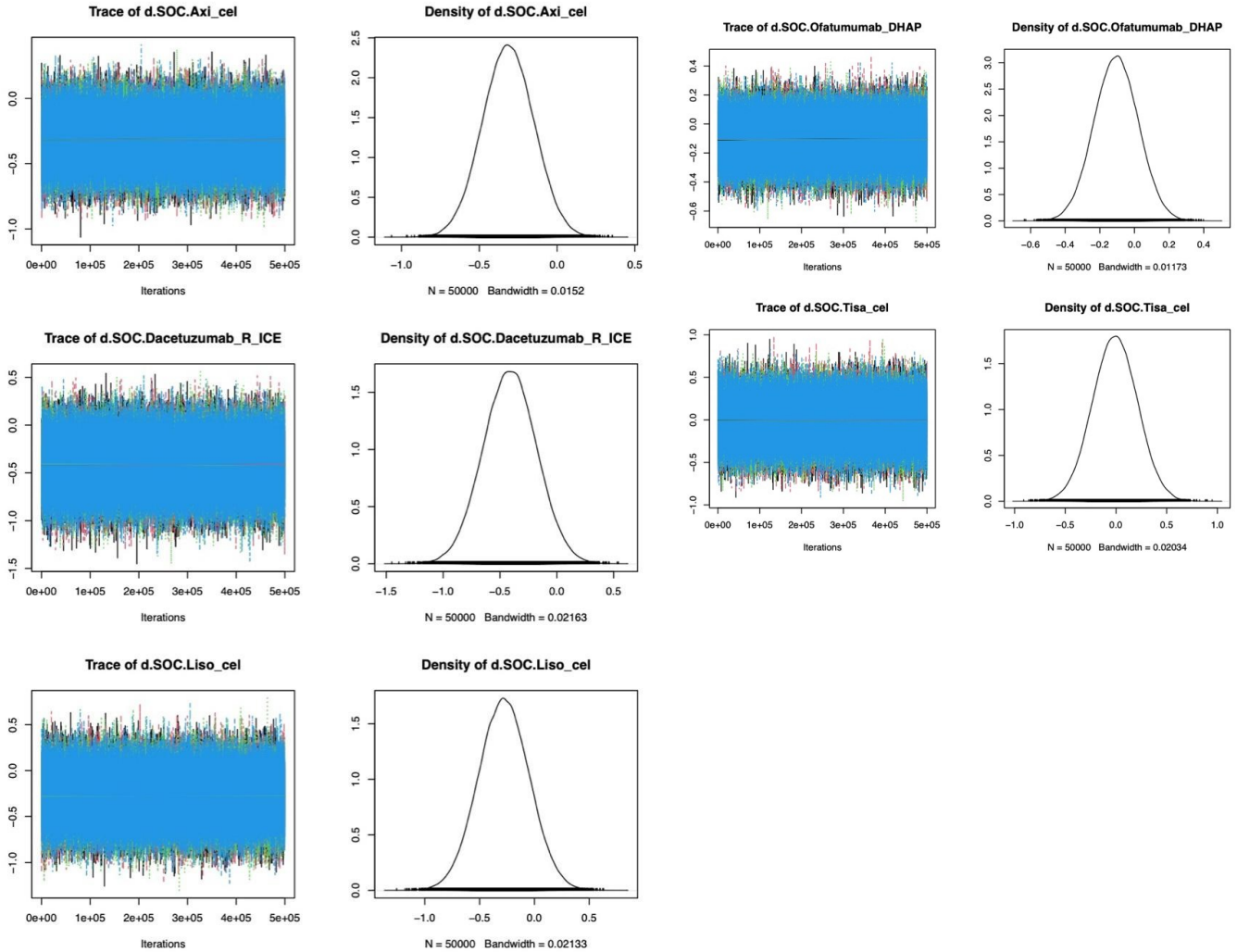

Figure S5 Convergence of the three chains established by inspection of the history feature and the Brooks-Gelman-Rubin diagnostic for overall survival in the transplant-eligible cohort.

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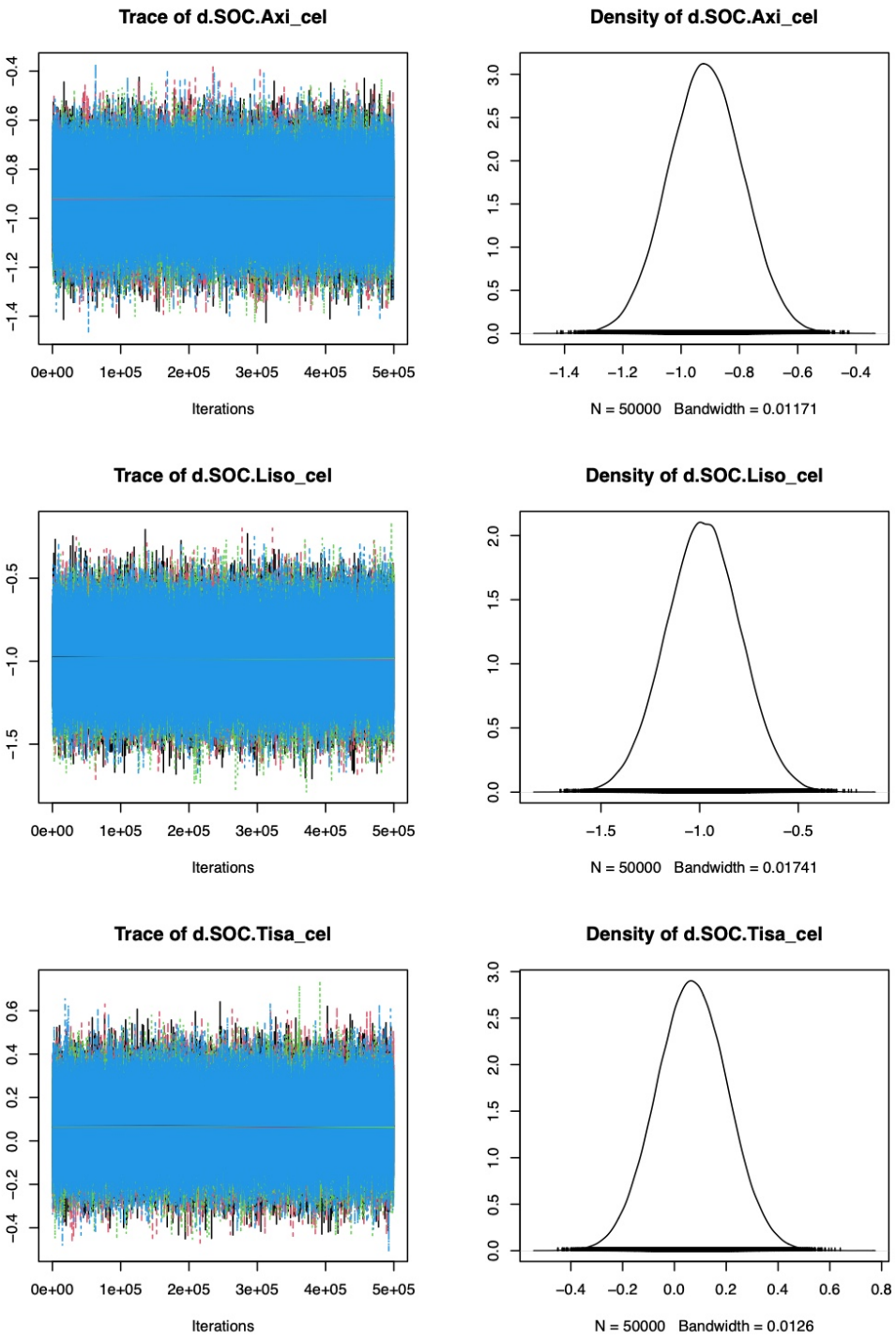

Figure S6 Convergence of the three chains established by inspection of the history feature and the Brooks-Gelman-Rubin diagnostic for event-free survival in the transplant-eligible cohort.

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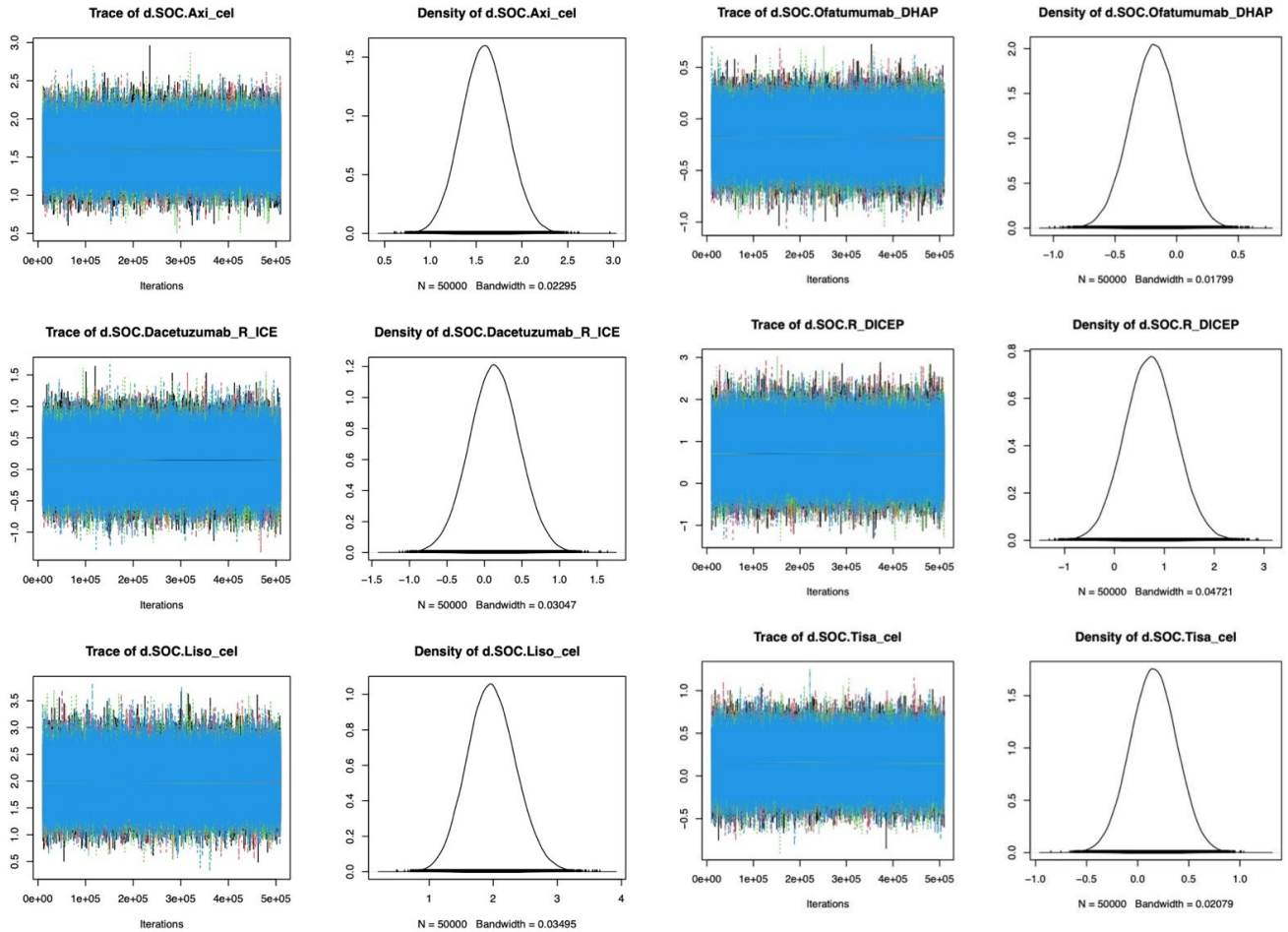

Figure S7 Convergence of the three chains established by inspection of the history feature and the Brooks-Gelman-Rubin diagnostic for objective response rate in the transplant-eligible cohort.

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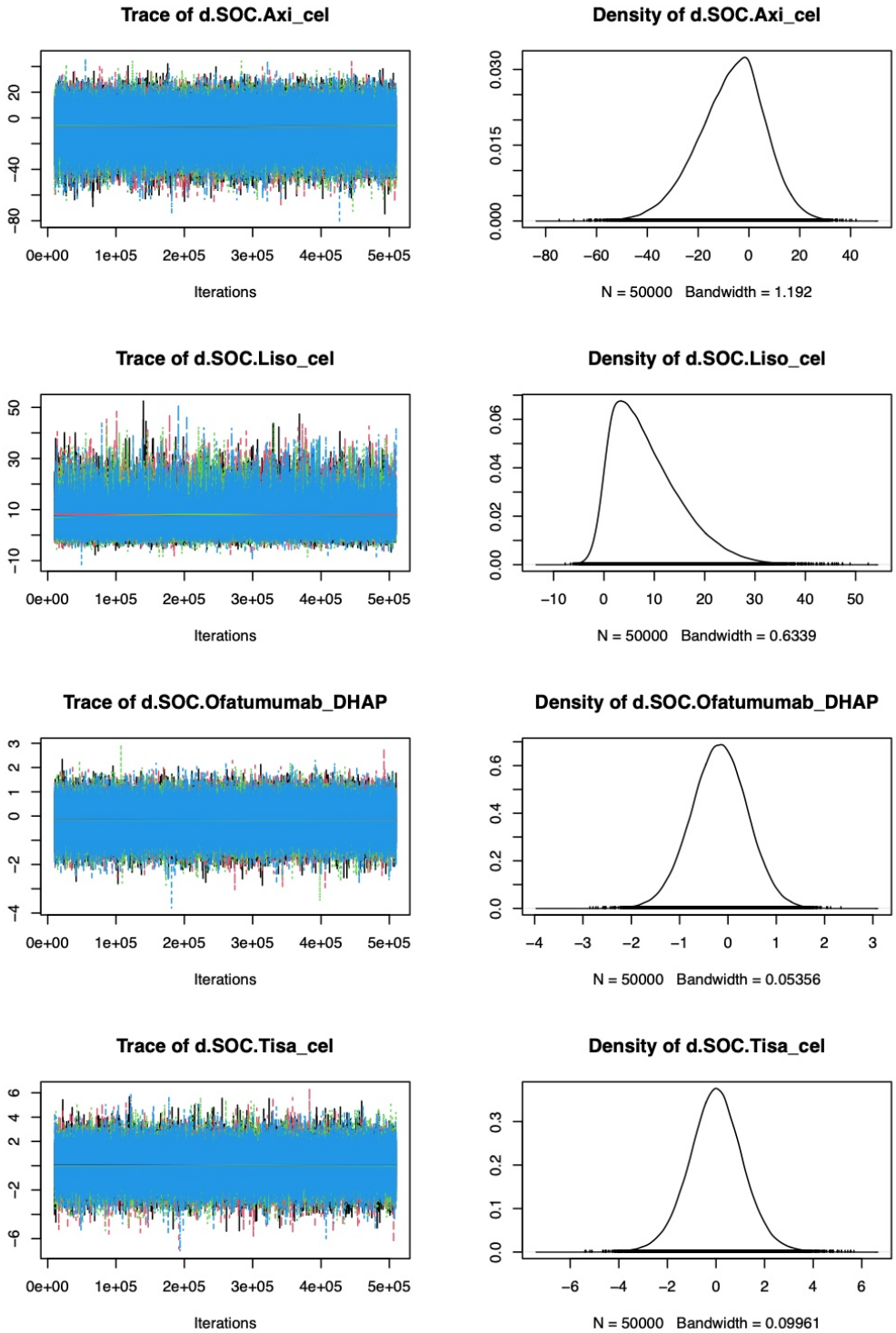

Figure S8 Convergence of the three chains established by inspection of the history feature and the Brooks-Gelman-Rubin diagnostic for treatment-emergent adverse events in the transplant-eligible cohort.

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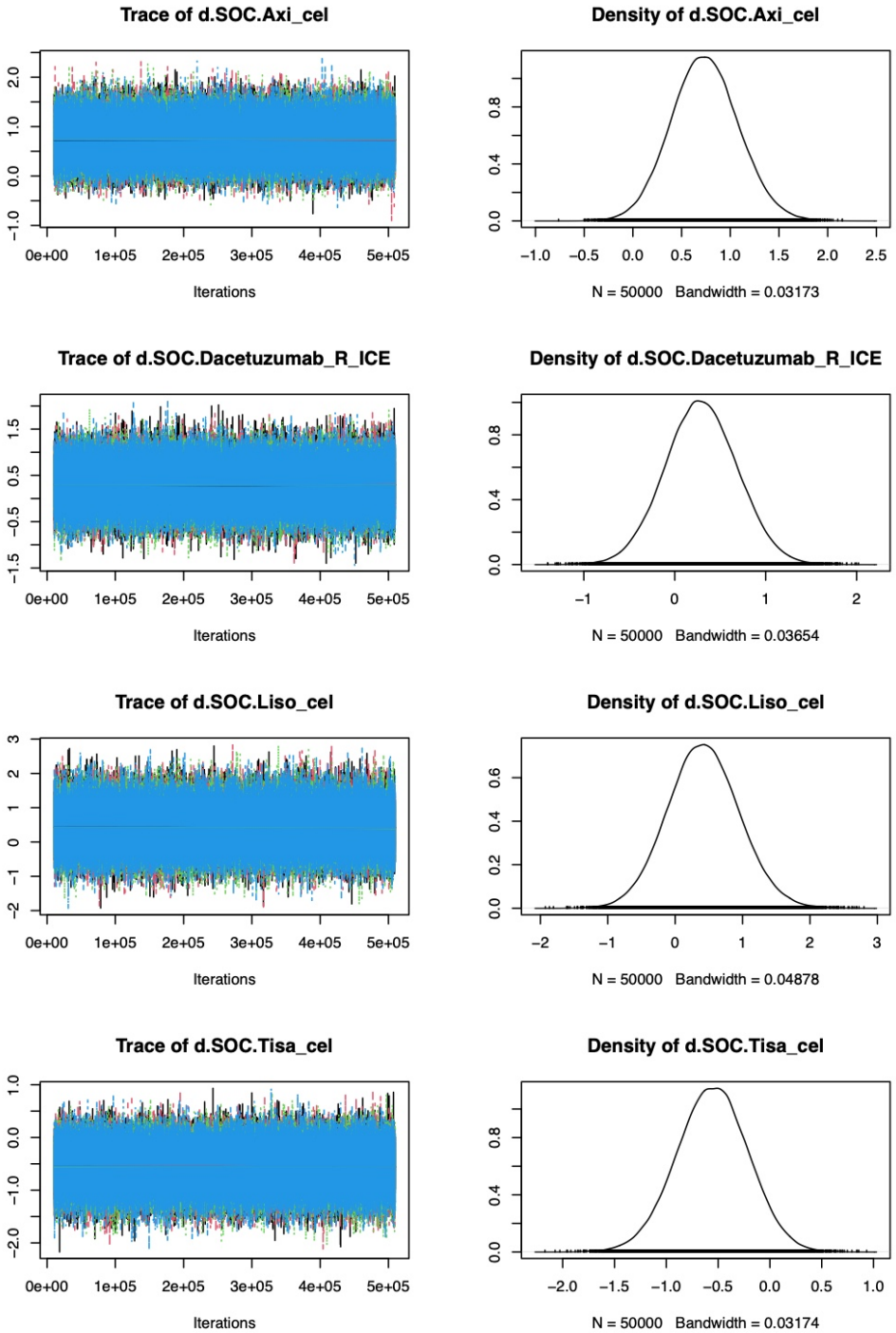

Figure S9 Convergence of the three chains established by inspection of the history feature and the Brooks-Gelman-Rubin diagnostic for Grade ≥3 treatment-emergent adverse events in the transplant-eligible cohort.

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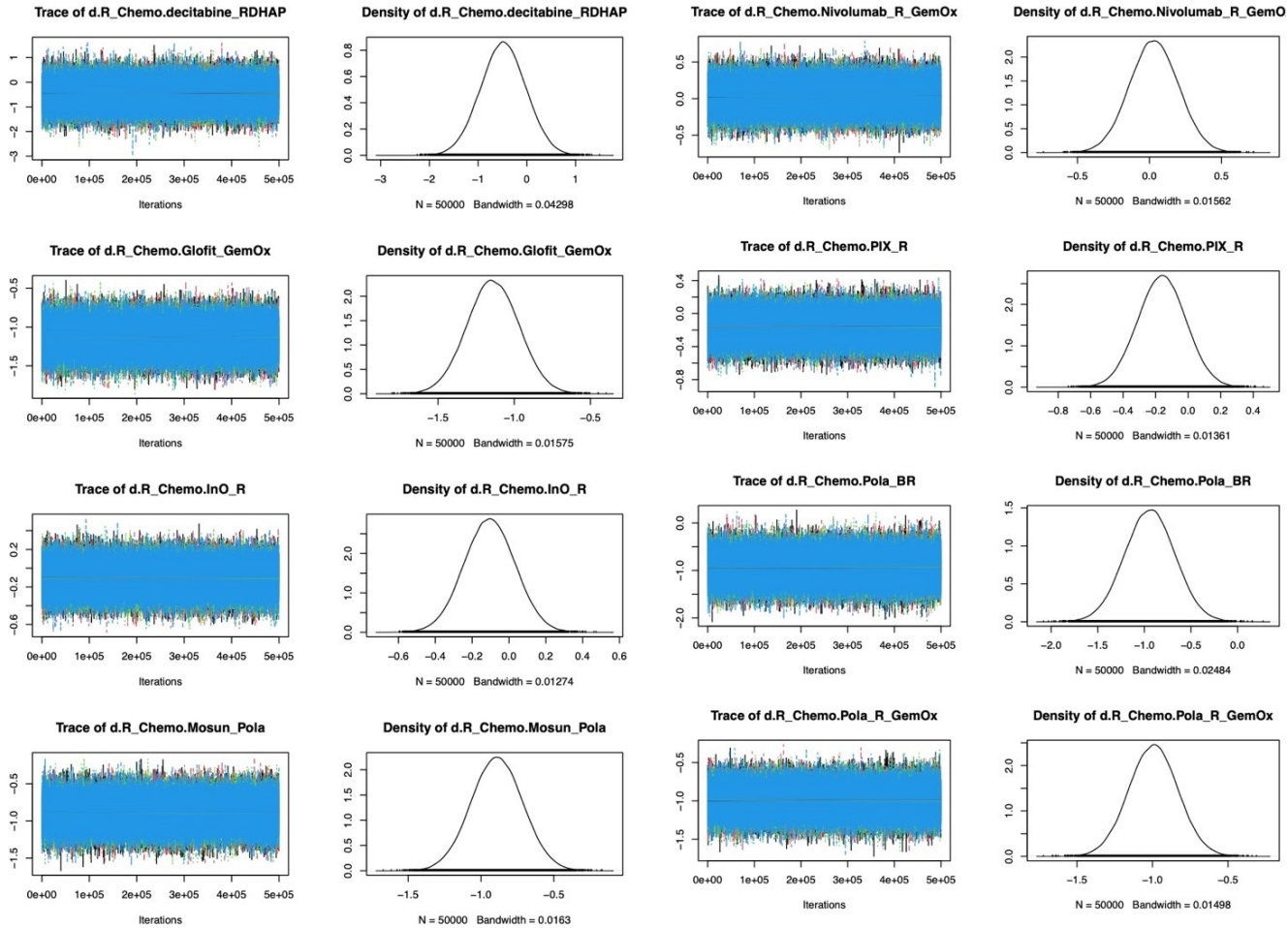

Figure S10 Convergence of the three chains established by inspection of the history feature and the Brooks-Gelman-Rubin diagnostic for progression-free survival in the transplant-ineligible cohort.

https://dx.doi.org/10.21037/tcr-2026-0678

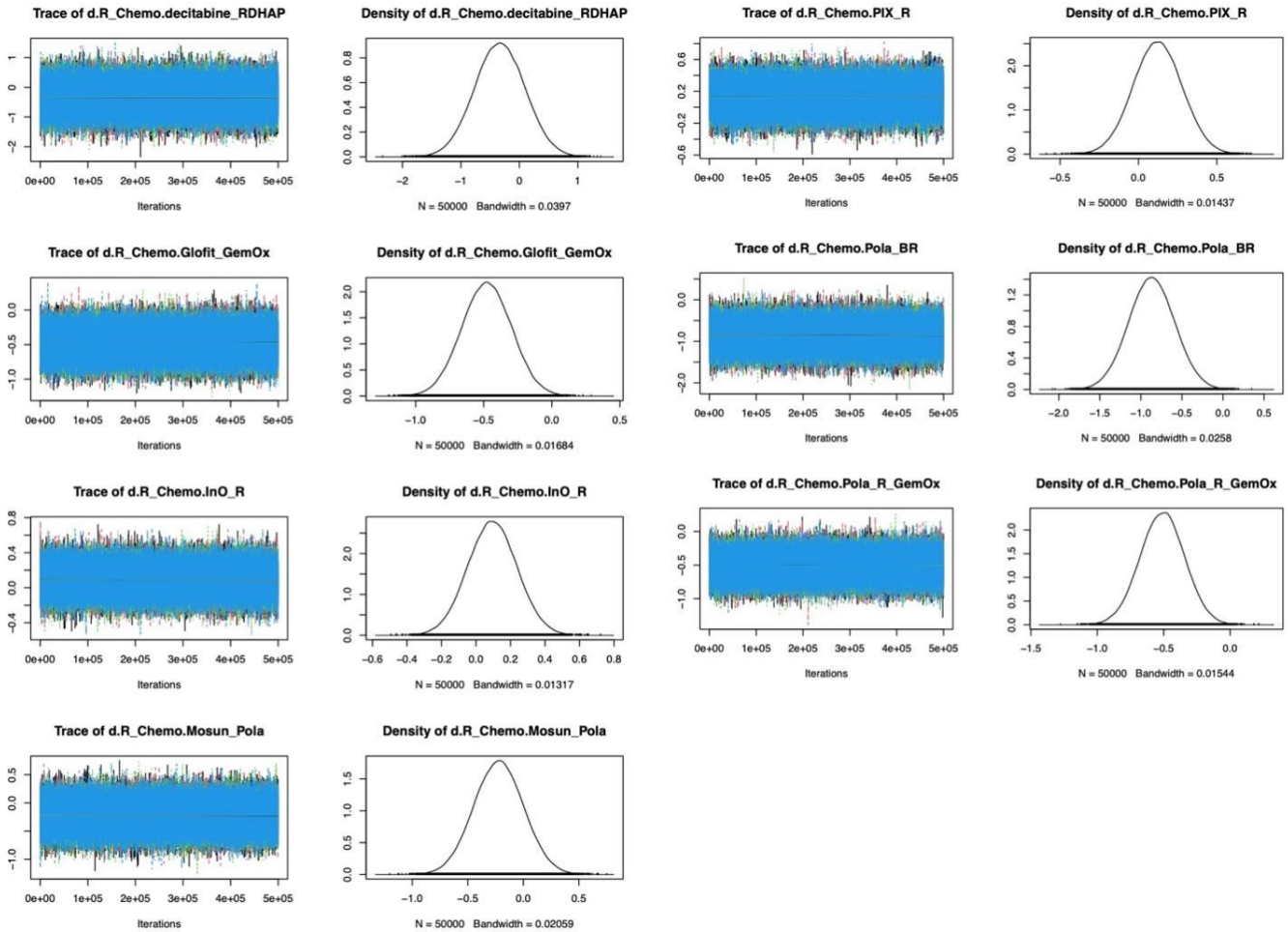

Figure S11 Convergence of the three chains established by inspection of the history feature and the Brooks-Gelman-Rubin diagnostic for overall survival in the transplant-ineligible cohort.

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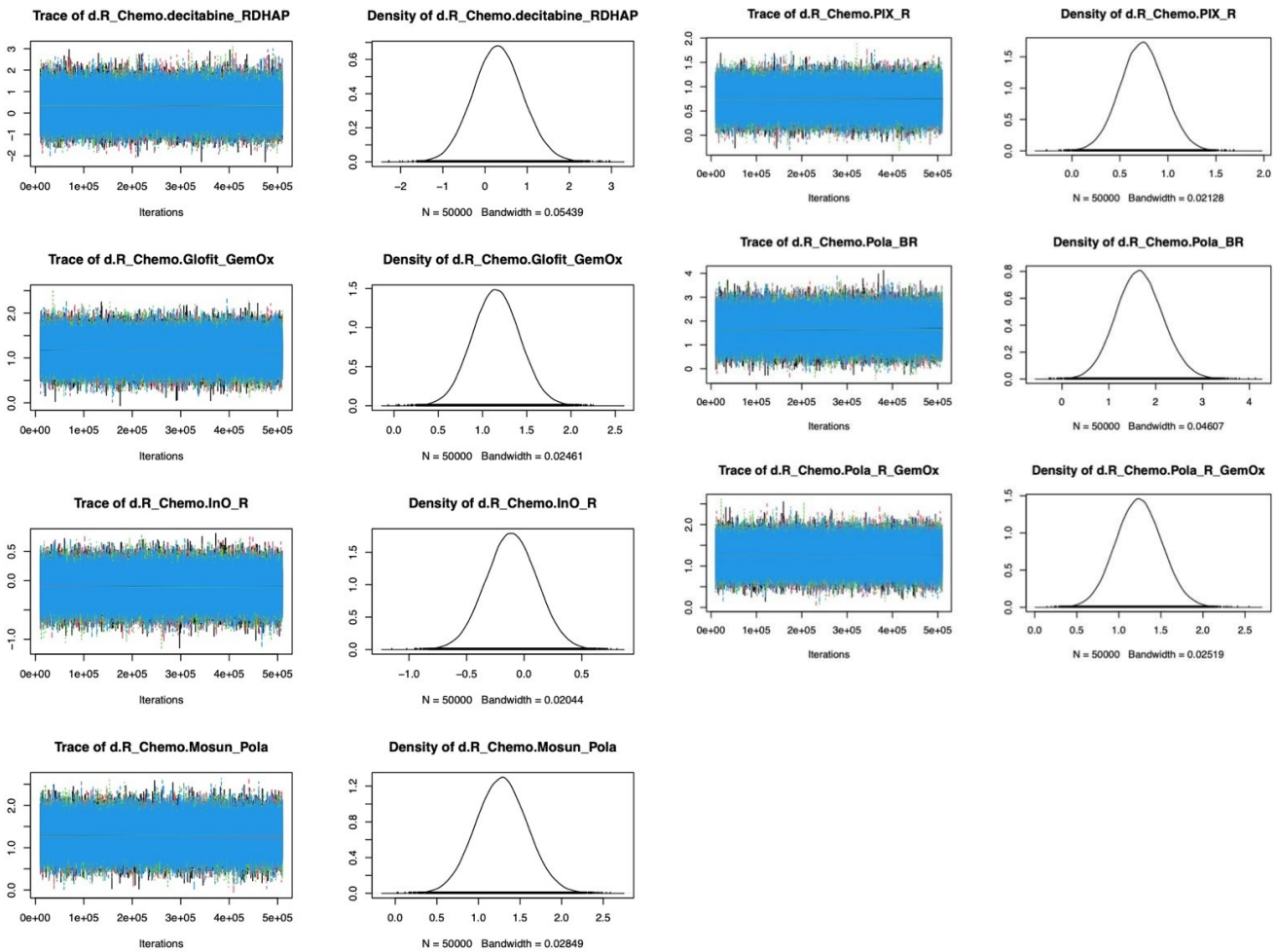

Figure S12 Convergence of the three chains established by inspection of the history feature and the Brooks-Gelman-Rubin diagnostic for objective response rate in the transplant-ineligible cohort.

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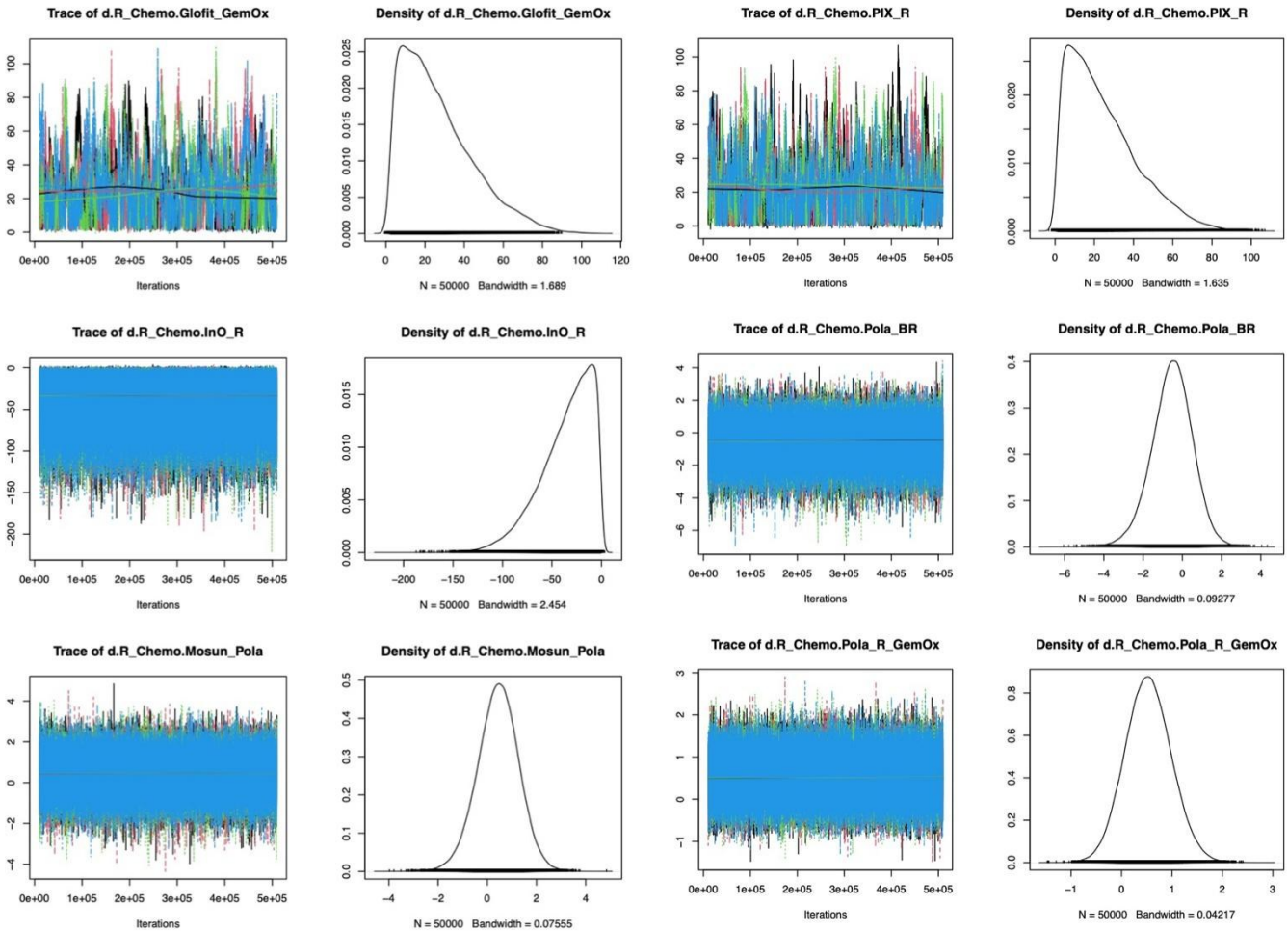

Figure S13 Convergence of the three chains established by inspection of the history feature and the Brooks-Gelman-Rubin diagnostic for treatment-emergent adverse events in the transplant-ineligible cohort.

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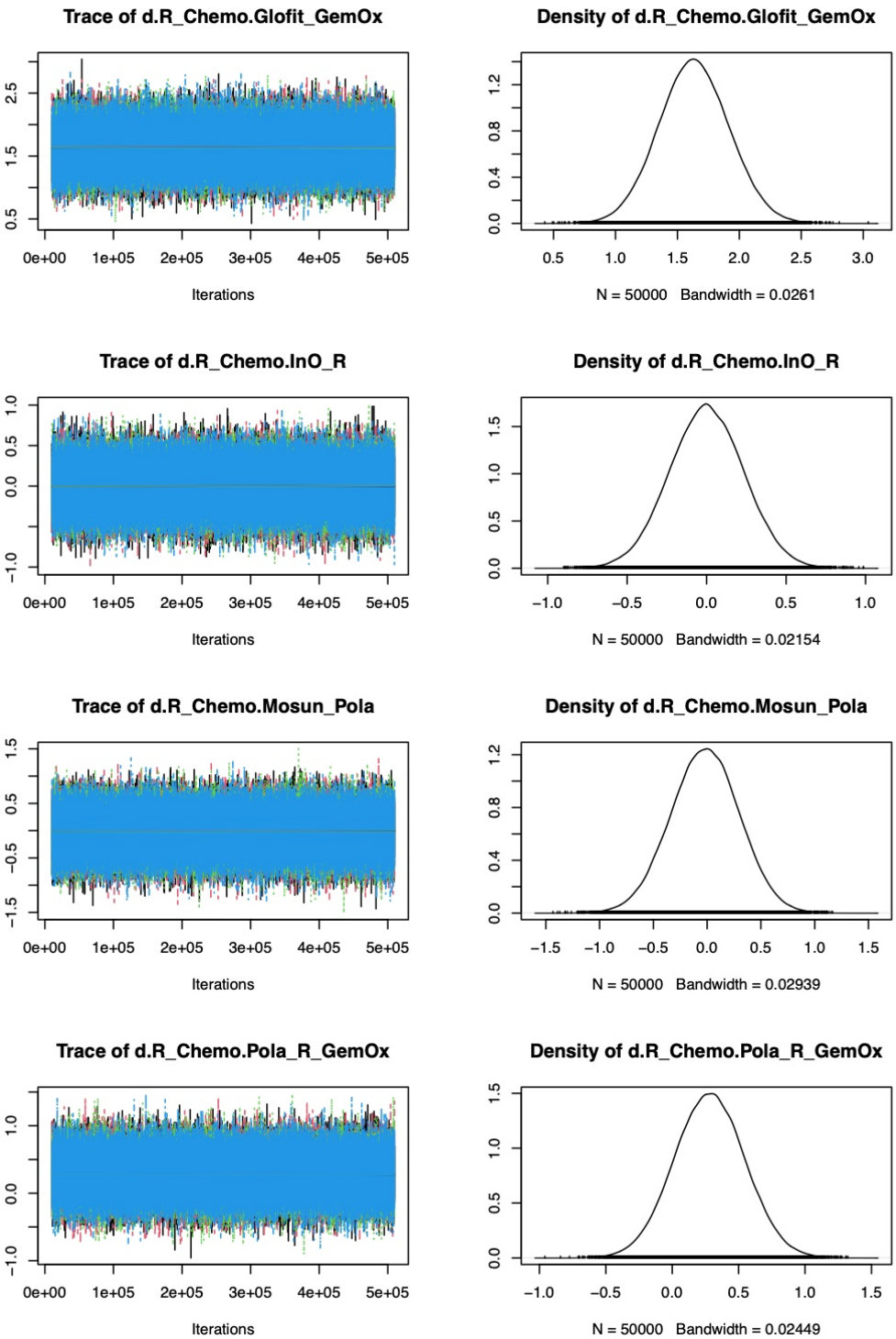

Figure S14 Convergence of the three chains established by inspection of the history feature and the Brooks-Gelman-Rubin diagnostic for Grade ≥3 treatment-emergent adverse events in the transplant-ineligible cohort.

https://dx.doi.org/10.21037/tcr-2026-0678

Table S4 The heterogeneity assessment

Type	Outcome	DIC	I^2(%)
Transplant-eligible	PFS	7.969436	25%
	EFS	5.99	33%
	OS	10.000978	20%
	ORR	24.15776	9%
	TEAE	10.967052	0%
	Grade ≥3 TEAE	16.174968	13%
Transplant-ineligible	OS	13.95727	14%
	PFS	16.015106	13%
	ORR	28.17979	8%
	TEAE	19.04959	0%
	Grade≥3 TEAE	16.092009	13%

DIC, Deviance information criterion; EFS, event-free survival; PFS, progression free survival; OS, overall survival; ORR, objective response rate; AE, adverse event; TEAE, treatment-emergent adverse event.

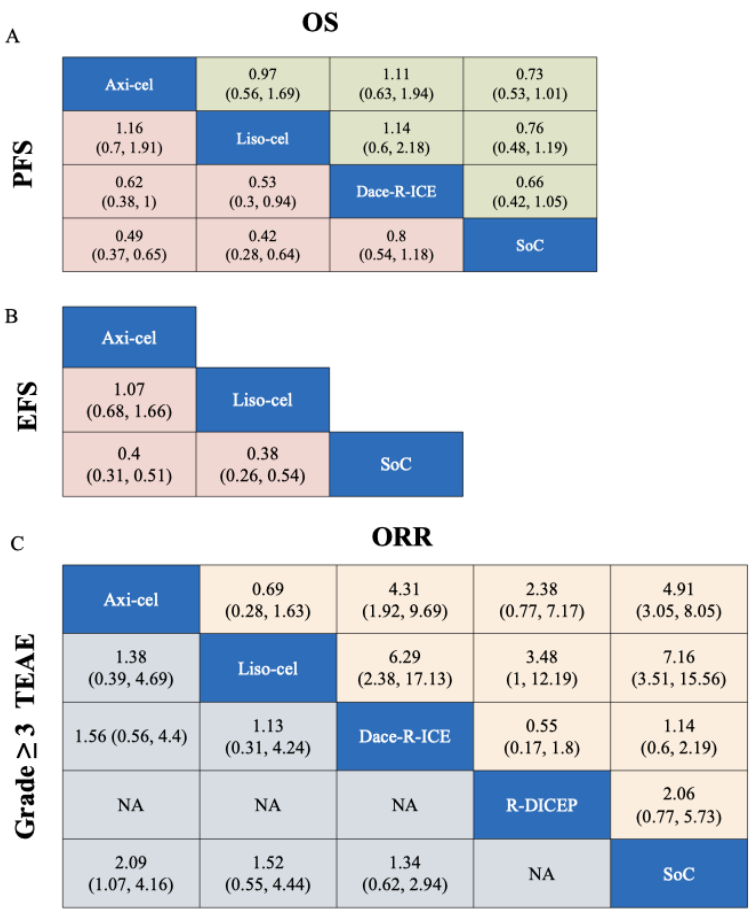

Figure S15 Pooled estimates of the network meta-analysis in the transplant-eligible patients after excluding trials with a median follow-up of <12 months.

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Table S5 The heterogeneity assessment after excluding trials with a median follow-up of <12 months

Type	Outcome	DIC	I^2 (%)
Transplant-eligible	OS	5.99	33%
	EFS	3.99	50%
	PFS	5.99	33%
	ORR	16.15	13%
	TEAE	2.66	0%
	Grade ≥3 TEAE	12.16	18%

Trials with a median follow-up of <12 months only existed in transplant-eligible cohort, the results in transplant-ineligible cohort remained unchanged. DIC, Deviance information criterion; EFS, event-free survival; PFS, progression free survival; OS, overall survival; ORR, objective response rate; TEAE, treatment-emergent adverse events.

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