

Additional File 1: Supplementary Data

Manuscript title: Efficacy and safety of thalidomide in β -thalassaemia: a systematic review and meta-analysis

Supplementary Table 1. Study Quality Assessment by NIH Tool for transfusion-dependent β -thalassaemia (TDT) and non-transfusion-dependent β -thalassaemia (NTDT)

NIH Quality Assessment Tool for Pre-Post Studies with No Control Group	Ali et al.	Chandra et al.	Jain et al.	Jian et al.	Ju et al.,	Li et al.,	Nag et al.	Ren et al.	Yang et al.	Yang et al.	Yassin et al.,	Bawazir	Dolai	Li	Mishra	Rahman	Singha
1. Was the study question or objective clearly stated?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	CD	Y	Y	Y	Y
2. Were eligibility/selection criteria for the study population prespecified and clearly described?	Y	Y	Y	CD	Y	Y	Y	Y	Y	CD	Y	Y	Y	Y	Y	Y	Y
3. Were the participants in the study representative of those who would be eligible for the test/service/intervention in the general or clinical population of interest?	Y	Y	Y	Y	Y	Y	CD	Y	Y	Y	Y	N	Y	CD	CD	Y	CD
4. Were all eligible participants that met the prespecified entry criteria enrolled?	CD	Y	Y	CD	CD	Y	CD	Y	Y	CD	CD	Y	Y	Y	CD	CD	Y

5. Was the sample size sufficiently large to provide confidence in the findings?	Y	Y		N	N	Y	N	N	CD	N	N	Y	Y	Y	Y	Y	CD
6. Was the test/service/intervention clearly described and delivered consistently across the study population?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
7. Were the outcome measures clearly defined, valid, reliable, and assessed consistently across all study participants?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
8. Were the people assessing the outcomes blinded to the participants' exposures/interventions?	N	N	N	N	N	N	N	N	N	N	N	CD	N	N	N	N	Y
9. Was the loss to follow-up after baseline 20% or less? Were those lost to follow-up accounted for in the analysis?	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	CD	N	CD	CD	N	Y
10. Did the statistical methods examine changes in outcome measures from before to after the intervention? Were statistical tests done that provided p values for the pre-to-post changes?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	NA	Y	Y

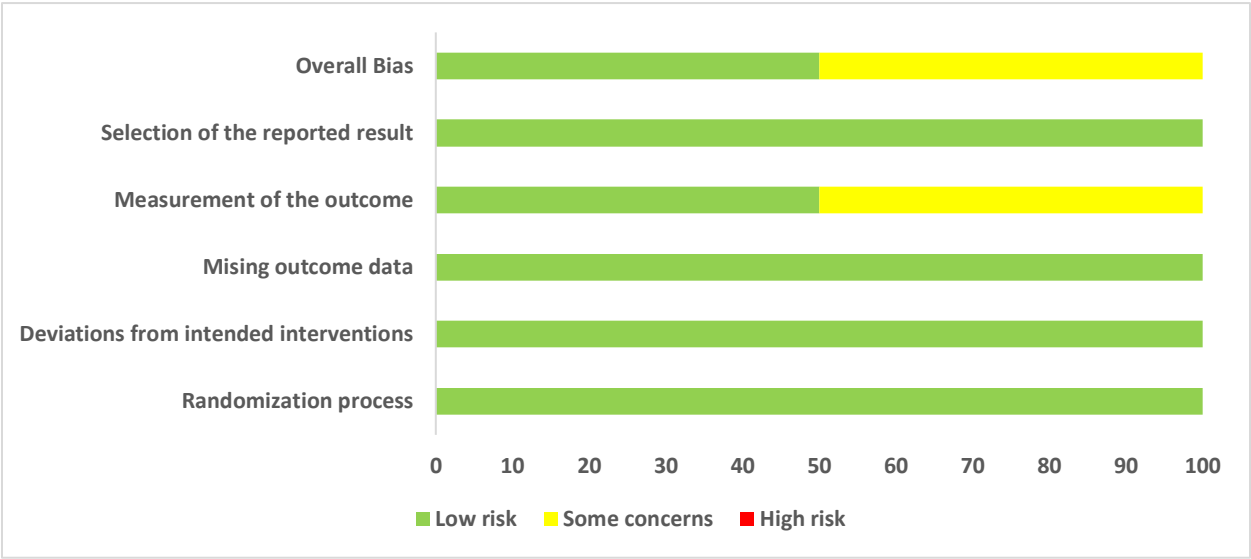
11. Were outcome measures of interest taken multiple times before the intervention and multiple times after the intervention (i.e., did they use an interrupted time-series design)?	Y	N	Y	Y	Y	N	N	CD	CD	N	CD	N	N	N	NA	N	N
12. If the intervention was conducted at a group level (e.g., a whole hospital, a community, etc.) did the statistical analysis take into account the use of individual-level data to determine effects at the group level?	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Study Quality	Good	Good	Good	Fair	Fair	Good	Fair	Good	Good	Fair	Fair	Fair	Fair	Fair	Fair	Good	Good

Y=Yes; N=No; CD= cannot determine; NA= not applicable; NR= not reported

Supplementary Table 2. Summary of changes in serum ferritin levels following thalidomide treatment in β -thalassaemia patients across the included studies

	Study & year	Duration (months)	Baseline serum ferritin value (ng/mL)	Post treatment serum ferritin value (ng/mL)	Mean difference or percentage difference	Reporting format
1	Ali 2023	6	2195	1516		Mean
2	Bhatta 2023	6	3309.4 $\pm$ 3342.39	2587.4 $\pm$ 2204.39	1059.3 $\pm$ 1571.58	Mean $\pm$ SD
3	Chandra 2021	6	1758.9 $\pm$ 835.1	1549.6 $\pm$ 1016.9		Mean $\pm$ SD
4	Chen 2021	6	3706.2 (1993.7-6116.9)	2013.5 (930.3-4428.4)		Median (IQR)
5	Jain 2021	18	307.33 $\pm$ 131.99	282.93 $\pm$ 117.23		Mean $\pm$ SD
6	Nag 2020	3	Responders:1919 Non-responders:3931	Responders: 1404 Nonresponders: 2610		Median
7	Yang 2024	12			1490.5 $\pm$ 295.7	Mean $\pm$ SE
8	Yassin 2019	15			Responders: 21.27% Non-responders: -7.77%	Mean
9	Dolai 2025	12	1947 $\pm$ 816	1554 $\pm$ 1258		Mean $\pm$ SD
10	Singha 2025 TDT NTDT	6	1194.2 $\pm$ 452.5 796.7 $\pm$ 382.1	839.4 $\pm$ 443.1 520.9 $\pm$ 257.6		Mean $\pm$ SD
11	Rahman 2025	30	3105.65 (2194.5-4802.5)	909.5 (523.0-1620.5)		Median (IQR)

Supplementary Figure 1. Risk of bias for randomised controlled trials (RCTs) included in the meta-analysis



(A) Risk of bias graph

	Bhattacharjee et al.,	Chen et al.
Randomisation process	+	+
Deviations from the intended interventions	!	+
Missing outcome data	+	+
Measurement of the outcome	+	+
Selection of the reported result	+	+
Overall Bias	!	+

+

Low risk

!

Some concerns

-

High risk

(B) Risk of bias summary