



Supplementary File 2: Quality and Risk of Bias Assessment

A. Observational Studies (Newcastle-Ottawa Scale)

Study	Selection (Max 4)	Comparability (Max 2)	Outcome (Max 3)	Total Score	Overall Risk	Key Limitations
Anand et al. (2023)	4	2	3	9/9	Low	None identified; robust adjustment for confounders.
Duchesne et al. (2019)	3	1	2	6/9	Moderate	Retrospective; unmeasured confounding possible.
Gong et al. (2023)	3	1	2	6/9	Moderate	Single-center design; selection bias risk.
Cothren et al. (2007)	3	1	2	6/9	Moderate	Small sample size; no control group.
French et al. (2020)	2	1	2	5/9	Moderate	Focus on bleeding disorders; limited generalizability.

B. Systematic Reviews/Meta-Analyses (AMSTAR-2)

Study	Protocol Registered?	Comprehensive Search?	Risk of Bias Considered?	Overall Confidence	Key Limitations
Martinez et al. (2024)	Yes (PROSPERO)	Yes	Yes	High	Heterogeneity in included studies.
Li et al. (2020)	No	Partial	Yes	Moderate	Limited search strategy; unpublished data not sought.
Cullinane et al. (2011)	N/A (Guideline)	Yes	Yes	High	Consensus-driven; lacks primary data.

C. Other Studies

Study	Tool Applied	Key Findings	Overall Risk	Limitations
Mauffrey et al. (2014)	Narrative synthesis	Expert consensus	Low	No formal bias assessment.
Franchini (2008)	N/A (Editorial)	Opinion-based	High	Not original research.

Key for Ratings:

• Newcastle-Ottawa Scale (NOS):

- o Low risk: ≥ 7 stars
- o Moderate risk: 5–6 stars
- o High risk: ≤ 4 stars

• AMSTAR-2:

- o High confidence: ≤ 1 critical flaw
- o Moderate confidence: > 1 non-critical flaw
- o Low confidence: ≥ 1 critical flaw

References

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