

Appendix 2. Table. Definitions Used for Assessing Risk of Bias Items in Individual Randomized Trials

Risk of bias item	Risk of bias judgment	Definition
Sequence generation	<i>Low</i>	Central randomization Computer random-number generator Minimization Random number table Coin tossing, shuffling cards or envelopes
	<i>High</i>	Date of birth Date of hospital admission
	<i>Unclear</i>	Not reported
Allocation concealment	<i>Low</i>	Central randomization Sequentially numbered, opaque, sealed envelopes Sequentially numbered drug containers of identical appearance
	<i>High</i>	Allocation based on date of birth, alternation Open random allocation schedule Unsealed envelopes
	<i>Unclear</i>	Not reported
Blinding participants and personnel¹	<i>Low</i>	Blinding of participants and personnel Low likelihood that blinding could have been broken
	<i>High</i>	Any situation where blinding of participants and personnel is not possible (e.g. surgical treatment) Subjective outcome likely to be influenced by lack of blinding
	<i>Unclear</i>	Incomplete information
Blinding outcome assessor¹	<i>Low</i>	No blinding but with objective outcome Blinding of outcome assessor
	<i>High</i>	Subjective outcome likely to be influenced by lack of blinding
	<i>Unclear</i>	Incomplete information

INCOMPLETE OUTCOME DATA

Attrition bias due to amount, nature or handling of incomplete outcome data.

Criteria for a judgement of ‘Low risk’ of bias: Any one of the following:

- No missing outcome data;
- Reasons for missing outcome data unlikely to be related to true outcome (for survival data, censoring unlikely to be introducing bias);
- Missing outcome data balanced in numbers across intervention groups, with similar reasons for missing data across groups;
- For dichotomous outcome data, the proportion of missing outcomes compared with observed event risk not enough to have a clinically relevant impact on the intervention effect estimate;
- Missing data have been imputed using appropriate methods.

Criteria for the judgement of ‘High risk’ of bias.

Any one of the following:

Reason for missing outcome data likely to be related to true outcome, with either imbalance in numbers or reasons for missing data across intervention groups;

- For dichotomous outcome data, the proportion of missing outcomes compared with observed event risk enough to induce clinically relevant bias in intervention effect estimate;
- ‘As-treated’ analysis done with substantial departure of the intervention received from that assigned at randomization;
- Potentially inappropriate application of simple imputation.

Criteria for the judgement of ‘Unclear risk’ of bias.

Any one of the following:

- Insufficient reporting of attrition/exclusions to permit judgement of ‘Low risk’ or ‘High risk’ (e.g. number randomized not stated, no reasons for missing data provided);
- The study did not address this outcome.

¹In a secondary analysis the two items related to blinding were also reconsidered as low risk of bias in the case of objective outcomes. Results remained unchanged.