

PRISMA 2020 Checklist — 27 items for systematic reviews

Systematic reviews · Meta-analyses. Items 10, 13, 16, 20, 23, and 24 contain lettered sub-items — confirm each sub-item, not just the heading.

Use this as a pre-submission check: confirm each item is reported somewhere in your manuscript or its supplementary files. The two items reviewers check first are the flow diagram (16) and registration (24) — leave neither implicit.

TITLE

- ☐ **1 Title** — Identify the report as a systematic review in the title (and as a meta-analysis where applicable).

ABSTRACT

- ☐ **2 Abstract** — Report the abstract against the PRISMA 2020 for Abstracts checklist — background, objectives, eligibility criteria, information sources, risk of bias, synthesis of results, interpretation, funding, and registration.

INTRODUCTION

- ☐ **3 Rationale** — Describe the rationale for the review in the context of existing knowledge.
- ☐ **4 Objectives** — Provide an explicit statement of the objective(s) or question(s) the review addresses.

METHODS

- ☐ **5 Eligibility criteria** — Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses.
- ☐ **6 Information sources** — Specify all databases, registers, websites, organisations, reference lists, and other sources searched or consulted, with the date each source was last searched.
- ☐ **7 Search strategy** — Present the full search strategies for all databases, registers, and websites, including any filters and limits used.
- ☐ **8 Selection process** — State how studies were screened against the inclusion criteria: how many reviewers per record, whether they worked independently, and any automation tools used.
- ☐ **9 Data collection process** — State how data were collected from reports: how many reviewers, whether independent, processes for obtaining or confirming data from investigators, and any automation tools used.
- ☐ **10 Data items** (*sub-items a–b*) — List and define all outcomes for which data were sought and whether all compatible results were collected; list all other variables sought (participant, intervention, funding characteristics) and assumptions made about missing or unclear information.
- ☐ **11 Study risk of bias assessment** — Specify the tool(s) used to assess risk of bias in the included studies, how many reviewers assessed each study, whether they worked independently, and any automation tools used.
- ☐ **12 Effect measures** — Specify for each outcome the effect measure(s) used (e.g., risk ratio, mean difference) in the synthesis or presentation of results.
- ☐ **13 Synthesis methods** (*sub-items a–f*) — Describe: eligibility for each synthesis; data preparation (handling missing statistics, conversions); tabulation and visual display methods; the synthesis method used (for meta-analysis: the model, heterogeneity assessment, and software); exploration of heterogeneity (subgroup analysis, meta-regression); and sensitivity analyses.
- ☐ **14 Reporting bias assessment** — Describe any methods used to assess risk of bias due to missing results in a synthesis (arising from reporting biases).
- ☐ **15 Certainty assessment** — Describe any methods used to assess certainty (or confidence) in the body of evidence for an outcome — typically GRADE.

RESULTS

- ☐ **16 Study selection** (*sub-items a–b*) — Report the flow from records identified to studies included, ideally with the PRISMA flow diagram; cite studies that appeared to meet the criteria but were excluded, and explain why.
- ☐ **17 Study characteristics** — Cite each included study and present its characteristics, typically in a summary table.
- ☐ **18 Risk of bias in studies** — Present assessments of risk of bias for each included study, by domain.
- ☐ **19 Results of individual studies** — For each study and outcome, present summary statistics and an effect estimate with its precision (e.g., 95% CI), ideally using forest plots.
- ☐ **20 Results of syntheses** (*sub-items a–d*) — For each synthesis: briefly summarise characteristics and risk of bias among contributing studies; present the summary estimate with its precision and measures of heterogeneity; report investigations of possible causes of heterogeneity; report sensitivity analyses.
- ☐ **21 Reporting biases** — Present assessments of risk of bias due to missing results (reporting biases) for each synthesis assessed.
- ☐ **22 Certainty of evidence** — Present assessments of certainty (or confidence) in the body of evidence for each outcome — typically a GRADE summary-of-findings table.

DISCUSSION

- ☐ **23 Discussion** (*sub-items a–d*) — Provide a general interpretation of the results in the context of other evidence; discuss limitations of the evidence included; discuss limitations of the review processes; state implications for practice, policy, and future research.

OTHER INFORMATION

- ☐ **24 Registration and protocol** (*sub-items a–c*) — Provide registration information (e.g., PROSPERO number) or state that the review was not registered; say where the protocol can be accessed, or that one was not prepared; describe and explain any amendments.
- ☐ **25 Support** — Describe sources of financial or non-financial support for the review, and the role of the funders or sponsors.
- ☐ **26 Competing interests** — Declare any competing interests of the review authors.
- ☐ **27 Availability of data, code and other materials** — Report which of the following are publicly available and where: template data collection forms; data extracted from included studies; data used for analyses; analytic code; any other materials.

THE PRISMA FAMILY — WHICH CHECKLIST APPLIES

Checklist	Use it for	Notes
PRISMA 2020	Systematic reviews and meta-analyses of health interventions.	The base 27-item checklist on this page.
PRISMA 2020 for Abstracts	Journal and conference abstracts of systematic reviews.	12-item companion — item 2 of the main checklist points here.
PRISMA-ScR	Scoping reviews.	A different item set — do not report a scoping review against the base PRISMA checklist.
PRISMA-S	Documenting the literature search.	Extension elaborating items 6–7; expected by information specialists and many journals.

PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) 2020 is maintained by the PRISMA Executive (prisma-statement.org) and listed by the EQUATOR Network. Item text here is paraphrased for explanation; for the full official wording and the rationale behind each item, see the PRISMA 2020 statement (BMJ 2021;372:n71) and the Explanation & Elaboration paper. Annotated reference by PeerReviewAI — peerreviewai.org/guides/prisma-checklist.