

Improving the quality of reports of meta-analyses of randomised controlled trials: the QUOROM statement checklist

| Heading | Subheading | Descriptor | Reported? (Y/N) | Page number |
|---------------------|-----------------------------|--|-----------------|-------------|
| Title | | Identify the report as a meta-analysis [or systematic review] of RCTs ²⁶ | Y | 1 |
| Abstract | | Use a structured format ²⁷ | Y | 2 |
| | Describe | | | |
| | Objectives | The clinical question explicitly | Y | 2 |
| | Data sources | The databases (ie, list) and other information sources | Y | 2 |
| | Review methods | The selection criteria (ie, population, intervention, outcome, and study design); methods for validity assessment, data abstraction, and study characteristics, and quantitative data synthesis in sufficient detail to permit replication | Y | 2 |
| | Results | Characteristics of the RCTs included and excluded; qualitative and quantitative findings (ie, point estimates and confidence intervals); and subgroup analyses | Y | 2 |
| | Conclusion | The main results | Y | 3 |
| | | | | |
| | | Describe | | |
| Introduction | | The explicit clinical problem, biological rationale for the intervention, and rationale for review | Y | 4 |
| Methods | Searching | The information sources, in detail ²⁸ (eg, databases, registers, personal files, expert informants, agencies, hand-searching), and any restrictions (years considered, publication status, ²⁹ language of publication ^{30,31}) | Y | 5 |
| | Selection | The inclusion and exclusion criteria (defining population, intervention, principal outcomes, and study design ³²) | Y | 5 |
| | Validity assessment | The criteria and process used (eg, masked conditions, quality assessment, and their findings ³³⁻³⁶) | Y | 6 |
| | Data abstraction | The process or processes used (eg, completed independently, in duplicate) ^{35,36} | Y | 6 |
| | Study characteristics | The type of study design, participants' characteristics, details of intervention, outcome definitions, &c, ³⁷ and how clinical heterogeneity was assessed | Y | 6 |
| | Quantitative data synthesis | The principal measures of effect (eg, relative risk), method of combining results (statistical testing and confidence intervals), handling of missing data; how statistical heterogeneity was assessed; ³⁸ a rationale for any a-priori sensitivity and subgroup analyses; and any assessment of publication bias ³⁹ | Y | 6,7 |
| Results | Trial flow | Provide a meta-analysis profile summarising trial flow (see figure) | Y | 25 |
| | Study characteristics | Present descriptive data for each trial (eg, age, sample size, intervention, dose, duration, follow-up period) | Y | 8,9,20 |
| | Quantitative data synthesis | Report agreement on the selection and validity assessment; present simple summary results (for each treatment group in each trial, for each primary outcome); present data needed to calculate effect sizes and confidence intervals in intention-to-treat analyses (eg 2x2 tables of counts, means and SDs, proportions) | Y | 9,10,26-30 |
| Discussion | | Summarise key findings; discuss clinical inferences based on internal and external validity; interpret the results in light of the totality of available evidence; describe potential biases in the review process (eg, publication bias); and suggest a future research agenda | Y | 11-15 |

Quality of reporting of meta-analyses