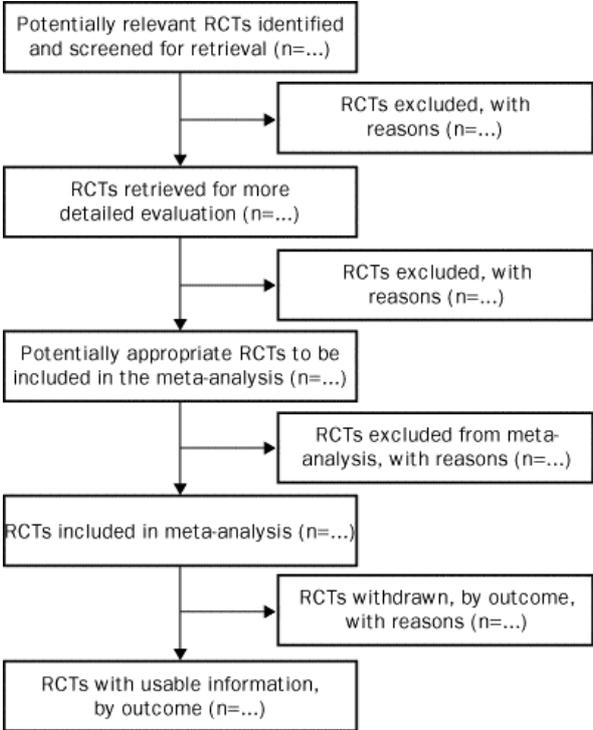


# Improving the quality of reports of meta-analyses of randomised controlled trials: the QUOROM statement checklist

| Heading             | Subheading                         | Descriptor   | Reported? (Y/N) | Page number |
|---------------------|------------------------------------|--|-----------------|-------------|
| <b>Title</b>        |                                    | Identify the report as a meta-analysis [or systematic review] of RCTs <sup>26</sup>  |                 |             |
| <b>Abstract</b>     |                                    | Use a structured format <sup>27</sup>  |                 |             |
|                     | <b>Objectives</b>                  | <b>Describe</b><br>The clinical question explicitly  |                 |             |
|                     | <b>Data sources</b>                | The databases (ie, list) and other information sources   |                 |             |
|                     | <b>Review methods</b>              | 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   |                 |             |
|                     | <b>Results</b>                     | Characteristics of the RCTs included and excluded; qualitative and quantitative findings (ie, point estimates and confidence intervals); and subgroup analyses   |                 |             |
|                     | <b>Conclusion</b>                  | The main results   |                 |             |
|                     |                                    | <b>Describe</b>  |                 |             |
| <b>Introduction</b> |                                    | The explicit clinical problem, biological rationale for the intervention, and rationale for review   |                 |             |
| <b>Methods</b>      | <b>Searching</b>                   | The information sources, in detail <sup>28</sup> (eg, databases, registers, personal files, expert informants, agencies, hand-searching), and any restrictions (years considered, publication status, <sup>29</sup> language of publication <sup>30,31</sup> )   |                 |             |
|                     | <b>Selection</b>                   | The inclusion and exclusion criteria (defining population, intervention, principal outcomes, and study design <sup>32</sup> )  |                 |             |
|                     | <b>Validity assessment</b>         | The criteria and process used (eg, masked conditions, quality assessment, and their findings <sup>33-36</sup> )  |                 |             |
|                     | <b>Data abstraction</b>            | The process or processes used (eg, completed independently, in duplicate) <sup>35,36</sup>   |                 |             |
|                     | <b>Study characteristics</b>       | The type of study design, participants' characteristics, details of intervention, outcome definitions, &c, <sup>37</sup> and how clinical heterogeneity was assessed   |                 |             |
|                     | <b>Quantitative data synthesis</b> | 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; <sup>38</sup> a rationale for any a-priori sensitivity and subgroup analyses; and any assessment of publication bias <sup>39</sup> |                 |             |
| <b>Results</b>      | <b>Trial flow</b>                  | Provide a meta-analysis profile summarising trial flow (see figure)  |                 |             |
|                     | <b>Study characteristics</b>       | Present descriptive data for each trial (eg, age, sample size, intervention, dose, duration, follow-up period)   |                 |             |
|                     | <b>Quantitative data synthesis</b> | 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)                  |                 |             |
| <b>Discussion</b>   |                                    | 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  |                 |             |

## Quality of reporting of meta-analyses

# Improving the quality of reports of meta-analyses of randomised controlled trials: the QUOROM statement flow diagram



\*The *Lancet* is happy for readers to make copies of the checklist and flow diagram. Permission need not be obtained from the journal for reproduction of these items.