

# Improving the quality of reports of meta-analyses of randomized 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>	Yes	1
<b>Abstract</b>		Use a structured format <sup>27</sup>	Yes	2
		<b>Describe</b>		
	Objectives	The clinical question explicitly	Yes	2
	Data sources	The databases (ie, list) and other information sources	Yes	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	Yes	2
	Results	Characteristics of the RCTs included and excluded; qualitative and quantitative findings (ie, point estimates and confidence intervals); and subgroup analyses	Yes	2
	Conclusion	The main results	Yes	2
		<b>Describe</b>		
<b>Introduction</b>		The explicit clinical problem, biological rationale for the intervention, and rationale for review	Yes	3
<b>Methods</b>	Searching	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> )	Yes	4, 23
	Selection	The inclusion and exclusion criteria (defining population, intervention, principal outcomes, and study design <sup>32</sup> )	Yes	4
	Validity assessment	The criteria and process used (eg, masked conditions, quality assessment, and their findings <sup>33-36</sup> )	Yes	5
	Data abstraction	The process or processes used (eg, completed independently, in duplicate) <sup>35,36</sup>	Yes	5
	Study characteristics	The type of study design, participants' characteristics, details of intervention, outcome definitions, &c, <sup>37</sup> and how clinical heterogeneity was assessed	Yes	5, 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; <sup>38</sup> a rationale for any a-priori sensitivity and subgroup analyses; and any assessment of publication bias <sup>39</sup>	Yes	5, 6
<b>Results</b>	Trial flow	Provide a meta-analysis profile summarising trial flow (see figure)	Yes	7, Figure 1
	Study characteristics	Present descriptive data for each trial (eg, age, sample size, intervention, dose, duration, follow-up period)	Yes	7, Table 1
	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 2 × 2 tables of counts, means and SDs, proportions)	Yes	7-9, Figures 2-4, Tables 2, 3
<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	Yes	10-14

## Quality of reporting of meta-analyses