# Peer Review Checklist

## First Read-through

- Is it clear what the authors want to communicate and the direction of the manuscript?
- Is it reporting original research or is it another type of article? How does this change your report?
- What contribution does the article make to the field of study?
- Is the manuscript original?
- Is the overall study design and approach appropriate?
- Are you concerned about the language? Are revisions needed to make it possible to review?

## Detailed Review – Research Articles

### Title

- Does it express clearly what the manuscript is about?
- Does it highlight the importance of the study?
- Does it contain any unnecessary description?

### Abstract

- Is it a short and clear summary of the aims, key methods, important findings and conclusions?
- Does it include enough information to stand alone?
- Does it contain unnecessary information?
INTRODUCTION

☐ Does it clearly summarize the current state of the topic?
☐ Does it address the limitations of current knowledge in this field?
☐ Does it clearly explain why the study was necessary?
☐ Does it clearly define the aim of the study and is this consistent with the rest of the manuscript?
☐ Is the research question clear and appropriate?

METHODS

☐ Are the study design and methods appropriate for the research question?
☐ Is there enough detail to repeat the experiments?
☐ Is it clear how samples were collected or how participants were recruited?
☐ Is there any potential bias in the sample or in the recruitment of participants?
☐ Are the correct controls/ validation included?
☐ Are any potential confounding factors considered?
☐ Has any randomization been done correctly?
☐ Is the time-frame of the study sufficient to see outcomes?
☐ Is there sufficient power and appropriate statistics?
☐ Do you have any ethical concerns?

RESULTS

☐ Are the results presented clearly and accurately?
☐ Do the results presented match the methods?
☐ Have all the relevant data been included?
☐ Is there any risk of patients or participants being identified?
☐ Is the data described in the text consistent with the data in the figures and tables?
DISCUSSION AND CONCLUSION

☐ Do the authors logically explain the findings?
☐ Do the authors compare the findings with current findings in the research field?
☐ Are the implications of the findings for future research and potential applications discussed?
☐ Are the conclusions supported by the data presented?
☐ Are any limitations of the study discussed?
☐ Are any contradictory data discussed?

TABLES AND FIGURES

☐ Are data presented in a clear and appropriate manner?
☐ Is the presentation of tables and figures consistent with the description in text?
☐ Do the figure legends and table headings clearly explain what is shown?
☐ Do the figures and tables include measures of uncertainty, such as standard error or confidence intervals, where required as well as the sample size?
☐ Do you have any concerns about the manipulation of data?

REFERENCES

☐ Are there any key references missing?
☐ Do the authors cite the initial discoveries where suitable?
☐ Are there places where the authors cite a review but should cite the original paper?
☐ Do the cited studies represent current knowledge?
## FINAL CHECKS – BEFORE YOU SUBMIT YOUR REPORT

- Have you given a brief summary of the article and highlighted the key messages?
- Have you given positive feedback as well as constructive criticism?
- Have you made it clear which of your concerns are major (significant points, essential for publication) or minor (smaller issues, may not be essential for publication)?
- Are your concerns specific, with examples where possible?
- Have you numbered your comments and referred to page/line numbers in the article to make it easy for the authors to address your points?
- Is your feedback constructive, and focused on the research?
- If you were the authors, would you understand how to improve the manuscript?
- If you were the Editor, would the comments be detailed enough to help you make a decision?
- Have you checked the spelling and grammar in your report?
- Have you included your comments in the correct places in the online system – checking that any confidential comments for editors are in the right place – and have you answered all the questions?
Many of the same questions will be relevant to all articles. However, articles which do not present original research are unlikely to have a methods section and results but may be more focused on the discussion of a topic. Check the article type and journal requirements if you are unsure.

*Here are some questions to consider for some non-research article types.*

### SYSTEMATIC REVIEWS
- Are the search terms and inclusion/exclusion criteria clearly described?
- Are the search terms and criteria correct to ensure all the relevant articles are included?
- If a meta-analysis has been done, were previous studies combined appropriately?

### CASE REPORTS
- Does the diagnosis appear to be correct?
- Was the treatment reasonable for the diagnosis?
- Are the treatment and outcomes clearly described?
- As far as possible, is the patient anonymous?
- Are the conclusions reasonable and not attempting to generalize to wider population?

### METHODOLOGY ARTICLES
- Is the new method clearly described?
- Is it possible to replicate the new method?
- Is there a rationale for why the new method is needed?
- Is the new method compared to existing approaches?
- Usually there should not be any experimental results, other than to demonstrate the utility of the methods.
### REVIEW ARTICLES

- Is there any content which has been previously presented in a review?
- Does it focus on recent advances in research?
- Is it a balanced and unbiased overview of current understanding?
- Are any recent or important references missing?
- Is it too focused on the author's own research?
- Is the interpretation and presentation of results of previous studies accurate and precise?
- Has it a valuable contribution to the research field?
- Is it understandable for non-expert readers?

### OPINION ARTICLES (also called Editorials or Commentaries)

- Does the article add to the discussion on a research topic?
- Is the opinion of the author well-argued?
- Is the opinion based on current knowledge, or if it makes a big leap from current knowledge then is this logical? What supports the opinion presented?