

Letters in Biomathematics

Points for Reviewers to Consider

Reviewers are asked to provide detailed, constructive comments that will help the editors make a decision on publication and the author(s) improve their manuscript. A key issue is whether the work has serious flaws that should preclude its publication, or whether there are additional experiments or data required to support the conclusion(s) drawn. Where possible, reviewers should provide references to substantiate their comments. Reviewers should address the points below and indicate whether they consider any required revisions to be “major compulsory revisions”, “minor essential revisions”, or “discretionary revisions”. In general, revisions are likely to be “major compulsory revision” if (i) additional controls are required to support the claims or the interpretations are not supported by the data, (ii) further analysis is required that may change the conclusion(s), or (iii) the methods used are inadequate or statistical errors have been made.

The following is a list of points that each reviewer should keep in mind when composing the Referee Report.

1. Is the question posed original, important, and well-defined?

The research question posed by the authors should be easily identifiable and understood. It is useful to both the editors and authors if reviewers comment on the originality and importance of the study within the context of its field. If the research question is not original because related work has been published previously, please give references. Reviewers should ask themselves after reading the manuscript if they have learned something new and if there is a clear conclusion from the study.

2. Are the data sound and well-controlled?

If you feel that inappropriate controls have been used please say so, indicating the reasons for your concerns, and suggesting alternative controls where appropriate. If you feel that further evidence is required to substantiate the results, please provide details.

3. Is the interpretation (discussion and conclusion) well-balanced and supported by the data?

The interpretation should discuss the relevance of all the results in an unbiased manner. Are the interpretations overly positive or negative? conclusion(s) drawn from the study should be valid and result directly from the data shown, with reference to other relevant work as applicable. Have the authors provided references wherever necessary?

4. Are the methods appropriate and well-described and are sufficient details provided to allow others to evaluate and/or replicate the work?

Please remark on the suitability of the methods for the study, which should be clearly described and reproducible by peers in the field. If statistical analyses have been carried out, specify whether or not they need to be assessed specifically by an additional reviewer with statistical expertise.

5. What are the strengths and weaknesses of the methods?

Please comment on any improvements that could be made to the study design to enhance the quality of the results. If any additional experiments are required, please give details. If novel experimental techniques were used please pay special attention to their reliability and validity.

6. Can the writing, organization, or tables and figures be improved?

Although the editorial team may also assess the quality of the written English, please do comment if you consider the standard is below that expected for a scientific publication. If the manuscript is organized in such a manner that it is illogical or not easily accessible to the reader, please suggest improvements. Please provide feedback on whether the data are presented in the most appropriate manner. For example, is a table being used where a graph would give increased clarity? Are the figures of a high enough quality to be published in their present form?

7. Should revisions be requested?

Reviewers may recommend revisions for any or all of the following reasons: data need to be added to support the authors' conclusion(s), better justification is needed for the arguments based on existing data, the clarity and/or coherence of the paper needs to be improved.

8. Are there any ethical issues or competing interests you would like to raise?

The study should adhere to standards for COPE's Responsible Conduct of Research, including use of human subjects, use of animals in research, and environmental impacts if relevant for the project. Authors should declare that they have received ethics approval and/or subject consent for the study, where appropriate. Considering the review process is blind, we do not expect the reviewers to delve into authors' competing interests. However, if you are aware of any issues that you do not think have been adequately addressed, please inform the editorial office.

9. Are the included additional files (supplementary materials) appropriate?

Online publishing enables the inclusion of additional files with published articles. Additional files of many types can be submitted, including movies, tabular data, and mini-websites. Reviewers are encouraged to comment on the appropriateness of the types of additional files included with the manuscript for publication with the final article. Additional files pertaining to original/raw data files that support the results reported in the manuscript can be included. It is not expected that reviewers should reanalyze all supporting data as part of their peer review, but the availability of supporting data enables more detailed investigation of particular aspects of the study if the reviewer or editor feels it is necessary.

10. Reviewers are reminded of the importance of timely reviews.

If reviewers encounter or foresee any problems meeting the deadline for a report, they should contact Editor-in-Chief.

11. Confidentiality

Any manuscript sent for peer review is a confidential document and should remain so until it is formally published.