Checklist for Critical Review
General Study Design

Overall impression:

☑ Original material
☑ Important topic
☑ Valid interpretation of the findings
☑ Clear writing
☑ Relevant to the readership of the journal

Title:

☑ Reflection of the central message of the manuscript
☑ Specific

Abstract:

☑ Brief statement of the rationale
☑ Summary of the specific aims, basic procedures, main findings, main conclusions
☑ Internal consistency
☑ Concise, clear writing

Introduction:

☑ Opening paragraph on the general topic/problem
☑ Solid review of previously published literature in the research area
☑ Up-to-date citations
☑ No extraneous citations
☑ Concise statement of the aims/hypotheses of the study

Methods:

☑ Description of the methods for selecting subjects/specimens
☑ Clear definitions of the independent variables and methods of controlling/intervening
☑ Clear definitions of the dependent variables and methods of assessment
☑ Description of appropriate statistical approaches
☑ References for unfamiliar procedures, including statistical analyses
☑ Approval of the protocol for human/animal studies

Results:

☑ Description of the final set of subjects/specimens
☑ Suitable data summaries for all outcome variables
☑ Corresponding method in the Methods section for every finding in the Results section
☑ Figures and tables that enhance the description of results
☑ No overlap between the figures and tables
☑ Internal consistency
☑ Logical sequence in the presentation of results
☑ No extraneous results
Discussion:
- Introductory paragraph summarizing the main findings
- Interpretation of the findings
- Valid generalizations
- Insightful comparison to other studies
- Discussion of the strengths and limitations
- Recommendations if appropriate
- Summary paragraph
- Logical order