

Critical evaluation of a paper/report

Please pay attention to the following questions when reading (or writing) a scientific paper/report:

Introduction

1. Did the author(s) indicate why the study was undertaken?
2. Was the background information provided adequate to understand the aims of the study?

Methods

1. Has the source of the data been clearly given?
2. Were the methods described in sufficient detail for others to repeat or extend the study?
3. If standard methods were used, were adequate references given?
4. Have the author(s) indicated the reasons why particular procedures were used?
5. Have the author(s) indicated clearly the potential problems with the methods used?
6. Have the author(s) indicated the limitations of the methods used?
7. (Have the sources of drugs been given?)
8. Have the author(s) specified the statistical procedures used?
9. Are the statistical methods appropriate?

Results

1. Were the experiments/calculations done appropriate with respect to objectives of the study?
2. Do the results obtained make sense?
3. Do the legends to the figures describe clearly the data obtained?
4. Are the data presented in tabular form clear?
5. Has the appropriate statistical analysis been performed on these data?

Discussion

1. Were the objectives of the study met?
2. Do the author(s) discuss their results in relation to available information?
3. Do the author(s) indulge in needless speculation?
4. If the objectives were not met, do the author(s) have any explanation?

References

1. Do the author(s) cite appropriate papers for comments made?
2. (Do the author(s) cite their own publications needlessly?)

Abstract

1. Is the abstract intelligible?
2. Does the abstract accurately describe the objectives and results obtained?
3. Does the abstract include data not presented in the paper?
4. Does the abstract include material that cannot be substantiated?