How to review a paper

For Heart

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How to review a paper (or get yours accepted)

Be courteous to authors

• Agree to review right away
  ▪ Download the paper and read it that day
  ▪ Think about it and then go back to take notes for your review as discussed on following slides

• If unable to review, answer “no” quickly so the next reviewer can be invited
  ▪ Decline if you really do not have time (2-3 hours)
  ▪ Decline if the paper is outside your area of expertise

• Turn your review in on time (or early)!
  ▪ Authors appreciate rapid turn-around
  ▪ Editors value timely reviews
How to review a paper (or get yours accepted)

From submission to decision

- Paper submitted
- Editorial assistant checks format, etc
- Editor in Chief
- Associate Editor
- Peer Review
- 1st revision
- Stat. Review
- 2nd revision
- Associate Editor
- Final Decision
- Editorial Committee

How to review a paper (or get yours accepted)

Peer review is key to scientific publishing

- Independent reviewers with expertise in the field evaluate the submitted paper and provide an unbiased objective assessment
- Pre-publication peer reviews ensures high quality papers are published in high impact journals.
- Post-publication peer review is what we all do every day when we discuss published research
How to review a paper (or get yours accepted)
First, read the paper

- Is the article important?
- Will it help readers to make better decisions and, if so, how?
- Will the article add enough to existing knowledge?
- Does the article read well and make sense?
- Does it have a clear message?

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Next, organize your thoughts

- Background and Hypothesis
  - Does the study address an important question?
- Methods
  - Are the methods appropriate and clearly described?
- Results
  - Are the results presented clearly and analyzed correctly?
- Conclusions
  - Are the conclusions justified by the data presented?
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**Address an important question?**

- Does the paper address an important clinical or science question?
- Is the background and rationale for the study described clearly and concisely?
- Is the hypothesis clearly stated?
- Is this the appropriate journal for publication of this paper?

**Methods appropriate and clearly described?**

- Will the study design provide an answer to the question?
- Is the sample size adequate to provide a definitive answer?
- Are the methods valid and clearly described?
- Is the statistical approach appropriate for the data?
- Are details adequate for replication of the study data?
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Results presented clearly?

- Does the text of the results match the methods described?
- Is the data in tables complete and understandable?
- Has the best graphical display of data been used and are all the data elements displayed?
- Is there overlap between text, tables and figures?
- Are any data elements missing?

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Other considerations

- References
  Up to date and relevant? Any glaring omissions?
- Abstract/summary/key messages
  Reflect accurately what the paper says?
- Is the title descriptive of the study design and objectives?
- Research checklists (e.g. CONSORT, PRISMA, and STROBE)
  See http://www.equator-network.org
  Do these properly match what is in the manuscript? Do they contain information that should be better reported in the manuscript, or raise questions about the work?
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Key Reporting Guidelines

- Randomized controlled trials (RCTs): CONSORT guidelines
- Systematic reviews and meta-analyses: PRISMA guidelines and MOOSE guidelines
- Observational studies in epidemiology: STROBE guidelines and MOOSE guidelines
- Diagnostic accuracy studies: STARD guidelines
- Quality improvement studies: SQUIRE guidelines

How to review a paper (or get yours accepted)

Comments to the Authors

- Summary (1-2 sentences) of the key point of the paper
- Comment on study design, whether data are convincing and conclusions appropriate
- Be polite
- Specific recommendations to strengthen the paper
  - Background
  - Methods
  - Results – including tables and figures
  - Conclusions
# How to review a paper (or get yours accepted)

## Comments to the Editor

- Originality
- Importance of the work to readers of this journal
- Scientific reliability
- Clinical Impact

Do not repeat comments to authors! (the editors can see both)

- Why you recommend accept/reject/revise
- Major flaws
- Key revisions
- Is an editorial needed?

## Ethics of publishing

- Are there any ethical concerns in terms of study design, patient consent or review board approval?

- Are you concerned about duplicate publication, plagiarism or fraud?

- Remember that the article is confidential until published.

- Avoid real or perceived conflicts of interest
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Finally...

- Being asked to review an article is a professional accomplishment (list ad hoc reviewer on your CV)
- Reviewers have insight into cutting edge science and learn critical thinking – these skills enhance their own research and publications
- Reviewers who provide frequent useful reviews on time are invited to join Editorial Boards