

## EDITORIAL - Peer-reviewing: the Backbone of Scientific Journals



Acta Radiológica Portuguesa is the scientific voice of Portuguese Radiologists and national Radiological Societies and Associations. We welcome short communications, editorials and perspectives from all interested readers. Acta Radiológica Portuguesa represents the written voice of the Portuguese Society of Radiology and Nuclear Medicine (SPRMN). It relies on all SPRMN associates to live and prosper. Readers will want quality manuscripts, with interesting information that may have a direct impact on their daily practices. However, to assure quality on all provided materials, a journal cannot solely rely on the submitting authors. The journal needs experienced peer-reviewers that help to “raise the bar” and provide homogeneous high-level quality manuscripts. Thus, we rely on SPRMN associates not only to read and follow our journal; but also to use it as a scientific voice submitting their work and last, but not the least, to help during the peer-reviewing process. Acta Radiológica Portuguesa should be in the priority lane of all Portuguese-speaking Radiologists when considering a journal to submit their work. Only through quality and volume of submitted manuscripts we can help our journal. Once we have volume and quality of submitted materials we can move on to reviewing. Remember that Acta Radiológica Portuguesa does not solely publish original scientific materials, we also accept review manuscripts, case reports and editorials/commentaries that may reflect important political/societal aspects of modern national Radiological practice.

Focusing on the peer-reviewing process, I will try to summarize some reasons on why/when/how you should review manuscripts for scientific journals. Why review? You can learn a lot! From other reviewer’s and editor’s comments. You can improve your skills when reporting / writing your own data and you have an opportunity to get updated with the most recent radiology literature. This is an opportunity to help the SPRMN family and through quality reviewing you may be promoted within the Editorial Board. All reviewers provide an enormous service to the national Portuguese Radiological community. For those working in teaching Hospitals and Medicine universities, peer-reviewing allows for academic credits. Last, but not the least, It should be fun! It should be something you take some pleasure from. This leads to my second question: when to say yes/no to a reviewer invitation? You should only accept to review if you have the time and patience to complete the task. Usually, a review should be completed within 14 days after acceptance. Do not forget that time is always a matter of priorities. It will be easier for you to complete the review if you are experienced in the specific topic of the manuscript, even though the level of expertise required for peer-reviewing is debatable. I have had amazing reviews from radiology residents and terrible reviews from experienced authors on the specific topic. The less

knowledge, the more time needed to review. Ideally you should have interest in the topic, or else the review process will not be fun. Never accept a review if you feel you may have a potential for a biased decision because you may know the authors or the manuscript is from a competing group.

Now, some pearls on how to review. There are no right or wrong answers regarding manuscript faith. Reviewers make suggestions; Editors take decisions. It’s more about what you suggest/comment on the paper than a specific suggestion on accept/reject. How much time you need to review? Very variable... 1-4 hours?? Depends a lot on your experience, knowledge on the specific topic, how much work the paper needs.

Rating the overall quality of a paper depends on the quality of the data on one hand, but also on the quality of reporting on the other hand. Quality of data largely depends on 1) prospective or retrospective; 2) Single-arm versus controls; 3) Cohort size; 4) Follow-up quality. Reporting issues rely on English/language editing; scientific style of reporting; following reporting standards. On Equator-network.org you can find most relevant guidelines for reporting data (STROBE / CONSORT / STARD / PRISMA/ SPIRIT). What an Editor wants from a reviewer? Help authors improve manuscript strength - be nice! Make positive suggestions. Avoid negative criticisms. Always try to suggest how authors can change things for better. Provide a thorough/balanced review with suggestions to improve manuscript quality. See if Language / style of reporting is adequate; check if specific equator guidelines have been followed. Finally assess the quality of data, novelty of topic and if it covers predicate literature with adequate references. The first step into a review process should be to assess if instructions for authors for Acta Radiológica Portuguesa were followed for each specific manuscript type.

Finally, some tips and tricks. Start assessing general issues: manuscript category; relevance and novelty with specific references; interest for radiology community; reporting quality; language /style. Go in depth with detailed suggestions how to improve with specific comments. Title and abstract: should be able to stand alone from the manuscript as well as tables and figures. You should be able to understand the key messages from the study without looking at main text. Main text: Intro should be < 1 page; Methods and Results should be 2/3 of manuscript length; Discussion < 2 pages. Images and tables: are they clear and easy to understand? Labels? No 1st person verbiage – we, our; no single sentence paragraphs; no claims of primacy; Spell out all abbreviations 1st time used. Introduction – cut to the point – introduce gap in knowledge/rationale that justified current study and end with study purpose. Methods: generalizability/reproducibility of data? Subheadings

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are useful most times. For example: Study population / Interventions / Outcome measures / Follow-up protocol / statistical analysis plan. Results: reported orderly based on methods section – baseline data, mean follow-up time, outcome measures – data. Discussion – highlights study relevance – does not repeat results – focused to the point. Never forget to assess the limitations paragraph before the ending conclusion sentences. Conclusion sentences at end of manuscript must be clearly backed up by the results presented.

Never: Provide a suggestion to reject or accept with no comments for authors; provide contradicting comments

and accept/reject suggestions; aggressive attitude; negative comments without suggestions on how authors can improve; address authors by “you“ and talk about your own expertise; accept to review and ask others to do your job... share manuscript with others...

There is no right or wrong way for peer-reviewing. Acta Radiológica Portuguesa relies on all of you to help us improve. In the end do not forget that, Acta Radiológica Portuguesa is “our solar system”, publish and review for us, and you will get you the best spot at sunset!

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