AMERICAN JOURNAL OF PHARMTECH RESEARCH

Journal home page: http://www.ajptr.com/

Reviewer guidelines

Reviewers play an essential part in science and in scholarly publishing. For more than **300 years**, scientists and scholars have relied upon peer review to validate research, engage other specialists in the support of submitted work, and increase networking possibilities within specific specialist communities.

Although in recent years the peer review process has attracted some criticism, it remains the only widely accepted method for research validation and a cornerstone of the scientific publishing process.

Recent science, like most scientific publishing companies, relies on effective peer review processes to uphold not only the quality and validity of individual articles, but also the overall integrity of the journals we publish.

Purpose of Peer Review

Peer review is a critical element of scholarly publication, and one of the major cornerstones of the scientific process. Peer Review serves two key functions:

- Acts as a filter: Ensures research is properly verified before being published
- Improves the quality of the research: rigorous review by other experts helps to hone key points and correct inadvertent errors

On Being Asked To Review

1. ***Does the article you are being asked to review truly match your expertise?***

The Editor who has approached you may not know your work intimately, and may only be aware of your work in a broader context. Accept an invitation if you are competent to review the article.

2. ***Do you have time to review the paper?***

Reviewing an article can be quite time consuming. The time taken to review can vary greatly between disciplines and of course on article type, but on average, an article will take about 5 hours to review properly. Will you have sufficient time before the deadline stipulated in the

invitation to conduct a thorough review? If you cannot conduct the review let the editor know immediately, and if possible advise the editor of alternative reviewers.

3. *Are there any potential conflicts of interest?*

A conflict of interest will not necessarily eliminate you from reviewing an article, but full disclosure to the editor will allow them to make an informed decision. For example; if you work in the same department or institute as one of the authors; if you have worked on a paper previously with an author; or you have a professional or financial connection to the article. These should all be listed when responding to the editor's invitation for review.

Conducting the Review

Reviewing needs to be conducted confidentially, the article you have been asked to review should not be disclosed to a third party. You should not attempt to contact the author. Be aware when you submit your review that any recommendations you make will contribute to the final decision made by the editor.

Depending upon the journal, you will be asked to evaluate the article on a number of criteria. Some journals provide detailed guidance. Others do not, but normally you would be expected to evaluate the article according to the following:

Originality

Is the article sufficiently novel and interesting to warrant publication? Does it add to the canon of knowledge? Does the article adhere to the journal's standards? Is the research question an important one? In order to determine its originality and appropriateness for the journal, it might be helpful to think of the research in terms of what percentile it is in? Is it in the top 25% of papers in this field?

Structure

Is the article clearly laid out? Are all the key elements (where relevant) present: abstract, introduction, methodology, results, conclusions? Consider each element in turn:

- Title: Does it clearly describe the article?
- Abstract: Does it reflect the content of the article?
- Introduction: Does it describe what the author hoped to achieve accurately, and clearly state the problem being investigated? Normally, the introduction should summarize relevant research to provide context, and explain what other authors' findings, if any, are being challenged or extended. It should describe the experiment, the hypothesis(es) and the general experimental design or method.
- Method: Does the author accurately explain how the data was collected? Is the design suitable for answering the question posed? Is there sufficient information present for you

to replicate the research? Does the article identify the procedures followed? Are these ordered in a meaningful way? If the methods are new, are they explained in detail? Was the sampling appropriate? Have the equipment and materials been adequately described? Does the article make it clear what type of data was recorded; has the author been precise in describing measurements?

- Results: This is where the author/s should explain in words what he/she discovered in the research. It should be clearly laid out and in a logical sequence. You will need to consider if the appropriate analysis has been conducted. Are the statistics correct? If you are not comfortable with statistics, please advise the editor when you submit your report. Interpretation of results should not be included in this section.
- Conclusion/Discussion: Are the claims in this section supported by the results, do they seem reasonable? Have the authors indicated how the results relate to expectations and to earlier research? Does the article support or contradict previous theories? Does the conclusion explain how the research has moved the body of scientific knowledge forward?
- Language: If an article is poorly written due to grammatical errors, while it may make it more difficult to understand the science, you do not need to correct the English. You should bring this to the attention of the editor, however.

Finally, on balance, when considering the whole article, do the figures and tables inform the reader, are they an important part of the story? Do the figures describe the data accurately? Are they consistent, e.g. bars in charts are the same width, the scales on the axis are logical.

Previous Research

If the article builds upon previous research does it reference that work appropriately? Are there any important works that have been omitted? Are the references accurate?

Ethical Issues

- Plagiarism: If you suspect that an article is a substantial copy of another work, please let the editor know, citing the previous work in as much detail as possible
- Fraud: It is very difficult to detect the determined fraudster, but if you suspect the results in an article to be untrue, discuss it with the editor
- Other ethical concerns: For medical research, has confidentiality been maintained? Has there been a violation of the accepted norms in the ethical treatment of animal or human subjects? If so, then these should also be identified to the editor

Communicating Your Report to the Editor

Once you have completed your evaluation of the article the next step is to write up your report. As a courtesy, let the editor know if it looks like you might miss your deadline.

Some journals may request that you complete a form, checking various aspects of the paper, others will request an overview of your remarks. Either way, it is helpful to provide a quick summary of the article at the beginning of your report. This serves the dual purpose of reminding the editor of the details of the report and also reassuring the author and editor that you have understood the article.

The report should contain the key elements of your review, addressing the points outlined in the preceding section. Commentary should be courteous and constructive, and should not include any personal remarks or personal details including your name.

Providing insight into any deficiencies is important. You should explain and support your judgment so that both editors and authors are able to fully understand the reasoning behind your comments. You should indicate whether your comments are your own opinion or are reflected by the data.

When you make a recommendation regarding an article, it is worth considering the categories the editor most likely uses for classifying the article.

- Rejected due to poor quality, or out of scope
- Accept without revision
- Accept but needs revision (either major or minor)

In the latter case, clearly identify what revision is required, and indicate to the editor whether or not you would be happy to review the revised article