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DESCRIPTION

Journal of Pharmacological and Toxicological Methods publishes original articles on current methods of investigation used in pharmacology and toxicology. Pharmacology and toxicology are defined in the broadest sense, referring to actions of drugs and chemicals on all living systems. With its international editorial board and noted contributors, Journal of Pharmacological and Toxicological Methods is the leading journal devoted exclusively to experimental procedures used by pharmacologists and toxicologists.

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AUDIENCE

Pharmacologists, Toxicologists, Biochemists.

IMPACT FACTOR

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BIOSIS Citation Index
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GUIDE FOR AUTHORS

INTRODUCTION

Journal of Pharmacological and Toxicological Methods publishes articles on methods used in pharmacology, safety pharmacology and toxicology. Journal of Pharmacological and Toxicological Methods is the leading international journal devoted exclusively to the elaboration and validation of experimental methods.

Please visit our Pharmacology Author Resources page for guidance on manuscript preparation.

Types of paper

The Journal of Pharmacological and Toxicological Methods publishes papers in a range of categories:

"Research paper": description and characterization of a new or modified disease model, method, technique, apparatus or approach to analysis of data. This may include interspecies comparisons that contrast drug actions from a model relevance perspective; "Short communication" detailing simple modifications of an existing model, method, technique, apparatus or approach to analysis of data; "How To" articles that provide step-by-step guidance on the execution of a specific technique; "Appraisal of state-of-the-art" or "Historical review" of particular models, methods, techniques or apparatus; "Methods in drug discovery" - perhaps the most important category. Here, by showing how a method was used to select a drug that was eventually found to be clinically effective, the author establishes validation of the method.

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Additional information
Manuscripts will be evaluated by a member of the board of editors of the Journal, and a panel of international reviewers. An editorial decision will normally be made within 4 weeks of receipt of the manuscript, and publication will normally take place within 3 months of final acceptance.

**PREPARATION**
Note that papers focused on the actions of drugs are beyond the scope of the journal.

**Specific instructions for regular articles & short communications :**

Introduction

This must outline the reason for the study and justify the approach taken.

Methods
This section should be sufficiently detailed to permit the reader to replicate the study. It should be a full recipe, with step by step instructions. We prefer the bulk of the descriptions in prose, but tables summarising sequences of procedures are a good accompaniment to the text. Subcomponents of the method that have been described in detail in the literature should be described in full, but appropriate citation of the original source method is mandatory.

Results

This section should be concise and must not contain repetition of the methods. Data in the text must not replicate data in tables or figures. SI units must be used.

Discussion

The potential value of the data to pharmacological or toxicological or safety pharmacology research methods must be clearly explained, with appropriate reference to existing methods and their limitations. This section must not contain paragraphs dealing with topics that are beyond the scope of the study. Use subheadings for clarity.

Specific instructions for "How To" articles:

"How To" articles provide step-by-step guidance on the execution of specific techniques.

Introduction

For "How To" articles, this section will be very brief, and will simply identify the therapeutic area, the goal of the method, and give mention to published alternatives descriptions if available. It is unlikely that many papers will be cited in this section.

Methods

This section should be sufficiently detailed to permit the reader to replicate the study. It should be a full recipe, with step by step instructions. We prefer the bulk of the descriptions in prose, but tables summarising sequences of procedures are a good accompaniment to the text. Subcomponents of the method that have been described in detail in the literature should be described in full, but appropriate citation of the original source method is mandatory.

Results

This section should be concise and must not contain repetition of the methods. Data in the text must not replicate data in tables or figures. SI units must be used.

Discussion

The potential value of the data to pharmacological or toxicological research methods must be clearly explained, with appropriate reference to existing methods and their limitations. This section must not contain paragraphs dealing with topics that are beyond the scope of the study.

Specific instructions for "Appraisal of State of the Art"-articles:

Appraisal articles are reviews about the current best models. The article should identify and describe the current best model, and discuss the evidence (or lack of) to support this. A good model should demonstrably detect drugs that work (or cause adverse effects) in humans, and demonstrably have
few false positives or negatives. This evidence should be presented. The review should contrast the current best model with other available but inferior models, thereby illustrating why one is the state-of-the-art model.

Text to be divided into sections according to author choice.

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Historical reviews can be more personal and less formal. Senior figures in a field may have decades of experience with models, methods, techniques of apparatus. It is of immense value and interest to the research community to learn the history of the development of a model, understand why one model was abandoned and another developed, and get insight into the thinking behind a model, and the impact of good and bad models in drug development in a particular field. In addition, in many fields many models are still used that are transparently inadequate - it would be of great value to obtain a candid expose from an experienced practitioner as to why this might be, including insight into personal perspective as it changed over the years.

Text to be divided into sections according to author choice

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These articles are specifically intended to showcase, for the wider audience, exactly how methods were applied by a pharmaceutical company in the preclinical development of one of their own drugs. While it is appreciated that companies may wish to keep certain information confidential, it would be of great interest to the reader to be able to understand the logic (or lack of) behind the choice of each preclinical test used in the drug's development. Demonstration that use of a series of models, methods, techniques and apparatus gave rise to a drug that works in man is the closest we can get to a methods validation - a much neglected area. The reader would also benefit by having revealed the logic behind the decision-making that allowed the successful drug to proceed in development, while analogues and other compounds were dropped. Consideration of whether this decision was making based on proof, or on the exercise of judgment, or a mixture of both will be of value to the author as well as the reader as it will identify weak areas in the process for future improvements in pharmacological and toxicological methods.

Text to be divided into the following sections

Brief overview of evidence that drug X is now established as being clinically effective
Original hypothesis that triggered the search for a drug if type X
Preclinical models used in defining drug X's properties (subsections in sequence, explaining logic behind choice)
Outcome of tests (subsections in sequence, explaining logic behind successive decision making)
Conclusions

Specific instructions for all articles:

Essential title page information for all articles

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Abstract
This must not exceed 250 words and should be subdivided into four subsections headed: Introduction, Methods, Results, Discussion.

Keywords
Immediately after the abstract, provide a maximum of 10 keywords (one of which should be "methods") in alphabetical order, using British spelling and avoiding general and plural terms and multiple concepts (avoid, for example, "and", "of"). These keywords will be used for indexing purposes.

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Be sparing with abbreviations: only abbreviations firmly established in the field may be eligible.

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This journal operates a single blind review process. All contributions will be initially assessed by the editor for suitability for the journal. Papers deemed suitable are then typically sent to a minimum of two independent expert reviewers to assess the scientific quality of the paper. The Editor is responsible for the final decision regarding acceptance or rejection of articles. The Editor's decision is final. More information on types of peer review.

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Highlights are optional yet highly encouraged for this journal, as they increase the discoverability of your article via search engines. They consist of a short collection of bullet points that capture the novel results of your research as well as new methods that were used during the study (if any). Please have a look at the examples here: example Highlights.

Highlights should be submitted in a separate editable file in the online submission system. Please use 'Highlights' in the file name and include 3 to 5 bullet points (maximum 85 characters, including spaces, per bullet point).

**Acknowledgements**

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**Electronic artwork**

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Use a logical naming convention for your artwork files
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Size the illustrations close to the desired dimensions of the published version
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TIFF (or JPEG): Bitmapped (pure black and white pixels) line drawings, keep to a minimum of 1000 dpi.
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Please ensure that every reference cited in the text is also present in the reference list (and vice versa). Any references cited in the abstract must be given in full. Unpublished results and personal communications are not recommended in the reference list, but may be mentioned in the text. If these references are included in the reference list they should follow the standard reference style of the journal and should include a substitution of the publication date with either 'Unpublished results' or 'Personal communication'. Citation of a reference as 'in press' implies that the item has been accepted for publication.
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As a minimum, the full URL should be given and the date when the reference was last accessed. Any further information, if known (DOI, author names, dates, reference to a source publication, etc.), should also be given. Web references can be listed separately (e.g., after the reference list) under a different heading if desired, or can be included in the reference list.

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**Examples:**

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Reference to a journal publication with an article number:

Reference to a book:

Reference to a chapter in an edited book:

Reference to a website:

Reference to a dataset:
Reference to a conference paper or poster presentation:

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