



TABLE OF CONTENTS

●	Description	p.1
●	Impact Factor	p.1
●	Abstracting and Indexing	p.1
●	Editorial Board	p.1
●	Guide for Authors	p.4



ISSN: 1347-8613

DESCRIPTION

Journal of Pharmacological Sciences (JPS) is an international open access journal intended for the advancement of pharmacological sciences in the world. The Journal welcomes submissions in all fields of experimental and clinical pharmacology, including neuroscience, and biochemical, cellular, and molecular pharmacology for publication as Reviews, Full Papers or Short Communications. Short Communications are short research article intended to provide novel and exciting pharmacological findings. Manuscripts concerning descriptive case reports, pharmacokinetic and pharmacodynamic studies without pharmacological mechanism and dose-response determinations are not acceptable and will be rejected without peer review. The ethnopharmacological studies are also out of the scope of this journal. Furthermore, JPS does not publish work on the actions of biological extracts unknown chemical composition.

IMPACT FACTOR

2017: 2.575 © Clarivate Analytics Journal Citation Reports 2018

ABSTRACTING AND INDEXING

Directory of Open Access Journals (DOAJ)
Scopus
Science Citation Index Expanded
Current Contents/Life Sciences
BIOSIS Previews
MEDLINE®

EDITORIAL BOARD

Editor-in-Chief

Kiyofumi Yamada, Nagoya University, Aichi, Japan

Press Editor

Kazuhiro Takuma, Osaka University, Osaka, Japan

Associate Editor

Shenuarin Bhuiyan, Louisiana State University Health Sciences Center, Shreveport, USA

Feng Han, Zhejiang University, Hangzhou, China
Naoki Inagaki, Gifu Pharmaceutical University, Gifu, Japan
Masayuki Kobayashi, Nihon University School of Dentistry, Tokyo, Japan
Junko Kurokawa, Tokyo Medical and Dental University, Tokyo, Japan
Andrew John Lawrence, University of Melbourne, Australia
Tangui Nicolas Maurice, Université de Montpellier, Montpellier, France
Masahiro Nishibori, Okayama University, Okayama, Japan
Akira Nishiyama, Medical School, Kagawa University, Kagawa, Japan
Atsumi Nitta, University of Toyama, Toyama, Japan
Yukihiro Ohno, Osaka University of Pharmaceutical Sciences, Osaka, Japan
Frank A. Redegeld, Dept. of Pharmacology, Universiteit Utrecht, Utrecht, Netherlands
Toshiyuki Sasaguri, Kyushu University, Fukuoka, Japan
Yoo-Hun Suh, Seoul National University, Korea
Minoru Tsuji, International University of Health and Welfare, Tochigi, Japan
Yasuhito Uezono, National Cancer Center Research Institute, Tokyo, Japan
Peter Tsun-Hon Wong, National University of Singapore, Singapore
Qiang Xu, Nanjing University, China
Naoki Yoshimura, University of Pittsburgh, USA

Advisory Board Member

Yukio Ago
Naohiko Anzai
Hiroaki Araki
Ross Bathgate
Jinsong Bian
Yoshihiko Chiba
Young Hae Chong
Tomoe Fujita
Kohji Fukunaga
Chikuma Hamada
Yuichi Hattori
Katsuya Hirano
Hitoshi Ishibashi
Yoichiro Isohama
Katsunori Iwasaki
Junzo Kamei
Hiroshi Katsuki
Hye Sun Kim
Yasuo Kizawa
Kazunao Kondo
Tsutomu Kotegawa
Yutaka Koyama
Naoko Kuzumaki
Ying-mei Lu
Alessandra Mallei
Naoki Matsumoto
Hirokazu Mizoguchi
Masaki Mogi
Laura Musazzi
Mitsuhiko Ohshima
Keiichi Ohya
Clare Parish
Abdur Razzaque
Norio Sakai
Jutamaad Satayavivad
Toshiaki Sendo
Yuxian Shen
Yang Sun
Takeshi Takarada
Yasuo Takeda
Tadayoshi Takeuchi
Hiroyuki Tanaka
Yoshio Tanaka
Akifumi Togari
Shogo Tokuyama
Masahiro Tsuboi
Hiromasa Tsuda

**Masato Tsutsui
Shinya Uchida
Nasir Uddin
Susumu Ueno
Kazuo Umemura
Bruno Vincent
Toshihiko Yanagida
Wen-Xia Zhou**

GUIDE FOR AUTHORS

Use of inclusive language

Inclusive language acknowledges diversity, conveys respect to all people, is sensitive to differences, and promotes equal opportunities. Articles should make no assumptions about the beliefs or commitments of any reader, should contain nothing which might imply that one individual is superior to another on the grounds of race, sex, culture or any other characteristic, and should use inclusive language throughout. Authors should ensure that writing is free from bias, for instance by using 'he or she', 'his/her' instead of 'he' or 'his', and by making use of job titles that are free of stereotyping (e.g. 'chairperson' instead of 'chairman' and 'flight attendant' instead of 'stewardess').

Notice to Contributors

Journal of Pharmacological Sciences is an **international journal** intended for the advancement of pharmacological sciences in the world. The *Journal* welcomes submissions in all fields of experimental and clinical pharmacology, including neuroscience, and biochemical, cellular, and molecular pharmacology of the 21 subject categories described below, for publication as **Reviews, Full Papers, or Short Communications**. All papers are subjected to **peer-review**. Manuscripts will be published within 2 months after their acceptance.

Submissions that have been published or accepted, or are under consideration for publication, with essentially the same content, will not be considered. This restriction does not apply to results published as an abstract, letters to editors, or as submissions for symposia, provided that the submission adds significantly to the information available in the previously published submission.

Conflict of Interest (COI) must be considered to prevent ambiguity about financial and personal relationships that might bias the submitted work. All authors are requested to disclose any actual or potential conflict of interest including any financial, personal, or other relationships with other people or organizations for the past one year prior to submission that could inappropriately influence, or be perceived to influence, their work. This disclosure must be included in the text of the manuscript under the Conflicts of Interest heading. If the authors have no conflicts of interest, they must state as much, for example: "The authors indicated no potential conflicts of interest." For a general description of **authorship** and the conception of COI, please refer to the "Authorship and Contributorship" and "Conflicts of Interest" sections in the "*Uniform Requirements for Manuscripts Submitted to Biomedical Journals*" (<http://www.icmje.org/index.html>).

Manuscripts that reveal a lack of proper, ethical consideration for experimental animals or human subjects will not be accepted for publication. The *Journal* endorses the "*Guiding Principles for the Care and Use of Laboratory Animals*" approved by The Japanese Pharmacological Society and the "*Recommendations from the Declaration of Helsinki*". All ethical conditions must be indicated in the manuscript; e.g., the procedures followed were in accordance with institutional guidelines; the study was approved by a relevant ethical review committee (for experiments using human subjects, a certificate of approval must be also provided at the manuscript submission); the human subjects gave their informed consent; etc.

Authors are requested **to select two or three** (in their order of priority) **of the following subject categories** to which the manuscript applies. For any study employing natural medicine materials (NMM) (the details for NMM are described later in the last paragraph of section 5. General Instructions), be sure to include the category of "Natural Medicine Materials (NMM) with significant biological activities" in your selection:

1. Biogenic active substances
2. Receptors/Channels/Transport systems
3. Intracellular signaling
4. Biochemical and Molecular Pharmacology
5. Stem Cell Pharmacology
6. Pain Pharmacology
7. Peripheral nervous system pharmacology
8. Cardiovascular pharmacology/Hematology
9. Central nervous system pharmacology
10. Respiratory pharmacology

11. Renal pharmacology
12. Gastrointestinal pharmacology
13. Smooth muscle pharmacology
14. Bone and dental pharmacology
15. Endocrine pharmacology
16. Clinical pharmacology
17. Immunopharmacology/Inflammation
18. Biopharmaceutical Pharmacology
19. Chemotherapy
20. Toxicology
21. Natural medicine materials (NMM) with significant biological activities (req checklist)

Authors are required to **suggest four reviewers** who would be the most pertinent to review the submitted paper. Authors may also indicate up to three reviewers that they would like excluded from the review process. The ultimate selection of such reviewers is at the sole discretion of the editor.

COPYRIGHT

Upon acceptance of an article, authors will be asked to complete a 'Journal Publishing Agreement' (see [more information](#) on this). An e-mail will be sent to the corresponding author confirming receipt of the manuscript together with a 'Journal Publishing Agreement' form or a link to the online version of this agreement.

For open access articles: Upon acceptance of an article, authors will be asked to complete an 'Exclusive License Agreement' ([more information](#)). Permitted third party reuse of open access articles is determined by the author's choice of [user license](#).

Author rights

As an author you (or your employer or institution) have certain rights to reuse your work. [More information](#).

Elsevier supports responsible sharing

Find out how you can [share your research](#) published in Elsevier journals.

Preparation of Manuscripts

Papers should be in **standard English** and be prepared in A4 (210 mm × 297 mm) page size, using standard fonts with size of 11 or 12, with double-spacing, and margins of at least 25 mm all around (desirably, 25 lines per page). The authors must strictly adhere to the proper format of the *Journal* for all sections of the manuscript; refer to papers in recent issues for the general layout of the paper and also for details. For authors whose native language is not English, the *Journal* strongly recommends brushing up the English of the manuscript by consulting an English-speaking scientist before submission to avoid delays in receiving and processing of the manuscript.

1. Full Papers

1) Title page - should include the complete title of the manuscript; full names of all authors; their affiliations and addresses; a running title (short title) of no more than 40 characters (including spaces); and the name and E-mail address of the corresponding author.

2) Abstract and keywords - 200 words presented in a concise form and including the purpose, general methods, findings, and conclusions of the research described in the paper. A list of 5 keywords or short phrases suitable for indexing should be typed at the bottom of the abstract page. Avoid vague or overly general terms. If necessary, the keywords will be adjusted to the standards of the Journal by the editors without consulting the authors.

3) Introduction - should give a short and clear statement of the relevant background and the rationale of the study.

4) Materials and Methods - should include explicit, concise descriptions of all new methods or procedures employed. Commonly used methods require only a citation of the original source. The description should be such that the reader can judge the accuracy, reproducibility, reliability, etc. of the work.

5) Results - should include experimental data but not extended discussions of its relative significance. Results are more easily grasped by readers if they are presented in graphic or tabular form rather than discursively. Data should not be repeated in the text, Tables, and Figures.

6) Discussion - should be pertinent to the results. Speculation is to be based on data only; be concise and clear. Lengthy discussions will necessarily mean a delay in accepting manuscripts for publication. The text should be written with a logical connection between the introduction and conclusions.

7) References - The format should be as described in 5. General Instructions.

Article Length: The main body of the text should ordinarily be less than 4,000 words from Introduction to References, and manuscripts should contain no more than 8 Figures and/or Tables and an abstract not exceeding 200 words. The manuscripts normally occupy 8 journal pages (e.g., about 24 typewritten pages including all components).

2. Short Communications are completed projects of smaller scope, but may not be used for preliminary publications of the data; therefore, the same material cannot be published elsewhere as an original paper. The main body of the text of these communications should be no more than 1,500 words in length, without any subheadings, and manuscripts should contain no more than 3 Figures and/or Tables and a maximum of 15 references. They should have an abstract not exceeding 100 words in length. The manuscripts normally occupy 4 journal pages (e.g., about 12 typewritten pages including all components). Provide a running title (short title) of no more than 40 characters (including spaces) in length and 3 keywords or short phrases for indexing (see 1. Full Papers). Indicate the number of words used in the main body of the text. Please refer to 5. General Instructions for references and other manuscript requirements.

3. Reviews will usually be written at the request of the *Journal*. Occasionally, unsolicited ones will be considered for publication; authors/organizers of such reviews should consult one of the editors, enclosing a one-page typed synopsis, before submitting the article. The unsolicited articles are subjected to rigorous assessment of their suitability for publication.

Five types of reviews will be considered:

1) Current Perspectives (up to 10 typewritten pages for the main body of the text and a maximum of 30 references; they will normally occupy 6 journal pages): These articles should provide insight into or comments on current directions of research on a topic and/or discuss potential new approaches to an area of investigation.

2) Critical Reviews (up to 40 typewritten pages for the main body of the text and a maximum of 100 references): These should cover a current topic of interest that has not been recently reviewed, emphasizing a critical discussion of noteworthy developments in the field; they should not be just a compendium of studies on the topic and should not be only autobiographical.

3) Survey Reviews (up to 60 typewritten pages for the main body of the text and a maximum of 300 references): Should be a comprehensive survey of the research on a topic that has not been recently reviewed.

4) Forum Minireviews (approx. 30 journal pages): One set of reviews is put together by an organizer(s) on a particular topic; each set is composed of a maximum of 6 minireview articles (about 15 typewritten pages for all components of each manuscript, as a standard length; 4 – 5 journal pages, each) and a preface. The topic and contributors should be based on one of the Symposia of the Annual Meeting of The Japanese Pharmacological Society or they may be occasionally based on Symposia of special interest to pharmacologists.

5) New Drugs and Recent Techniques (up to 60 typewritten pages for the main body of the text and a maximum of 300 references): The purpose of these reviews is to introduce worldwide recently developed drugs and new techniques. These articles should be written in sufficient scientific detail and format to explain the characteristics of the drugs and/or promising techniques evaluating pharmacological actions.

Each manuscript should include an abstract, not exceeding 200 words, a running title (short title) of no more than 40 characters (including spaces) in length, and 5 keywords or short phrases for indexing (see 1. Full Papers). Please refer to 5. General Instructions for further details.

4. Correspondence (Letters to the Editor): The *Journal* will occasionally consider publishing letters to the editor from readers and authors in the "Correspondence" section. Letters should be comments and clarifications on articles that have recently been published in this *Journal* and be in a concise form. The text of these Correspondences should be no more than 2,000 words in length, without any Figures and/or Tables and a maximum of 10 references. When necessary, please refer to 5. .

Figures and Tables — should be numbered consecutively with Arabic numerals, with each one displayed on a separate page. These usually will be reduced to fit a single column, 8.8-cm-wide, or at most, a double column, maximally 18.3-cm-wide.

Any color **Figure** submitted by the authors will be processed with the understanding that upon acceptance of the manuscript, the **Figure must be published in color online without any additional charge to the authors.**

Abbreviations and Units — while authors should avoid unfamiliar abbreviations, a limited number of clearly defined abbreviations may be used. Such abbreviations must be defined at the first mention in the text or defined in alphabetical order in a footnote on the first page. When in doubt, avoid unfamiliar abbreviations. For units, the *Journal* recommends the use of the International System of Units (SI Units). It is desirable to refer to standard abbreviations and units listed in the Instructions to Authors of the *Journal of Biological Chemistry* (<http://www.jbc.org/misc/ifora.xhtml>).

Drugs — Generic names should be used in the text, Figures, and Tables.

Electronic Supplementary Materials — Although manuscripts must be complete and self-explanatory without supplementary information, materials that cannot be presented on the journal pages for reasons of space or format restrictions may be published online as supplementary materials without any additional charge to the authors. Background information regarding experimental procedures may also be included. These additional or secondary materials are subject to the same peer-review process as the rest of the manuscript and must be cited in the main text. File sizes must be as small as possible so that they can be downloaded quickly. Acceptable formats for movie and sound are: mpg, mov, avi, mp3, and wav. For more detailed instructions please visit the artwork instruction pages at <https://www.elsevier.com/artworkinstructions>.

Guidelines for manuscripts concerning natural medicines — Here, “natural medicines” mean any extract(s) or unpurified constituent(s) obtained from natural sources (natural medicine materials: NMM). Studies discussing NMM should comply with the Guidelines/Checklist of the Journal shown later; authors **MUST** provide the **completed checklist for NMM** upon manuscript submission. Manuscripts concerning simple screening of biological activities of the NMM and/or studies that do not meet the NMM guidelines stipulated in the Checklist for the NMM are **likely to be rejected without review.**

Consult the “Author’s Checklist for Manuscript Submission” that appears on the final page of these instructions for a more detailed explanation of the requirements on the manuscript preparation.

Submission of Manuscripts

Manuscripts should be submitted via the online manuscript submission review, and tracking system “**Editorial Manager®**” at <http://jphs.edmgr.com/>. We will not accept any manuscripts submitted as an E-mail attachment or by post. Before entering the submission web site, please refer to this “Notice to Contributors” including “Author’s Checklist for Manuscript Submission” for overall guidelines for how your manuscript should be structured and formatted. Then, be sure to refer to the “Tutorial for Authors” available at the submission web site, which will provide you with more detailed, technical, and other important information.

Brief guidelines for electronic submission procedures

1) Prepare the text (title page, abstract, main text, references, legends for Figures, and Tables) by MS-Word; be sure to insert page numbers. Tables can be prepared with a separate file.

2) Prepare the Figures using applications that are capable of generating high-resolution files. The Figure number must be indicated on each Figure itself, outside the image area.

*Compatible data files (such as Figure, Table, text) for Electronic Supplementary Materials must be prepared in the same manner.

3) Login as an author to Editorial Manager®. You are required to have your login ID. If you do not have one, you can easily get an ID by registering your name and E-mail address.

4) Click “Submit New Manuscript” and enter required information [article type, title and short (running) title, authors, abstract, keywords, classification (1 or 2 subject category(s)), additional information (COI, statement of originality, confirmations of the author’s checklists / NMM checklist / color Fig(s)), four suggested reviewers, comments, etc.] into the web pages.

5) On the "Attach File" page, upload the files by selecting the appropriate entry item such as i) Manuscript, ii) Table(s), iii) Figure(s), iv) Movie(s), v) Others (for review), vi) Others (not for review). Items i, ii, and iii will be built into a single PDF; items iv and v will be accessed via PDF with links; item vi will not be included in PDF, but will be accessible to the Editorial Office and Editor only as a companion file. Item v may include the COI statement; a certificate of approval issued by the ethical committee for experiments using human subjects; an "In Press" article to be referred to; or appended data/information necessary for the manuscript such as papers discussing natural medicine materials (NMM); supplementary materials other than those falling under categories ii – iv.

6) After uploading the files, you will be requested to approve the formatted PDF. Return to the main menu

The editors reserve the right to make minor revisions in manuscripts accepted for publication in the interest of clarity, consistency, and readability. However, they cannot accept responsibility for opinions expressed by contributors.

After Acceptance

The copyright: Upon acceptance of an article, authors will be asked to complete an 'Exclusive License Agreement' where authors will retain copyright (for more information on this see <https://www.elsevier.com/OAauthoragreement>).

Retained author rights: As an author you (or your employer or institution) retain certain rights, including copyright; for details you are referred to <https://www.elsevier.com/OAauthoragreement>.

Role of the funding source: You are requested to identify who provided financial support for the conduct of the research and/or preparation of the article and to briefly describe the role of the sponsor(s), if any, in study design; in the collection, analysis and interpretation of data; in the writing of the report; and in the decision to submit the article for publication. If the funding source(s) had no such involvement then this should be stated. Funding body agreements and policies: Elsevier has established agreements and developed policies to allow authors whose articles appear in journals published by Elsevier, to comply with potential manuscript archiving requirements as specified as conditions of their grant awards. To learn more about existing agreements and policies please visit <https://www.elsevier.com/fundingbodies>.

Open access: This journal is fully open access; all articles will be immediately and permanently free for everyone to read and download. Permitted reuse is defined by the following Creative Commons user license: **Creative Commons Attribution-NonCommercial-NoDerivs (CC BY-NC-ND)**: for non-commercial purposes, lets others distribute and copy the article, and to include in a collective work (such as an anthology), as long as they credit the author(s) and provided they do not alter or modify the article. If you need to comply with your funding body policy you can apply for a CC-BY license after your manuscript is accepted for publication.

Publication Fees (the indicated price does not include the domestic consumption tax):

•The following publication Fees are charged to the authors with the JPS membership.

Full Paper (limit 8 pages): JPY 75,000

Review type article (limit 8 pages): JPY 75,000

Short Communication (limit 4 pages): JPY 35,000

Correspondence (limit 4 pages): JPY 35,000

Extra page charge exceeding the limit pages: JPY 10,000 per page

•The following publication Fees are charged to the authors without the JPS membership.

Full Paper (limit 8 pages): JPY 100,000

Review type article (limit 8 pages): JPY 100,000

Short Communication (limit 4 pages): JPY 50,000

Correspondence (limit 4 pages): JPY 50,000

Extra page charge exceeding the limit pages: JPY 10,000 per page

*If you wish to join JPS, please contact the membership office at society@pharmacol.or.jp .

Annual membership fee for a general member is JPY 6,000, for a graduate student is JPY 3,000, and for a student is JPY 3000.

Once you become a member of JPS before your author proof, your publication fee is charged as a JPS member.

- Invited articles are exempt from the charges.
- Authors are responsible for the costs of a corrigendum (JPY 10,000 per page)
- The fees are charged to authors after acceptance. Articles are not published until the required payments are fully paid online. If author fails to do so within (2) months of the payment notice, the paper may be withdrawn from the journal publication service.

Use of the Digital Object Identifier: The Digital Object Identifier (DOI) may be used to cite and link to electronic documents. The DOI consists of a unique alpha-numeric character string which is assigned to a document by the publisher upon the initial electronic publication. The assigned DOI never changes. Therefore, it is an ideal medium for citing a document, particularly 'Articles in press' because they have not yet received their full bibliographic information. When you use a DOI to create links to documents on the web, the DOIs are guaranteed never to change.

Proofs: One set of page proofs (as PDF files) will be sent by e-mail to the corresponding author (if we do not have an e-mail address then paper proofs will be sent by post) or, a link will be provided in the e-mail so that authors can download the files themselves. Elsevier now provides authors with PDF proofs which can be annotated; for this you will need to download Adobe Reader version 9 (or higher) available free from <http://get.adobe.com/reader>. Instructions on how to annotate PDF files will accompany the proofs (also given online). The exact system requirements are given at the Adobe site:

<http://www.adobe.com/products/reader/tech-specs.html>.

If you do not wish to use the PDF annotations function, you may list the corrections (including replies to the Query Form) and return them to Elsevier in an e-mail. Please list your corrections quoting line number. If, for any reason, this is not possible, then mark the corrections and any other comments (including replies to the Query Form) on a printout of your proof and return by fax, or scan the pages and e-mail, or by post. Please use this proof only for checking the typesetting, editing, completeness and correctness of the text, tables and figures. Significant changes to the article as accepted for publication will only be considered at this stage with permission from the Editor. We will do everything possible to get your article published quickly and accurately iV please let us have all your corrections within 48 hours. It is important to ensure that all corrections are sent back to us in one communication: please check carefully before replying, as inclusion of any subsequent corrections cannot be guaranteed. Proofreading is solely your responsibility. Note that Elsevier may proceed with the publication of your article if no response is received.

Offprints: The corresponding author, at no cost, will be provided with a PDF file of the article via e-mail (the PDF file is a watermarked version of the published article and includes a cover sheet with the journal cover image and a disclaimer outlining the terms and conditions of use). Both corresponding and co-authors may order offprints at any time via Elsevier's WebShop (<http://webshop.elsevier.com/myarticleservices/offprints>).

Accepted Articles: Visit <https://www.elsevier.com/authors> for the facility to track accepted articles and set email alerts to inform you of when an article's status has changed. The website also provides detailed artwork guidelines, copyright information, frequently asked questions and more. Contact details for questions arising after acceptance of an article, especially those related to proofs, are provided after registration of an article for publication.

Editorial/Publishing Correspondence:

Journal of Pharmacological Sciences Editorial Office:
Elsevier Japan KK
1-9-15 Higashi Azabu, Minatoku, Tokyo 106-0044 Japan
Tel: +81 (0)3 3589 5037 / Fax: +81(0)3 3589 6364
jps.editorialoffice@elsevier.com

Journal

<http://www.journals.elsevier.com/journal-of-pharmacological-sciences/>

information:

Abstract/Full text online:

<http://www.jstage.jst.go.jp/browse/jphs/> (issues after 2003)

<http://www.jstage.jst.go.jp/browse/jjp/> (issues before 2002)

<http://www.sciencedirect.com/science/journal/13478613> (issues after 2015)

Submission online "Editorial Manager®": <http://jphs.edmgr.com/>

Elsevier Researcher Academy

Researcher Academy is a free e-learning platform designed to support early and mid-career researchers throughout their research journey. The "Learn" environment at Researcher Academy offers several interactive modules, webinars, downloadable guides and resources to guide you through the process of writing for research and going through peer review. Feel free to use these free resources to improve your submission and navigate the publication process with ease.

Guidelines/Checklist for authors submitting papers discussing Natural Medicine Materials (NMM)

Experimental procedures and manuscript preparation must comply with the proceeding requirements. Please **upload the completed checklist and required supplemental data/information on the "Attach File" page of the web submission system.**

Author's Checklist for Manuscript Submission

Please consult the "Notice to Contributors" and complete the following checklist so that your manuscript will conform to the style and usage of the *Journal of Pharmacological Sciences* before submission.

[] Title page

- title: avoid using the trade name of a drug / should not contain abbreviations except for very standard ones / should indicate the experimental animal / a drug for which a generic name has not yet been given can be designated by a combination of letters and numbers only when accompanied by a specification of its pharmacological property (e.g., anti-allergic drug, AB-123)
- provide full names of all authors / provide affiliations and addresses of all authors / identify each author with the appropriate address by numerical superscripts
- provide the corresponding author's information including e-mail address, telephone number, and fax number.
- provide a running title (short title) of no more than 40 characters and spaces
- indicate the number of words used in the main body of the text
- provide any necessary footnotes (e.g., change of address)

[] Abstract page

- limit Abstract to 200 words for Full Paper and Review, 100 words for Short Communication
- do not cite references in Abstract by reference numbers, but use full citation; omit the article title
- provide keywords: 5 items for Full Paper and Review, 3 items for Short Communication / avoid vague or overly general terms

[] Text

- main- and subheadings: refer to current style in this Journal
- drug names: use generic names; if a generic name has not yet been given, provide the full chemical name at the first mention
- ionic charge should be shown throughout (e.g., Ca²⁺ channel)
- provide names of sources including city, state (USA), and country (except for Japan) for experimental apparatuses, reagents, animals, and cell strains
- all ethical conditions for experimental procedures should be clearly described in the Materials and Methods section
- unpublished data, personal communication, etc. in the text: specify the source of the information (e.g., Y. Yamada et al., unpublished data)
- disclose, if any, authors' financial interest in the subject matter or relationship with other people and organizations with such financial interest in the Conflicts of Interest section

[] References -refer to current issues-

- list references in numerical order according to the first mention in the text
- "in press" citation must have been accepted for publication; designate journal title

- "unpublished observations", "personal communication", "submitted manuscript": do not list in "References", but insert in appropriate places in the text with source name
- "encyclopedia", "patent", and "thesis" are not valid reference citations
- state "(text in [specify language used] with English abstract)" for a paper with text written in languages other than English but with English abstract
- avoid citing any paper written in a language not normally used for international scientific publications (including Japanese) and does not have an English abstract; if you must cite such a reference, state your justification for including this reference, on a separate sheet; and specify the language in the reference list

[] Figures and their legends -refer to current issues-

- supply Figs. of sufficient quality for direct printing
- all Figure elements (letters, numbers, and symbols, etc.) should be sufficiently large and clear so that they can be easily read after reduction
- in Fig. legends, do not use the pictorial representation of the actual graphic symbols themselves or actual patterns, but describe them in words (e.g., closed circle, dotted column) or commonly usable marks (e.g., *, #); alternatively, give the explanations of symbols/patterns on the Figs., if representing them pictorially
- magnification of electronmicrographs should be indicated by a calibration bar on the photographs themselves to ensure that, after any necessary reduction, the scale is reduced in the correct proportion
- symbols indicating statistical significance: the number of symbols used to indicate a particular probability (P value) should be consistent throughout the manuscript; the same probability should be represented by the same number of symbols in the Figs. and Tables, and the number of symbols should increase as the P value decreases
- avoid unnecessary three-dimensional representation of data in bar graphs
- type legends for Figs. double-spaced on a separate page
- for a Fig. consisting of separate panels: do not provide a separate title for each panel, but rather provide one comprehensive title; explanations of panels to be provided in the legend following the title

[] Tables and their footnotes -refer to current issues-

- type each Table double-spaced on a separate page; do not insert in the running text
- type a brief informative title above the Table and footnotes at the foot of the Table - do not use vertical lines to separate columns

[] Full Paper

- Abstract of 200 words or less
- main body of the text of 4,000 words or less (on the title page, indicate the number of words used)
- no more than 8 Figs. and/or Tables

[] Short Communication - to determine if your study is appropriate for publication as a Short Communication, carefully read the Notice to Contributors

- type text without subdivision into sections
- Abstract of 100 words or less
- main body of the text of 1,500 words or less (on the title page, indicate the number of words used)
- no more than 15 references
- **no more than 3 Figs. and/or Tables**

Other manuscript requirements: see items shown above (from Title page to Tables sections)

Peer review

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.](#)

Reference style

Text: Indicate references by (consecutive) superscript arabic numerals in the order in which they appear in the text. The numerals are to be used *outside* periods and commas, *inside* colons and semicolons. For further detail and examples you are referred to the [AMA Manual of Style](#), A Guide for Authors and Editors, Tenth Edition, ISBN 0-978-0-19-517633-9.

List: Number the references in the list in the order in which they appear in the text.

Examples:

Reference to a journal publication:

1. Van der Geer J, Hanraads JAJ, Lupton RA. The art of writing a scientific article. *J Sci Commun*. 2010;163:51–59. <https://doi.org/10.1016/j.Sc.2010.00372>.

Reference to a journal publication with an article number:

2. 1. Van der Geer J, Hanraads JAJ, Lupton RA. The art of writing a scientific article. *Heliyon*. 2018;19:e00205. <https://doi.org/10.1016/j.heliyon.2018.e00205>.

Reference to a book:

3. Strunk W Jr, White EB. *The Elements of Style*. 4th ed. New York, NY: Longman; 2000.

Reference to a chapter in an edited book:

4. Mettam GR, Adams LB. How to prepare an electronic version of your article. In: Jones BS, Smith RZ, eds. *Introduction to the Electronic Age*. New York, NY: E-Publishing Inc; 2009:281–304.

Reference to a website:

5. Cancer Research UK. Cancer statistics reports for the UK. <http://www.cancerresearchuk.org/aboutcancer/statistics/cancerstatsreport/>; 2003 Accessed 13 March 2003.

Reference to a dataset:

[dataset] 6. Oguro, M, Imahiro, S, Saito, S, Nakashizuka, T. Mortality data for Japanese oak wilt disease and surrounding forest compositions, Mendeley Data, v1; 2015. <https://doi.org/10.17632/xwj98nb39r.1>.

Online proof correction

Corresponding authors will receive an e-mail with a link to our online proofing system, allowing annotation and correction of proofs online. The environment is similar to MS Word: in addition to editing text, you can also comment on figures/tables and answer questions from the Copy Editor. Web-based proofing provides a faster and less error-prone process by allowing you to directly type your corrections, eliminating the potential introduction of errors.

If preferred, you can still choose to annotate and upload your edits on the PDF version. All instructions for proofing will be given in the e-mail we send to authors, including alternative methods to the online version and PDF.

We will do everything possible to get your article published quickly and accurately. Please use this proof only for checking the typesetting, editing, completeness and correctness of the text, tables and figures. Significant changes to the article as accepted for publication will only be considered at this stage with permission from the Editor. It is important to ensure that all corrections are sent back to us in one communication. Please check carefully before replying, as inclusion of any subsequent corrections cannot be guaranteed. Proofreading is solely your responsibility.

Offprints

The corresponding author will be notified and receive a link to the published version of the open access article on [ScienceDirect](#). This link is in the form of an article DOI link which can be shared via email and social networks. For an extra charge, paper offprints can be ordered via the offprint order form which is sent once the article is accepted for publication. Both corresponding and co-authors may order offprints at any time via Elsevier's [Webshop](#). Authors requiring printed copies of multiple articles may use Elsevier Webshop's 'Create Your Own Book' service to collate multiple articles within a single cover.

© Copyright 2018 Elsevier | <https://www.elsevier.com>