DESCRIPTION

Annals of Hepatology (AoH) is an international, open access journal published bi-monthly with funds from the Medica Sur Clinical Foundation. It is the official journal of the Mexican Association of Hepatology (AMH), the Latin American Association for the Study of the Liver (ALEH), the Canadian Association for the Study of the Liver (CASL) and the Czech Society of Hepatology (CSH). AoH publishes editorials, opinions, concise reviews, original articles, brief reports, letters to the editor, news from affiliated associations, clinical practice guidelines and summaries of congresses in the field of Hepatology.

Topics covered by AoH include alcoholic liver disease, autoimmune hepatitis, biliary diseases, drug-induced liver injury, genetic liver diseases, NAFLD/NASH and viral hepatitis (HAV, HBV, HCV, HDV, HEV). Our journal seeks to publish articles on basic clinical care and translational research focused on preventing rather than treating the complications of end-stage liver disease.

IMPACT FACTOR

2019: 2.125 © Clarivate Analytics Journal Citation Reports 2020

ABSTRACTING AND INDEXING

Web of Science
PubMed/Medline
Scopus
Science Citation Index
Sistema de Clasificación de Revistas Mexicanas de Investigación (Conacyt)

EDITORIAL BOARD

Editor in Chief
Arturo Panduro, University of Guadalajara, Guadalajara, Mexico

Co-Editors
Marco Arrese, Pontifical Catholic University of Chile, Santiago, Chile
Norberto C. Chávez-Tapia, South Medical, Tlalpan, Mexico
Claudio Tiribelli, Italian Liver Foundation, Basovizza, Italy
Misael Uribe, Medica Sur Clinical Foundation, National Autonomous University of Mexico, Tlalpan, Mexico

Founding Editor
Nahum Méndez-Sánchez, Medica Sur Clinical Foundation, National Autonomous University of Mexico, Ciudad de México, Mexico

Associate Editors
Agustín Albillos Martínez, Ramón y Cajal University Hospital, Madrid, Spain
Ramon Bataller, Pittsburgh Liver Research Center, University of Pittsburgh Medical Center (UPMC), Pittsburgh, Pennsylvania, United States of America
Irene Cacciola, Department of Internal Medicine, University Hospital of Messina, Messina, Italy
Andres Cardenas, Hospital Clínico and University of Barcelona, Barcelona, Spain
Graciela Elia Castro Narro, National Institute of Medical Sciences and Nutrition Salvador Zubirán, Ciudad de México, Mexico
José Debes, University of Minnesota, Minneapolis, Minnesota, United States of America
Andrés Duarte-Rojo, University Arkansas Medical Sciences, Little Rock, AR, United States of America
Peter Fickert, Medical University of Graz, Graz, Austria
Nora A. Fierro, Institute for Biomedical Research, National Autonomous University of Mexico, Ciudad de México, Mexico
Gabriel E. Gondolesi, University Hospital - Favaloro Foundation, Buenos Aires, Argentina
Patrick S. Kamath, Mayo Clinic College of Medicine, Rochester, MN, United States of America
Anna Kramvis, Department of Internal Medicine, University of the Witwatersrand, Johannesburg, South Africa
Frank Lammert, Saarland University Medical Center, Homburg, Germany
Mariana Lazo, Johns Hopkins University, Baltimore, Maryland, United States of America
Rajeshwar Mookerjee, University College London, London, United Kingdom
Pablo Muriel, Center for Research and Advanced Studies of the National Polytechnic Institute, Ciudad de Mexico, Mexico
Federico Pinero, Austral University, Buenos Aires, Argentina
Giovanni Raimondo, University Hospital of Messina, Messina, Italy
João Renato Rebelo Pinho, University of São Paulo, São Paulo, Brazil
Ana Maria Rivas-Estilla, Autonomous University of Nuevo León, Nuevo León, Mexico
Sonia Roman, University of Guadalajara, Guadalajara, Mexico
Yasuhide Tanaka, Nagoya University Graduate School of Medicine Faculty of Medicine, Nagoya, Japan
Libor Vitek, Charles University in Prague, Prague, Czechia
Shira Zelber-Sagi, Tel Aviv Medical Center, Haifa, Israel

Advisory Board
Radan Bruha, Czech Society of Hepatology, Czech Medical Association of JE Purkyne, Charles University in Prague, Prague, Czechia
Laura Cisneros Garza, Saint Joseph Hospital of Monterrey Center for Liver, Digestive Diseases and Clinical Nutrition, Monterrey, Mexico
Jordan Feld, President of CASL, Toronto General Hospital Research Institute (TGHRI), Ontario, Ontario, Canada
Marcelo Silva, President of ALEH, Hepatology and Liver Transplant Unit, Austral University Hospital, Pilar, Argentina

Editorial Staff
Varinia B. Chacón, South Medical, Tlalpan, Mexico
GUIDE FOR AUTHORS

INTRODUCTION

Annals of Hepatology (AoH) (ISSN 1665-2681) is an international open access journal published bi-monthly and is funded by Medica Sur Clinical Foundation, Mexico City, Mexico. It is the official journal of the Mexican Association of Hepatology (AMH), the Latin-American Association for the Study of the Liver (ALEH) and the Canadian Association for the Study of the Liver (CASL). AoH publishes editorials, opinions, concise reviews, original articles, letters to the editor, news from affiliated associations, clinical practice guidelines and summaries of congresses in the field of Hepatology. Topics covered by AoH include alcoholic liver disease, viral hepatitis (HAV, HBV, HCV, HDV, HEV), NAFLD/NASH, genetic liver diseases, autoimmune hepatitis, drug-induced liver injury and biliary diseases. The journal's aim is to publish articles focused on basic, clinical care and translational research that seeks to prevent rather than treating the complications of end-stage liver disease. We encourage the submission of articles that provide new insights into emerging topics in the field of Hepatology, among them:

Advances in early molecular and clinical diagnosis of liver disease. Genome-based nutrition for healthier liver function and in patients with liver disease. Regionalized and individualized medicine tailored by population. Genetic and environmental factor interactions: genes-alcohol, genes-NASH, genes-viral hepatitis. Strategies preventing or halting the progression of chronic injury by any etiological agent. Treatment by medication, lifestyle interventions, liver transplantation, or gene therapy.

Authors are required to submit a complete electronic copy of their manuscripts, tables and figures, using the online submission system www.editorialmanager.com/annhepatol. All papers must be elaborated as specified in the Preparation section below.

Manuscripts are carefully evaluated by anonymous peer reviewers prior to delivery of a decision on their acceptance or rejection for publication. Submissions regarded by the Editors as incomplete or unlikely to be accepted are returned to the authors as Early Rejects without undergoing full peer review. Once authors receive the initial disposition letter on their papers, they are allowed one single resubmission, which is to be received by the journal within two weeks of the receipt of the disposition letter. Manuscripts requiring more than one revision or returned to the journal more than two weeks after receipt of the disposition letter will be treated as new submissions.

All submitted materials remain in the Editorial Office. Copyright of all material published in AoH is vested in Fundacion Clinica Medica Sur, A.C. Upon acceptance of an article, authors will be asked to complete a 'Journal Publishing Agreement' (see more information on this). The statements and opinions expressed in the articles and communications in AoH are those of the author(s) and not necessarily those of the Editor(s) or publisher, and the Editor(s) and publisher disclaim any responsibility or liability for such material. Neither the Editor(s) nor the publisher guarantees, warrants, or endorses any product or service advertised in the journal, nor do they guarantee any claim made by the manufacturer of such products or services.

We look forward to receiving your manuscripts.

Arturo Panduro, MD, PhD, FAASLD.
Editor in Chief
editorinchief@annalsofhepatology.com
Varinia B. Chacon
Editorial Manager
editorialmanager@annalsofhepatology.com

Types of article

Editorials
This section consists of brief editorial commentaries written by the editors or by individuals they have invited as editorial authors. Commentaries deal with one or several of the articles published in AoH. Alternatively, they can discuss topics of special importance to our readership. No more than three authors and a minimum of 15 references are allowed per editorial. One table and/or figure can be added to the text and must be included in the word count. The length of editorials should not exceed 1,500 words (excluding the title, byline, and references).

Opinions
These essays present opinions, hypotheses and controversial issues in all areas of hepatology. The length of an opinion should not exceed 1,000 words. No tables or figures are allowed (exceptions are solely at the discretion of the editors). A minimum of 15 references are allowed.

Concise reviews
Review articles on selected clinical and basic topics should be no longer than 5,000 words. References should not exceed a maximum of 150.

**Original articles**
The maximum length of manuscripts that describe original research is 4,000 words (excluding references). Original articles should include no more than 50 references. Manuscripts that are redundant or contain extraneous material will be returned for shortening, even if otherwise acceptable.

**Correspondence**
We welcome letters to the editor that comment on articles recently published in AoH. Letters should contain no more than 500 words and a minimum of 15 references are allowed.

**Milestones in Hepatology** This section refers to invited or proposed articles concerning the biography and contributions of outstanding clinicians, researchers or mentors in the field of hepatology with an emphasis on their impact in clinical care, teaching and research. Chronological timelines regarding topics or trends in hepatology will also be considered. Maximum specifications: 1,500-2,000 words (excluding title, byline, and references); no more than one table and/or figure. A minimum of 15 references are allowed.

**Education and Training in Hepatology** Relates to education and practice articles that provide novel training strategies, management flow charts or qualitative research in medical education and training with a meaningful impact on the prevention, management or treatment of liver disease. Maximum specifications: 3,000 words (excluding title, byline, and references), and up to two illustrations (table and/or figure). A minimum of 15 references are allowed.

**News**
This section contains information on the year-round academic and scientific activities developed by our affiliated associations. This section will be open for announcements of new presidencies, clinical practice guidelines or consensus statements. One page and with no more than 1 table and/or figure; 5 or fewer bibliographic references.

**Clinical Practice Guidelines and Position Papers**
AoH welcomes all official articles from the represented Scientific Societies referring to recommendations, practice guidelines, position papers or reports of Consensus Conferences on relevant topics in Hepatology. The main text should not exceed 6,000 words (excluding abstract, references, tables and figures). All manuscripts should contain a non-structured abstract of no more than 200 words. Authorship of the article should be attributed only to the reference society(ies), whose name(s) should be placed below the title. Only contributors who meet specific authorship criteria are to be listed on the title page as Authors, with their affiliations. Any other participating contributors are to be listed in an Appendix at the end of the article. The methodology used to generate the recommendations should be reported, as well as the levels of evidence and strength of the recommendation, if applicable. Besides the aforementioned, manuscripts proposed by the corresponding societies within the Latin American region should include a comparative synopsis of the management of liver diseases indicated in the national/regional guideline with other international guidelines, such as AASLD, EASL or APASL. Limitations of the current knowledge, if applicable, and perspectives for future research needs are highly recommended.

**Other Publications** Congress proceedings, generally in the form of selected abstracts, may be considered for publication. Supplements to the journal containing extended abstracts, or full papers may also be taken into consideration.

**Contact details for submission**
You can send your manuscript at www.editorialmanager.com/annhepatol

**Language**
This journal is published in English language.

**Submission checklist**
You can use this list to carry out a final check of your submission before you send it to the journal for review. Please check the relevant section in this Guide for Authors for more details.

**Ensure that the following items are present:**
One author has been designated as the corresponding author with contact details:
- E-mail address
- Full postal address

All necessary files have been uploaded:
Manuscript:
• Include keywords
• All figures (include relevant captions)
• All tables (including titles, description, footnotes)
• Ensure all figure and table citations in the text match the files provided
• Indicate clearly if color should be used for any figures in print

Graphical Abstracts / Highlights files (where applicable)
Supplemental files (where applicable)

Further considerations
• Manuscript has been 'spell checked' and 'grammar checked'
• All references mentioned in the Reference List are cited in the text, and vice versa
• Permission has been obtained for use of copyrighted material from other sources (including the Internet)
• A competing interests statement is provided, even if the authors have no competing interests to declare
• Journal policies detailed in this guide have been reviewed
• Referee suggestions and contact details provided, based on journal requirements

For further information, visit our Support Center.

BEFORE YOU BEGIN

Ethics in publishing
Please see our information on Ethics in publishing.

Studies in humans and animals
If the work involves the use of human subjects, the author should ensure that the work described has been carried out in accordance with The Code of Ethics of the World Medical Association (Declaration of Helsinki) for experiments involving humans. The manuscript should be in line with the Recommendations for the Conduct, Reporting, Editing and Publication of Scholarly Work in Medical Journals and aim for the inclusion of representative human populations (sex, age and ethnicity) as per those recommendations. The terms sex and gender should be used correctly.

Authors should include a statement in the manuscript that informed consent was obtained for experimentation with human subjects. The privacy rights of human subjects must always be observed.

All animal experiments should comply with the ARRIVE guidelines and should be carried out in accordance with the U.K. Animals (Scientific Procedures) Act, 1986 and associated guidelines, EU Directive 2010/63/EU for animal experiments, or the National Institutes of Health guide for the care and use of Laboratory animals (NIH Publications No. 8023, revised 1978) and the authors should clearly indicate in the manuscript that such guidelines have been followed. The sex of animals must be indicated, and where appropriate, the influence (or association) of sex on the results of the study.

Informed consent and patient details
Studies on patients or volunteers require ethics committee approval and informed consent, which should be documented in the paper. Appropriate consents, permissions and releases must be obtained where an author wishes to include case details or other personal information or images of patients and any other individuals in an Elsevier publication. Written consents must be retained by the author but copies should not be provided to the journal. Only if specifically requested by the journal in exceptional circumstances (for example if a legal issue arises) the author must provide copies of the consents or evidence that such consents have been obtained. For more information, please review the Elsevier Policy on the Use of Images or Personal Information of Patients or other Individuals. Unless you have written permission from the patient (or, where applicable, the next of kin), the personal details of any patient included in any part of the article and in any supplementary materials (including all illustrations and videos) must be removed before submission.

Declaration of interest
All authors must disclose any financial and personal relationships with other people or organizations that could inappropriately influence (bias) their work. Examples of potential competing interests include employment, consultancies, stock ownership, honoraria, paid expert testimony, patent applications/registrations, and grants or other funding. Authors must disclose any interests in two
places: 1. A summary declaration of interest statement in the title page file (if double anonymized) or the manuscript file (if single anonymized). If there are no interests to declare then please state this: 'Declarations of interest: none'. 2. Detailed disclosures as part of a separate Declaration of Interest form, which forms part of the journal's official records. It is important for potential interests to be declared in both places and that the information matches. More information.

Submission declaration and verification
Submission of an article implies that the work described has not been published previously (except in the form of an abstract, a published lecture or academic thesis, see 'Multiple, redundant or concurrent publication' for more information), that it is not under consideration for publication elsewhere, that its publication is approved by all authors and tacitly or explicitly by the responsible authorities where the work was carried out, and that, if accepted, it will not be published elsewhere in the same form, in English or in any other language, including electronically without the written consent of the copyright-holder. To verify originality, your article may be checked by the originality detection service Crossref Similarity Check.

Preprints
Please note that preprints can be shared anywhere at any time, in line with Elsevier's sharing policy. Sharing your preprints e.g. on a preprint server will not count as prior publication (see 'Multiple, redundant or concurrent publication' for more information).

Use of inclusive language
Inclusive language acknowledges diversity, conveys respect to all people, is sensitive to differences, and promotes equal opportunities. Content should make no assumptions about the beliefs or commitments of any reader; contain nothing which might imply that one individual is superior to another on the grounds of age, gender, race, ethnicity, culture, sexual orientation, disability or health condition; and use inclusive language throughout. Authors should ensure that writing is free from bias, stereotypes, slang, reference to dominant culture and/or cultural assumptions. We advise to seek gender neutrality by using plural nouns ("clinicians, patients/clients") as default/wherever possible to avoid using "he, she," or "he/she." We recommend avoiding the use of descriptors that refer to personal attributes such as age, gender, race, ethnicity, culture, sexual orientation, disability or health condition unless they are relevant and valid. These guidelines are meant as a point of reference to help identify appropriate language but are by no means exhaustive or definitive.

Authorship
All authors should have made substantial contributions to all of the following: (1) the conception and design of the study, or acquisition of data, or analysis and interpretation of data, (2) drafting the article or revising it critically for important intellectual content, (3) final approval of the version to be submitted.

Changes to authorship
Authors are expected to consider carefully the list and order of authors before submitting their manuscript and provide the definitive list of authors at the time of the original submission. Any addition, deletion or rearrangement of author names in the authorship list should be made only before the manuscript has been accepted and only if approved by the journal Editor. To request such a change, the Editor must receive the following from the corresponding author: (a) the reason for the change in author list and (b) written confirmation (e-mail, letter) from all authors that they agree with the addition, removal or rearrangement. In the case of addition or removal of authors, this includes confirmation from the author being added or removed.

Only in exceptional circumstances will the Editor consider the addition, deletion or rearrangement of authors after the manuscript has been accepted. While the Editor considers the request, publication of the manuscript will be suspended. If the manuscript has already been published in an online issue, any requests approved by the Editor will result in a corrigendum.

Clinical trial results
In line with the position of the International Committee of Medical Journal Editors, the journal will not consider results posted in the same clinical trials registry in which primary registration resides to be prior publication if the results posted are presented in the form of a brief structured (less than 500 words) abstract or table. However, divulging results in other circumstances (e.g., investors' meetings) is discouraged and may jeopardise consideration of the manuscript. Authors should fully disclose all posting in registries of results of the same or closely related work.
Reporting clinical trials
Randomized controlled trials should be presented according to the CONSORT guidelines. At manuscript submission, authors must provide the CONSORT checklist accompanied by a flow diagram that illustrates the progress of patients through the trial, including recruitment, enrollment, randomization, withdrawal and completion, and a detailed description of the randomization procedure. The CONSORT checklist and template flow diagram are available online.

Registration of clinical trials
Registration in a public trials registry is a condition for publication of clinical trials in this journal in accordance with International Committee of Medical Journal Editors recommendations. Trials must register at or before the onset of patient enrolment. The clinical trial registration number should be included at the end of the abstract of the article. A clinical trial is defined as any research study that prospectively assigns human participants or groups of humans to one or more health-related interventions to evaluate the effects of health outcomes. Health-related interventions include any intervention used to modify a biomedical or health-related outcome (for example drugs, surgical procedures, devices, behavioural treatments, dietary interventions, and process-of-care changes). Health outcomes include any biomedical or health-related measures obtained in patients or participants, including pharmacokinetic measures and adverse events. Purely observational studies (those in which the assignment of the medical intervention is not at the discretion of the investigator) will not require registration.

Article transfer service
This journal is part of our Article Transfer Service. This means that if the Editor feels your article is more suitable in one of our other participating journals, then you may be asked to consider transferring the article to one of those. If you agree, your article will be transferred automatically on your behalf with no need to reformat. Please note that your article will be reviewed again by the new journal. More information.

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.

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.

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.

Open access
The article publishing charge (APC) for this journal is $1500 for Original Articles and Reviews, excluding taxes. Elsevier has established an agreement with the Medica Sur Clinical Foundation to enable authors to publish open access in Annals of Hepatology and help cover the costs of gold open access. As a result of this agreement, the open access fee for this journal is $300 for Original Articles and Reviews, excluding taxes. The articles sent by corresponding authors members of the affiliated societies to the Foundation will be entitled to a discount of 50% of the open access fee. Elsevier is a founding member of Research4Life, a public-private partnership that provides free and low-cost scientific research to scientists and doctors in more than 115 developing countries aiming at bridging the digital research divide, this includes waiving and discounting the open access fees for eligible Research 4 Life (R4L) authors. Learn more about Elsevier's pricing policy.
**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.

**Language (usage and editing services)**

Please write your text in good English (American or British usage is accepted, but not a mixture of these). Authors who feel their English language manuscript may require editing to eliminate possible grammatical or spelling errors and to conform to correct scientific English may wish to use the English Language Editing service available from Elsevier's WebShop. AoH's authors can get a 10% discount using this voucher code.

**Submit your article**

Our online submission system guides you stepwise through the process of entering your article details and uploading your files. The system converts your article files to a single PDF file used in the peer-review process. Editable files (e.g., Word, LaTeX) are required to typeset your article for final publication. All correspondence, including notification of the Editor's decision and requests for revision, is sent by e-mail. Please submit your article via www.editorialmanager.com/annhepatol

**Referees**

Please submit the names and institutional e-mail addresses of several potential referees. For more details, visit our Support site. Note that the editor retains the sole right to decide whether or not the suggested reviewers are used.

**PREPARATION**

**Peer review**

This journal operates a double anonymized 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. Editors are not involved in decisions about papers which they have written themselves or have been written by family members or colleagues or which relate to products or services in which the editor has an interest. Any such submission is subject to all of the journal's usual procedures, with peer review handled independently of the relevant editor and their research groups. More information on types of peer review.

**Double anonymized review**

This journal uses double anonymized review, which means the identities of the authors are concealed from the reviewers, and vice versa. More information is available on our website. To facilitate this, please include the following separately:

*Title page (with author details)*: This should include the title, authors' names, affiliations, acknowledgements and any Declaration of Interest statement, and a complete address for the corresponding author including an e-mail address.

*Anonymized manuscript (no author details)*: The main body of the paper (including the references, figures, tables and any acknowledgements) should not include any identifying information, such as the authors' names or affiliations.

**Use of word processing software**

It is important that the file be saved in the native format of the word processor used. The text should be in single-column format. Keep the layout of the text as simple as possible. Most formatting codes will be removed and replaced on processing the article. In particular, do not use the word processor's options to justify text or to hyphenate words. However, do use bold face, italics, subscripts, superscripts etc. When preparing tables, if you are using a table grid, use only one grid for each individual table and not a grid for each row. If no grid is used, use tabs, not spaces, to align columns. The electronic text should be prepared in a way very similar to that of conventional manuscripts (see also the Guide to Publishing with Elsevier). Note that source files of figures, tables and text graphics will be required whether or not you embed your figures in the text. See also the section on Electronic artwork.

To avoid unnecessary errors you are strongly advised to use the 'spell-check' and 'grammar-check' functions of your word processor.
Article structure
Subdivision - unnumbered sections
Divide your article into clearly defined sections. Each subsection is given a brief heading. Each heading should appear on its own separate line. Subsections should be used as much as possible when cross-referencing text: refer to the subsection by heading as opposed to simply 'the text'.

Introduction
State the objectives of the work and provide an adequate background, avoiding a detailed literature survey or a summary of the results.

Material and methods
Provide sufficient details to allow the work to be reproduced by an independent researcher. Methods that are already published should be summarized, and indicated by a reference. If quoting directly from a previously published method, use quotation marks and also cite the source. Any modifications to existing methods should also be described.

Results
Results should be clear and concise.

Discussion
This should explore the significance of the results of the work, not repeat them. A combined Results and Discussion section is often appropriate. Avoid extensive citations and discussion of published literature.

Conclusions
The main conclusions of the study may be presented in a short Conclusions section, which may stand alone or form a subsection of a Discussion or Results and Discussion section.

Appendices
If there is more than one appendix, they should be identified as A, B, etc. Formulae and equations in appendices should be given separate numbering: Eq. (A.1), Eq. (A.2), etc.; in a subsequent appendix, Eq. (B.1) and so on. Similarly for tables and figures: Table A.1; Fig. A.1, etc.

Essential title page information
- **Title.** Concise and informative. Titles are often used in information-retrieval systems. Avoid abbreviations and formulae where possible.
- **Author names and affiliations.** Please clearly indicate the given name(s) and family name(s) of each author and check that all names are accurately spelled. You can add your name between parentheses in your own script behind the English transliteration. Present the authors' affiliation addresses (where the actual work was done) below the names. Indicate all affiliations with a lowercase superscript letter immediately after the author's name and in front of the appropriate address. Provide the full postal address of each affiliation, including the country name and, if available, the e-mail address of each author.
- **Corresponding author.** Clearly indicate who will handle correspondence at all stages of refereeing and publication, also post-publication. This responsibility includes answering any future queries about Methodology and Materials. **Ensure that the e-mail address is given and that contact details are kept up to date by the corresponding author.**
- **Present/permanent address.** If an author has moved since the work described in the article was done, or was visiting at the time, a 'Present address' (or 'Permanent address') may be indicated as a footnote to that author's name. The address at which the author actually did the work must be retained as the main, affiliation address. Superscript Arabic numerals are used for such footnotes.

Highlights
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).
Structured abstract
A structured abstract, by means of appropriate headings, should provide the context or background for the research and should state its purpose, basic procedures (selection of study subjects or laboratory animals, observational and analytical methods), main findings (giving specific effect sizes and their statistical significance, if possible), and principal conclusions. It should emphasize new and important aspects of the study or observations.
The headings will consist of: "Introduction and Objectives", "Patients or Materials and Methods", "Results" y "Conclusions".

Graphical abstract
Although a graphical abstract is optional, its use is encouraged as it draws more attention to the online article. The graphical abstract should summarize the contents of the article in a concise, pictorial form designed to capture the attention of a wide readership. Graphical abstracts should be submitted as a separate file in the online submission system. Image size: Please provide an image with a minimum of 531 × 1328 pixels (h × w) or proportionally more. The image should be readable at a size of 5 × 13 cm using a regular screen resolution of 96 dpi. Preferred file types: TIFF, EPS, PDF or MS Office files. You can view Example Graphical Abstracts on our information site. Authors can make use of Elsevier's Illustration Services to ensure the best presentation of their images and in accordance with all technical requirements.

Keywords
Immediately after the abstract, provide a maximum of 6 keywords, using British spelling and avoiding general and plural terms and multiple concepts (avoid, for example, 'and', 'of'). Be sparing with abbreviations: only abbreviations firmly established in the field may be eligible. These keywords will be used for indexing purposes.

Abbreviations
Define abbreviations that are not standard in this field in a footnote to be placed on the first page of the article. Such abbreviations that are unavoidable in the abstract must be defined at their first mention there, as well as in the footnote. Ensure consistency of abbreviations throughout the article.

Acknowledgements
Collate acknowledgements in a separate section at the end of the article before the references and do not, therefore, include them on the title page, as a footnote to the title or otherwise. List here those individuals who provided help during the research (e.g., providing language help, writing assistance or proof reading the article, etc.).

Formatting of funding sources
List funding sources in this standard way to facilitate compliance to funder's requirements:

Funding: This work was supported by the National Institutes of Health [grant numbers xxxx, yyyy]; the Bill & Melinda Gates Foundation, Seattle, WA [grant number zzzz]; and the United States Institutes of Peace [grant number aaaa].

It is not necessary to include detailed descriptions on the program or type of grants and awards. When funding is from a block grant or other resources available to a university, college, or other research institution, submit the name of the institute or organization that provided the funding.

If no funding has been provided for the research, please include the following sentence:

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Units
Follow internationally accepted rules and conventions: use the international system of units (SI). If other units are mentioned, please give their equivalent in SI.

Artwork

Image manipulation
Whilst it is accepted that authors sometimes need to manipulate images for clarity, manipulation for purposes of deception or fraud will be seen as scientific ethical abuse and will be dealt with accordingly. For graphical images, this journal is applying the following policy: no specific feature within an image may be enhanced, obscured, moved, removed, or introduced. Adjustments of brightness, contrast,
or color balance are acceptable if and as long as they do not obscure or eliminate any information present in the original. Nonlinear adjustments (e.g. changes to gamma settings) must be disclosed in the figure legend.

**Electronic artwork**

**General points**

- Make sure you use uniform lettering and sizing of your original artwork.
- Embed the used fonts if the application provides that option.
- Aim to use the following fonts in your illustrations: Arial, Courier, Times New Roman, Symbol, or use fonts that look similar.
- Number the illustrations according to their sequence in the text.
- Use a logical naming convention for your artwork files.
- Provide captions to illustrations separately.
- Size the illustrations close to the desired dimensions of the published version.
- Submit each illustration as a separate file.
- Ensure that color images are accessible to all, including those with impaired color vision.

A detailed guide on electronic artwork is available. **You are urged to visit this site; some excerpts from the detailed information are given here.**

**Formats**

If your electronic artwork is created in a Microsoft Office application (Word, PowerPoint, Excel) then please supply 'as is' in the native document format.

Regardless of the application used other than Microsoft Office, when your electronic artwork is finalized, please 'Save as' or convert the images to one of the following formats (note the resolution requirements for line drawings, halftones, and line/halftone combinations given below):

- EPS (or PDF): Vector drawings, embed all used fonts.
- TIFF (or JPEG): Color or grayscale photographs (halftones), keep to a minimum of 300 dpi.
- TIFF (or JPEG): Bitmapted (pure black & white pixels) line drawings, keep to a minimum of 1000 dpi.
- TIFF (or JPEG): Combinations bitmapped line/half-tone (color or grayscale), keep to a minimum of 500 dpi.

**Please do not:**

- Supply files that are optimized for screen use (e.g., GIF, BMP, PICT, WPG); these typically have a low number of pixels and limited set of colors;
- Supply files that are too low in resolution;
- Submit graphics that are disproportionately large for the content.

**Color artwork**

Please make sure that artwork files are in an acceptable format (TIFF (or JPEG), EPS (or PDF) or MS Office files) and with the correct resolution. If, together with your accepted article, you submit usable color figures then Elsevier will ensure, at no additional charge, that these figures will appear in color online (e.g., ScienceDirect and other sites). Further information on the preparation of electronic artwork.

**Illustration services**

Elsevier's Author Services offers Illustration Services to authors preparing to submit a manuscript but concerned about the quality of the images accompanying their article. Elsevier's expert illustrators can produce scientific, technical and medical-style images, as well as a full range of charts, tables and graphs. Image 'polishing' is also available, where our illustrators take your image(s) and improve them to a professional standard. Please visit the website to find out more.

**Figure captions**

Ensure that each illustration has a caption. Supply captions separately, not attached to the figure. A caption should comprise a brief title (not on the figure itself) and a description of the illustration. Keep text in the illustrations themselves to a minimum but explain all symbols and abbreviations used.

**Tables**

Please submit tables as editable text and not as images. Tables can be placed either next to the relevant text in the article, or on separate page(s) at the end. Number tables consecutively in accordance with their appearance in the text and place any table notes below the table body. Be sparing in the use of tables and ensure that the data presented in them do not duplicate results described elsewhere in the article. Please avoid using vertical rules and shading in table cells.

**References**
Citation in text
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.

Web references
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.

Data references
This journal encourages you to cite underlying or relevant datasets in your manuscript by citing them in your text and including a data reference in your Reference List. Data references should include the following elements: author name(s), dataset title, data repository, version (where available), year, and global persistent identifier. Add [dataset] immediately before the reference so we can properly identify it as a data reference. The [dataset] identifier will not appear in your published article.

References in a special issue
Please ensure that the words 'this issue' are added to any references in the list (and any citations in the text) to other articles in the same Special Issue.

Most Elsevier journals have their reference template available in many of the most popular reference management software products. These include all products that support Citation Style Language styles, such as Mendeley. Using citation plug-ins from these products, authors only need to select the appropriate journal template when preparing their article, after which citations and bibliographies will be automatically formatted in the journal’s style. If no template is yet available for this journal, please follow the format of the sample references and citations as shown in this Guide. If you use reference management software, please ensure that you remove all field codes before submitting the electronic manuscript. More information on how to remove field codes from different reference management software.

If you manage your research with Mendeley Desktop, you can easily install the reference style for this journal by clicking the link below:
When preparing your manuscript, you will then be able to select this style using the Mendeley plug-ins for Microsoft Word or LibreOffice. For more information about the Citation Style Language, visit http://citationstyles.org.

If you manage your research with Mendeley Desktop, you can easily install the reference style for this journal by clicking the link below: https://www.mendeley.com/download-desktop/.

When preparing your manuscript, you will then be able to select this style using the Mendeley plug-ins for Microsoft Word or LibreOffice. For more information about the Citation Style Language, visit http://citationstyles.org.

Reference style
Text: Indicate references by superscript numbers in the text. The actual authors can be referred to, but the reference number(s) must always be given.

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

Examples:
Reference to a journal publication:
Reference to a journal publication with an article number:
Reference to a book:
Reference to a chapter in an edited book:
Reference to a dataset:

Note shortened form for last page number. e.g., 51–9, and that for more than 6 authors the first 6 should be listed followed by 'et al.' For further details you are referred to 'Uniform Requirements for Manuscripts submitted to Biomedical Journals' (J Am Med Assoc 1997;277:927–34)(see also Samples of Formatted References).

Journal abbreviations source
Journal names should be abbreviated according to the List of Title Word Abbreviations.

Video
Elsevier accepts video material and animation sequences to support and enhance your scientific research. Authors who have video or animation files that they wish to submit with their article are strongly encouraged to include links to these within the body of the article. This can be done in the same way as a figure or table by referring to the video or animation content and noting in the body text where it should be placed. All submitted files should be properly labeled so that they directly relate to the video file's content. In order to ensure that your video or animation material is directly usable, please provide the file in one of our recommended file formats with a preferred maximum size of 150 MB per file, 1 GB in total. Video and animation files supplied will be published online in the electronic version of your article in Elsevier Web products, including ScienceDirect. Please supply 'stills' with your files: you can choose any frame from the video or animation or make a separate image. These will be used instead of standard icons and will personalize the link to your video data. For more detailed instructions please visit our video instruction pages. Note: since video and animation cannot be embedded in the print version of the journal, please provide text for both the electronic and the print version for the portions of the article that refer to this content.

Data visualization
Include interactive data visualizations in your publication and let your readers interact and engage more closely with your research. Follow the instructions here to find out about available data visualization options and how to include them with your article.

Supplementary material
Supplementary material such as applications, images and sound clips, can be published with your article to enhance it. Submitted supplementary items are published exactly as they are received (Excel or PowerPoint files will appear as such online). Please submit your material together with the article and supply a concise, descriptive caption for each supplementary file. If you wish to make changes to supplementary material during any stage of the process, please make sure to provide an updated file. Do not annotate any corrections on a previous version. Please switch off the 'Track Changes' option in Microsoft Office files as these will appear in the published version.

AFTER ACCEPTANCE

Online proof correction
To ensure a fast publication process of the article, we kindly ask authors to provide us with their proof corrections within two days. 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 Author Services.

**AUTHOR INQUIRIES**

Visit the Elsevier Support Center to find the answers you need. Here you will find everything from Frequently Asked Questions to ways to get in touch. You can also check the status of your submitted article or find out when your accepted article will be published.

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