DESCRIPTION

The International Journal of Surgery (IJS) is dedicated to the global advancement of surgical research, education and clinical practice. It aims to promote continued developments in surgery through the sharing of knowledge, ideas and good practice across all surgical specialties. The IJS provides readers with critically peer-reviewed, carefully selected/edited and up to date publications about advances in the field of surgery that are relevant to them.

The journal aims to develop and uphold the highest standards at the cutting-edge of research, provide a focus for evidence-based medicine through the publication of timely review articles and special issues and give the findings context, through the publication of editorials, commentaries and letters from the surgical community. We enforce reporting guidelines and mandate the registration of all research involving human participants in a publicly accessible research registry.

As a broad scope journal covering all surgical specialities, the IJS aims to facilitate the transfer of important ideas and lines of thought between and across specialties. In this way, the journal will help prevent the trend of increasing sub-specialisation leading to 'tunnel-vision' and the sequestration of important surgical advances within particular specialties.

The journal is published monthly and focuses on rapid submission to decision times. We provide open access options. All articles are made open access two-years after publication in our delayed open archive, maximising the long-term visibility, impact and influence of our content. We also recognise the efforts of peer-reviewers and publish their reviews (anonymously), which are indexed in PubMed along with the articles content.

The Harold Ellis Prize in Surgery

The International Journal of Surgery awards the prestigious annual Harold Ellis Prize (Est. 2003) in recognition of scientific papers judged to be outstanding. For terms and conditions, and details on how to apply, please click on the link.

- Indexed and Abstracted in:
- AcademicPub
- The British Library
- Cancerlit
- EMBASE
- Google Scholar
Disclaimer

The information and opinions presented in the Journal reflect the views of the authors and not of the Journal or its Editorial Board or the Publisher. Publication does not constitute endorsement by the journal. Neither International Journal of Surgery nor its publishers nor anyone else involved in creating, producing or delivering International Journal of Surgery or the materials contained therein, assumes any liability or responsibility for the accuracy, completeness, or usefulness of any information provided in International Journal of Surgery, nor shall they be liable for any direct, indirect, incidental, special, consequential or punitive damages arising out of the use of International Journal of Surgery. International Journal of Surgery, nor its publishers, nor any other party involved in the preparation of material contained in International Journal of Surgery represents or warrants that the information contained herein is in every respect accurate or complete, and they are not responsible for any errors or omissions or for the results obtained from the use of such material. Readers are encouraged to confirm the information contained herein with other sources.

IMPACT FACTOR

2018: 3.158 © Clarivate Analytics Journal Citation Reports 2019

ABSTRACTING AND INDEXING

Embase
Scopus
PubMed/Medline
PubMed/Medline
Cancerlit
Google Scholar
Web of Science
Science Citation Index Expanded
Web of Science
AcademicPub
The British Library
ProQuest
Emerging Sources Citation Index (ESCI)
ScienceDirect
ClinicalKey
Academic Search (EBSCO)

EDITORIAL BOARD

Editor-in-Chief
J. W. Y. Lau, Shatin, Hong Kong

Editor-in-Chief Emeritus
D. Rosin, Bridgetown, Barbados

Managing and Executive Editor
R Agha, London, United Kingdom

Senior Editors
R.Y. Afifi, Cairo, Egypt
H. Alam, Ann Arbor, United States
J. P. Barret, Barcelona, Spain
B. Challacombe, London, United Kingdom
X-P. Chen, Wuhan, China
R.L. De Wilde, Oldenburg, Germany
B. Ekser, Indianapolis, United States
H.B. Hechtman, Boston, United States
O. Muentererer, Mainz, Germany
S. Rogers, Chicago, United States
J. Talati, Karachi, Pakistan
M. Thorat, London, United Kingdom
F.C. Wei, Taoyuan, Taiwan

Associate Editors
R. Coppola, Roma, Italy
V. Kasivisvanathan, London, United Kingdom
R Keijzer, Winnipeg, Canada
B Kirshtein, Be’er Sheva, Israel
J.A. McCaul, Bradford, United Kingdom
E.R. McGlone, London, United Kingdom
D. Muzumdar, Mumbai, India
A Petroianu, Belo Horizonte, Brazil
S.G. Raja, London, United Kingdom
K Raveendran, Ipoh, Malaysia
D. Yeh, Boston, United States

Assistant Editors
R. Al-mahfoudh, Oxford, United Kingdom
H. M. Atta, Boston, United States
G. Augustin, Zagreb, Croatia
M. Bashashati, Calgary, Canada
S. Basu, Varanasi, India
A. Beamish, Goteborg, Sweden
M. Cárbaro, Valladolid, Spain
A. G. Charles, Chapel Hill, United States
A. Das, Hyderabad, India
M. Deitel, Toronto, Canada
S. A. Esquivel Gaón, Mexico
S. Feng, Shanghai, China
J. Gómez Rivas, Madrid, Spain
H. Kaafarani, Boston, United States
Y. D. Kamat, Mangaluru, India
O. Khan, London, United Kingdom
T. Konishi, Koto-Ku, Japan
K. Kular, Bija, Punjab, India
T. Manning, Heidelberg, Australia
I. Mukherjee, Staten Island, United States
E Ofo, Adelaide, South Australia
S. Pai, Mumbai, India
A. Smailys, Kaunas, Lithuania
P. Suman, Evanston, United States
D.G. Weber, Perth, Australia
H. Zhu, Shanghai, China

Statistical Editors
N. Donaldson, Colombia, South America
M.W. Gray, Washington DC, United States

Society Representatives
X-P. Chen, Huazhong University of Science and Technology
G.F. Coppa, President of the New York Surgical Society
M. Deitel, Director, MGB-OAGB Club
A. Williams, President, Association of Surgeons in Training

Executive Committee
G. Catto
A. Darzi, London, United Kingdom
H. Ellis, London, United Kingdom
B. Jackson
C.-H. Leong, Pokfulam, Hong Kong
A.K-C. Li, Hong Kong, Hong Kong
I. McColl, London, United Kingdom
J. Norcini, Philadelphia, United States
S. Standring
M. C. Warlé, Nijmegen, Netherlands
J. Wee, Boston, United States
N. Williams
M. Yacoub, London, United Kingdom
Y. Zhang, Shanghai, China

Editorial Board
R. A. Badwe, Mumbai, India
M. Boscoe, Uxbridge, United Kingdom
R. Bueno, Boston, United States
G. Catto
K. Chatamra, Bangkok, Thailand
P. Coulthard, Manchester, United Kingdom
A. d’Cruz, Mumbai, India
A. Darzi, London, United Kingdom
M. Desai, Nadiad, India
D.W. Green, London, United Kingdom
I. Harirchi, Tehran, Iran, Islamic Republic of
D. Henne-Bruns, Ulm, Germany
B. Jackson
D. Kahn, Rondebosch, South Africa
C.-H. Leong, Pokfulam, Hong Kong
X. Lin, Shanghai, China
A. Mahapatra, New Delhi, India
I. Mittra, Mumbai, India
V. Naraynsingh, West Indies, Trinidad and Tobago
A. Nuñez De Pierro, Buenos Aires, Argentina
R. Orda, Tel Aviv, Israel
F. Panaro, Montpellier, France
V. Semiglazov, St. Petersburg, Russia
T. Singh, Ludhiana, India
B.L. Smith, Charlestown, United States
S. Standring
T.E. Udwadia, Mumbai, India
M. C. Warlé, Nijmegen, Netherlands
J. Wee, Boston, Massachusetts, United States
M. Weiser, New York, New York, United States
N. Williams
Z.F. Xia, Shanghai, China
Y. Zhang, Shanghai, China
J Zhong, Shanghai, China
GUIDE FOR AUTHORS

As a general surgical journal, International Journal of Surgery covers all specialties, and is dedicated to publishing original research, review articles and more all offering significant contributions to knowledge in clinical surgery, experimental surgery, surgical education and history.

Please note, IJS no longer accepts case reports; however authors are encouraged to submit them to the sister journal, International Journal of Surgery Case Reports, an online-only, author-pays journal that is freely available to all without a subscription. For more details, and to submit your case report, go to https://www.journals.elsevier.com/international-journal-of-surgery-case-reports.

Reporting Guidelines

Compliance with the relevant reporting guideline is mandatory for submission of the following guidelines. You need to: 1. Submit a completed checklist, indicating the page numbers where compliance was achieved. 2. Mention in your methods section that the research is being reported in line with the relevant guideline which should be named and cited.

Randomised Controlled Trials

All randomised controlled trials submitted for publication in International Journal of Surgery should include a completed Consolidated Standards of Reporting Trials (CONSORT) flow chart and ensure that all elements in the CONSORT checklist are covered. A copy of the CONSORT checklist must be uploaded as supplemental material. Please refer to the CONSORT statement website at http://www.consort-statement.org for more information.

Systematic Reviews

Systematic reviews should be reported in accordance PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) Guidelines (http://www.prisma-statement.org/) and must include the flow diagram as a figure and the checklist as supplemental material. Please download a PRISMA Flowchart and a PRISMA Checklist from the link above. Please also upload a completed AMSTAR 2 checklist to aid the methodological quality of your article: https://amstar.ca/Amstar_Checlist.php or https://amstar.ca/docs/AMSTAR-2.pdf.

Cohort, Case-control and Cross-sectional studies

Cohort, Case-control and Cross-sectional studies should all be compliant with the STROCSS criteria (Strengthening the reporting of cohort studies in surgery). Please see http://www.strocssguideline.com and Agha RA, Abdall-Razak A, Crossley E, Dowlut N, Iosifidis C, Mathew G, for the STROCSS Group. STROCSS 2019 Guideline: Strengthening the reporting of cohort studies in surgery. - each study type has its own checklist which should be uploaded as a supplemental file.

Diagnostic, Quality Improvement and Qualitative studies

Diagnostic Studies should be reported in accordance with the STARD statement criteria (Standards for the Reporting of Diagnostic accuracy studies) flow diagram and checklist please see (http://www.equator-network.org/wp-content/uploads/2015/03/STARD-2015-flow-diagram.pdf and https://www.elsevier.com/__data/promis_misc/ISSM_STARD_Checklist.pdf). Quality Improvement studies should comply with the Standards for Quality Improvement Reporting Excellence (SQUIRE) criteria: http://squire-statement.org. Qualitative studies require the Consolidated criteria for Reporting Qualitative Research (COREQ) checklist, please see: http://intqhc.oxfordjournals.org/content/19/6/349.long

Health Economic Evaluation

Health Economic Evaluation studies should conform to the CHEERS statement: http://www.bmj.com/content/346/bmj.f1049.pdf%2Bhtml

Tumour Marker Prognostic Study

Tumor Marker Prognostic studies should be reported in accordance with the REMARK criteria.

Before and After Studies

Before and After studies measuring particular characteristics of a population or group of individuals at the end of an event or intervention, compares them with those characteristics before the event or intervention: then gauges the effects of the event or intervention. These studies should conform to the STROCSS statement. http://www.strocssguideline.com

Best Evidence Topic

IJS no longer accepts Best Evidence Topic papers. If you would like to submit a Best Bets paper this could be submitted to IJS Open or to the Annals of Medicine and Surgery.

Experimental Animal Studies
Animal studies must be reported in accordance with the ARRIVE guidelines (Animals in Research: Reporting In Vivo Experiments) and must include the checklist as supplemental material. A blank form can be downloaded for completion here. An example of a completed checklist can be found at http://www.nc3rs.org.uk/page.asp?id=1357. (The example checklist is based on an original publication by Kilkenny C, Browne WJ, Cuthill IC, Emerson M, Altman DG (2010) Improving Bioscience Research Reporting: The ARRIVE Guidelines for Reporting Animal Research. PLoS Biol 8(6): e1000412. https://doi.org/10.1371/journal.pbio.1000412). The institutional protocol number should be included at the end of the abstract of the article.

Qualitative Surveys

Qualitative Surveys should be reported in accordance with the following criteria: SRQR Guidelines http://www.equator-network.org/reporting-guidelines/srqr/ For synthesis of qualitative research: http://www.equator-network.org/reporting-guidelines/entreq/ Interviews and Focus Groups - COREQ - http://www.equator-network.org/reporting-guidelines/coreq/

Case Series

Please ensure your case series is compliant with the PROCESS Guidelines: https://www.processguideline.com and submit a completed PROCESS checklist. Please also ensure you state that the work has been reported in line with the PROCESS criteria and cite the following paper: Riaz A. Agha, Mimi R. Borrelli, Reem Farwana, Kiron Koshy, Alex Fowler, Dennis P. Orgill, for the PROCESS Group. The PROCESS 2018 Statement: Updating Consensus Preferred Reporting Of Case Series in Surgery (PROCESS) Guidelines. International Journal of Surgery 2018;60:279-282.

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.

Title

For Original Research articles please state the study design at the end of the title, i.e. Systematic Review, Meta-analysis, Randomised Controlled Trial, Cohort Study, Case Controlled Study, Observational, Case Series, Questionnaire or Other - please state.

BEFORE YOU BEGIN

Ethics in publishing

Please see our information pages on Ethics in publishing and Ethical guidelines for journal publication.
Work on human beings that is submitted to International Journal of Surgery should comply with the principles laid down in the Declaration of Helsinki (Recommendations guiding physicians in biomedical research involving human subjects. Adopted by the 18th World Medical Assembly, Helsinki, Finland, June 1964, amended by the 29th World Medical Assembly, Tokyo, Japan, October 1975, the 35th World Medical Assembly, Venice, Italy, October 1983, and the 41st World Medical Assembly, Hong Kong, September 1989). The manuscript should contain a statement that the work has been approved by the appropriate ethical committees related to the institution(s) in which it was performed and that subjects gave informed consent to the work. Studies involving experiments with animals must state that their care was in accordance with institution guidelines. Patients and volunteers names, initials, and hospital numbers should not be used.

**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-blind) or the manuscript file (if single-blind). If there are no interests to declare then please state this: 'Declarations of interest: none'. This summary statement will be ultimately published if the article is accepted. 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.

This should be included at the end of the text under the subheading 'Conflict of interest statement'.

**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.

**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').

**Contributorship**
The IJS lists contributors in two ways. Firstly, we publish a list of authors' names at the beginning of the paper and, secondly, we list contributors (some of whom may not be included as authors) at the end of the paper, giving details of who did what in planning, conducting, and reporting the work. One or more of these contributors are listed as guarantors of the paper. The guarantor accepts full responsibility for the work and/or the conduct of the study, had access to the data, and controlled the decision to publish.

**Author contributions**
For transparency, we encourage authors to submit an author statement file outlining their individual contributions to the paper using the relevant CRediT roles: Conceptualization; Data curation; Formal analysis; Funding acquisition; Investigation; Methodology; Project administration; Resources; Software; Supervision; Validation; Visualization; Roles/Writing - original draft; Writing - review & editing. Authorship statements should be formatted with the names of authors first and CRediT role(s) following. More details and an example
**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.

When submitting a paper authors must complete the Author Disclosure Form, which can be downloaded here. This form confirms that all authors agree to publication if the paper is accepted and allows authors to declare any conflicts of interest, sources of funding and ethical approval (if required). Please download the form and submit it with your paper. Submissions that do not include a completed form will be returned without review.

**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.

**Registration of Research**

The World Medical Association's Declaration of Helsinki 2013 states in article 35: 'Every research study involving human subjects must be registered in a publicly accessible database before recruitment of the first subject'. Editors of IJS require that all types of research studies involving human participants should be registered prospectively, but failing that retrospectively. There are many places to register your research, and you can choose which is the most suitable for your needs:

- https://www.clinicaltrials.gov/ - for all human studies - free
- http://www.chictr.org.cn/index.aspx - for all human studies - free
- https://www.researchregistry.com/ - for all human studies - charge
- https://www.isrctn.com/ - for all human studies - charge
- Prospero - for systematic reviews - free
- There are many national registries approved by the UN that can be found here

Elsevier does not support or endorse any registry. Once registered, you will need to submit your assigned Unique Identifying Number (UIN) from your registration body as a mandatory part of your submission.

**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.

Subscribers may reproduce tables of contents or prepare lists of articles including abstracts for internal circulation within their institutions. Permission of the Publisher is required for resale or distribution outside the institution and for all other derivative works, including compilations and translations. If excerpts from other copyrighted works are included, the author(s) must obtain written permission from the copyright owners and credit the source(s) in the article. Elsevier has preprinted forms for use by authors in these cases.
For gold 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 gold 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.

**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**
Please visit our Open Access page from the Journal Homepage for more information.

**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 Author Services.

**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.

**Submission**
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.

Submit your article
Please submit your article via http://ees.elsevier.com/ijs.

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 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.
**Double-blind review**

This journal uses double-blind 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.

**Blinded 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**

**Word Limits**

Papers should not exceed 3000 words for an original research article, review article, Perspective, Cohort, Case control, Cross Sectional, diagnostic, Quality Improvement, Qualitative studies, experimental research or editorial (excluding references). Correspondence should not exceed 750 words in length and should only have 1 table or figure, 3 authors and 5 references. Book and media reviews should not exceed 1000 words.

**Subdivision - numbered sections**

Divide your article into clearly defined and numbered sections. Subsections should be numbered 1.1 (then 1.1.1, 1.1.2, ...), 1.2, etc. (the abstract is not included in section numbering). Use this numbering also for internal cross-referencing: do not just refer to 'the text'. Any subsection may be given a brief heading. Each heading should appear on its own separate line.

**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.

**Theory/calculation**

A Theory section should extend, not repeat, the background to the article already dealt with in the Introduction and lay the foundation for further work. In contrast, a Calculation section represents a practical development from a theoretical basis.

**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 lower-case 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.

Your title page, numbered as 1, should give the title in capital letters (not exceeding 100 letters), and a running title (not exceeding 50 letters).

Abstract

A concise and factual abstract is required. The abstract should state briefly the purpose of the research, the principal results and major conclusions. An abstract is often presented separately from the article, so it must be able to stand alone. For this reason, References should be avoided, but if essential, then cite the author(s) and year(s). Also, non-standard or uncommon abbreviations should be avoided, but if essential they must be defined at their first mention in the abstract itself.

The abstract should be a maximum of 300 words. For all original research articles, the abstract should be structured with the following headings:

- Background;
- Materials and Methods;
- Results;
- Conclusion

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 $531 \times 1328$ pixels ($h \times w$) or proportionally more. The image should be readable at a size of $5 \times 13$ 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.

Highlights

Highlights are concise bullet points that convey the core findings and provide readers with a quick textual overview of the article (see https://www.elsevier.com/highlights for examples). These bullet points describe the essence of the research. Highlights are mandatory for all original research articles.

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.
Units and Abbreviations
Système Internationale (SI) units should be used, with the traditional equivalent in parentheses where appropriate. Conventions for abbreviations should be those detailed in: Baron DN, ed. *Units, Symbols, and Abbreviations: A Guide for Biological and Medical Editors and Authors.* 5th edition. London: Royal Society of Medicine Services, 1994.

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.).

Examples of those who might be acknowledged include a person who provided purely technical help, writing assistance, or a department chair who provided only general support. Authors should disclose whether they had any writing assistance and identify the entity that paid for this assistance.

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 xxsx, 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.

Math formulae
Please submit math equations as editable text and not as images. Present simple formulae in line with normal text where possible and use the solidus (/) instead of a horizontal line for small fractional terms, e.g., X/Y. In principle, variables are to be presented in italics. Powers of e are often more conveniently denoted by exp. Number consecutively any equations that have to be displayed separately from the text (if referred to explicitly in the text).

Footnotes
Footnotes should be used sparingly. Number them consecutively throughout the article. Many word processors can build footnotes into the text, and this feature may be used. Otherwise, please indicate the position of footnotes in the text and list the footnotes themselves separately at the end of the article. Do not include footnotes in the Reference list.

Artwork
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): Bitmapped (pure black & white pixels) line drawings, keep to a minimum of 1000 dpi.
- TIFF (or JPEG): Combinations bitmapped line/halftone (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.

**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.

**Reference links**
Increased discoverability of research and high quality peer review are ensured by online links to the sources cited. In order to allow us to create links to abstracting and indexing services, such as Scopus, CrossRef and PubMed, please ensure that data provided in the references are correct. Please note that incorrect surnames, journal/book titles, publication year and pagination may prevent link creation. When copying references, please be careful as they may already contain errors. Use of the DOI is highly encouraged.

A DOI is guaranteed never to change, so you can use it as a permanent link to any electronic article. An example of a citation using DOI for an article not yet in an issue is: VanDecar J.C., Russo R.M., James D.E., Ambhe W.B., Franke M. (2003). Aseismic continuation of the Lesser Antilles slab beneath northeastern Venezuela. Journal of Geophysical Research, https://doi.org/10.1029/2001JB000884. Please note the format of such citations should be in the same style as all other references in the paper.
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.

Reference management software
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 plugin 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.

Users of Mendeley Desktop can easily install the reference style for this journal by clicking the following link:
http://open.mendeley.com/use-citation-style/international-journal-of-surgery
When preparing your manuscript, you will then be able to select this style using the Mendeley plug-ins for Microsoft Word or LibreOffice.

Reference style
Text: Indicate references by number(s) in square brackets in line with the text. The actual authors can be referred to, but the reference number(s) must always be given.
Example: '..... as demonstrated [3,6]. Barnaby and Jones [8] obtained a different result ....'
List: Number the references (numbers in square brackets) 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 website:
Reference to a dataset:

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.

**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.

**Research data**

This journal encourages and enables you to share data that supports your research publication where appropriate, and enables you to interlink the data with your published articles. Research data refers to the results of observations or experimentation that validate research findings. To facilitate reproducibility and data reuse, this journal also encourages you to share your software, code, models, algorithms, protocols, methods and other useful materials related to the project.

Below are a number of ways in which you can associate data with your article or make a statement about the availability of your data when submitting your manuscript. If you are sharing data in one of these ways, you are encouraged to cite the data in your manuscript and reference list. Please refer to the "References" section for more information about data citation. For more information on depositing, sharing and using research data and other relevant research materials, visit the research data page.

**Data linking**

If you have made your research data available in a data repository, you can link your article directly to the dataset. Elsevier collaborates with a number of repositories to link articles on ScienceDirect with relevant repositories, giving readers access to underlying data that gives them a better understanding of the research described.

There are different ways to link your datasets to your article. When available, you can directly link your dataset to your article by providing the relevant information in the submission system. For more information, visit the database linking page.

For supported data repositories a repository banner will automatically appear next to your published article on ScienceDirect.

In addition, you can link to relevant data or entities through identifiers within the text of your manuscript, using the following format: Database: xxxx (e.g., TAIR: AT1G01020; CCDC: 734053; PDB: 1XFN).

**Mendeley Data**

This journal supports Mendeley Data, enabling you to deposit any research data (including raw and processed data, video, code, software, algorithms, protocols, and methods) associated with your manuscript in a free-to-use, open access repository. During the submission process, after uploading your manuscript, you will have the opportunity to upload your relevant datasets directly to Mendeley Data. The datasets will be listed and directly accessible to readers next to your published article online.

For more information, visit the Mendeley Data for journals page.
**Data statement**

To foster transparency, we require you to state the availability of your data in your submission if your data is unavailable to access or unsuitable to post. This may also be a requirement of your funding body or institution. You will have the opportunity to provide a data statement during the submission process. The statement will appear with your published article on ScienceDirect. For more information, visit the Data Statement page.

**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, at no cost, receive a customized Share Link providing 50 days free access to the final published version of the article on ScienceDirect. The Share Link can be used for sharing the article via any communication channel, including email and social media. 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. Corresponding authors who have published their article gold open access do not receive a Share Link as their final published version of the article is available open access on ScienceDirect and can be shared through the article DOI link.

**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