

Spinal Cord Series and Cases



About the Journal	1	Post-Acceptance	6
Article Type Specifications	1	Editorial Policies	7
Preparation of Articles	2	Further Information	13
How to Submit	6		

ABOUT THE JOURNAL

Aims and Scope

Spinal Cord Series and Cases: Clinical Management in Spinal Cord Disorders is an international, online-only journal which publishes high quality case reports, small case series, pilot and retrospective studies, perspectives, Pulse survey articles, Point-counterpoint articles, correspondences and book reviews. It specialises in material that addresses all aspects of life for persons with spinal cord injuries or disorders including psychosocial, vocational, medical, social, environmental, wellness and of course spinal cord anatomy, physiology and lesions (injury and disease). The journal covers practical topics for practitioners who treat patients with spinal cord injuries and to highlight educational issues. It will also cover topics related to professional and personal providers of care for persons with SCIs.

The journal strongly supports the use of the International Data Sets, the International Standards to Document Remaining Autonomic Function after Spinal Cord Injury and the International Standards for the Neurologic Classification of SCI in submitted publications and also encourages papers that highlight the educational aspects of these documents.

Spinal Cord Series and Cases follows a continuous publishing model, with available content published every week.

Spinal Cord Series and Cases' sister journal *Spinal Cord* publishes high quality original papers and topical reviews on basic science, clinical and applied studies, psychology and epidemiology of spinal disorders. For more information, please see the aims and scope of [Spinal Cord](#).

Journal Details

Editor-in-Chief: Dr Daniel Graves, Sidney Kimmel Medical College, Thomas Jefferson University, USA, SpinalCord@comcast.net

Editorial office: scsc@iscos.org.uk

Frequency: continuous publication

ISSN: 2058-6124

Abstracted in:

EBSCO Discovery Service
Google Scholar
OCLC
SCOPUS
Summon by ProQuest

PubMedCentral
ProQuest Central
ProQuest Health & Medical Collection
ProQuest Health Research Premium Collection

Patient consent

For all articles that include information or clinical photographs relating to individual patients, where those patients could be identified by readers in any way, written and signed consent to publish must be obtained from each patient and a patient consent form should be emailed to the editorial office. If identifiable features are not essential to the illustration, please indicate where the illustration can be cropped. In cases where consent has not been obtained and recognizable features may appear it will be necessary to retouch the illustration to mask the eyes or otherwise render the individual 'officially unrecognizable'.

ARTICLE TYPE SPECIFICATIONS

ARTICLE DESCRIPTION	SPECIFICATIONS
Case Report* Please see 'Preparation of Case Reports' below for further details. Case Reports must adhere to the reporting guidelines as outlined by CARE Guidelines and authors must complete the CARE Checklist and upload as a Related Manuscript file at submission.	Structured Abstract, max 250 words; Main body of text max 2,500 words Max of 10 tables or figures
Psychometric, Retrospective or Pilot Studies (Article)* Please see 'Preparation of Articles' below for further details. Please select 'Article' when submitting through the submission system	Structured Abstract, max 250 words; Main body of text max 3,000 words Max of 10 tables or figures
Pulse Survey These are invited features designed to assist in developing educational priorities for professionals and patients in the field of SCD; they follow the article format below and you must select 'Article' when submitting	Structured Abstract, max 250 words; Main body of text max 3,000 words Max of 10 tables or figures
Point-Counterpoint These invited papers include two different points of view pertaining to a single topic area. They are accompanied	Unstructured Abstract, max 250 words; Main body of text max 2,000

by a synopsis article that reflects and synthesizes these opinions. When submitting please select the article type Perspective	Max of 2 tables or figures
Correspondence Correspondences are encouraged. They may deal with material in published papers or they may raise new issues. In the former case the Editor-in-Chief may send the letter first to the authors of the original paper so that their response may be published at the same time as the letter.	No abstract required Main body of text max 900 words Max of 10 tables or figures
Perspective Perspectives are a hybrid of a correspondence and a review, providing an opinion-driven perspective on a particular research topic or field of interest to the <i>Spinal Cord Series and Cases</i> readership. Authors should present a view that can be supported by data and literature with the goal of sparking debate and stimulating future research avenues	No abstract required Main body of text max 2,000 words Max of 10 tables or figures

***If you wish to submit a case series with more than 3 cases you should decide on the best layout for your paper (see [preparation of articles](#) below); case report or article. It is essential that on the submission page you select the appropriate 'article type' to match the layout you have chosen. Please select the article type 'Article' if you wish to submit a case series with the layout of an article.**

Though there is no restriction on words/pages/figures or tables for most types of submissions, authors should be realistic of the length of their submission and what is needed to explain their methods and outcomes properly. When it is judged that the text is too long or the number of tables and figures exceed what is needed a restriction will be proposed.

PREPARATION OF ARTICLES

House Style: Authors should adhere to the following formatting guidelines

Text should be double spaced with a wide margin.

- All pages and lines are to be numbered. To add page numbers in MS Word, go to Insert then Page Numbers. To add line numbers go to File, Page Setup, then click the Layout tab. In the Apply to box, select Whole document, click Line Numbers then select the Add line numbering check box, followed by Continuous.
- Do not make rules thinner than 1pt (0.36mm).
- Use a coarse hatching pattern rather than shading for tints in graphs.
- Colour should be distinct when being used as an identifying tool.
- Commas, not spaces should be used to separate thousands.
- At first mention of a manufacturer, the town (and state if USA) and country should be provided.
- Statistical methods: For normally distributed data, mean (SD) is the preferred summary statistic. Relative risks should be expressed as odds ratios with 95% confidence interval. To compare two methods for measuring a variable the method of Bland & Altman (1986, *Lancet* 1, 307–310) should be used; for this, calculation of P only is not appropriate.
- Units: Use metric units (SI units) as fully as possible. Preferably give measurements of energy in kilojoules or Megajoules with kilocalories in parentheses (1 kcal = 4.186kJ). Use % throughout.
- Abbreviations: On first using an abbreviation place it in parentheses after the full item. Note these abbreviations: gram **g**; litre **l**; milligram **mg**; kilogram **kg**; kilojoule **kJ**; megajoule **MJ**; weight **wt**; second **s**; minutes **min**; hours **h**. Do not add s for plural units.

Please note that **Case Reports** must contain the following components:

- Title page
- Structured Abstract
- Introduction
- Case Presentation
- Discussion
- Data Availability Statement
- References
- Acknowledgements
- Author Contribution Statement
- Funding
- Ethical Approval
- Competing Interests
- Figure legends
- Tables
- Figures
- CARE Checklist

Please note that **Articles** must contain the following components:

- Title page
- Structured Abstract
- Introduction
- Methods
- Results
- Discussion
- Data Availability Statement
- References
- Acknowledgements
- Author Contribution Statement
- Funding
- Ethical Approval
- Competing Interests
- Figure legends
- Tables
- Figures

Please see below for further details.

Reports of clinical trials must adhere to the registration and reporting requirements listed in the [Editorial Policies](#).

Cover Letter

Authors should provide a cover letter that includes the affiliation and contact information for the corresponding author. Authors should briefly discuss the importance of the work and explain why it is considered appropriate for the diverse readership of the journal. The cover letter should confirm the material is original research, has not been previously published and has not been submitted for publication elsewhere while under consideration. If the manuscript has been previously considered for publication in another journal, please include the previous reviewer comments, to help expedite the decision by the Editorial team.

Title Page

The title page should contain:

- Title of the paper - brief, informative, of 150 characters or less and should not make a statement or conclusion

- Full names of all the authors and their affiliations, as well as the e-mail address of the corresponding author. If authors regard it as essential to indicate that two or more co-authors are equal in status, they may be identified by an asterisk symbol with the caption ‘These authors contributed equally to this work’ immediately under the address list.

Consortia: For papers containing one or more consortia, all members of the consortium who meet the criteria for authorship must be listed individually as authors on the title page. The name of the consortia needs to also be on the title page and listed as an author (e.g. The BP Consortia). However, phrases such as “on behalf of” should not be used. If necessary, individual authors can be listed in both the main author list and as a member of a consortium. When submitting your manuscript via the online submission system, the consortium name should be entered as an author, together with the contact details of a nominated consortium representative. The Consortium should be mentioned in the Acknowledgements section, not as an Author, when it is made up of a group of people who do not meet authorship criteria. See here [<https://www.nature.com/documents/nr-consortia-formatting.pdf>] for further consortia formatting guidelines, which should be adhered to prior to acceptance.

New requirements

Cfr. the standardization as described by DeVivo *et al.* Authors are invited to follow these rules that all reports regarding age at injury include mean and standard deviation, median & range. When grouped, 15 year increments shall be used: 0–15, 16–30, 31–45, 46–60, 61–75, 76+. For pediatric SCI the following grouping is advised: 0–5, 6–12, 13–15, 16–21. Time since injury shall include mean and standard deviation, median & range. If to be given with intervals the following are to be used: <1 year, 1–5 years, 6–10 years, 11–15 years, and 5-year increments thereafter. Calendar time (years during which the study is conducted) shall be grouped by either 5 or 10 year increments with years ending in 4 or 9. Length of stay shall be given with mean and standard deviation as well as the median. The severity of injury shall be grouped as C1-4 ASIA Impairment Scale grade (AIS) A, B, or C; C5-8 AIS A, B, or C; T1-S5 AIS A, B, or C; AIS D at any injury level; Ventilator-dependent at any injury level or AIS grade. If the particular dataset is limited, the above groups may be collapsed.

Structured Abstract

Case Reports and Articles must be prepared with a structured abstract designed to summarise the essential features of the paper in a logical and concise sequence under the following mandatory headings:

Case Report

- Introduction
- Case Presentation
- Discussion

Article

- Study Design

- Objectives
- Setting (i.e. country and/or county or state)
- Methods
- Results
- Conclusions: Answer (significant or not) to main question
- Sponsorship (where applicable)

Please note: As with all Springer Nature titles, *Spinal Cord Series and Cases* does not collect keywords. Keywords that are provided to us will not be published. If a term is important in the discoverability of the paper, it should be in the title or abstract of the paper.

Graphical Abstracts (optional)

A graphical abstract, which summarizes the manuscript in a visual way, is designed to attract the attention of readers in the table of contents of the journal. Graphical abstracts are published in the table of contents and in the article. The graphic should be submitted as a single file using a standard file format (.tiff, .eps, .jpg, .bmp, .doc, or .pdf.), it should be 9 cm wide x 5 cm high when printed at full scale and a minimum of 300 dpi. All graphical abstracts should be submitted with a white background and imagery should fill the available width, whenever possible. Colour graphical abstracts are encouraged and will be published at no additional charge. Textual statements should be kept to a minimum.

Introduction

The Introduction should assume that the reader is knowledgeable in the field and should therefore be as brief as possible but can include a short historical review where desirable.

Case Presentation

This section should include a description of the patient’s relevant demographic details, medical history, symptoms and signs, treatment or intervention, outcomes and any other significant details.

Methods (for Articles)

The Methods section should contain sufficient detail, so that all experimental procedures can be reproduced. All standard procedures and outcome measures should be referenced. Methods, that have been published in detail elsewhere can be summarised with a reference to the full methodology. Authors should provide the name of the manufacturer and their location for any specifically named medical equipment or instrument. All drugs should be identified by their pharmaceutical names, and by their trade name if relevant.

Results

The Results section should briefly present the experimental data in text, Tables or Figures. Results presented in Tables or Figures should not be described extensively in the text. All results comparing groups should be presented as point estimates with measures of precision (e.g. between group differences and 95% confidence intervals).

Discussion

The discussion should focus on the interpretation and the significance of the findings with concise objective comments that describe their relation to other work in the area. For Articles it should not repeat information presented in the Results section. The final paragraph should highlight the main conclusion(s), and provide some indication of direction for future research or importance in the field.

Data Availability Statement

Please include a statement at the end of your paper that tells readers where the data generated or analysed during this study can be found e.g. within the published article and its supplementary files, within a recognised repository, with a link to the data in said repository, or if additional data are available from the corresponding author on reasonable request. The inclusion of this statement is mandatory.

Please see the [Data Availability and Policy](#) page on the journal website for more information.

References

Only papers directly related to the article should be cited. Exhaustive lists should be avoided. References should follow the Vancouver format. In the text they should appear as numbers in square brackets placed before punctuations and starting at one. Example “...the scale maintains adequate construct validity and measures the attributes it purports to measure [15,16].”

The full details of the References should appear at the end of the paper (double-spaced) in numerical order corresponding to the order of citation in the text.

All authors should be listed for papers with up to six authors; for papers with more than six authors, the first six only should be listed, followed by *et al.* Abbreviations for titles of medical periodicals should conform to those used in the latest edition of Index Medicus. The first and last page numbers for each reference should be provided. Abstracts and letters must be identified as such. Papers in press may be included in the list of references. Personal communications must be allocated a number and included in the list of references in the usual way or simply referred to in the text; the authors may choose which method to use. In either case authors must obtain permission from the individual concerned to quote his/her unpublished work.

Examples:

Journal article:

Neidlein, S, Wirth, R, Pourhassan, M. Iron deficiency, fatigue and muscle strength and function in older hospitalized patients. *Eur J Clin Nutr.* 2020; 75:456–463.

Journal article by DOI:

Kurotani K, Shinsugi C, Takimoto H. Diet quality and household income level among students: 2014 National Health and Nutrition Survey Japan. *Eur J Clin Nutr.* 2020; <https://doi.org/10.1038/s41430-020-00794-1>.

Journal article, in press:

Gallardo RL, Juneja HS, Gardner FH. Normal human marrow stromal cells induce clonal growth of human malignant T-lymphoblasts. *Int. J Cell Cloning* (in press).

Complete book:

Atkinson K, Champlin R, Ritz J, Fibbe W, Ljungman P, Brenner MK (eds). *Clinical Bone Marrow and Blood Stem Cell Transplantation*. 3rd ed. Cambridge University Press, Cambridge; 2004.

Chapter in book:

Coccia PF. Hematopoietic cell transplantation for osteopetrosis. In: Blume KG, Forman SJ, Appelbaum FR (eds). *Thomas' Hematopoietic Cell Transplantation*. 3rd ed. Blackwell Publishing Ltd, Malden; 2004. pp. 1443–1454.

Abstract:

Abstracts from the 2020 Annual Scientific Meeting of the British and Irish Hypertension Society (BIHS). *J Hum Hypertens* 34; 2020; 1–20

Website:

Kassambara A. rstatix: pipe-friendly framework for basic statistical tests. 2020. <https://rpkgs.datanovia.com/rstatix/>.

Online Document:

Doe J. Title of subordinate document. In: *The dictionary of substances and their effects*. Royal Society of Chemistry. 1999. <http://www.rsc.org/dose/title> of subordinate document. Accessed 15 Jan 1999.

Acknowledgements

These should be brief, and should include sources of technical assistance, critical advice or other assistance, which contributed to the final manuscript.

Author Contributions

Authors must include a statement about the contribution of each author to the manuscript (see section on [Authorship](#)). The initials of each author may be used. This is an example for a systematic review:

MAJ was responsible for designing the review protocol, writing the protocol and report, conducting the search, screening potentially eligible studies, extracting and analysing data, interpreting results, updating reference lists and creating 'Summary of findings' tables.

SBM was responsible for designing the review protocol and screening potentially eligible studies. She contributed to writing the report, extracting and analysing data, interpreting results and creating 'Summary of findings' tables.

DIH conducted the meta-regression analyses and contributed to the design of the review protocol, writing the report, arbitrating potentially eligible studies, extracting and analysing data and interpreting results.

NAL contributed to data extraction and provided feedback on the report.

FRT and RAL provided feedback on the report.

Funding

The funding section is mandatory. Authors must declare sources of study funding including sponsorship (e.g. university, charity, commercial organization) and sources of material (e.g. novel drugs) not available commercially. If no financial assistance was received in support of the study, please include a statement to this fact here.

Ethical Approval

Authors must provide a statement regarding ethical approval (see information on [Human and Other Animal Experiments](#) in the Editorial Policy section for further details). If ethical approval was not required, authors must provide an explanation of why it was not needed.

Competing Interests

Authors must declare whether or not there are any competing interests in relation to the work described. This information must be included at this stage and will be published as part of the paper. Please see the Competing Interests section under [Editorial Policies](#) for detailed information.

Figure Legends

These should be brief, specific and appear on a separate manuscript page after the References section titled 'Figure Legends'.

Tables

Tables should only be used to present essential data; they should not duplicate what is written in the text. **It is imperative that any tables used are editable**, ideally presented in Excel. Each must be uploaded as a separate workbook with a title or caption and be clearly labelled, sequentially. Reference to table footnotes should be made by means of Arabic numerals. Tables should consist of at least two columns; columns should always have headings. Please make sure each table is cited within the text and in the correct order, e.g. (Table 3). Please save the files with extensions .xls / .xlsx / .ods / or .doc or .docx. Please ensure that you provide a 'flat' file, with single values in each cell with no macros or links to other workbooks or worksheets and no calculations or functions.

Figures

Figures and images should be labelled sequentially and cited in the text e.g. (Fig.1). Figures should not be embedded within the text but uploaded as separate files. The use of three-dimensional histograms is strongly discouraged when the addition of the third dimension gives no extra information. Composite figures containing more than three individual figures will count as two figures. All parts of a figure should be grouped together. Where possible large figures and tables should be included as supplementary material.

Detailed guidelines for submitting artwork can be found by downloading [Artwork Guidelines](#). Using the guidelines, please submit production quality artwork with your initial online submission. If you have followed the guidelines, we will not require the artwork to be resubmitted following the peer-review process, if your paper is accepted for publication.

Standard abbreviations

Because the majority of readers will have experience in spinal cord medicine, the journal will accept papers which use certain standard abbreviations, without definition in the summary or in the text. Non-standard abbreviations should be defined in full at their first usage in the Abstract and again at the first usage in the text, in the conventional manner. If a term is used 1-4 times in the text, it should be defined in full throughout the text and not abbreviated.

Supplementary Information

Supplementary information is material directly relevant to the conclusion of an article that cannot be included in the printed version owing to space or format constraints. The article must be complete and self-explanatory without the Supplementary Information, which is posted on the journal's website and linked to the article. Supplementary Information may consist of data files, graphics, movies or extensive tables. Please see our [Artwork Guidelines](#) for information on accepted file types.

Authors should submit supplementary information files in the FINAL format as they are not edited, typeset or changed, and will appear online exactly as submitted. When submitting Supplementary Information, authors are required to:

- Include a text summary (no more than 50 words) to describe the contents of each file.
- Identify the types of files (file formats) submitted.

Please submit supplementary figures, small tables and text as a single combined PDF document. Tables longer than one page should be provided as an Excel or similar file type. For optimal quality video files please use H.264 encoding, the standard aspect ratio of 16:9 (4:3 is second best) and do not compress the video. Supplementary information is not copyedited, so please ensure that it is clearly and succinctly presented, and that the style and terminology conform to the rest of the manuscript, with any tracked-changes or Review mark-ups removed.

Please note: We do not allow the resupplying of Supplementary Information files for style reasons after a paper has been exported in production, unless there is a serious error that affects the science and, if by not replacing, it would lead to a formal correction once the paper has been published. In these cases we would make an exception and replace the file; however there are very few instances where a Supplementary Information file would be corrected post publication.

Subject Ontology

Choosing the most relevant and specific subject terms from our subject ontology will ensure that your article will be more discoverable and will appear on appropriate subject specific pages on nature.com, in addition to the journal's own pages. Your article should be indexed with at least one, and up to four unique subject terms that describe the key subjects and concepts in your manuscript. Click [here](#) for help with this.

Language Editing

Spinal Cord Series and Cases is read by scientists from diverse backgrounds and many are not native English speakers. In addition, the readership of *Spinal Cord Series and Cases* is multi-disciplinary; therefore authors need to ensure their findings are clearly communicated. Language and concepts that are well known in one subfield may not be well known in another. Thus, technical jargon should be avoided as far as possible and clearly explained where its use is unavoidable. Abbreviations, particularly those that are not standard, should also be kept to a minimum. The background, rationale and main conclusions of the study should be clearly explained and understandable by all working in the field. Titles and abstracts in particular should be written in language that will be readily understood by all readers.

Authors who are not native speakers of English sometimes receive negative comments from referees or editors about the language and grammar usage in their manuscripts, which can contribute to a paper being rejected. To reduce the possibility of such problems, we strongly encourage such authors to take at least one of the following steps.

- Have your manuscript reviewed for clarity by a colleague whose native language is English.
- Visiting the [English language tutorial](#) which covers the common mistakes when writing in English.

- Using a professional language editing service where editors will improve the English to ensure that your meaning is clear and identify problems that require your review. Two such services are provided by our affiliates [Nature Research Editing Service](#) and [American Journal Experts](#).

Please note that the use of a language editing service is at the author's own expense and does not guarantee that the article will be selected for peer review or accepted.

HOW TO SUBMIT

Pre-submission Enquiries

The Editors encourage authors to submit manuscripts in full and aim to provide an efficient time to decision which, if the manuscript is deemed unacceptable for the journal, allows authors to submit elsewhere without delay. Pre-submission enquiries should be sent to the editorial office: E-mail scsc@iscos.org.uk

Online Submission

We only accept manuscript submission via our [online manuscript submission system](#). Before submitting a manuscript, authors are encouraged to consult both our [Editorial Policies](#) and the [Submission Instructions](#) for our online manuscript submission system. If you have not already done so, please [register for an account](#) with our online manuscript system. You will be able to monitor the status of your manuscript online throughout the editorial process.

Summary of the Editorial Process

- The author submits a manuscript and receives a tracking number
- The editorial office performs an initial quality check on the manuscript to ensure that the paper is formatted correctly
- The Editor-in-Chief then decides whether to send out to review. If the decision is not to send out the manuscript for review, the Editor-in-Chief contacts the author with the decision
- If the Editor-in-Chief decides the paper is within the Journal's remit, the paper will be assigned to an Associate Editor
- The Associate Editor selects and assigns reviewers. This can take some time depending on the responsiveness and availability of the reviewers selected
- Reviewers are given 14 days from acceptance to submit their reports. Once the required reports are submitted the Associate Editor will make a decision recommendation to the Editor-in-Chief based on the comments received
- The Editor-in-Chief makes the final decision

Authors are able to monitor the status of their paper throughout the peer review process

Peer Review

To expedite the review process, only papers that seem most likely to meet editorial criteria are sent for external review. Papers judged by the editors to be of insufficient general interest or otherwise inappropriate are rejected promptly without external review.

Manuscripts sent out for peer review are evaluated by at least one independent reviewer (often two or more). Authors are welcome to suggest independent reviewers to evaluate their manuscript, however these must not be colleagues who are close associates, collaborators, or family members. By policy, referees are not identified to the authors, except at the request of the referee.

Reviewer selection is critical to the publication process, and we base our choice on many factors, based on expertise, reputation, and specific recommendations. A reviewer may decline the invitation to evaluate a manuscript where there is a perceived conflict of interest (financial or otherwise). Once a sufficient number of reviews are received, the editors then make a decision based on the reviewers' evaluations:

- **Accept** – The manuscript is appropriate to be accepted as it stands
- **Minor or Major revision** – In cases where the editor determines that the authors should be able to address the referees' concerns in six months or less the editor may request a revised manuscript that addresses these concerns. The revised version is normally sent back to the original referees for re-review. The decision letter will specify a deadline for receipt of the revised manuscript and link via which the author should upload to the online system
When submitting a revision authors are asked to upload (1) A rebuttal letter, indicating point-by-point how the comments raised by the reviewers have been addressed. If you disagree with any of the points raised, please provide adequate justification in your letter. (2) A marked-up version of the manuscript that highlights changes made in response to the reviewers' comments in order to aid the Editors and reviewers. (3) A 'clean' (non-highlighted) version of the manuscript.
- **Reject with the option to resubmit** – In cases where the referees' concerns are very serious and appear unlikely to be addressed within six months, the editor will normally reject the manuscript. If the editor feels the work is of potential interest to the journal, however, they may express interest in seeing a future resubmission. The resubmitted manuscript may be sent back to the original referees or to new referees, at the editor's discretion. If the author decides to resubmit, the updated version of the manuscript must be submitted online as a new manuscript and should be accompanied by a cover letter that includes a point-by-point response to referees' comments and an explanation of how the manuscript has been changed.
- **Reject outright** – Typically on grounds of specialist interest, lack of novelty, insufficient conceptual advance or major technical and/or interpretational problems.

POST-ACCEPTANCE

Once a manuscript is accepted and typeset, the corresponding author will be prompted to complete and sign a license to publish form on behalf of all authors. **Failure to complete the form will result in delay of publication.**

Springer Nature does not require authors of original research papers to assign copyright of their published contributions. Authors grant Springer Nature an exclusive licence to publish, in return for which they can re-use their papers in their future printed work. Springer Nature's [author licence page](#) provides details of the policy.

The corresponding author will be prompted to choose *Standard* or *Open Access* publication.

Standard Publication

Manuscripts published under the standard method of publication will be behind a paywall, requiring readers to pay to view the article, either via their institutional or personal subscription or on a pay-per-view basis. Authors will need to complete the standard Licence to Publish form when prompted. Government employees from the United States, Canada and the UK are required to complete the license to publish form relevant to them.

Open Access Publication (gold open access)

Authors can opt to pay an article processing charge (APC) for their article to be made open access online immediately upon publication. Open access articles are published under a CC BY Creative Commons license, which allows authors to retain copyright to their work while making it open to readers. The cost for open access publication in *Spinal Cord Series and Cases* is £1,990/ \$2,890/ €2,290 (VAT or local taxes will be added where applicable). **ISCO members receive a 10% discount on the open access fee. Please tick the box and include your membership number in the space provided on the Article Processing Charge form.**

If authors opt to publish via the open access route then the corresponding author will receive instructions to complete an open access License to Publish (LTP) form on behalf of all authors, and will be contacted to arrange payment of the associated Article Processing Charge (APC). This will occur after acceptance and typesetting of the article has taken place.

Please note this process must be completed prior to publication and failure to do so will result in delay of publication.

Government employees from the United States, Canada and the UK are required to complete the government open access license to publish form relevant to them.

Please note with regards to payment that usual credit terms are 30 days from receipt of invoice. Failure to pay your invoice within the stated credit term may result in the Open Access status of the paper being rescinded, with the paper being placed behind the paywall. You may also be subject to such penalties as restrictions on your ability to publish with Springer Nature in the future, involvement of a third party debt collection agency and legal proceedings.

To facilitate self-archiving Springer Nature deposits open access articles in PubMed Central and Europe PubMed Central. Authors are also permitted to post the final, published PDF of their article on a website, institutional repository or other free public server, immediately on publication. Visit our [open research site](#) for further information about licenses, APCs, and our free OA [funding support service](#).

Compliance with open access mandates

Springer Nature's open access journals allow authors to comply with all funders' open access policies worldwide. Authors may need to take specific actions to achieve compliance with funder and institutional open access mandates.

Learn more about [open access compliance](#).

Waiver of institutional open access policies

Please note that Harvard University FAS, Princeton, University of Hawaii at Manoa, California Institute of Technology (Caltech), the University of Rhode Island and the Georgia Institute of Technology have enacted Open Access policies that conflict with our own policy for articles published via the subscription route. If any corresponding or contributing authors are from these institutions, you will need to provide a waiver from the institution of every affected author, which can be obtained from the institution. This waiver should be submitted along with your final files. This requirement does not apply to articles published via the open access route.

Self-archiving and manuscript deposition (green open access)

Authors of original research articles are encouraged to submit the author's version of the accepted paper (the unedited manuscript) to a repository for public release six months after publication. Springer Nature also offers a free, opt-in Manuscript Deposition Service for original research articles in order to help authors fulfil funder and institutional mandates.

Learn more about [self-archiving and manuscript deposition](#)

E-Proofs

The Springer Nature e-proofing system is a unique solution that will enable authors to remotely edit /correct your article proofs.

The corresponding author will receive an e-mail containing a URL linking to the e-proofing site. Proof corrections must be returned within 48 hours of receipt. Failure to do so may result in delayed publication. Extensive corrections cannot be made at this stage.

For more information and instructions on how to use the e-proofing tool please see [here](#).

Content Sharing

In order to aid the dissemination of research swiftly and legally to the broader community, we are providing all authors with the ability to generate a unique shareable link that will allow anyone to read the published article. If you have selected an Open Access option for your paper, or where an individual can view content via a personal or institutional subscription, recipients of the link will also be able to download and print the PDF.

As soon as your article is published, you can generate your shareable link by entering the DOI of your article here: <http://authors.springernature.com/share>

We encourage you to forward this link to your co-authors, as sharing your paper is a great way to improve the visibility of your work. There are no restrictions on the number of people you may share this link with, how many times they can view the linked article or where you can post the link online. More information on Springer Nature's commitment to content sharing is available [here](#).

EDITORIAL POLICIES

Researchers should conduct their research – from research proposal to publication – in line with best practices and codes of conduct of relevant professional bodies and/or national and international regulatory bodies.

Springer Nature is committed to upholding the integrity of the scientific record. As a member of the [Committee on Publication Ethics](#) (COPE), *Spinal Cord*

Series and Cases abides by COPE's principles on how to deal with potential acts of misconduct, which includes formal investigation of all perceived transgressions.

Authorship

Requirements for all categories of articles should conform to the "Uniform Requirements for Manuscripts Submitted to Biomedical Journals," developed by the ICMJE (www.icmje.org).

Each author must have contributed sufficiently to the intellectual content of the submission. The corresponding author should list all authors and their contributions to the work. The corresponding author must confirm that he or she has had full access to the data in the study and final responsibility for the decision to submit for publication.

To qualify as a contributing author, one must meet all of the following criteria:

1. Conceived and/or designed the work that led to the submission, acquired data, and/or played an important role in interpreting the results.
2. Drafted or revised the manuscript.
3. Approved the final version.
4. Agreed to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved

Contributions by individuals who made direct contributions to the work but do not meet all of the above criteria should be noted in the Acknowledgments section of the manuscript. Medical writers and industry employees can be contributors. Their roles, affiliations, and potential conflicts of interest should be included in the author list or noted in the Acknowledgments and/or Contributors section concurrent with their contribution to the work submitted. Signed statements from any medical writers or editors declaring that they have given permission to be named as an author, as a contributor, or in the Acknowledgments section is also required. Failure to acknowledge these contributors can be considered inappropriate, which conflicts with the journal's editorial policy.

Changes to Authorship

It is the corresponding author's responsibility to ensure that the author list is correct, both in the manuscript file upload and in the online submission form. Any changes to an author list, including the removal or addition of any authors, between initial submission and acceptance will require written agreement from all authors should the manuscript be considered for publication. New authors must also confirm they fully comply with the journal's authorship requirements.

Changes to authorship (addition or removal) will not be allowed once the manuscript has been accepted for publication.

Correspondence with the Journal

One author is designated the contact author for matters arising from the manuscript (materials requests, technical comments and so on). It is this author's responsibility to inform all co-authors of matters arising and to ensure such matters are dealt with promptly. Before submission, the corresponding author ensures that all authors are included in the author list, its order agreed upon by all authors, and are aware that the manuscript was submitted. After acceptance for publication, the corresponding author will receive an email containing a link to the e-proofing site and is responsible for checking the proofs, answering queries and coordinating any corrections with the co-authors.

Anonymity and Confidentiality

Editors, authors and reviewers are required to keep confidential all details of the editorial and peer review process on submitted manuscripts. Unless otherwise declared as a part of open peer review, the peer review process is confidential and conducted anonymously. All details about submitted manuscripts are kept confidential and no comments are issued to outside parties or organizations about manuscripts under consideration or if they are rejected. Editors are restricted to making public comments on a published article's content and their evaluation.

Upon accepting an invitation to evaluate a manuscript, reviewers must keep the manuscript and associated data confidential, and not redistribute them without the journal's permission. If a reviewer asks a colleague to assist in assessing a manuscript, confidentiality must be ensured and their names must be provided to the journal with the final report.

We ask reviewers not to identify themselves to authors without the editor's knowledge. If they wish to reveal their identities while the manuscript is under consideration, this should be done via the editor; if this is not practicable, we ask authors to inform the editor as soon as possible after the reviewer has revealed their identity. Our own policy is to neither confirm nor deny any speculation about reviewers' identities, and we encourage reviewers to adopt a similar policy.

We deplore any attempt by authors to confront reviewers or try to determine their identities. Reviewers should be aware that it is our policy to keep their names confidential and that we do our utmost to ensure this confidentiality. We cannot, however, guarantee to maintain this confidentiality in the face of a successful legal action to disclose identity.

Regardless of whether a submitted manuscript is eventually published, correspondence with the journal, referees' reports, and other confidential material must not be published, disclosed, or otherwise publicised without prior written consent.

Competing Interests

In the interests of transparency and to help readers form their own judgments of potential bias, authors must declare whether or not there are any competing financial interests in relation to the work described. The corresponding author is responsible for submitting a competing interests statement on behalf of all authors of the paper. This statement must be included within the article after the References section listed under 'Competing Interests'. In cases where the authors declare a competing financial interest, a statement to that effect is published as part of the article. If no such conflict exists, the statement will simply read that the authors have nothing to disclose.

For the purposes of this statement, competing interests are defined as those of a financial nature that, through their potential influence on behaviour or content, or from perception of such potential influences, could undermine the objectivity, integrity or perceived value of a publication. They can include any of the following:

- **Funding:** Research support (including salaries, equipment, supplies, reimbursement for attending symposia, and other expenses) by organizations that may gain or lose financially through this publication. The role of the funding body in the design of the study, collection and analysis of data and decision to publish should be stated.
- **Employment:** Recent (while engaged in the research project), present or anticipated employment by any organization that may gain or lose financially through this publication. This includes positions on an advisory board, board of directors, or other type of management relationship.
- **Personal financial interests:** Stocks or shares in companies that may gain or lose financially through publication; consultation fees or other forms of remuneration from organisations that may gain or lose financially; patents or patent applications whose value may be affected by publication.
- **Patents:** Holding, or currently applying for, patents, relating to the content of a manuscript; receiving reimbursement, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript.

It is difficult to specify a threshold at which a financial interest becomes significant, but note that many US universities require faculty members to disclose interests exceeding \$10,000 or 5% equity in a company. Any such figure is arbitrary, so we offer as one possible practical alternative guideline: "Declare all interests that could embarrass you were they to become publicly known after your work was published." We do not consider diversified mutual funds or investment trusts to constitute a competing financial interest.

The statement included in the submission must contain an explicit and unambiguous description of any potential competing interests, or lack thereof, for any of the authors as it relates to the subject of the report. Examples include

- **Competing interests.**
The authors declare no competing interests.
- **Competing interests.**
Dr Caron's work has been funded by the NIH. He has received compensation as a member of the scientific advisory board of Acadia Pharmaceutical and owns stock in the company. He also has consulted for Lundbeck and received compensation. Dr Rothman and Dr Jensen declare no potential competing interests.

Neither the precise amount received from each entity nor the aggregate income from these sources needs to be provided.

Non-financial interests that authors may like to disclose include:

- a close relationship with, or a strong antipathy to, a person whose interests may be affected by publication of the article,
- an academic link or rivalry with someone whose interests may be affected by publication of the article,
- membership in a political party or special interest group whose interests may be affected by publication of the article, or
- a deep personal or religious conviction that may have affected what the author wrote and that readers should be aware of when reading the article.

Reviewers approached for assessment of submitted articles are also requested to declare conflicts of interest that may impede on their judgment of that article. This specifically includes competing research in the same area that could be negatively affected by publication of the submitted article.

Clinical Trials

All clinical trials must be registered in a public registry prior to submission and the trial registry number must be included in the manuscript and provided upon submission. The journal follows the trials registration policy of the ICMJE (www.icmje.org) and considers only trials that have been appropriately registered before submission, regardless of when the trial closed to enrolment. Acceptable registries must meet the following ICMJE requirements:

- be publicly available, searchable, and open to all prospective registrants
- have a validation mechanism for registration data
- be managed by a not-for-profit organization

Examples of registries that meet these criteria include:

1. Clinicaltrials.gov the registry sponsored by the United States National Library of Medicine
2. the International Standard Randomized Controlled Trial Number Registry
3. the Cochrane Renal Group Registry
4. the European Clinical Trials Database

Randomised Controlled Trials (RCTs) must adhere to the CONSORT statement, (CONSolidated Standards Of Reporting Trials) and submissions must be accompanied by a completed CONSORT checklist (uploaded as a related manuscript file). Further information can be found at www.consort-statement.org.

Informed Consent

Publication of identifiable images from human research participants (or a parent or legal guardian for participants under the age of 16 years) must be accompanied by a statement attesting that the authors have obtained consent to publication of the images. If the participant is deceased, consent must be sought from the next of kin of the participant. In all such instances, all reasonable measures must be taken to protect patient anonymity. Black bars over the eyes are not acceptable means of anonymization. In certain cases, the journal may insist upon obtaining evidence of informed consent from authors. Images without appropriate consent must be removed from publication.

Human and Other Animal Experiments

Research involving human subjects, human material, or human data must have been performed in accordance with the Declaration of Helsinki and must have been approved by an appropriate ethics committee. A statement detailing this, including the name of the ethics committee and the reference number where appropriate, must appear in all manuscripts reporting such research.

For primary research manuscripts reporting experiments on live vertebrates and/or higher invertebrates, the corresponding author must confirm that all experiments were performed in accordance with relevant guidelines and regulations. The manuscript must include in the Supplementary Information

(methods) section (or, if brief, within of the print/online article at an appropriate place), a statement identifying the institutional and/or licensing committee approving the experiments, including any relevant details regarding animal welfare, patient anonymity, drug side effects and informed consent. Sex and other characteristics of animals that may influence results must be described. Details of housing and husbandry must be included where they are likely to influence experimental results. *Spinal Cord Series and Cases* recommends following the [ARRIVE reporting guidelines](#) when documenting animal studies.

Biosecurity Policy

The Editor may seek advice about submitted papers not only from technical reviewers but also on any aspect of a paper that raises concerns. These may include, for example, ethical issues or issues of data or materials access. Occasionally, concerns may also relate to the implications to society of publishing a paper, including threats to security. In such circumstances, advice will usually be sought simultaneously with the technical peer-review process. As in all publishing decisions, the ultimate decision whether to publish is the responsibility of the editor of the journal concerned.

Reproducibility

Spinal Cord Series and Cases requires authors of papers that are sent for external review to include in their manuscripts relevant details about several elements of experimental and analytical design. This initiative aims to improve the transparency of reporting and the reproducibility of published results, focusing on [elements of methodological information](#) that are frequently poorly reported. Authors being asked to resubmit a manuscript will be asked to confirm that these elements are included by filling out a [checklist](#) that will be made available to the editor and reviewers.

Data Availability and Policy

Spinal Cord Series and Cases adheres to [Springer Nature's Data Policy Type 3](#). This means that a submission to *Spinal Cord Series and Cases* implies that materials described in the manuscript, including all relevant raw data, **will be freely available to any researcher wishing to use them** for non-commercial purposes, without breaching participant confidentiality. It also means that a **Data Availability Statement** is required by the journal. Please see the [Data Availability and Policy](#) page on the journal website for more information.

Sequences, Structures and "Omics"

Papers reporting protein or DNA sequences and molecular structures will not be accepted without an accession number to [Genbank/EMBL/DBJ](#), [SWISS-PROT](#), [ProteinDataBank](#), or other publicly available database in general use in the field that gives free access to researchers from the date of publication.

Authors of papers describing structures of biological macromolecules must provide experimental data upon the request of Editor if they are not already freely accessible in a publicly available database such as [ProteinDataBank](#), [Biological Magnetic Resonance Databank](#), or [Nucleic Acid Database](#).

Misconduct

Springer Nature takes seriously all allegations of potential misconduct. As a member of the [Committee on Publication Ethics](#) (COPE), *Spinal Cord Series and Cases* will follow the COPE guidelines outlining how to deal with cases of suspected misconduct. As part of the investigation, the journal may opt to do one or more of the following:

- suspend review or publication of a paper until the issue has been investigated and resolved;
- request additional information from the author, including original data or images or ethics committee or IRB approval;
- make inquiries of other titles believed to be affected;
- forward concerns to the author's employer or person responsible for research governance at the author's institution;
- refer the matter to other authorities or regulatory bodies (for example, the Office of Research Integrity in the US or the General Medical Council in the UK); or
- submit the case to COPE in an anonymized form for additional guidance on resolution.

Please note that, in keeping with the journal's policy of the confidentiality of peer review, if sharing of information with third parties is necessary, disclosure will be made to only those Editors who the Editor believes may have information that is pertinent to the case, and the amount of information will be limited to the minimum required.

Duplicate Publication

Papers must be original and not published or submitted for publication elsewhere. This rule also applies to non-English language publications. Springer Nature allows and encourages prior publication on recognized community preprint servers for review by other scientists before formal submission to a journal. The details of the preprint server concerned and any accession numbers should be included in the cover letter accompanying manuscript submission. This policy does not extend to preprints available to the media or that are otherwise publicized outside the scientific community before or during the submission and consideration process. Springer Nature also allows publication of meeting abstracts before the full contribution is submitted. Such abstracts should be included with the journal submission and referred to in the cover letter accompanying the manuscript. Again this policy doesn't extend to meeting abstracts and reports available to the media or which are otherwise publicised outside of the scientific community during the submission and consideration process.

Plagiarism

Plagiarism is when an author attempts to pass off someone else's work as his or her own. Duplicate publication, sometimes called self-plagiarism, occurs when an author reuses substantial parts of his or her own published work without providing the appropriate references. This can range from getting an identical paper published in multiple journals, to 'salami-publishing', where authors add small amounts of new data to a previous paper. Plagiarism can be said to have clearly occurred when large chunks of text have been cut-and-pasted. Minor plagiarism without dishonest intent is relatively frequent, for example, when an author reuses parts of an introduction from an earlier paper. Journal editors judge any case of which they become aware (either by their own knowledge of and reading about the literature, or when alerted by referees) on its own merits.

Springer Nature is a member of Similarity Check (formerly CrossCheck), a multi-publisher initiative used to screen published and submitted content for originality. *Spinal Cord Series and Cases* uses Similarity Check to detect instances of overlapping and similar text in submitted manuscripts. To find out more about CrossCheck visit <https://www.crossref.org/services/similarity-check/>

If a case of plagiarism comes to light after a paper is published, the Journal will conduct a preliminary investigation, utilising the guidelines of the [Committee on Publication Ethics](#). If plagiarism is proven, the Journal will contact the author's institute and funding agencies as appropriate. The paper containing the plagiarism may also be formally retracted or subject to correction.

Data Fabrication & Falsification

Falsification is the practice of altering research data with the intention of giving a false impression. This includes, but is not limited to, manipulating images, removing outliers or "inconvenient" results, or changing, adding or omitting data points. Fabrication is the practice of inventing data or results and recording and/or reporting them in the research record. Data falsification and fabrication call into question the integrity and credibility of data and the data record, and as such, they are among the most serious issues in scientific ethics.

Some manipulation of images is allowed to improve them for readability. Proper technical manipulation includes adjusting the contrast and/or brightness or colour balance if it is applied to the complete digital image (not parts of the image). The author should notify the Editor in the cover letter of any technical manipulation. Improper technical manipulation refers to obscuring, enhancing, deleting and/or introducing new elements into an image. See Image Integrity & Standards below for more details.

Permissions

If a table or figure has been published before, the authors must obtain written permission to reproduce the material in both print and electronic formats from the copyright owner and submit it with the manuscript. This follows for illustrations and other materials taken from previously published works not in the public domain. The original source should be cited in the figure caption or table footnote. Permission to reproduce material can usually be obtained through the [Copyright Clearance Center](#).

Image Integrity and Standards

Images submitted with a manuscript for review should be minimally processed (for instance, to add arrows to a micrograph). Authors should retain their unprocessed data and metadata files, as editors may request them to aid in manuscript evaluation. If unprocessed data is unavailable, manuscript evaluation may be stalled until the issue is resolved.

A certain degree of image processing is acceptable for publication, but the final image must correctly represent the original data and conform to community standards. The guidelines below will aid in accurate data presentation at the image processing level:

- Authors should list all image acquisition tools and image processing software packages used. Authors should document key image-gathering settings and processing manipulations in the Methods section.
- Images gathered at different times or from different locations should not be combined into a single image, unless it is stated that the resultant image is a product of time-averaged data or a time-lapse sequence. If juxtaposing images is essential, the borders should be clearly demarcated in the figure and described in the legend.
- Touch-up tools, such as cloning and healing tools in Photoshop, or any feature that deliberately obscures manipulations, is to be avoided.
- Processing (such as changing brightness and contrast) is appropriate only when it is applied equally across the entire image and is applied equally to controls. Contrast should not be adjusted so that data disappear. Excessive manipulations, such as processing to emphasize one region in the image at the expense of others (for example, through the use of a biased choice of threshold settings), is inappropriate, as is emphasizing experimental data relative to the control.

For **gels and blots**, positive and negative controls, as well as molecular size markers, should be included on each gel and blot – either in the main figure or an expanded data supplementary figure. The display of cropped gels and blots in the main paper is encouraged if it improves the clarity and conciseness of the presentation. In such cases, the cropping must be mentioned in the figure legend.

- Vertically sliced gels that juxtapose lanes that were not contiguous in the experiment must have a clear separation or a black line delineating the boundary between the gels.
- Cropped gels in the paper must retain important bands.
- Cropped blots in the body of the paper should retain at least six band widths above and below the band.
- High-contrast gels and blots are discouraged, as overexposure may mask additional bands. Authors should strive for exposures with grey backgrounds. Immunoblots should be surrounded by a black line to indicate the borders of the blot, if the background is faint.
- For quantitative comparisons, appropriate reagents, controls and imaging methods with linear signal ranges should be used.

Microscopy adjustments should be applied to the entire image. Threshold manipulation, expansion or contraction of signal ranges and the altering of high signals should be avoided. If 'pseudo-colouring' and nonlinear adjustment (for example 'gamma changes') are used, this must be disclosed. Adjustments of individual colour channels are sometimes necessary on 'merged' images, but this should be noted in the figure legend. We encourage inclusion of the following with the final revised version of the manuscript for publication:

- In the Methods section, specify the type of equipment (microscopes/objective lenses, cameras, detectors, filter model and batch number) and acquisition software used. Although we appreciate that there is some variation between instruments, equipment settings for critical measurements should also be listed.
- The display lookup table (LUT) and the quantitative map between the LUT and the bitmap should be provided, especially when rainbow pseudo-colour is used. It should be stated if the LUT is linear and covers the full range of the data.
- Processing software should be named and manipulations indicated (such as type of deconvolution, three-dimensional reconstructions, surface and volume rendering, 'gamma changes', filtering, thresholding and projection).
- Authors should state the measured resolution at which an image was acquired and any downstream processing or averaging that enhances the resolution of the image.

Communication with the Media

Material submitted must not be discussed with the media. We reserve the right to halt the consideration or publication of a paper if this condition is broken. If a paper is particularly newsworthy, the press release will be sent to our list of journalists in advance of publication with an embargo that forbids any coverage of the manuscript, or the findings of the manuscript, until the time and date clearly stated. Authors whose papers are scheduled for publication

may also arrange their own publicity (for instance through their institution's press offices), but they must strictly adhere to our press embargo and are advised to coordinate their own publicity with our [press office](#).

Communication Between Scientists

We do not wish to hinder communication between scientists. We ask you to communicate with other researchers as much as you wish, whether on a recognized community preprint server, by discussion at scientific meetings or by online collaborative sites such as wikis, but we do not encourage premature publication by discussion with the press (beyond a formal presentation, if at a conference).

Pre- and Post-Submissions

Authors are welcome to post pre-submission versions or the original submitted version of the manuscript on a personal blog, a collaborative wiki or a recognized preprint server (such as [ArXiv](#) or [bioRxiv](#)). Preprint posting is not considered prior publication and will not jeopardize consideration at *Spinal Cord Series and Cases*. Authors posting preprints are asked to respect our [policy on communications with the media](#). Our policy on posting and citation of preprints of primary research manuscripts is summarized below:

- The original submitted version of the manuscript (the version that has not undergone peer review) may be posted at any time. Authors should disclose details of preprint posting, including DOI, upon submission of the manuscript to the journal.
- Preprints may be cited in the reference list as below:
Babichev, S. A., Ries, J. & Lvovsky, A. I. Quantum scissors: teleportation of single-mode optical states by means of a nonlocal single photon. Preprint at <http://arxiv.org/quantph/0208066> (2002).
- If you have posted a preprint on any preprint server, please ensure that the preprint details are updated with a publication reference, including the DOI and a URL to the published version of the article on the journal website.
- For subscribed content, the author accepted version of the manuscript, following the review process, may only be posted 6 months after the paper is published in a Springer Nature journal, consistent with our [self-archiving policy](#). A publication reference and URL to the published version on the journal website must be provided on the first page of the postprint. The published version — copyedited and in the individual Springer Nature journal format — may not be posted on any website or preprint server. However, authors are encouraged to obtain a free ShareIt link of their paper, which can be posted online and allows read-only access. Please note that the Author's Accepted Manuscript may not be released under a Creative Commons license. For our Terms of Reuse of archived manuscripts please [click here](#).
- For open access content published under a creative commons license, authors can replace the submitted version with the final published version at publication as long as a publication reference and URL to the published version on the journal website are provided.

Correction and Retraction Process

Content published as Advance Online Publication (AOP) is final and cannot be amended. The online and print versions are both part of the published record hence the original version must be preserved and changes to the paper should be made as a formal correction. If an error is noticed in an AOP article, a correction should accompany the article when it publishes in print. An HTML (or full-text) version of the correction will also be created and linked to the original article. If the error is found in an article after print publication the correction will be published online and in the next available print issue.

All requests for corrections will be assessed by our Editors to see if they qualify based on the following two criteria: 1) if the error impacts the indexing of the article; and 2) if the error impacts the scientific integrity of the article. Decisions about corrections are made by the Editor (sometimes with peer-reviewers' advice) and this sometimes involves author consultation. Requests to make corrections that do not affect the paper in a significant way or impair the reader's understanding of the contribution (a spelling mistake or grammatical error, for example) are not considered. Updates to the original article are only allowed in exceptional cases.

Corrections will appear as a new article (with its own DOI) and will bi-directionally link to the original article. Please note the following categories of corrections online versions of peer reviewed content:

- **Correction.** Notification of an important error made by the author or journal that affects the publication record or the scientific integrity of the paper, together with the correct information.
- **Retraction.** Notification of invalid results. Where a paper is retracted, a statement will be published that includes a full justification for the retraction. The original article will be marked as retracted, but remain available to readers.
- **Editorial Note of Concern.** Where significant issues have been raised, but the outcome of an official investigation is delayed, the editors may publish a note of concern to alert readers. In cases where co-authors disagree about a correction/retraction, the editors will take advice from independent peer-reviewers and impose the appropriate correction, noting the dissenting author(s) in the text of the published version.

If there is suspicion of misconduct, the journal will carry out an investigation following COPE guidelines. Following an investigation, if the allegation raises valid concerns, the author will be contacted and given an opportunity to address the issue. If misconduct is established beyond reasonable doubt, this may result in the Editor implementing one of the following measures:

- If the article is still under consideration, it may be rejected and returned to the author.
- If the article has already been published online, depending on the nature and severity of the infraction, either an erratum will be published alongside the article or, in severe cases, complete retraction of the article will occur. The reason for the erratum or retraction must be given.
- In either case, the author's institution or funding agency may be informed.

In cases where co-authors disagree about a correction or retraction, the editors will take advice from independent peer-reviewers and impose the appropriate measure, noting the dissenting author(s) in the text of the published version.

FURTHER INFORMATION

For inquiries related to submission requirements, please contact the [editorial office](#). For inquiries related to advertising, subscriptions, permissions, papers in production or publishing a supplement, please contact the [publisher's office](#). For inquiries related to publication agreements and publication charges, please contact [author services](#).