

The *Journal of Dental Research* (JDR) adheres to the CSE (8th Edition) editorial style. All submitted manuscripts should be formatted in this style

The *Journal of Dental Research* (JDR) is a peer-reviewed scientific journal dedicated to the dissemination of new knowledge and information on all science relevant to dentistry and to the oral cavity and associated structures in health and disease. The *Journal of Dental Research*'s primary readership consists of oral, dental, and craniofacial researchers, clinical scientists, hard-tissue scientists, dentists, dental educators, and oral and dental policymakers. The *Journal* is published monthly, allowing for frequent dissemination of its leading content. The *Journal of Dental Research* also offers OnlineFirst, by which forthcoming articles are published online before they are scheduled to appear in print.

Authors of all types of articles should be aware of the following guidelines when submitting to *JDR*.

ONLINE SUBMISSION

Submissions to the *Journal of Dental Research* are only accepted for consideration via the SAGETrack online manuscript submission site at <http://mc.manuscriptcentral.com/jdr>. Authors who do not have an active account within the system are required to create a new account by clicking, "Create Account," on the log-in page. The system will prompt the authors through a step-by-step process to create their account. Once created authors can submit their manuscripts by entering their "Author Center" and clicking the button by "Click Here to Submit a New Manuscript."

If any difficulty is encountered at any time during the account creation or submission process, authors are encouraged to contact the *Journal of Dental Research* at jdr@iadr.org.

MANUSCRIPT REQUIREMENTS BY TYPE

The *Journal of Dental Research* accepts the following types of manuscripts for peer review and publication consideration:

Original Research Reports: These manuscripts are based on clinical, biological, and biomaterials and bioengineering subject matter. Manuscripts submitted as research reports have a limit of 3,200 words (including introduction, materials, methods results, discussion and excluding abstracts, acknowledgments, figure legends and references); a total of 5 figures or tables; 40 references; and must contain a 300-word abstract.

Letters to the Editor*: Letters must include evidence to support a position about the scientific or editorial content of the *JDR*. Manuscripts submitted as a letter to editor have a limit of 250 words. No figures or tables are permitted. Letters on published articles must be submitted within 3 months of the article's print publication date.

Guest Editorials*: A clear and substantiated position on issues of interest to the readership community can be considered for this manuscript type. Guest Editorials are limited to 1,000 words. No figures or tables are permitted.

*Brief responses to Letters to the Editor or Guest Editorials will be solicited for

concurrent publication.

Discovery!: Essays that explore seminal events and creative advances in the development of dental research are considered for the “Discovery!” section of the *Journal*. Manuscripts submitted for “Discovery!” have a limit of 2,500 words and a total of 2 figures or tables. Manuscripts are to be submitted by invitation only.

Critical Reviews in Oral Biology & Medicine: These manuscripts should summarize information that is well known and emphasize recent developments over the last three years with a prominent focus on critical issues and concepts that add a sense of excitement to the topic being discussed. Manuscripts are to be submitted by invitation only. Authors interested in submitting to this section must contact the Editor of *Critical Reviews in Oral Biology & Medicine*, Dr. Dana Graves, at dgraves@iadr.org for submission approval and instructions. Manuscripts submitted as Critical Reviews have a limit of 4,000 words; a total of 6 figures or tables; 60 references; and must contain a 300-word abstract.

Additional Instructions for Critical Reviews:

It is important to include several illustrations or diagrams to enhance clarity. Manuscripts that lack figures or diagrams typically receive a low priority score.

Summarize important concepts in tables or flow charts or show critical data in the form of figures. NOTE: authors will need to obtain permission to reproduce a previously published figure or table.

Due to the broad readership, abbreviations commonly recognized in one field may not be readily apparent to those in a different field. Keep abbreviation use to a minimum.

The title page, abstract, text, summary, figure legends, and tables should be combined into a single Word document. Figures should be submitted as a separate document.

To view examples of recent Critical Reviews in the Journal, please click the following links: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3318079/> or <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3327727/>

Clinical Reviews: (formerly Concise Reviews): These manuscripts are generally systematic reviews of topics of high clinical relevance to oral, dental and craniofacial research. Meta-analyses should be considered only when sufficient numbers of studies are available. Manuscripts that include investigations of limited study quality of under-studied areas are typically not acceptable as topics for a clinical review. Although some systematic reviews may be well done, those that receive highest scientific priority will only be considered given the very limited space allowed for these reviews in the journal. Manuscripts submitted as Clinical Reviews have a strict limit of 4,000 words (including introduction, materials, methods results, discussion and; excluding abstracts, acknowledgments, figure legends and references); a total of 6 figures or tables; up to a maximum of 60 references; and must contain a 300 word abstract. Manuscripts above the 4,000 word/6 figure or table limit may use supplemental appendices for other supporting information that would be available online only.

Additional Instructions for Clinical Reviews:

It is important to include illustrations or diagrams to enhance clarity. Manuscripts that lack figures or diagrams typically receive a low priority score.

Summarize important concepts in tables or flow charts or show critical data in the form of figures. NOTE: authors will need to obtain permission to reproduce a previously published figure or table.

Due to the broad readership, abbreviations commonly recognized in one field may not be readily apparent to those in a different field. Keep abbreviation use to a minimum.

The cover page, abstract, text, summary, figure legends, and table(s) should be combined into a single Word document. Figures should be submitted as a separate document.

To view examples of recent Clinical Reviews in the Journal, please click the following links: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5613886/> or <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5004242/>

All submissions must include a title page and be accompanied by a cover letter and list of suggested reviewers. Cover letters should certify the research is original, not under publication consideration elsewhere, and free of conflict of interest. Title pages should include: the abstract word count, total word count (Abstract to Acknowledgments), total number of tables/figures, number of references, and a minimum of 6 keywords.

Keywords cannot be words that have been included in the manuscript title. Key words should be selected from Medical Subject Headings (MeSH) to be used for indexing of articles. See: <http://www.nlm.nih.gov/mesh/MBrowser.html> for information on the selection of key words.

Please submit the names and email addresses of four preferred reviewers when prompted by the SAGETrack system. Preferred reviewers cannot be colleagues at the contributors' institution or present or former collaborators.

TITLES

Titles can consist of a maximum of 75 characters (including spaces). Titles do not normally include numbers, acronyms, abbreviations, or punctuation. The title should include sufficient detail for indexing purposes but be general enough for readers outside the field to appreciate what the paper is about.

ACKNOWLEDGMENTS

Authors are required to report all sources of support for their project or study, including but not limited to: grant funds, commercial sources, funds from a contributors' institution. Do not refer to a study being "partially funded by the cited sources." Consultancies and funds paid directly to investigators must also be listed. Authors are required to specify during the submission process if their paper received funding from NIH, NIDCR, or any other NIH Institute or Center and provide the grant number. To comply with the NIH Public Access Mandate, for qualifying NIH- funded papers, the *Journal of Dental Research* will deposit the final, copyedited paper to PubMed Central on behalf of the authors.

Any perceived or actual conflicts of interest need to be identified in the acknowledgments section. The *JDR* abides by the International Committee of Medical Journal Editors guidelines for the Ethical Considerations in the Conduct and Report of Research (<http://www.icmje.org>). Authors are requested to include this information in the acknowledgments section and the corresponding author must confirm that all co-authors have reported any potential conflicts.

Authors are required to provide a written statement of author contributions as part of your Acknowledgements. Include as many authors as you have, note their completed roles, and conclude with the following statement. "All authors gave their final approval and agree to be accountable for all aspects of the work."

For example:

Author contributions

Author 1: Contributed to conception, design, data acquisition and interpretation, drafted and critically revised the manuscript

Author 2: Contributed to conception, design, data acquisition and interpretation, performed all statistical analyses, drafted, and critically revised the manuscript

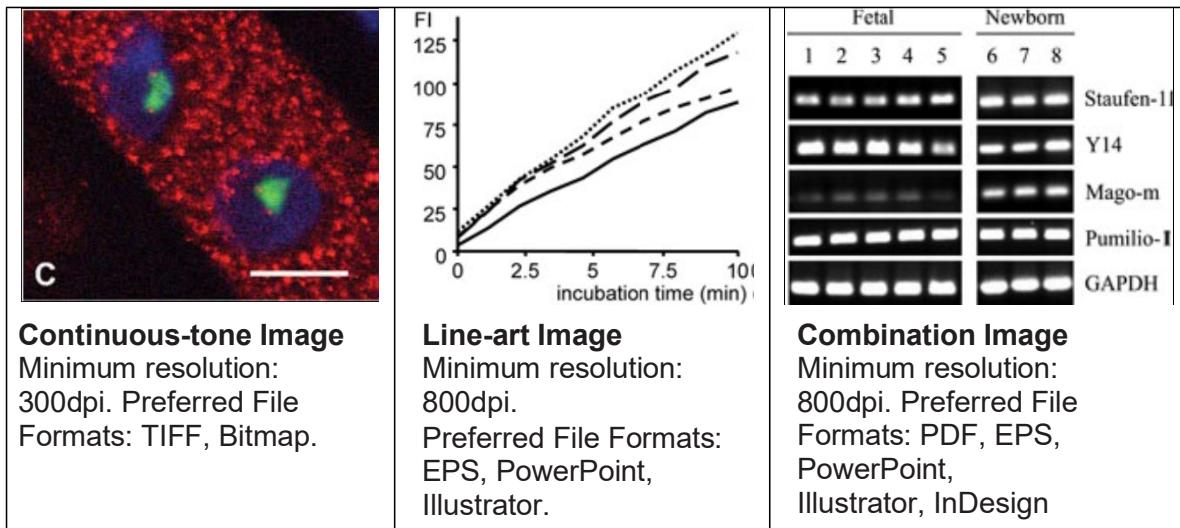
Author 3: Contributed to conception, design, and critically revised the manuscript

FIGURE AND TABLE REQUIREMENTS

These guidelines are intended to aid authors in providing figures that will reproduce well in both print and online media. Submitting digital image files that conform to these guidelines will prevent delays in the review and publication processes and maximize the published quality of your figures.

Figure Types and Resolution

JDR figures can fall into one of three categories: **Continuous-tone images**, **Line-art images**, and **Combination images**. Each image type has specific requirements in terms of the resolution needed for publication and the file types best suited for the figure. See the following panels for examples and requirements.



For a figure to be used in publication, its Digital Image File must have the required resolution when it is created. The resolution cannot be raised *after* the original image is made unless the image size is decreased correspondingly. Attempting to do so (for example, with Adobe Photoshop's® “*Image Size*” command) results in the addition of artificial pixels that distort the image and do not faithfully reproduce the image as it was taken. The figures on the right show an example of this reduced sharpness.

To help render higher quality figures for print, please supply the figures in their native file format (i.e., the original file generated by the application used to create it; e.g., if the figure was created in PowerPoint, submit the PowerPoint file). If you used proprietary software to create the figure, please export the figure in one of the following formats: .EPS, .SVG, or .PDF.

Fonts

Limit fonts used in any figure to Times, Times New Roman, Arial, Frutiger, and Sabon. Other fonts cannot be guaranteed to reproduce properly.

Tables should be viewable in a portrait view. Tables that are created in a landscape view are more suitable for an appendix.

Figures supplied in color will be published in color for the online version and converted to black-and-white for the print version unless color printing is arranged (see 'Color Figure Charges' below). If figures are to be produced in color online and black-and-white in print, it is important that the black-and-white version can be understood (for example, by using color with a distinctive pattern or dotted lines). Be careful when making references to color in the legend if the printed version will be black-and-white.

Image Integrity Guidelines

The International Committee of Medical Journal Editors (ICMJE) recommendations note that scientific misconduct includes deceptive manipulation of images. Figures submitted to the *Journal of Dental Research* should be minimally processed and should reflect the integrity of the original data in the image(s). Adjustments to images in brightness, contrast, or color balance should be applied equally to the entire image, provided they do not distort any data in the figure, including the background. Selective adjustments and touch-up tools used on portions of a figure are not appropriate. Images should not be layered or combined into a single image unless it is stated that the figure is a product of time-averaged data. In the case of gel images, the grouping of lanes from different gels, fields or exposures must be made explicit by the arrangement of the figure (e.g. by the use of the dividing lines). All adjustments to image data, including the grouping of lanes from gels, should be clearly disclosed in the figure legend. Images may be additionally screened to confirm faithfulness to the original data. If original data cannot be provided by an author when requested, acceptance of the manuscript may be revoked. Authors are expected to supply raw image data upon request. Authors should also list tools and software used to collect image data and should document settings and manipulations in the Methods section. These guidelines were derived from those provided by the *Journal of Cell Biology* and *Nature*:

<http://icb.rupress.org/editorial-policies#data-integrity>

<https://www.nature.com/authors/policies/image.html>

Experimental controls

Appropriate controls should be provided for all experimental methods. For example, negative controls are needed for immunofluorescence (IF) and immunohistochemistry (IHC), i.e. control primary antibody or antibody plus excess antigen, which can be added as supplemental data. In addition, arrows should identify representative immunopositive cells that are clearly distinguished from background staining in IF and IHC images.

REFERENCES

The *Journal of Dental Research (JDR)* adheres to the CSE (8th Edition) editorial style. All submitted manuscripts should be formatted in this style:

<http://www.scientificstyleandformat.org/Tools/SSF-Citation-Quick-Guide.html>.

SUPPLEMENTAL FILES

Additional supporting data may be referenced as a supplemental appendix for publication online only. All supplemental appendix files must be submitted with the manuscript for review. Supplementary files will be subjected to peer-review alongside the article.

Supplementary files will be uploaded as supplied. They will not be checked for accuracy, copyedited, typeset or proofread. The responsibility for scientific accuracy and file functionality remains with the authors. A disclaimer will be displayed to this effect with any supplementary material published. Supplemental files may include additional figures or tables that exceed the Journal's limit. Material intended for the supplemental appendix must have "supplemental" or "appendix" in the file name upon upload. When formatting your supplemental files, please follow these instructions:

- Authors should provide a single Word file with all Appendix content. Figures and tables should be included in the main Appendix file so they can appear immediately alongside their captions. High resolution figures may also be supplied separately if authors wish, but they also must be copied into the Word file so everything can be kept together.
- Be sure to run spell check and proofread the text.
- Remove all highlighting/other colors. Use one font throughout.
- The Appendix should include the title of the article and all authors. Page numbers are recommended.
- Figures and Tables should be labeled Appendix Figure/Table 1, Appendix Figure/Table 2, etc. Avoid labeling as S1, S2, and so forth.
- All table footnotes and figure legends should be included.
- Preferably, authors shouldn't label separate parts as "Appendix 1", "Appendix 2", etc.; just use section heads as in a regular article.

Language Editing: Manuscripts submitted for publication consideration should be written in English. Prior to submission, if a manuscript would benefit from professional editing, authors may consider using a language-editing service. Suggestions for this type of service can be found at www.iadr.org/EditingServices. The *Journal of Dental Research* does not take responsibility for, or endorse these services, and their use has no bearing on acceptance of a manuscript for publication.

GENERAL INFORMATION FOR AUTHORS SUBMITTING A MANUSCRIPT

PRIOR PUBLICATION

Manuscripts submitted to the *Journal of Dental Research* are accepted for consideration giving the understanding that it contains original material that has not been submitted for publication or has been previously published elsewhere. Any form of publication other than an abstract only constitutes prior publication.

Manuscripts posted or submitted to a non-commercial preprint server are not considered previously published. Submitting authors will be required to disclose if the manuscript has been posted or submitted to a non-commercial preprint server.

ICMJE COMPLIANCE STATEMENT

Manuscript submission guidelines for the *Journal of Dental Research* follow the “Uniform Requirements for Manuscripts Submitted to Biomedical Journals” set forth by the International Committee of Medical Journal Editors (ICMJE). For additional information please visit the ICMJE web site at <http://www.icmje.org/>.

CHECKLIST COMPLETION POLICY AND CLINICAL TRIAL REGISTRATION

Manuscripts reporting randomized clinical trials, human observation studies in epidemiology or studies involving laboratory animals are required to submit appropriate checklists with their manuscripts. When uploaded to the SAGETrack system, any checklists completed by authors should be given a supplementary file designation. Authors who have completed a checklist should include as the last sentence in the Methods section a sentence stating compliance with the appropriate guidelines/checklist.

For randomized clinical trials or human observation studies in the field of oral health, we recommend the OHStat Guidelines, which can be found here: <https://www.equator-network.org/reporting-guidelines/the-ohstat-guidelines-for-reporting-observational-studies-and-clinical-trials-in-oral-health-research-manuscript-checklist/>

Alternatively, randomized clinical trials may use the CONSORT checklist, available at <http://www.equator-network.org/reporting-guidelines/consort/>

Human observational studies may use the STROBE checklist, which can be downloaded from www.strobe-statement.org/index.php?id=strobe-home

Studies involving laboratory animals must submit with their manuscript the full version of the Animal Research: Reporting In Vivo Experiments (ARRIVE) 2.0 checklist, which can be found at <https://arriveguidelines.org/resources/author-checklists>

Checklists and guidelines are available for many other study types, including (but not limited to) systematic reviews (PRISMA), economic evaluations (CHEERS) and diagnostic/prognostic studies (STARD). Additional guidance on compliance with various research guidelines can be found on the Guideline Information - Enhancing the Quality and Transparency of Health Research: www.equator-network.org.

The *Journal of Dental Research* requires authors to register their clinical trials in a public trials' registry before recruitment of the first subject. A list of acceptable registries is provided here: <https://icmje.org/about-icmje/faqs/clinical-trials-registration>. Authors of

manuscripts describing such studies are asked to submit the name of the registry and the study registration number prior to publication. Authors are asked to include their clinical trial registration number at the end of their abstracts. In accordance with the Declaration of Helsinki, clinical trials will only be considered for publication if they are registered prospectively.

INSTITUTIONAL REVIEW BOARD AND WRITTEN INFORMED CONSENT

For protocols involving the use of human subjects, authors should indicate in their Methods section that subjects' rights have been protected by an appropriate Institutional Review Board and written informed consent was granted from all subjects. When laboratory animals are used, indicate the level of institutional review and assurance that the protocol ensured humane practices. Reference numbers for ethical approval should be provided in the Methods section.

PUBLIC GENE DATA

Prior to submission, the *Journal of Dental Research* asks that novel gene sequences be deposited in a public database and the accession number provided to the Journal. Authors may want to use the following Journal approved databases:

EMBL: www.ebi.ac.uk/embl/Submission/index.html

DDBJ: <https://www.ddbj.nig.ac.jp/index-e.html>

GenBank: <https://www.ncbi.nlm.nih.gov/genbank/submit/>

Manuscript submissions including microarray data should include the information recommended by the MIAME guidelines in their submission, and/or identify the submission details for the experiments details to one of the publicly available databases such as Array Express or GEO. Information on MIAME, Array Express and GEO can be found by clicking on the corresponding links below:

MIAME: <http://fged.org/projects/miame/>

ArrayExpress: <http://www.ebi.ac.uk/arrayexpress>

GEO: <http://www.ncbi.nlm.nih.gov/geo>

FUNDING COMPLIANCE STATEMENT

Effective April 7, 2008, the National Institutes of Health (NIH) Revised Policy on Enhancing Public Access to Archived Publications Resulting from NIH-Funded Research (Public Access Policy) requires all studies funded by NIH to submit or have submitted for them their final peer-reviewed manuscript upon acceptance for publication to the National Library of Medicine's PubMed Central (PMC) to be made publicly available no later than 12 months after the official date of publication. Only final, copyedited

manuscripts are uploaded.

Manuscripts by authors whose work is funded by the Wellcome Trust may submit their final peer-reviewed manuscript upon acceptance for publication to Europe PMC to be made publicly available no later than 6 months after the official date of publication. Only final, copyedited manuscripts are uploaded.

Authors are required to specify during the submission process if their paper received funding from NIH, NIDCR, or the Wellcome Trust and provide the grant number.

The *Journal of Dental Research* will deposit final, copyedited papers to PubMed Central on behalf of the authors.

DEFINITION OF CONTRIBUTORSHIP IN JDR

As stated in the Uniform Requirements for Manuscripts Submitted to Biomedical Journals, put forth by the ICMJE, the *Journal* considers the following as an accurate definition of contributorship:

Contributors Listed in Acknowledgments

All contributors who do not meet the criteria for authorship should be listed in an acknowledgments section. Examples of those who might be acknowledged include a person who provided purely technical help, writing assistance, or a department chairperson who provided only general support. Editors should ask corresponding authors to declare whether they had assistance with study design, data collection, data analysis, or manuscript preparation.

If such assistance was available, the authors should disclose the identity of the individuals who provided this assistance and the entity that supported it in the published article. Financial and material support should also be acknowledged.

Groups of persons who have contributed materially to the paper but whose contributions do not justify authorship may be listed under such headings as “clinical investigators” or “participating investigators,” and their function or contribution should be described—for example, “served as scientific advisors,” “critically reviewed the study proposal,” “collected data,” or “provided and cared for study patients.” Because readers may infer their endorsement of the data and conclusions, these persons must give written permission to be acknowledged.

CONTRIBUTOR FORMS

All rights to manuscripts will be transferred to the *Journal of Dental Research* upon submission. Submission of a manuscript will constitute each author's agreement that the Journal holds all propriety rights in the manuscript submitted, including all copyrights. Upon acceptance, the corresponding author will be asked to sign a formal transfer of copyright. Only the corresponding author is required to complete a contributor form unless any co-authors are work-for-hire or government employees. If co-authors fall into either of these categories, the corresponding author should contact the editorial office at jdr@iadr.org for additional instruction.

Please note that the *Journal of Dental Research* secures completed contributor forms electronically via the SAGETrack online submission and review system.

Without the completion of the contributor form for all co-authors listed, accepted manuscripts cannot continue into production, delaying publication.

OPTIONAL GRAPHICAL ABSTRACT SUBMISSION

JDR offers the opportunity for submitting authors to provide a graphical abstract file alongside their full manuscript submission for peer review. A graphical abstract is meant to be a clear, quick, and concise pictorial representation of research that will be published in the *Journal*. It is meant to support the written abstract that accompanies all manuscripts submitted for review to the *Journal*. All figures published in the journal, including graphical abstracts, should be of the highest quality and should highlight paper findings.

Formatting Tips for Graphical Abstract files:

Should an author determine they would like to upload this optional file to accompany the full manuscript into peer review, please keep the following information in mind:

- The graphic should be labelled as “graphical abstract” or similar, so that it is clear the file is not an article figure file (e.g. it should not be labelled “Fig1”, “Fig2” etc.)
- The aspect ratio for the graphic should be 16:9 (the recommended size ratio would be 600px X 338px)
- The figure file type should be the same as for other article figures. Graphical abstracts, as with all figures in the journal, are only accepted in the following formats: JPG, TIF, or EPS. The journals do not accept Word or PowerPoint figure files.
- A caption should be provided with the graphic. The caption should read: “This is a graphical representation of the abstract”
- Do not use images subject to copyright clearance for graphical abstracts. If at all, graphical abstracts should feature aspects of the original figures created for the paper it is supporting.
- The final visual abstract image should be sent with accepted article.
- Simplicity is the key to conveying information visually. Terms and abbreviations should match overall journal usage and style.

CHARGES ASSOCIATED WITH PUBLICATION

Page Charges

There is a charge of \$40 (U.S.) for every printed page in the *Journal of Dental Research*. You will receive an invoice with your page proofs.

Color Figure Charges

The cost of color figures in the print version will be borne by the authors. Rates for color reproduction are \$300 per initial page of color and \$150 for each additional page of color. However, there are no charges for figures and diagrams printed in black and white. Color figures may be included in the online version of *JDR* with no extra charges.

If the online version is in color and the printed version in black and white, please submit separate files for each version. Figures should be identical except in color or grayscale. The cost of color figures in the print version will be borne by the authors. Rates for color reproduction are \$300 per initial page of color and \$150 for each additional page of color. However, there are no charges for figures and diagrams printed in black and white. Color figures may be included in the online version of *JDR* with no extra charges.

Reprint Charges

Reprints can be ordered for material printed in the *Journal of Dental Research* and online only appendices. Quantities of reprints can be purchased with the reprint order form sent with page proofs to the contributors. Pre-payment is required for reprints. Visa, MasterCard, American Express and check are all acceptable forms of payment. Authors must pay for color figures in reprints. Reprints will be mailed from 6 to 8 weeks after the article appears in the *Journal*. To contact SAGE for additional information or to order reprints, visit the SAGE site at [SAGE Publishing Reprints](#).

SUBMISSION CHECKLISTS

All manuscripts submitted to the *Journal of Dental Research* are required to be in full compliance with the Instructions for Authors. Authors should be sure their manuscript meets all applicable requirements outlined in this document prior to submission.

The editorial office reserves the right to return the manuscript to the authors for the omission of the following requirements prior to peer-review:

- Completed Authorship form submitted in original Word forms (PC or MAC)
- 6 MESH Keywords
- Cover letter: certify that research is original, not under publication elsewhere
- Structured Abstract
- Knowledge transfer statement [JDR CTR ONLY]
- Word/figure/table and reference limit compliance by manuscript type
- Appropriate reporting checklists and compliance statements (STROBE, ARRIVE, CONSORT, CHEERS etc.) If they indicate during submission their paper needed one of these, Lily confirms they have uploaded the checklists and met requirements for compliance statements.
- Funding Acknowledgments
- Conflict of interest statements
- Author contributions section
- Figure permissions where necessary
- Main text document file in Word
- Tables/main tables in portrait view in Word
- Main Appendix file in Word
- Figures cannot be submitted in hmtl formats OR be larger than 40 megapixels or they will simply not show in the reviewer's pdf proof. They must be submitted in approved file formats that can be converted into pdf within the system.

Following peer-review the editorial office reserves the right to return manuscripts to authors for formatting purposes only for the following issues:

- Complete title page with author info and manuscript details
- CSE Formatting of citations and references
- **Text-only** figure/table legends in main doc
- High resolution figures for print reproduction