Insights into Imaging Manuscript Requirements

Version 1, June 2023

Considerations

Before you start polishing your manuscript for submission, you should ask yourself the following questions:

- Does it spark relevant interest to the medical community?
- Is it innovative and has or will have application in daily practice?
- Will it improve the way we perform radiology?

Documents for submission

Required files:

1. Title page
    - article title, full author names, and affiliations
2. Main text
    - Abstract, key points, keywords, abbreviations.
    - Main text, references, figure/table legends, if any.
3. Declarations section (following this template).

Optional files:

- Figures (provided as separate EPS, JPG, or TIFF files)
- Tables (in editable format like Word or Excel)
- Graphical abstract (following this template)
- Electronic Supplementary Material (in editable format)

Insights into Imaging

Table of Contents

Main text document:

Article Title

Article titles are the first point of contact with the reader. They should be as short and catchy as possible but include as many details as needed to grasp the essence of your work. The article title must be included in the main document and on the title page.

Keep in mind

- State which body part, disease, and/or problem are being investigated. Be as concise as possible.
- Use of most common abbreviations is allowed, e.g.: CT, MR, MRI, PET, US, Bi-RADS, Li-RADS, Pi-RADS
- Company names are not allowed in the title
- No more than 15 words.
- If space allows, indicate study type (e.g., observational study)

ⓘ Do not use any “running title”.

Abstract

Keep in mind

- Word limit: 250 words
- Company names and references are not allowed in the abstract.
- Do not use abbreviations, except very common ones.
- For Original articles, the abstract must be structured into:
    - Objectives (the problem to solve)
    - Methods (study design, population, intervention)
    - Results (description of the population, statistical comparisons)
    - Conclusion (answering the exposed problem).
- According to the type of the study, you are advised to consult the following abstract checklists: STARD, STROBE, PRISMA-DTA, PRISMA, TRIPOD, CONSORT

Critical Relevance Statement

The Critical Relevance Statement is a one sentence statement (max. 40 words) summarising the key message of your article.

It should explain how the article critically assesses an issue, and how it helps advancing the practice of clinical radiology.

Key Points

Key points are short sentences highlighting the importance of the study. They should be short and to the point, and should ideally invite the reader to read your paper.

Keep in mind

- Use the following structure for at least the first 3 Key Points:
    - 1st Key Point**:** briefly introduce the specific problem being studied.
    - 2nd Key Point**:** summarise the main results.
    - 3rd Key Point**:** state the main clinical relevance conclusion/effect of the study results.
- Ideally no more than 20 words per Key Point.
- Avoid hypotheticals and vague language (no could, might, can in future, etc.), opinions or extrapolations that are not proven by the study.
- Avoid abbreviations, except the most common ones.
- Company names are not allowed in the Key Points.
- Do not copy sentences already used in the main text or abstract as Key Points.

Keywords

The Keywords help your article to be more visible in future online searches.

Keep in mind:
Choose 3 to 5 terms from the Medical Subject Headings (MeSH) Keywords, that best fit your article topic and include:

- modality (body part)
- disease
- imaging modalities (CT, MRI, SPECT, but no abbreviations)
- or problem being studied

Separate by semicolons.

List of Abbreviations

Keep in mind:

- After the abstract/key points/keywords, an alphabetical list of all abbreviations used in the main text must be listed.
- All abbreviated terms must be spelled out at first use in the main text and the abbreviated version mentioned in brackets, e.g. “Area under the curve (AUC)”

- No need to include common abbreviations (e.g.: *CT, MR, PET*) in this list.

Introduction

Keep in mind:

- Focus on the gap in knowledge to be solved.
- Keep it as concise and possible.
- Include short paragraphs on:
    - The specific question to be evaluated: include a summary of the open questions or the problems in clinical practice.
    - Purpose: defined the specific problem, to which extent it has it been tried to be solved, and the relevance in the current clinical context.
    - Methods: how was the problem attempt to be solved
- In Critical and Educational Reviews:
    - Provide a brief information on the authors' personal experience to guarantee the authors' knowledge on the topic.
- Evaluate all statements following levels of evidence (see Martí-Bonmatí L, 2021).
    - Consider using a Table for summarising the basis of your article with evidence levels

Methods

This section should be given in sufficient detail to permit repetition of the work.

Include the following (if applicable):

- the institutional review board (IRB) approval and patient informed consent, including the reference to human and animal rights declarations and regulations.

- Statement of the character of your scientific study: experimental (interventional) or observational (non-experimental, non-interventional) study, and define whether the study is retrospective or prospective.

- Date range of the study and patient enrolment. Patients or information retrieval method.

- Inclusion and exclusion criteria, consecutive or random selection.
- Description of the index test and reference standard.
- Explanation of how the evaluation was performed.
- Mention of any utilised instruments or drugs (including contrast) with trade names, manufacturer's name in parentheses (do not include the country of origin).

- Statistical methods used to analyse the data.
  - Initials of all authors executing tests or readings/evaluations.
  - Clearly and well-explained reading strategy.
  - If applicable, please report the sample size calculation.

Results

The results section should describe the outcome of the study. Data should be presented as concisely as possible, if appropriate with the help of tables or figures.

Keep in mind:

- Describe the final cohort after application of inclusion/exclusion criteria described in the methods.
- Use Figure 1 to represent the flowchart of the study, from initial retrieval to final study cohort.
- Summarise the demographics of your study sample, ideally, presented in Table 1 (number of patients/participants, age and statistical variability, gender).
- If applicable, follow the same structure in the Results as in Methods.
- Do not include interpretation or opinions in the result section.
- *P* values should be generally expressed to 2 digits to the right of the decimal point Exceptions are $p < 0.01$ and close to 0.05. Three digits to the right of the decimal point are allowed.

ⓘ Ask a "naïve" colleague, not involved in the study, to read the Results section and collect his/her opinion on the clarity.

Discussion

The discussion should be a summary and interpretation of the results and their significance with reference to work by other authors. It should be written in with clear and concise language using the following structure.

Keep in mind:

- Focus on excellence in clinical practice, evidence-based knowledge, and causal reasoning in radiology.
- Identify, analyse, and solve problems by identifying inconsistencies and correcting errors.
- Outline biases and limitations, explaining in detail what the limitations are and how these can be addressed in the potential future studies.
- Provide a short and straightforward conclusion, including a statement on the clinical implications/relevance of your study.

- Avoid repetition with the introduction, general statements or hypothetical conclusion based on opinions and wishes.

ⓘ Be aware that many readers (especially those who are non-specialised and want to simply improve their knowledge without getting into the details) will read the Introduction and the Discussion, not the Material and Methods or the Results. For those readers, the authors should consider that the Discussion is the natural continuation of the Introduction.

References

Keep in mind

- All references must already be published or, at least, accepted for publication (DOI must already be available).
- References must be listed in the order that they appear in the text.
- Citations in the text should be in Arabic numerals typed in square brackets, e.g. [2, 5, 12].
- Adhere to the below shown reference style.

ⓘ Do not use references that have not been accepted for publication.

Reference style
References should follow the following format:

- Ward J, Robinson PJ (2002) How to detect hepatocellular carcinoma in cirrhosis. Eur Radiol 12:2258-2272

or

- Ward J, Robinson PJ (2002) How to detect hepatocellular carcinoma in cirrhosis. Eur Radiol. DOI:10.1007/s00330-002-1450-y

If there are 6 authors or fewer, the names of all authors should be provided (i.e. 'et al' should not be used).

- Lunkiewicz M, Forte S, Freiwald B, Singer G, Leo C, Kubik-Huch RA (2020) Interobserver variability and likelihood of malignancyfor fifth edition BI-RADS MRI descriptors in non-mass breast le-sions. Eur Radiol 30:77–86

or

- Lunkiewicz M, Forte S, Freiwald B, Singer G, Leo C, Kubik-Huch RA (2020) Interobserver variability and likelihood of malignancyfor fifth edition BI-RADS MRI descriptors in non-mass breast le-sions. Eur Radiol DOI: 10.1007/s00330-019-06312-7

If there are 7 authors or more, only the names of the first 3 authors in the list should be given followed by 'et al'

- Thomassin-Naggara I, Trop I, Chopier J et al (2011) Nonmasslike enhancement at breast MR imaging: the added value of mammography and US for lesion categorization. Radiology 261:69–79

or

- Thomassin-Naggara I, Trop I, Chopier J et al (2011) Nonmasslike enhancement at breast MR imaging: the added value of mammography and US for lesion categorization. Radiology DOI: 10.1148/radiol.11110190

All online resources should contain the date of last access.

- Foundational Model of Anatomy, NCBO BioPortal (2022) Available via https://bioportal.bioontology.org/ontologies/FMA. Accessed 11 Apr 2022

Figure Captions

Figure captions should be understandable even when not reading the full paper. They must be brief and provide clear, concise explanations of the illustrations.

Keep in mind:

- Any uncommon abbreviations used in the caption must be written in full when first mentioned.
- Multiple images (panels) within one figure should be marked with lowercase letters (e.g. Figure 1a, Figure 2b) for each of the panels. These should be addressed in the Figure captions using the same lowercase letters.
- Figure numbers and captions should be included only in the caption (and not embedded in the figure file).
- Address and explain any symbols/visual aids used in the figure (arrows, arrowheads, asterisks, lines, colour shades).
- Make sure that any symbols/visual aids are clearly visible and of appropriate size. Unless explicitly needed, these should be black or white.

Separate documents:

Declarations

In a separate document, statements on the following issues must be included:

- Ethics approval and consent to participate
- Consent for publication
- Availability of data and material
- Competing interests*
- Funding
- Authors' contributions
- Acknowledgements
- Authors' information (optional)

*Articles authored by a journal's Editorial board member must include a statement acknowledging their position.

ⓘ Use this template to create this document.

Figures and Tables

Tables help the reader to understand larger data by summarising it concisely. Figures present elements or findings of your study. Each table/figure must be cited in numeric order in the main text.

Tables and Figures must be numbered in Arabic numbers and should include a title.
All abbreviations in a table must be explained, and footnotes in tables are denoted by superscript lower-case letters (or asterisks for significance values and other statistical data).

Tables must be submitted in an editable format e.g., Microsoft Word or MS Excel and not as images, and as separate documents (not embedded in the main text document). Figures must be submitted as EPS, JPG, or TIFF files in the best possible resolution, and as separate documents (not embedded in the main text document).

Keep in mind:

- Limit your tables to no more than one typed page.
- Provide information on statistical variability when applicable (standard deviations for mean values or confidence intervals)
- Make tables understandable by themselves without reference to the results section.
- Indicate sub-sections of the first column by indenting the items within a section.
- Make sure that each column/row follows the same heading all the way down/across, and contain each item of data within its own cell.
- Define all abbreviations used in tables in the footnotes of each table.
- Indicate significance of any special characters/symbols or font typeface (**bold**, *italic*) in the footnote.

ⓘ Present the same data consistently (e.g., to the same number of significant digits) throughout the abstract, text, tables, figures, and supplements.

Graphical Abstract

The graphical abstract is a single-panel visual summary of either the main finding or the most important take-home message of the paper. It must be self-explanatory, and the reader should understand it without further explanation.
Authors should focus on delivering one main message to the reader (not an overview of all details). Less is more – only use few selected illustrations (symbolic, structural, or simplified research content) and limit text (in large fonts) to the minimum. The title of the paper should be included on top.

ⓘ Use this PowerPoint template: select the best suitable Layout for your slide and add the elements from your article as indicated.

Electronic Supplementary Material

Electronic Supplementary Material (ESM) should be used to provide additional data to readers: images, tables, videos, text.

If a portion of the text needs to be moved to the ESM due to the word count limit, it cannot be an entire mandatory manuscript section (such as “Material and Methods”).

Text and tables must be provided in an editable format (e.g. Microsoft Word or Excel).
Format your ESM documents in a neutral way, and provide separate parts (e.g. Appendix 1, 2, Image A, B, etc.).

Revised and Resubmitted Manuscripts

For revised submissons, you will be asked to provide two versions of your manuscript that will facilitate the peer review of your revision:

1. Annotated version:
   This is an edited version of your initial submission where changes made (against the previous version) are clearly indicated. Changes should be marked with Microsoft Word "track changes" mode. Alternatively, if only few changes are introduced, they can be highlighted in a color, or in a colored font.
   You should provide annotated versions of all docuements you made changes to (e.g. also tables).

2. Clean version:
   This is a version after accepting all changes in the annotated version. No highlighted text is allowed in the clean version.