**Research Article**

**Preparing your manuscript**

The information below details the section headings that you should include in your manuscript and what information should be within each section.

### **Title page**

The title page should:

* present a title that includes, if appropriate, the study design
* list the full names and institutional addresses for all authors​​​​​​​
  + if a collaboration group should be listed as an author, please list the Group name as an author.
* indicate the corresponding author

### **Abstract**

The Abstract should not exceed 450 words. Please minimize the use of abbreviations and do not cite references in the abstract. The abstract must include the following separate sections:

* **Background:** the context and purpose of the study
* **Methods:** a brief summary of materials and methods.
* **Results:** the main findings
* **Conclusions:** a brief summary and potential implications

### **Keywords**

Three to seven keywords representing the main content of the article.

### **Background**

The Background section should explain the background to the study, its aims, a summary of the existing literature and why this study was necessary.

### **Methods**

The methods section should include:

* the aim, design and setting of the study
* the characteristics of participants or description of materials
* a clear description of all processes, interventions and comparisons. Generic names should generally be used. When proprietary brands are used in research, include the brand names in parentheses
* the type of statistical analysis used, including a power calculation if appropriate

### **Results**

This should include the findings of the study including, if appropriate, results of statistical analysis which must be included either in the text or as tables and figures.

### **Discussion**

For research articles this section should discuss the implications of the findings in context of existing research and highlight limitations of the study. For study protocols and methodology manuscripts this section should include a discussion of any practical or operational issues involved in performing the study and any issues not covered in other sections.

### **Conclusions**

This should state clearly the main conclusions and provide an explanation of the importance and relevance of the study to the field.

## References

references must be adhered to the instructions on Referencing Style.

## Declarations

All manuscripts must contain the following sections after Abstract:

* Funding
* Authors' contributions
* Conflicts of interests
* Acknowledgements

Please see below for details on the information to be included in these sections.

#### **Conflicts of interests**

All financial and non-financial competing interests must be declared in this section.

See our editorial policies for a full explanation of competing interests. If you are unsure whether you or any of your co-authors have a competing interest, please contact the editorial office.

Please use the authors initials to refer to each authors' competing interests in this section.

If you do not have any competing interests, please state "The authors declare that they have no competing interests" in this section.

#### **Funding**

All sources of funding for the research reported should be declared. The role of the funding body in the design of the study and collection, analysis, and interpretation of data and in writing the manuscript should be declared.

#### **Authors' contributions**

The individual contributions of authors to the manuscript should be specified in this section. Guidance and criteria for authorship based on CRediT ([Contributor Roles Taxonomy](https://www.elsevier.com/authors/policies-and-guidelines/credit-author-statement)).

## Sample CRediT author statement

**Zhang San:** Conceptualization, Methodology, Software **Priya Singh.**: Data curation, Writing- Original draft preparation. **Wang Wu**: Visualization, Investigation. **Jan Jansen**: Supervision.**: Ajay Kumar**: Software, Validation.: **Sun Qi:** Writing- Reviewing and Editing,

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