

An Editor's Guide to the *PLOS ONE* Article Types



RESEARCH ARTICLES

Research Articles communicate the results of primary research across all areas of science, medicine, engineering and the related social sciences and humanities. This is the most common article type at *PLOS ONE*.

PLOS ONE welcomes all types of research articles, including multidisciplinary research, replication studies, systematic reviews, methods & software articles, and qualitative research.

Editor Resource: [Learn more about our scope](#)

What to evaluate in a Research Article:

- ▶ Does the study adhere to the highest standards of ethics and research integrity?
- ▶ Are the methods and analyses fully and transparently described, and appropriate for the type of study and field?
- ▶ Are experiments, statistics and other analysis performed to a high technical standard?
- ▶ Are the conclusions clear, and fully supported by the data?
- ▶ Is the writing clear and intelligible?

DO NOT consider novelty. *PLOS ONE* welcomes all well-conducted valid scientific research, including negative, null and replication studies.

Editor Resource: [PLOS ONE publication criteria](#)



CLINICAL TRIALS

PLOS ONE adheres to the World Health Organization's definition of a Clinical Trial as "any research study that prospectively assigns human participants or groups of humans to one or more health-related interventions to evaluate the effects on health outcomes."

What to evaluate in a Clinical Trial:

In addition to the criteria for a Research Article,

- ▶ Did the authors adhere to the IRB-approved procedure?
- ▶ Did the authors submit a completed CONSORT or TREND checklist?

- ▶ Did the authors register the trial in a clinical trial registry?

PLOS ONE will invite a statistical reviewer to assess all manuscripts reporting the results of a clinical trial.

Editor Resource: [Academic Editor Handbook: Appendix H: Clinical Trials](#)



REGISTERED REPORTS

Two linked peer-reviewed publications—a protocol and a full research article—each with its own DOI.

Authors submit a **Registered Report Protocol** describing the rationale, methodology and any approvals needed for the work.

Accepted protocols are published in the journal immediately, and authors receive an in-principle acceptance for the future **Registered Report** article reporting the results of the study.

Editor Resource: [Learn more about Registered Reports](#)

What to evaluate in a Registered Report Protocol:

- ▶ Is the rationale for the proposed study clear and valid?
- ▶ Is the protocol technically sound? Will it effectively achieve its aims and test the stated hypotheses?
- ▶ Is the methodology feasible and detailed enough to make the work replicable?

Editor Resource: [Quick Guide: Handling Registered Reports](#)

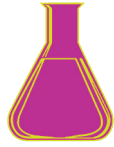
What to evaluate in a Registered Report:

- ▶ Have the authors followed the procedures outlined in their Registered Report Protocol? If not, do the changes make sense?
- ▶ Are there any additional experiments or exploratory results not outlined in the Registered Report Protocol? If so, were they reasonable and methodologically sound?
- ▶ Are the conclusions supported by the data and do they address the hypothesis from the original Registered Report Protocol?

Editor Resource: [Quick Guide: Handling Registered Reports](#)



PROTOCOLS



LAB PROTOCOLS

Developed in partnership with protocols.io, **Lab Protocols** describe verified, reusable methodologies. They consist of two interlinked components:

1. A step-by-step protocol posted to protocols.io, with access to specialized tools for communicating technical details.
2. A peer-reviewed *PLOS ONE* article contextualizing the protocol.

Editor Resource: [Learn more about Lab Protocols](#)



STUDY PROTOCOLS

Study Protocols describe detailed plans and proposals for research projects that have not yet generated results.

They consist of a single article in *PLOS ONE* that can be referenced in future papers.

Editor Resource: [Learn more about Study Protocols](#)

What to evaluate in a Lab Protocol:

- ▶ Has the protocol been validated? Have the authors referenced published research in which the protocol was used to generate data?
- ▶ Does the protocol provide all of the information you would need to reproduce the study yourself?
- ▶ Do the expected results make sense? Have the authors provided advice for interpreting and analyzing raw data?
- ▶ If the submission includes preliminary or sample data, is it sufficient for benchmarking, validation or troubleshooting purposes? Does it adhere to PLOS' Data Availability Policy?

What to evaluate in a Study Protocol:

- ▶ What data do authors plan to gather? Will the authors generate the data needed to answer their research question?
- ▶ What analyses will they perform? Is their approach rigorous, complete and appropriate for the type of study?
- ▶ Have the authors described their approach in sufficient detail? Could you reproduce their study based on the information provided?
- ▶ If required for their study, have the authors obtained approval from relevant research ethics committees?