



**Title:**

- It should illustrate the specific procedure to be investigated.
- It indicates the longitudinal nature of the study (if any).

**Abstract:**

- Preferably in a structured format including separate sections for: Aim, Material and methods, Results, Conclusion.
- Adequately cover the main points of the study.
- Delivers the “take home” message presented in the paper.

**1. Introduction:**

- Provide an adequate review of the literature.
- Cite references whenever presenting informative statements.
- Draw the justification of your study conduction from your literature findings, highlighting the study significance.
- Clearly state your hypothesis/ aim of the study.

**2. Materials and methods:**

2.1. Study design

- What type of study design do the authors use (prospective, retrospective, case control, blinded, etc)?
- Choose and explain the appropriate study design to explore the questions (hypothesis) asked.
- Methods of data collection should be clearly stated.
- All outcomes (primary and any secondary outcomes) should be clearly defined.
- Identify the proper process of research subject selection (inclusion/exclusion criteria, blinding, etc.)

2.2. (FOR CLINICAL STUDIES ONLY)

- What is the overall risk and benefit for the research subjects of this study (minimal, more than minimal, moderate, significant)
- Are there any potential IRB-related requirement with the study design? (Standard of care provided? Risk for confidentiality breach? HIPAA compliance? Bias in exclusion criteria? Vulnerable population?)

2.3. Sample size calculation and statistical analysis

- Proper sample size calculation, power, and level of significance (as required).
- Specify the types of descriptive statistical analysis and tests to be used that appropriately test the hypothesis presented.

**3. Results:**

- The final study population/sample should be reflective of the one described in materials and methods. If there is any discrepancy, explain why.
- List any data lost/excluded.
- Data must be presented in a logical order (demographic, descriptive summaries with measures of dispersion, then comparative, as applicable), with easily read tables and graphs.
- The statistical tests performed should match the ones described in Materials and Methods (with the same logical listed order).
- Again, this section must clearly list the primary and secondary outcomes, for which the hypothesis was accepted or rejected.

**4. Discussion:**

- Was the objective of the study met and does the discussion support the original hypothesis.
- Provide an adequate interpretation of all of the study's findings (in order following the original sequencing presented in the result section).
- Clearly discuss whether the results were in agreement or disagreement with the existing literature (using the indicated citation).
- Being the expert of your experiment, you may suggest alternative explanations for your findings (supported with appropriate references as applicable).
- Discuss all the studied outcomes (in order) giving the appropriate "weight" based on how strong the respective data was.
- Be cautioned from being biased in your interpretation in favor of your argument, and avoid using strong affirmative statements (positive or negative).
- Make sure to critique and review your study for any limitations that would influence generalizing the main findings from the study.
- Explain how the findings would be directly or indirectly applicable to clinical practice (or useful for conduction of potential prospective research/ funds).

**5. Conclusion:**

- In simple words, write the "take home" message from the study (if any).
- Write using the fewest sentences possible, and use bullet points if required (for listing multiple vital findings).
- Make sure that whatever written is supported and implied directly by the study outcomes (valid interpretation).
- Add your brief related recommendation (if applicable).

**References:**

- Follow the requested citation system by the journal of choice for publication. It can be found at the instruction to authors' section of each publisher website/ journal.
- Limit your references to the most updated ones, and critically choose studies and journals known to implement high research and publication standards.