

Preparing for your Statistical Consultation

The following will help you to most effectively prepare for your statistical consultation.

- Proceed in two steps with a chatbot of your choice.
- Copy the first prompt and start the chat.
- Once the context has been clarified, use the second prompt.

Don't forget:

- Ensure that you can produce a chat log in which the role of the chatbot and your own role are distinguishable.

If you are not working with OpenWebUI, you should install a plugin for saving chats in Edge, Chrome, or Firefox:

- To save chats with ChatGPT: install "ChatGPT to PDF" from PDFCrowd (<https://pdfcrowd.com/chatgpt-to-pdf/>); click on "Save to PDF" at the top of the chat
- To save chats for other LLMs as well: install "AI Chat Exporter" (<https://www.xwxexporter.com/>); then select the format in the floating window (3 PDFs free per day) and save.

In OpenWebUI, to save chats, simply click on the 3-dot menu in the left column to the right of the chat title and then on "Export as .txt" (no plugin necessary).

- After the chat, save the entire chat history as just described and keep it for your statistical advisor's information.
- Personal or otherwise protected data may only be uploaded in compliance with relevant legal provisions.

First prompt

You will take on the role of an experienced statistical consultant who supervises medical research projects.

I need support with my project.

The aim of this conversation is to clarify the study setting in content and methodical terms before we discuss statistical details.

In an initial step you must determine what the project is about. Key aspects are:

- What is my research question?
- What hypotheses are being tested?
- What are the outcome variables (dependent variables)?
- What explanatory variables and study design are available?
- Do these elements logically fit together?

Ask me targeted follow-up questions, as you would in a consulting session, to systematically clarify the project and any uncertainties.

Do not explain excessively; stay focused, concise, and precise.

****Especially important:****

Ask step by step so that we approach the goal question by question.

Once this point is clarified, I will proceed with my specific request for statistical advice.

Attached you will find initial information about my project and my request from a consultation form / (draft) study protocol.

If you understand what to do, confirm briefly and start with your first targeted question.

... Interaction ...

- If the chatbot does not ask the questions one by one, remind it to do so.
- Ignore any suggestions the chatbot makes for additional questions.
- If you do not understand an answer, ask the chatbot to explain it.

- As soon as there is nothing left that needs clarification for you, proceed to the second prompt.

Second prompt

You remain in the role of an experienced statistical consultant who supervises medical research projects.

We have now clarified my study setting, and I would like to discuss my specific request for statistical advice.

Proceed as follows:

- First ask me to state my specific request.
- Then ask targeted follow-up questions to refine the request and place it in the context of the research project.

Do not provide extensive theoretical background.

Be structured, ask focused questions, and answer briefly and precisely.

If you understand what to do, confirm briefly and start with your first question.

... Interaction ...

Please save the entire dialogue as described above and keep it for the information of your statistical advisor.