# P8108 - Hormonal Treatment and Survival in Breast Cancer

Zhezheng Jin, Mingkai Chen, Youlan Shen, Hongru Tang

2023-12-11

# Contents

# Abstract

o Briefly discuss the research problem and how this report addresses that problem. o If possible, mention the main results.

# Background and Objectives

Research Question: How effective are hormonal and chemotherapy treatments in improving survival rates?

o While this section is project-dependent, remember to include enough information so that the reader knows what your project is about. Briefly discuss the substantive field citing relevant papers where applicable.

# Exploratory Data Analysis

# Methods

## Study data

o Discuss study data in prose form. Here, you can talk about the study population, total sample size, the baseline characteristics, the primary outcome/endpoint, type of censoring etc. o Include well tabulated and annotated summary statistics of the baseline characteristics. o Missing data and how it was dealt with if applicable.

## Statistical methods

o Discuss primary objective(s) of the project. o The method used. Here, you can talk about the non-parametric, semi-parametric or parametric methods as applied in your report. Remember to provide some details on these methods. Mentioning them by name is inadequate. Use any reference (published papers, book) provided they are cited appropriately. o Discuss applicable assumptions. Does your model have proportional hazard assumption? What kind of censoring does your data have and what assumption is applicable here? How do you check if these assumptions are met? o Include relevant formulas for selected method(s) if applicable.

# Results

o Talk about the study results in prose form making sure to include appropriate tables and figures. No interpretation at this stage. o Things to consider include hazard ratio, p-values, median survival times, relevant confidence intervals, log-rank test(s). Remember to mention selected significance level (0.05, 0.01 etc).

# Discussion

o Briefly reiterate the study population, objective(s) and the primary outcome. o Discuss the results as presented in previous section. Here, you can provide interpretation as appropriate. o Mention any limitations if there and how that might affect the interpretation of the study results.

# Conlusion

o Summarize the main findings and your conclusions as related to the objectives. You can also give recommendations if any.

# References

# Appendix

o Put well organized and documented code here. o Any additional tables and figures