

P8110: Applied Regression II

Midterm Project Guide

1 Report 1 (full score 10)

Report 1 focuses on data analyses. This report serves for internal use purpose, so it does not need to be written using paragraphs. Instead, bullet points are acceptable. Interpretations are not required for Report 1.

1. SAS code needs to be annotated and should be referred to in the analyses of each section

2. Report 1 needs to be organized by 4 sections

★ • Data preparation section, such as how to create the outcome variables, how to handle missing data, if combine any categories, etc. *co variates*

★ • Descriptive statistics section

- the sample table in “Step 1 guide”
- KM curves

★ • Hypothesis I

- Fit Cox models
- Decide if there is any time-dependent covariate.
- Test PH assumption (tentatively removing the time-dependent covariate if there is any)
- If any violation of PH assumption, refit the Cox model with remedy strategies
- Provide HR and 95% CI

• Hypothesis II

- Same as Hypothesis I
- There are a few observations with $DSMSUBHR = 1$ but $BESUBON = -1$. Need to describe how to handle these observations.

2 Report 2 (full score 10)

1. Format of the report

- The report should be single-spaced and a maximum of two pages excluding any references, tables, and figures. Margins should be at least one inch all around with the font size to be 12 point. We allow a maximum of five tables and/or figures in total (not each). The report should include only three sections: Data Analysis, Results, and Conclusion (one paragraph).

2. Data Analysis section

- Define outcomes
- KM curve and log-rank / *table 1*
- Hypothesis 1 analysis
- Hypothesis 2 analysis
- Software use

3. Results section (always refer to the tables/figures)

- Description of the study sample
 - Overall sample
 - The outcomes
 - Covariates
- Description of the KM curves
- Findings from hypothesis 1
- Findings from hypothesis 2

4. Conclusion (What are the take-home message?)

5. Tables and figures

- Tables and figures need to be formatted in a quality for publication.
- Titles of tables and figures should be self-explanatory.