Survival Analysis Workshop
In-Workshop Assignment

[1] Open 'dig.csv' and read through the provided documentation 'DIG Documentation with supplement.pdf' to understand the data.

[2] Do some exploratory analysis to get a handle on the data. This could take many forms, including a 'table one' for the treatment and non-treatment groups.

[3] Ignore the reason for death. Make Kaplan-Meier curves for the survival in the two treatment groups.

[4] Perform a statistical test to see if there is a difference between the two survival curves.

[5] Fit a cox proportional hazards model to assess the difference between the two treatment groups adjusting for other factors. Interpret your results.

[6] Test the proportional hazards assumption in the model.

[7] In this dataset we have competing risks. Death can be caused by worsening heart failure, other cardiac causes, other vascular causes, unknown or non cardiac and nonvascular causes. Investigate the cumulative incidence function for the different causes (note that for interpretability you may want to collapse some categories together).

[8] Fit a competing risk regression model to determine the treatment effect while adjusting for other confounders.