

Lab 8 Deliverable

Survival Analysis

Adult Body Mass Index (BMI)

BMI is a person's weight in kilograms divided by the square of height in meters. A high BMI can indicate high body fat.

To calculate BMI, see the Adult BMI Calculator or determine BMI by finding your height and weight in this BMI Index Chart.

Create a column named `bmi.class` and append to the extracted (reduced) clinical data. Then assign the classified `bmi` into 5 groups as outlined below.

If your BMI is less than 18.5, it falls within the **underweight** range. If your BMI is 18.5 to <25, it falls within the **healthy** weight range. If your BMI is 25.0 to <30, it falls within the **overweight** range. If your BMI is 30.0 or higher, it falls within the **obesity** range. Finally if `bmi` is `NA`, set `bmi.class` equal to `NA`, too.

how does Body Mass Index affect survival?

- 1) Please plot **survival probability** and **risk table**
- 2) Is the null hypotheses true? Is there a statistically significant correlation between BMI and survival?