Study Summary

Learning outcomes

* Merger data frames
* Group data and summarizing
* Learning Matplotlib
* Create statistical summary report
* Drawing graph using pyplot and panda data frame plot

Tasks

* Prepare the data.
* Generate summary statistics.
* Create bar charts and pie charts.
* Calculate quartiles, find outliers, and create a box plot.
* Create a line plot and a scatter plot.
* Calculate correlation and regression.

Data set

In this study, 249 mice who were identified with SCC tumors received treatment with a range of drug regimens. Over the course of 45 days, tumor development was observed and measured. The purpose of this study was to compare the performance of Pymaceuticals’ drug of interest, Capomulin, against the other treatment regimens.

Mouse\_metadata.csv: This file contains the details of each mouse used for the test.

study\_results.csv: This file contains the details of study results of over the time period.

Out put of the analysis.

* Summary Statistics
* Bar Charts and Pie Charts
* Calculate Quartiles, Find Outliers, and Create a Box Plot
* Create a Line Plot and a Scatter Plot
* Calculate Correlation and Regression

Folder structure

Main folder : Pymaceuticals (Note : pymaceuticals.ipynb should be inside this folder)

Data source folder : Pymaceuticals/Data

Summary Folder : Pymaceuticals/Summary