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Data Analytics Bootcamp

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Matplotlib Challenge – Pymaceuticals Analysis

Analysis Observations:

1. In reference to the bar chart of mice per drug regimen, there are 10 treatments used for the study. The highest number of mice in the study are treated using Capomulin. while the lowest number of mice in the study are treated using Propriva.
2. In reference to the distribution of mouse sex across all treatments, there are more male mice treated than female mice, although statistics show only a 2% difference.
3. In reference to the box plot across four regimens of interest & summary statistics table, the final tumor volume treated by Capomulin and Ramicane trended lower than the others. Ramicane demonstrated lower final tumor volume, however it was used with a lower treatment than that of Capomulin. Fair results require equal treatment.
4. Capolmulin was used to treat Mouse ID l509 and the tumor volume seems to decrease with time. Sampling also charts that five mice treated with the same regimen supports the assumption that Capomulin could reduce the size of tumor volume.
5. In reference to the correlation between Capomulin with average weight and final tumor volume, the value is 0.84, meaning that there is a relation between the two variables. The r-squared value of 0.71 indicates that the final tumor volume could be predicted by using the average weight of a mouse.