

Observations Made From Pymaceuticals Inc. Study

1. From the line plot illustrating Tumor Volume (mm) by Timepoint (Days) for Mouse J119, we can observe the pattern at which Capomulin fights the tumor. We can see that there are two spikes during the line plot which reflect two separate six day periods in which there was a relatively low decrease in the size of the tumor volume. This is fascinating to understand the phases in which the drug worked most effectively against the tumor on the mouse.
2. From looking at the summary data frame showing the various statistics regarding Tumor Volume (mm³) grouped by the ten drug regimens, one can see that Ramipril and Capomulin have the lowest mean tumor volume (mm³) of all the drug regimens. One also sees that from the bar graph that charts number of timepoints by drug regimen, Ramipril and Capomulin were the drugs that had the highest number of timepoint and therefore the largest datasets.
3. Lastly, looking at the distribution of data between male and female mice (49% female, and 51% male), it could be interesting to start to make comparisons between mice of each sex as there is almost an equal distribution of data between the two sexes. This could allow us to further analyze each drug regimen's impact on the mice but with a more in-depth look at the mice.