Pymaceuticals Analysis

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In this exercise, we analyze three topics; tumor response to treatment, metastatic response to treatment, and survival rates. Using matplotlib I was able to display these topics and how they affected the patients over time.

In the first topic, tumor response to treatment, there is an obvious negative impact on tumor size using the drug Capomulin. While the other two drugs maintained a positive trend, with respect to tumor volume, at the same rate as the placebo. Therefore, there was no affect by the other two drugs with associated with reducing the size of the tumor.

In the second example, we analyze the metastatic response to treatment. In this chart we are able to see that Capomulin has a smaller rate of increase over time compared to the other drugs, with Ketapril appearing to be similar to a Placebo. Infubinol seems to be doing something about metastatic spread, but previously we determined that it had no affect on size. More study needs to be on Infubinol to determine if it can have an affect on metastatic spread.

Finally, when we look at survival rates during treatment, we can see that with Capomulin there is a les negative downward trend with respect to survival rates over time. This indicates that this drug is helping some patients survive longer during those periods of time. While the other two drugs maintained the same downward trend as the placebo so therefore had no impact on survival rates.