**Pymaceuticals Inc Data analysis**

The data provided from the research in the effort to determine the potential treatments for squamous cell carcinoma includes the data of the change in the size of tumor during the course of treatment for each of the drug used during the trial period of 45 days. The size of tumor volume was taken for every five-day interval during the treatment. The effect of each drug on the tumor was recorded. Along with the size of the tumor, the number of sites the cancer was metastasized was also monitored in the same time intervals. Finally, the data of the mice used was also recorded to determine the mice survival rate.

Trend 1: A scatterplot is used to demonstrate the effect of each drug on the size of the tumor in 45-day period visually. The scatterplot demonstrated that only two drugs out of ten that has successfully reduced the size of the tumor are Capomulin and Ramicane. Remainder of the eight drugs have almost minimum to no effect in reducing the size of the tumor. Error bars are included to account for the variability in mice. The error percentage increased with the number of days in the treatment.

Trend 2: For any cancer the one of the biggest concern the metastasis. It is equally important to ensure that the cancer has not metastasized or minimize the sites it can metastasize to in number. All the drugs have metastasized to other sites. Capomulin and Ramicane has metastasized to least number of sites at the end of the treatment.

Trend 3: Finally, percentage of tumor reduction are calculated and was demonstrated in a bar graph with green for positive and if the tumor grew, the adverse effect is demonstrated in red. This analysis again coincided with scatterplot shown originally, and Ramicane drug turned out to be most effective drug. Both Capomulin and Ramicane demonstrated to be effective and depending on the clinical history an appropriate drug can be appropriate choice. Also mouse Survival rate another factor that was tracked to finally draw an appropriate conclusion on the effects of the medicine also with side effects and length of survival.