The goal of analysing this data is to observe and analyse what kind of conditions and medicine affect the size of tumor volume (mm3) in mice. The information and data were extract from Mouse\_metadata.csv and Study\_result.csv to combine as a data to be analysed.

There are to­ total 249 mice tested different drugs regimen in this experiment.

Table

Description automatically generated

Based on the picture shown below. There are 11 drugs were used for treating the tumor volume in these mice. The most efficient treatment among these mice is to use Capomulin and Ramicane to cure these mice as the mean, median, variance and standard of the tumor volume is not as big as the rest of drug regimen. But there will be further discussion in next several pictures to check whether it is correct or not.

Table

Description automatically generated

Another evidence needs to be put into consideration is the frequency of using these drugs in the mice. The picture was showed as below. Based on this data, medicine “Capomulin “and “Ramicane “ has been used to insert to mouse more than 1000 times than the rest of drugs. It is hard to argue that these two drugs are more effectiveness and useful than the rest of drugs as they were not inserted as many times as “Capomulin” and “Ramicane” into mouse.

Chart, bar chart

Description automatically generated

Here use mice “s185” as an example analyse the relationship between timepoint and tumor volume (mm3).

From the beginning, the size of tumor volume was near to 45 to near 0 over timepoint from 5 to 45, the trend though this timepoint is decline.

Chart, line chart

Description automatically generated