

# **SUMMARY OF THE STUDY**

The study of effect of 9 drug regimens and 1 placebo regimen on squamous cell carcinoma was conducted on 249 mice with a gender bias of only 1% (male mice more than female mice)which is negligible. There were total of 1893 observations with 5 duplicate readings. We have used the cleaned data of 1888 observations. The study was more concentrated on Capomulin’s effect on Tumour volume.

The keys conclusions of the study are:

1. The effectiveness of Ramicane is the best in reducing the tumour volume. Capomulin is comparable. But both have given more desirable results compared to Infubinol and Ceftamine. This conclusion is based on the box plots of the final tumour volumes. The results of the study are very consistent, as there is only 1 outlier in the data set of the four drug-regimens (Infubinol).

2. The heavier the mouse, the less effective the drug is. This is a reliable conclusion because the r value is 0.84 (The relationship between two variables is generally considered strong when their r value is larger than 0.7. The correlation r measures the strength of the linear relationship between two quantitative variables.) This shows how much the the weight of the mouse determines the drug’s effect on tumour volume. The positive slope of 0.95 reconfirms the above said relation between the dependent (tumour volume)and independent variables(mouse weight).

3. Capomulin treatment shows a remarkable reduction in tumour size in the first 35 days then a slight increase in next 2-3 days.







