

Observations and Insights

By: Jahangir Dewan

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1. By looking at the Pie chart on “Male vs Female Mouse Population”, it is evident that the percentage of Male (50.20%) vs Female (49.799%) mice that are treated are almost same. **Gender balancing has been done very well!**
2. The correlation between “**Mouse Weight**” and “**Average Tumor Volume**” is 0.84. This means that they are correlated very well: **With increase in weight of the mouse the tumor volume is likely to increase.**
3. The regression analysis results and plot shows how “Average Tumor Volume” varies with respect to the “Weight” of mouse. The correlation and regression analysis results shows that we have R-squared value as 0.70. **This means that 70% of the observed data fit to the regression model.** This provides a fair prediction of the study results and how they are correlated with a Correlation coefficient of 0.84 (rvalue).
4. Comparing the Median values of all the top 4 treatment drug results, it is evident that **Capomulin and Ramicane are the most effective Drugs Regimen in reducing the size of the tumors for the mouse** (Please Refer to Mean Tumor volume: Capomulin tumors: 38.12, Ramicane tumors: 36.56, Infubinol tumors: 60.16 and Ceftamin tumors: 59.85).