Observations from Individual plots:

* From the bar plot drawn between the number of unique mice tested and drug regimen, it was clear that number of mice treated with Capomulin and Ramicane were high compared to other drugs. Almost equal number of mice were tested with Ketapril, Naftisol, Zoniferol, placebo, Stelysan, Infubinol, Ceftamin, Propriva.
* The pie chart drawn between male and female distribution of mice shows that equal number of male and female mice were selected without any bias which helps in determining the efficacy of the drugs.
* While assessing the tumor volume of the mice across the four drugs (Capomulin, Ramicane, Infubinol, and Ceftamin), it is clear from the box plot that Capomulin and Ramicane showed a great impact in reducing the tumor volume than Infubinol, and Ceftamin.
* Line graph drawn between tumor volume and timepoint for a mouse treated with Capomulin, there is a clear decrease in the size of the tumor with increase in number of days. So, over the course of 45 days there was a drastic decrease in the tumor volume.
* Scatter plot plotted between Capomulin treated mouse (Weight vs Tumor volume), it was clear that the tumor volume and weight are directly proportional. Tumor volume of the mice was increasing with increase in the weight of the mice.
* While considering the correlation between the Mouse weight and Average tumor volume, the correlation value 0.84 shows that there is a perfect and strong relation between the weight of the mouse and the tumor volume. Also, positive correlation was observed between the weight of the mouse and the tumor volume.

Finally, Capomulin showed great results in consistently decreasing the size of the tumor and the average tumor volume over the 45 days treatment. The average number of metastatic sites were less. Capomulin also saw significantly higher survival rates over the course of the 45 days.

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