Pymaceuticals Inc.

Analysis

Capomulin and Ramicane have the best results for reducing tumor size

Within this study, Capomulin and Ramicane have the best results for reducing tumor size. All mice within the study started with a tumor volume of 45 mm3. Reviewing the statistics of final tumor volumes, only three drug regimens (Capomulin, Infubinol, Ramicane) showed any mice with a decrease in tumor size by the end of the study. Of these three, only Capomulin and Ramicane had an average final tumor size less than the starting tumor size.

Drug Regimen	mean	median	var	std	count	sem	min	max
Capomulin	36.667568	38.125164	32.663378	5.715188	25	1.143038	23.343598	47.685963
Ceftamin	57.753977	59.851956	69.982735	8.365568	25	1.673114	45.000000	68.923185
Infubinol	58.178246	60.165180	74.010875	8.602957	25	1.720591	36.321346	72.226731
Ketapril	62.806191	64.487812	98.921330	9.945920	25	1.989184	45.000000	78.567014
Naftisol	61.205757	63.283288	106.029927	10.297083	25	2.059417	45.000000	76.668817
Placebo	60.508414	62.030594	78.759797	8.874672	25	1.774934	45.000000	73.212939
Propriva	56.493884	55.591622	70.822755	8.415626	24	1.717832	45.000000	72.455421
Ramicane	36.191390	36.561652	32.166354	5.671539	25	1.134308	22.050126	45.220869
Stelasyn	61.001707	62.192350	90.331586	9.504293	24	1.940056	45.000000	75.123690
Zoniferol	59.181258	61.840058	76.862027	8.767099	25	1.753420	45.000000	73.324432

Table 1

Gender does not appear to have a notable impact.

Gender does not appear to have a notable impact. Overall distribution is relatively even (Figure 1). While there are differences across drug regimens (Table 2), they do not appear significant. Looking at boxplots within Capomulin and Ramicane by gender (Figure 2) does not indicate notable differences considering population size.

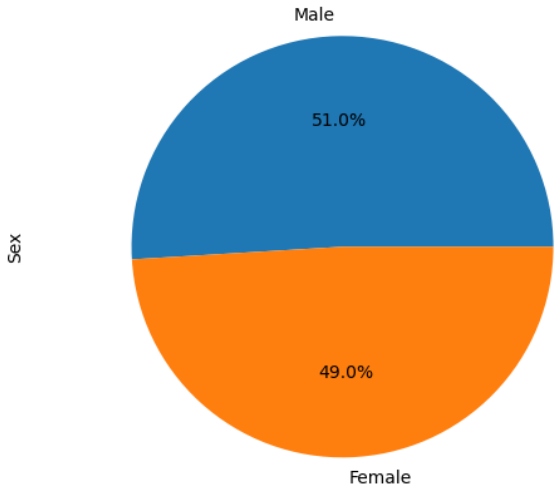

Figure 1

Sex	Drug Regimen	
Female	Capomulin	13
	Ceftamin	13
	Infubinol	12
	Ketapril	9
	Naftisol	13
	Placebo	13
	Propriva	11
	Ramicane	9
	Stelasyn	15
	Zoniferol	15
Male	Capomulin	12
	Ceftamin	12
	Infubinol	13
	Ketapril	16
	Naftisol	12
	Placebo	12
	Propriva	13
	Ramicane	16
	Stelasyn	9
	Zoniferol	10

Table 2

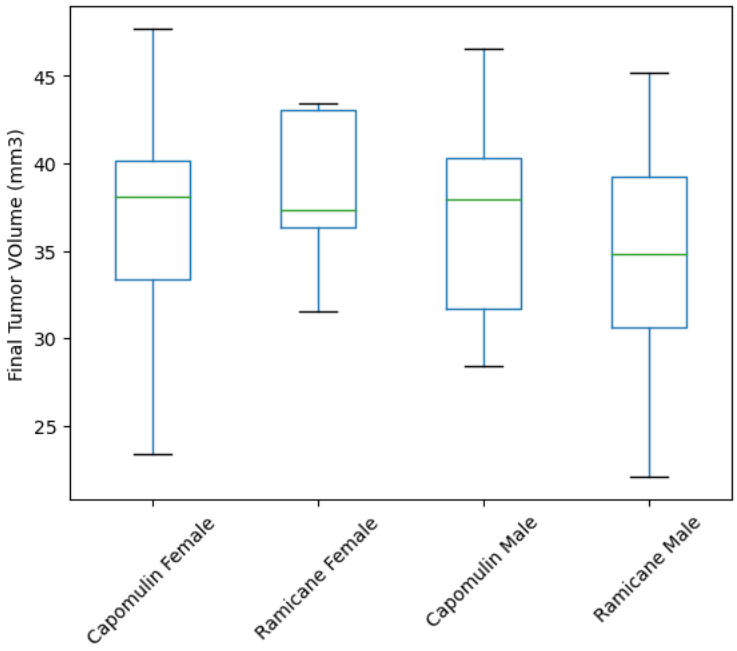

Figure 2

Mouse weight is highly correlated with average final tumor volume

Despite the starting tumor size being consistent, the mouse weight (g) is highly correlated with average final tumor volume (mm3) within both Capomulin (0.84 correlation coefficient) and Ramicane (0.81 correlation coefficient) regimens. The correlation coefficient for the combined regimens is 0.9 (Figure 3).

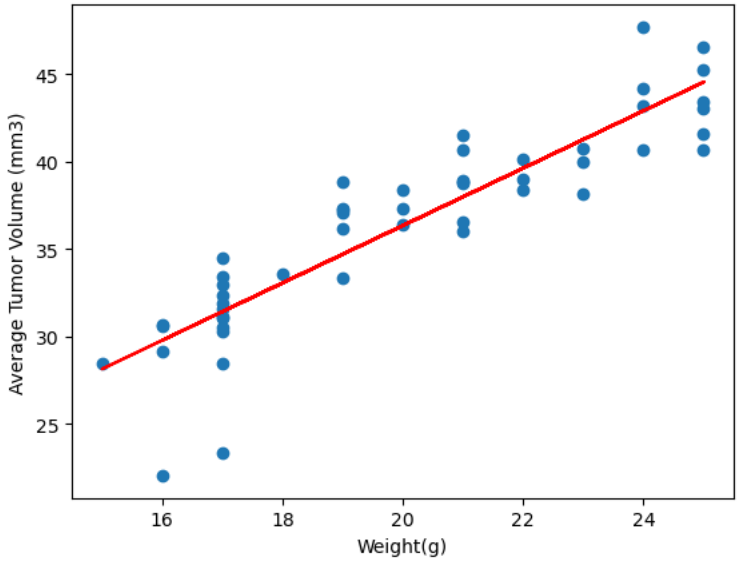

Figure 3