Capomulin and Ramicane demonstrated the lowest mean and median tumor volumes and the lowest degree of variability (variances and standard deviations) when assessed across all time points. These two drugs also showed the lowest median final tumor volumes. Ramicane showed the lowest median final tumor volume overall. However, given the substantial degree of overlap in the data distributions for ramicane and capomulin, it is unlikely that Ramicane is significantly more effective than Capomulin at reducing tumor size. Interestingly, Ketapril, Naftisol, and Stelasyn all showed larger full time course mean and median tumor volumes than the placebo treatment, suggesting that these drugs provide no benefit. However, these comparisons will require proper statistical analysis (including adjustments for multiple comparison testing) in order to draw any solid conclusions from the data.

Among the top four drugs analyzed, there was only a single final tumor volume for the Infubinol-treated mice that appears to be an outlier. None of the other top four drugs showed outlier final tumor volumes.

For the specific Capomulin-treated specimen selected, mouse s185, the volume of the tumor appears to decrease over time, suggesting that Capomulin treatment may afford time-dependent anti-tumor benefits. While promising, this observation must be considered preliminary at best. A firmer conclusion could be drawn by, for instance, assessing the average or median tumor volume at each timepoint for all mice that received Capomulin treatment.

The weights of Capomulin-treated mice appear to correlate positively with average tumor volume. Assuming that the weights of each mouse include the weights of the tumors and that there are no extraneous factors influencing the weights of the mice (e.g. increased fat or muscle mass in mice harboring larger tumors) , this trend suggests that the tumors comprise a significant portion of each mouse’s overall weight.