David Winton Written Report Matplotlib Homework “Pymaceuticals” 12/14/2019

The following data was derived from treating 250 mice through a variety of drug regimes over a 45-day treatment period. The three drugs and control element were: Capomulin, Infubinol, Ketapril and a Placebo.

1. Tumor growth diminished considerably for mice exposed to the drug Capumulin during the 45-day treatment, with volume dropping about 9 mm3 while volumes increasied for the other two test drugs and the placebo.

A close up of a map

Description automatically generated

1. Capomulin also had the biggest impact on controlling metastatic spread. The metastaic spread was about 1.5 mm3 with mice treated with Capomulin, compared to 2 mm3 for Infubinol and 3.4 mm3 with Ketapril, (which was slightlyhigher that the placebo rate).

A close up of a map

Description automatically generated

1. The only positive tumor change recorded over the 45-day treatment period was in mice treated with Capomulin, which showed a 19% reduction in tumor size. Meanwhile,, tumor size increased 45%, 57% and 51% in mice treated with Infubinol, Ketapril and the Placebo, respectively.

A screenshot of a cell phone

Description automatically generated

Summary

Based on the above data, Capomulin shows the most promise for cancer treatment with positive results in tumor response, metastatic spread and tumor change.