All four graphs clearly show that Capomulin was the most successful drug of the four that were included in this analysis. Capomulin was the only drug to successfully shrink tumor volumes, producing an average -19% change over 45 days of treatment. It also produced the best survival rate among the mice being tested, at 84% and did the best at limiting metastatic spread during treatment, with an average of 1.476 sites after 45 days.

On the flip side, Ketapril was the least successful drug and in several instances, performed worse than the Placebo, which would be of major concern to researchers. Ketapril produced a tumor volume increase of 57%, compared to an increase of 51% for the Placebo. Both Ketapril and the Placebo had a survival rate of 44%, but again Ketapril performed worse than the Placebo at limiting the number of metastatic sites, with an average of 3.364 sites after 45 days, compared to the Placebo at 3.273 sites.

When analyzing the “Metastatic Spread During Treatment” graph, researchers would most likely want to conduct additional research to determine why none of the four drugs were able to successfully prevent the metastatic spread over the course of treatment. The graph clearly shows that all four drugs produced an increase in the number of metastatic sites, but at differing rates. As noted previously, Capomulin produced the smallest increase in metastatic sites, with an average of 1.476 sites after 45 days, while Ketapril produced the greatest increase, with an average of 3.364 sites after 45 days. Also of note, Infubinol appeared to nearly stop the metastatic spread between day 40 (2.100 average sites) and 45 (2.111 average sites) which may suggest to researchers that a 45 day treatment is not sufficient and a longer course of treatment may produce more favorable results. I would be very interested to see what the results of a 90 day course of treatment would show.