Throughout the study, investigating the efficacy of different drug regimens in treating tumors in mice, several notable findings emerged. Despite Capomulin being the most frequently administered, Ramicane exhibited slightly superior effectiveness overall, particularly in reducing tumor size. A pertinent question arose regarding the potential influence of gender on treatment outcomes. However, analysis of the data revealed a near-equal distribution of male and female mice, indicating that gender did not significantly affect the drugs' efficacy. Furthermore, an examination of the relationship between mouse weight and tumor size revealed a close alignment with the regression line, suggesting a correlation between these variables. In summary, Ramicane demonstrated marginally greater effectiveness than Capomulin, with gender having a consistent impact across treatments, and tumor size closely associated with mouse weight. These findings underscore the effectiveness of Capomulin and Ramicane compared to other drugs like Infubinol and Ceftamin, which proved less effective in tumor reduction.