



It seems that the drug dose affects a change in blood pressure. However, that effect is not consistent across diseases. Higher doses result in increased blood pressure for patients with disease B, decreased blood pressure for patients with disease A, and little change in blood pressure for patients with disease C.

The global  $F$  test indicates a significant difference among the different groups. Because the interaction is in the model, this is a test of all combinations of **DrugDose\*Disease** against all other combinations. The R-square value implies that approximately 35% of the variation in **BloodP** can be explained by variations in the explanatory variables. The interaction term is statistically significant, as predicted by the plot of the means.

After observing p-values of three diseases, we can reject the null hypothesis in case of disease A and B, that means there is an effect of drug dose on diseases. In case of disease C, we failed to reject the null hypothesis as we got higher p-value than the significant level, that means there is no effect of the drug dose for disease C.