Text

Description automatically generated with medium confidence

1. False, we should compare The percentage of people with cardiovascular issues on Rosiglitazone and Pioglitazone and not numbers
2. True
3. False, we can not make that sort of inference based on this information.
4. True

Timeline

Description automatically generated with low confidence

1. 88% Died in the Control | 65% Died in the treatment
2. Part b
   1. H0: The treatment does not work | HA: The Treatment Works
   2. 28, 75, Control, Treatment, 0, HA
   3. The simulation shows that is very likely that the treatment works because a small percentage of the random samples give similar data to the initial test conditions

Chart, histogram

Description automatically generated

1. This is a randomized study as 166 people were roughly split evenly between two groups: Placebo and antibiotic.
2. Yes, because the participants did not know what group they were in.
3. Antibiotic = 66/85 = 0.776  
   Placebo = 65/81 = 0.802  
   Difference = 0.802 – 0.776 = -0.026
4. It appears that the placebo is a more effective treatment, this is because the placebo has a 2% better success rate
5. H0: The antibiotic does not have and effect on the improvement of symptoms  
   HA: The antibiotic improves the symptoms of the people taking it.
6. Based on the histogram, 66 people describing a improvement of symptoms is a normal value that can be reached. This measn that we fail to reject the Null hypothesis HO.

Chart

Description automatically generated

1. H0: The Provocative and Conservative woman have interventions at the same rates.  
   HA: The Provocative and Conservative woman have interventions at different rates.
2. 5/20 – 15/25 = 0.25-0.60 = -0.35
3. .02+.001 = .021  
   .021 \*2 = .04  
   P-Value = .04  
   Based on the low P-Value, we are going to reject H0