Right Test Summary and Discussion

The study of the fact of LPS on inflammation in rats was conducted on 10 rats. 5 rats were not dosed i.e (0mg) the other five were dosed with 10mg of LPS. With only 10 data points we will not yield quality data of statistical significance. For the control group 0mg the average inflammation produced is 10.516. The average for the second group, 10mg was 11.112 average inflammation produced. These two numbers are less than one apart. This does not bode well for the effectiveness of LPS on inflammation. The standard deviation is high and there is no consistency in the numbers. For instance in the 10mg Group the lowest level of inflammation was 3.55 and the highest 22.34. That is a very large spread for just five participants. What I am trying to get at is there is very little consistency in this study. As it turns out the T-test shows that there is no significance. And not surprisingly the post-hoc T-test also showed no significance. Although this test does not show significance, you could theorize that if you threw out outlier numbers in the 10mg group or just use more participants your results could look drastically different.