Statistical Inference

Statistical inference is the process of drawing conclusions about a population through statistical analysis from a sample of that population.

For example: In clinical trials, hypothesis testing is a means of drawing conclusions on the effect of the medicines under study on the population that the sample of trial participants was drawn from. For instance, the null hypothesis would state that the medicine being studied does not affect symptom reduction while the alternate hypothesis would state the opposite. Statistical inference from the trial data will allow researchers to reject the null hypothesis if the analysis indicates a statistically significant effect.