

Statistics in Biomedical Research

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Abstract

Biomedical research aims at detecting, diagnosing, treating and preventing diseases. In order to carry out a meaningful research on a specific issue, one must layout the study design, collect the relevant data, outline the models and methods to analyze these data and finally fit the models to data and perform the analysis. Starting right from the layout of the study design until the derivation of the conclusions, Statistics plays an indispensable role in Biomedical research. Appropriate and adequate statistical analysis of Biomedical data is of utmost importance in order to make reliable decisions targeting human population. The involvement of Statistics in medical research is gaining momentum and it is becoming more and more difficult to publish medical research not well supported by statistical analysis. In this talk, I will discuss various statistical tools that can be used to combat the challenge of analyzing biomedical data.