

A Genome-wide Association Study: Statistical Analysis and Perspectives

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Abstract

Since completion of human HapMap Project in 2005, the genome-wide association (GWA) study has been emerged as a major tool for search genetic variants associated with complex human disorders. As more and more GWA data available, statistician will face a great opportunity and challenge in that how to develop new methodology to conduct further analysis of the large amount of GWA data. In this presentation I am going to talk about the statistical analysis for GWA study based on case-control design. Overview of the existing GWA analysis strategies and perspective of the future methodological development in statistical genetics will be discussed.