Summary

Benjamini and Hochberg state that current methods for multiple comparisons control FWER. However, this may not be the optimal thing to control in some cases (e.g., when one wrong conclusion does not invalidate all other conclusions, one has made). They introduced a new way to control FDR by ordering the p-values and considering the ordering of the p-values.

Reaction

As a famous method today, this paper was interesting to read today. Some of the wording made it a bit difficult to follow. I liked the examples they gave and talking about when to use FWER or FDR. Interesting solution to this problem too.

Questions

1. They talk about how FWER should be used when one false conclusion invalidates other conclusions. I haven’t heard this before, so I was wondering if this rule is used in practice
2. For example, in GWAS, they use Bonferroni correction, which sets the FWER. However, isn’t this a case to control FDR? As one false positive, it wouldn’t want to invalidate other GWAS hits.