

In this paper, Eklund et al studied commonly used clustering method on experimental fMRI data and found that the false-positive rates (FPRs) in these approaches are inflated in cluster-level inference even after multiple testing correction. They also claimed that non-parametric methods could produce more valid FPRs

Eklund's paper stimulated extensive debate as the work challenged existing norms and raised concerns about the FPRs of previously published research. They demonstrated that the reasons leading to the invalid inference include the violation of a certain statistical assumption and a specific software error. They also proposed their non-parametric method for multiple testing correction. I don't work with fMRI data but it seems that there exists many packages for the multiple testing correction of fMRI data. When so many options are available and if none of them is regarded as the only "standard tool", I am concerned that researchers may select the package that is more sensitive to their results. I think it would be a better performance for fMRI researchers to report uncorrected results together with their primary findings.