

Multiple imputation is a simulation-based technique used to deal with incomplete data. Multiple imputation has become a leading method to handle incomplete data and has demonstrated preferred characteristics compared to ad-hoc techniques such as case deletion and single imputation. However, power calculation procedures used for study design and evaluation are not available in general when multiple imputation has been utilized. The purpose of this paper is to develop power calculation formula(s) for several standard tests when using multiple imputation to handle incomplete data. We will illustrate the use of the method using simulations and data examples.