

Additional File 2: Supplementary Material

Listing: Empirical Type I error rate

The Listing of the empirical type I error rates for the 225 scenarios (across all 10 000 simulation runs each) is attached in the following electronic file:

`Additional_File_2_1_Listing_Type_I_error.csv`

Listing: Empirical Power

The Listing of the empirical power for the 288 scenarios (across all 10 000 simulation runs each) is attached in the following electronic file:

`Additional_File_2_2_Listing_Power.csv`

R code

The simulation study was programmed using RStudio 2021.09.0+351 "Ghost Orchid" Release for Windows (R Software Version 4.2.2). The simulation study was performed with the R packages *foreach*, *parallel*, *doParallel*, *tidyr*, *rlist*, *dplyr*, *randomizr*, *bindata* and *DescTools*.

The R code for the simulation study is attached in the following electronic file:

`Additional_File_2_3_R_code.txt`