Continuous

C

D

Method
— Linear Model ···· Non-parametric

Method
— Linear Model
···· Non-parametric

n_i in unbalanced center   ○ 3 + 10 ◇ 40 ⊠ 80 ⊕ 200
△ 5 × 20 ▽ 50 ✳ 100

Ordinal

E

F

n_i in unbalanced center   ○ 3 + 10 ◇ 40 ⊠ 80 ⊕ 200
△ 5 × 20 ▽ 50 ✳ 100

Supplementary figure 1: The probability of falsely rejecting the null hypothesis for at least one center as a function of sample size for each method applied on relevant response outcome for balanced (left panel) and unbalanced designs (right panel). The nominal type I error rate $(\alpha = 0.05)$ is shown as a horizontal line. Dotted blue lines indicate error margins for simulations with 5000 runs. Simulated type-I-errors falling outside [0.044; 0.056] indicate a significant deviation from the prespecified level $(\alpha = 0.05)$.