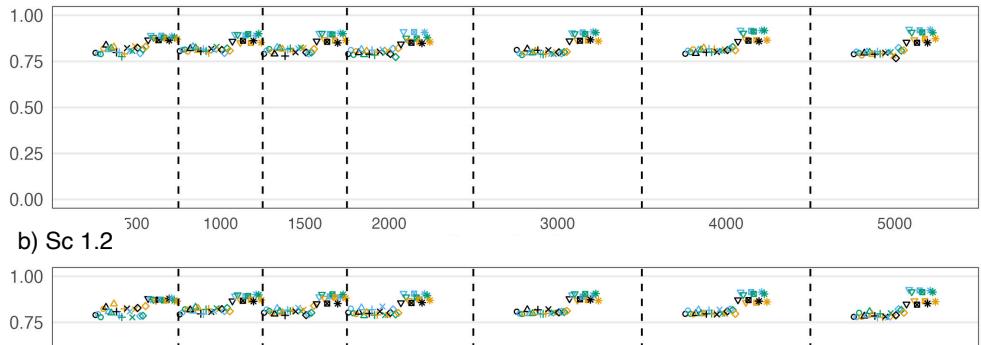
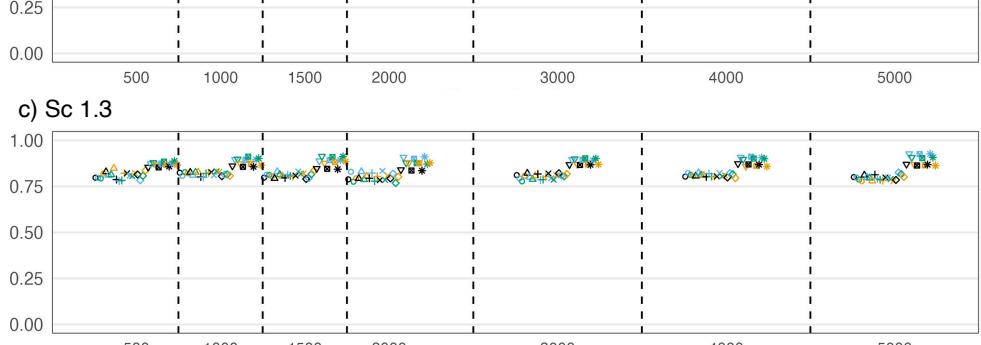


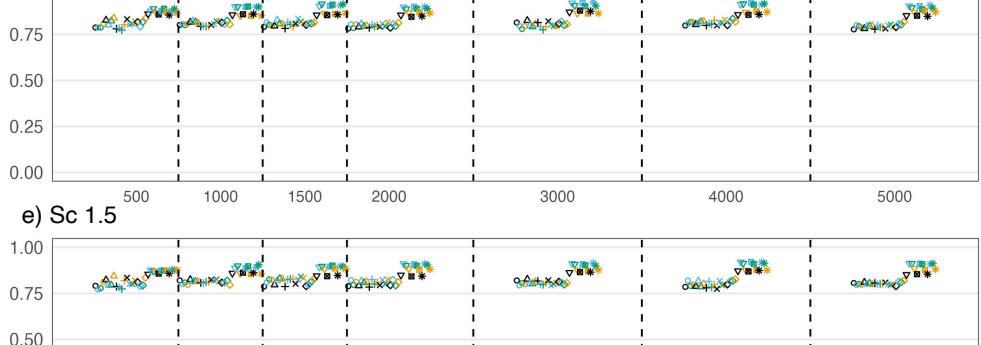
a) Sc 1.1



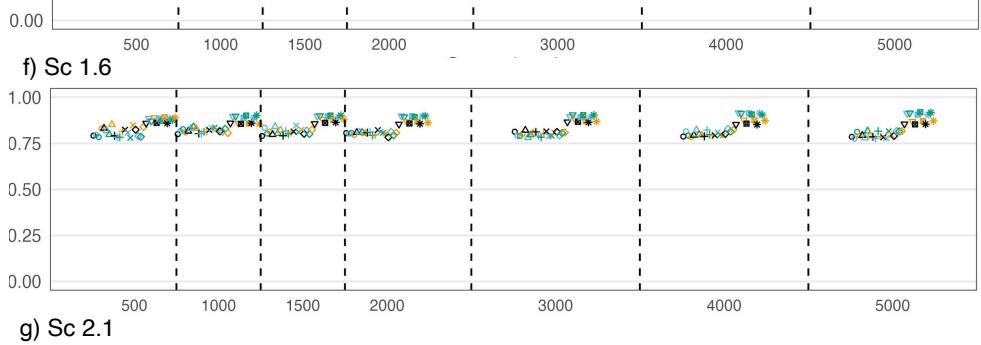
b) Sc 1.2



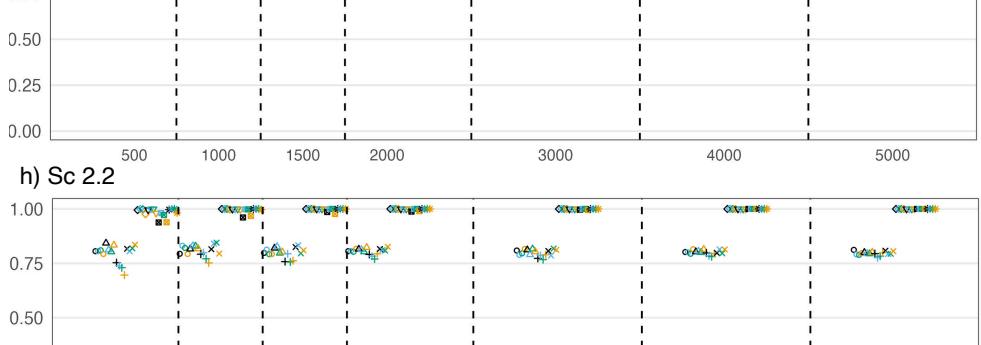
c) Sc 1.3



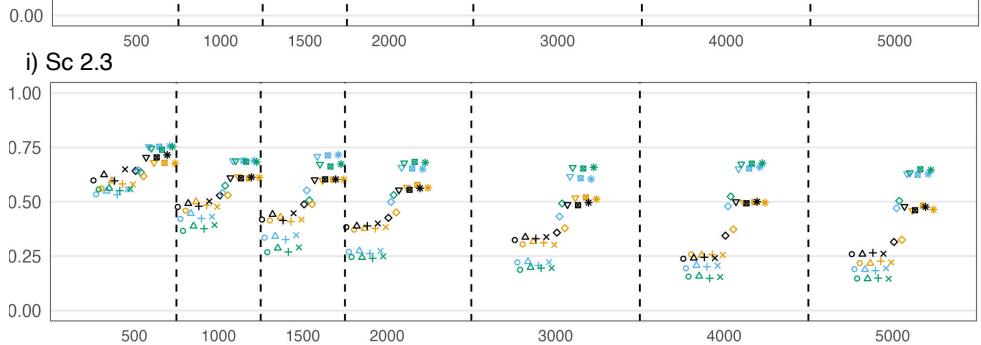
d) Sc 1.4



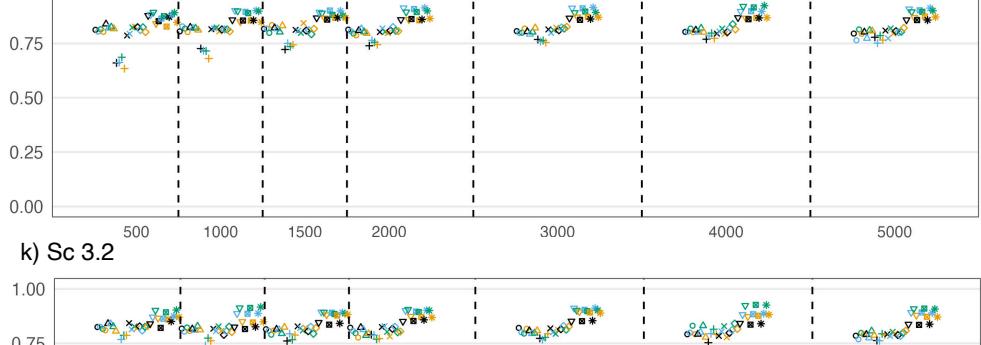
e) Sc 1.5



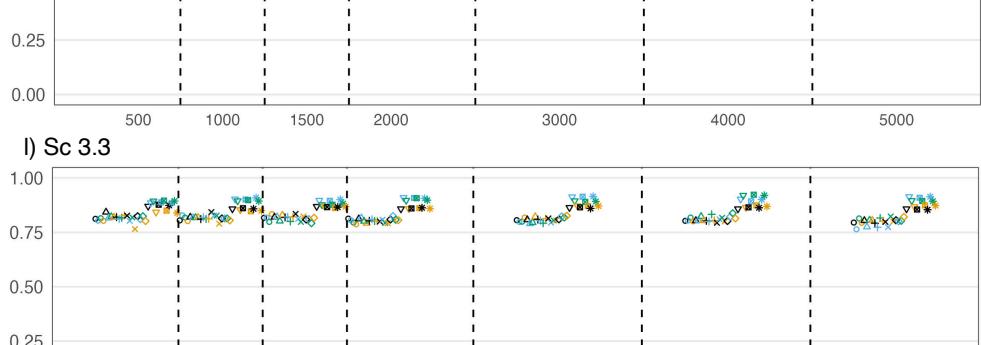
f) Sc 1.6



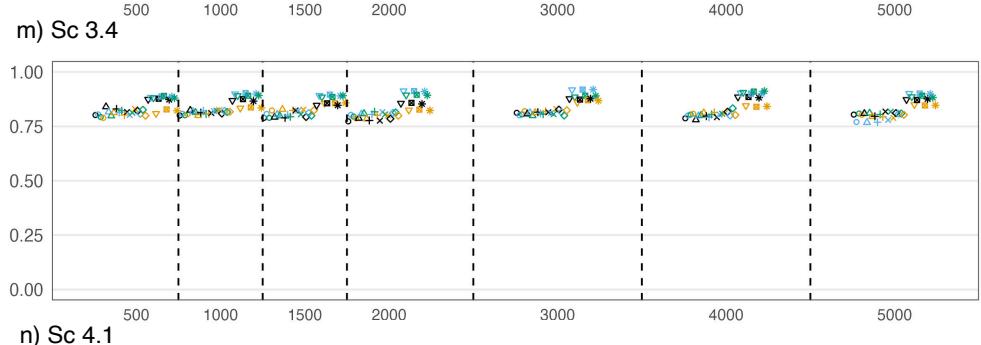
g) Sc 2.1



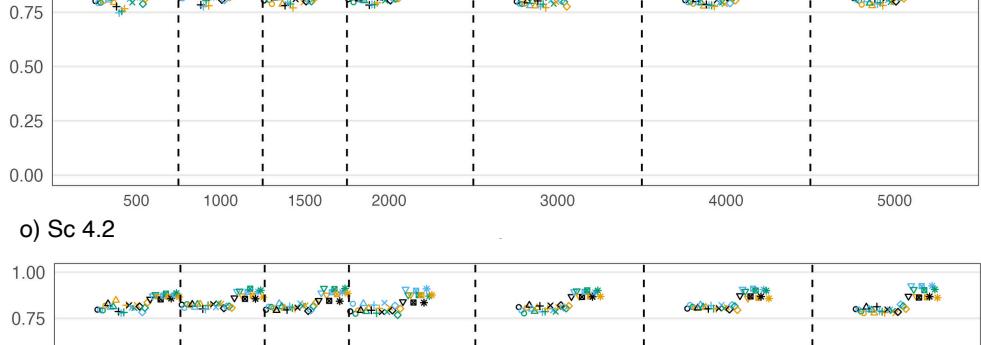
h) Sc 2.2



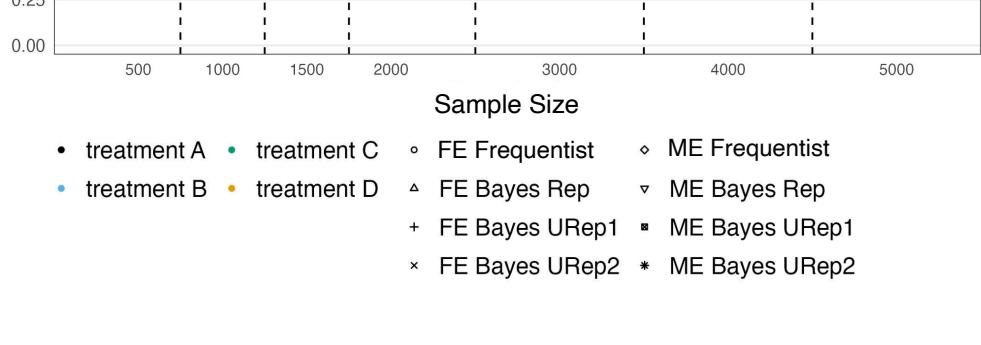
i) Sc 2.3



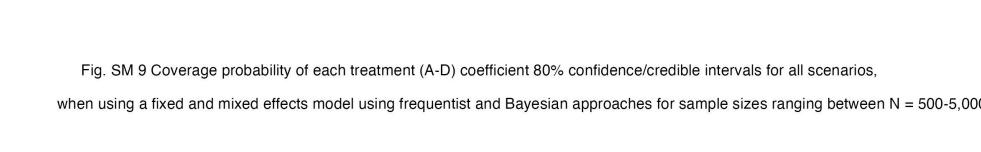
j) Sc 3.1



k) Sc 3.2



l) Sc 3.3



m) Sc 3.4



n) Sc 4.1



o) Sc 4.2



Sample Size

- treatment A
- treatment C
- treatment B
- treatment D
- FE Frequentist
- △ FE Bayes Rep
- + FE Bayes URep1
- × FE Bayes URep2
- ◊ ME Frequentist
- ▽ ME Bayes Rep
- ME Bayes URep1
- \* ME Bayes URep2

Fig. SM 9 Coverage probability of each treatment (A-D) coefficient 80% confidence/credible intervals for all scenarios,

when using a fixed and mixed effects model using frequentist and Bayesian approaches for sample sizes ranging between N = 500-5,000.