random\_X\_and\_structured\_Beta 0.7 0.6 0.75 0.75 0.6 observed 0.5 0.50 0.50 0.4 0.5 0.25 -0.25 0.3 -300 0.025 600 1200 2400 100 200 500 1000 2000 0.05 0.1 0.2 0.4 4800 Beta\_FPR 0.72 -0.72 -0.8 0.68 -0.8 0.71 ORC fine 0.70 -0.6 0.6 0.60 -0.69 0.4 0.4 0.56 -0.4 300 0.025 1200 4800 100 2000 0.05 0.2 600 2400 200 500 1000 20 40 60 80 0.1 batch\_effect Ν S

method → IBMR\_int -△· IBMR\_no\_Gamma → subset -× relabel

random\_X\_and\_structured\_Beta 4100 -3900 -3800 0.025 0.05 0.1 0.2 0.4 3750 -ORC\_fine 

Beta\_SSE

0.025

0.05

0.1

batch\_effect

0.2

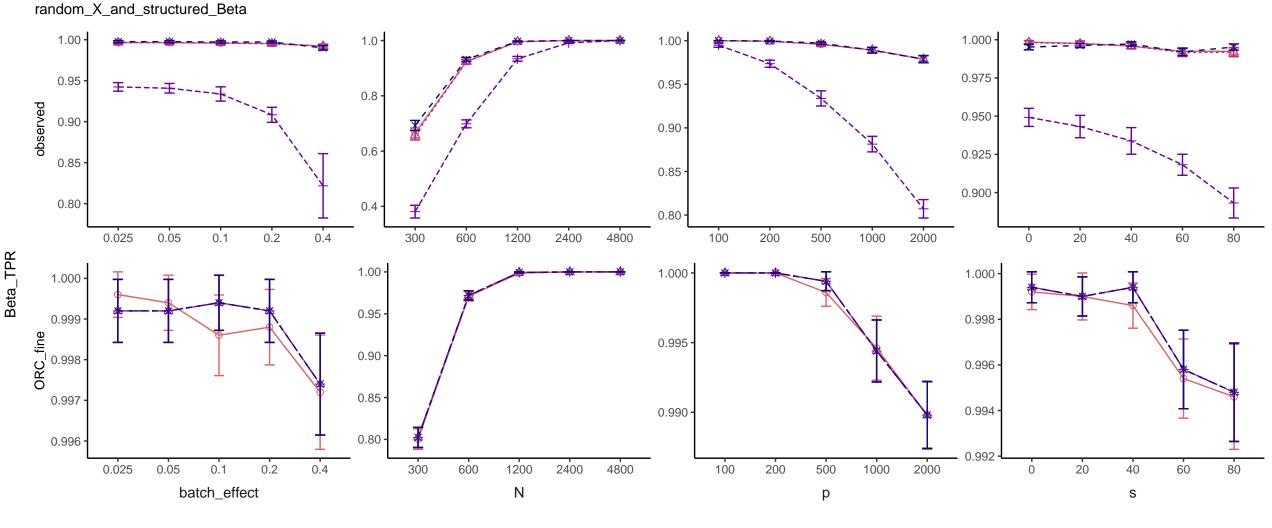
method → IBMR\_int -△· IBMR\_no\_Gamma +· subset -× relabel

р

S

0.4

Ν

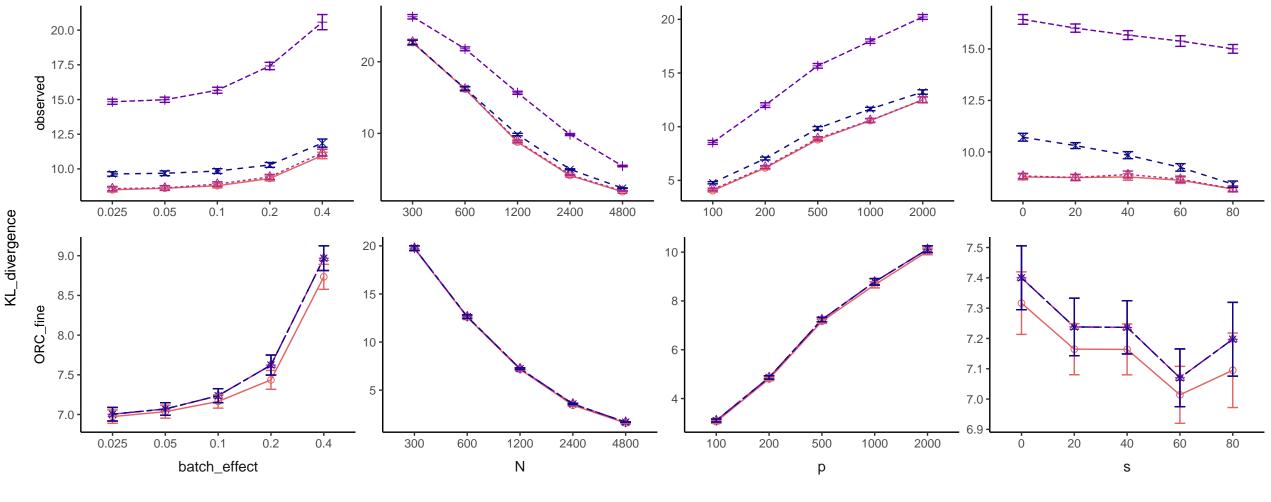


method → IBMR\_int -△· IBMR\_no\_Gamma +· subset -× relabel

random\_X\_and\_structured\_Beta 0.8 0.65 0.7 0.8 -0.60 0.7 0.6 observed 0.6 0.55 0.5 0.50 0.4 0.5 0.45 -0.025 300 1200 2400 4800 100 500 0.2 600 200 1000 2000 0.05 0.7 error 0.43 -0.45 0.43 0.6 0.42 -OBC\_fine 0.41 0.5 0.40 0.42 0.4 0.41 0.35 -0.3 0.40 0.40 -0.2 0.30 0.025 100 2000 0.05 0.4 300 1200 4800 500 0.2 600 2400 200 1000 40 0.1 20 60 80 batch\_effect Ν р S

method → IBMR\_int -△· IBMR\_no\_Gamma → subset -× relabel

random\_X\_and\_structured\_Beta



method → IBMR\_int -△· IBMR\_no\_Gamma +· subset -× relabel