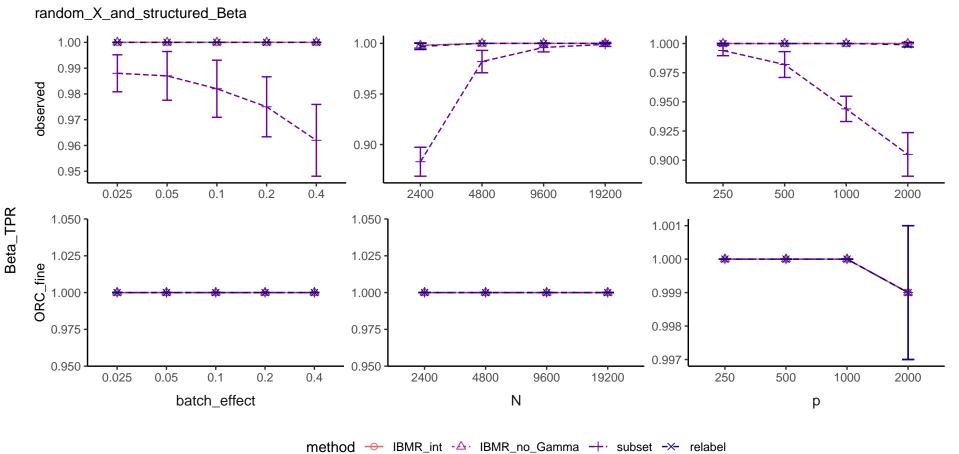


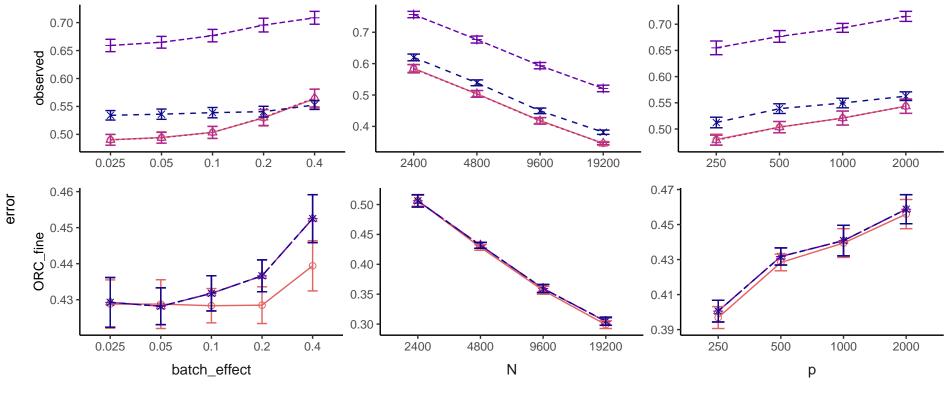
method → IBMR\_int -△· IBMR\_no\_Gamma + · subset -× relabel

random\_X\_and\_structured\_Beta 3000 -3000 -3000 -2750 payaerved 2500 2500 2500 -2500 2500 2000 -2250 2250 1500 2000 0.2 0.4 0.025 0.1 4800 9600 250 1000 2000 0.05 2400 500 19200 Beta\_SSE 2500 -2400 2300 ORC 2300 2000 -2100 1500 -2100 1900 -2000 0.2 0.4 4800 9600 250 500 1000 2400 19200 2000 0.025 0.05 0.1 batch\_effect Ν р

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



random\_X\_and\_structured\_Beta



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

random\_X\_and\_structured\_Beta 10 · 10 -9 8 observed 6 6 2400 0.2 0.4 4800 9600 1000 2000 500 0.025 0.05 0.1 19200 250 KL\_divergence 3.5 -3.0 ORC Line 3.0 2.5 3 -2.5 2.0 1.5 -2.0 1000 0.2 0.4 2400 250 500 2000 0.025 0.1 4800 9600 19200 0.05 batch\_effect Ν p

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