random_X_and_structured_Beta 0.6 0.75 0.5 0.4 observed 0.3 0.4 0.50 0.3 -0.25 0.2 0.2 0.025 0.05 0.2 0.4 300 1200 100 500 2000 0.1 600 2400 4800 200 1000 Beta_FPR 0.5 0.75 -0.45 0.5 ORC_fine 0.4 0.50 0.40 0.3 -0.25 -0.35 0.2 0.025 0.4 300 600 100 12 0.05 0.2 1200 2400 4800 200 500 1000 2000 0.1

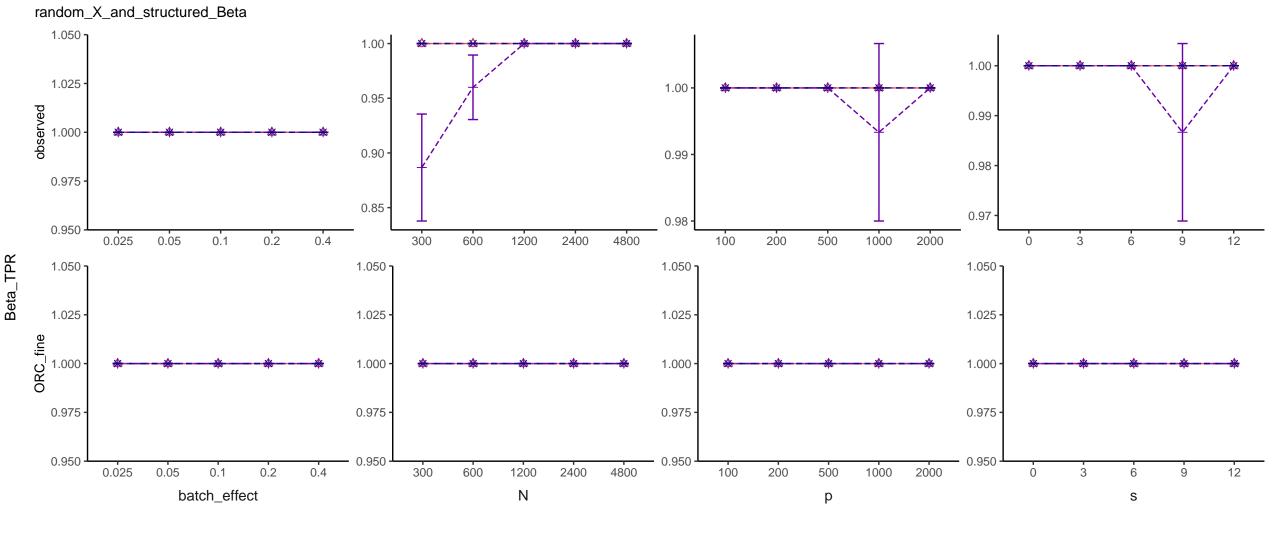
Ν

batch_effect

method → IBMR_int -△· IBMR_no_Gamma +· subset -× relabel

random_X_and_structured_Beta observed 90 60 · 60 -0.025 0.05 0.4 0.2 Beta_SSE 60 -75 -ORC_fine 40 -0.05 0.2 0.4 0.025 0.1 batch_effect Ν

method → IBMR_int -△· IBMR_no_Gamma +· subset -× relabel



method → IBMR_int -△· IBMR_no_Gamma → subset -× relabel

random_X_and_structured_Beta 0.50 -0.50 0.6 0.45 opserved 0.45 0.45 0.5 0.40 0.40 0.4 0.35 -0.35 0.3 0.35 0.025 0.05 1200 100 500 0.1 0.2 300 600 2400 4800 200 1000 2000 0.4 0.425 0.50 -0.40 0.38 0.45 -0.400 ORC_fine 0.37 0.40 0.36 0.375 0.35 0.35 0.350 -

error

0.34 -

0.025

0.05

0.1

batch_effect

0.30

300

600

1200

Ν

0.2

0.4

method → IBMR_int -△· IBMR_no_Gamma +· subset -× relabel

0.34

4800

2400

100

200

500

р

2000

S

1000

random_X_and_structured_Beta 1.25 -1.00 1.00 opserved 0.75 0.75 -0.50 -0.50 -0.25 0.025 300 500 2000 0.2 0.4 600 1200 2400 4800 100 200 1000 KL_divergence 1.25 -0.40 0.6 1.00 -0.38 0.4 ORC_fine 0.5 0.75 0.36 0.50 0.3 0.4 -0.34 0.25 0.32 0.025 300 1200 100 0.05 0.4 4800 2000 0.2 600 2400 200 500 1000 batch_effect Ν р S

method → IBMR_int -△· IBMR_no_Gamma → subset -× relabel