n=500, p=100, s=5 Correlation 0 Correlation 0.35 Correlation 0.7 1.00 0.75 Beta-type 1 0.50 0.25 0.00 1.00 0.75 Beta-type 2 0.50 Relative risk (to null model) 0.25 0.00 1.00 0.75 Beta-type 3 0.50 0.25 0.00 1.00 0.75 Beta-type 5 0.50 0.25 0.00 6.00 0.05 6.00 0.05 0.25 1.22 0.25 0.25 0.05 1.22 1.22 6.00 Signal-to-noise ratio

Method → Best Subset → BOSO – eBIC → Forward stepwise → Lasso → Relaxed lasso