Consistency result

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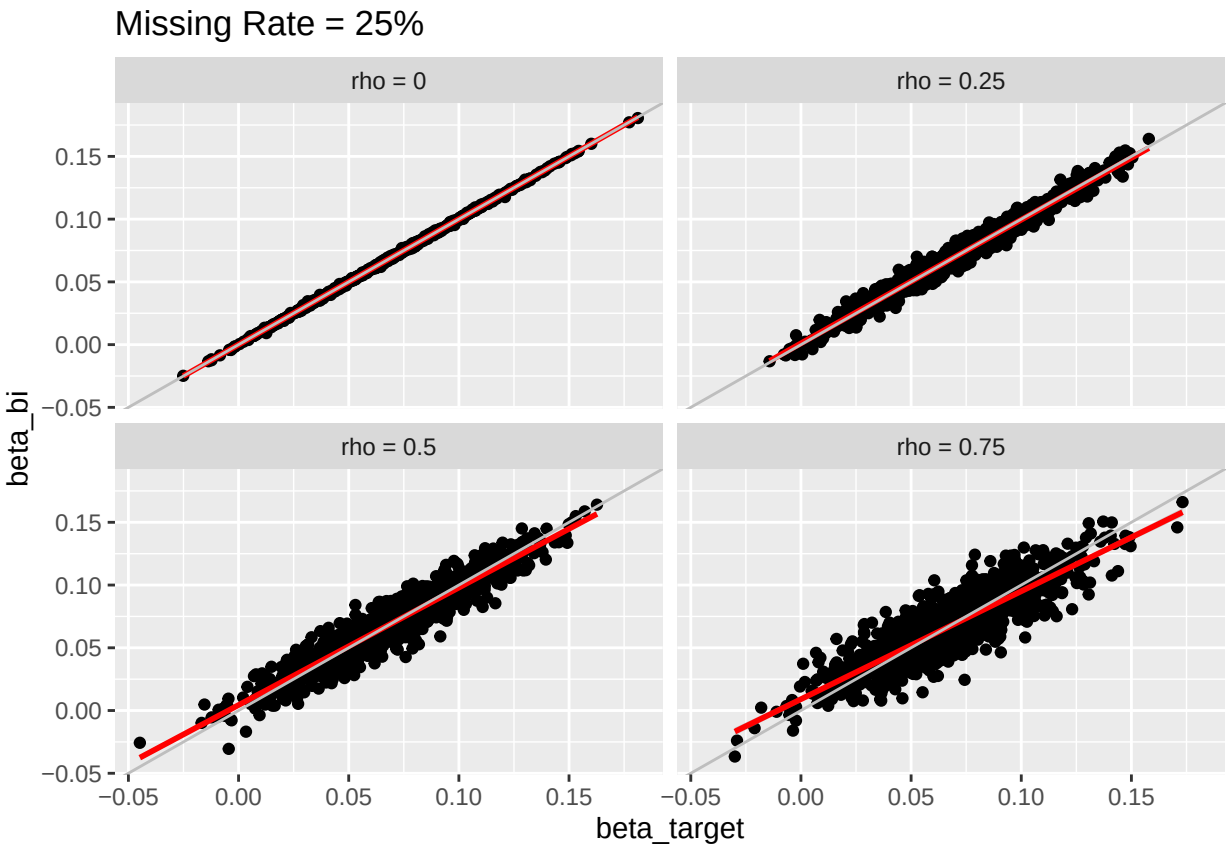
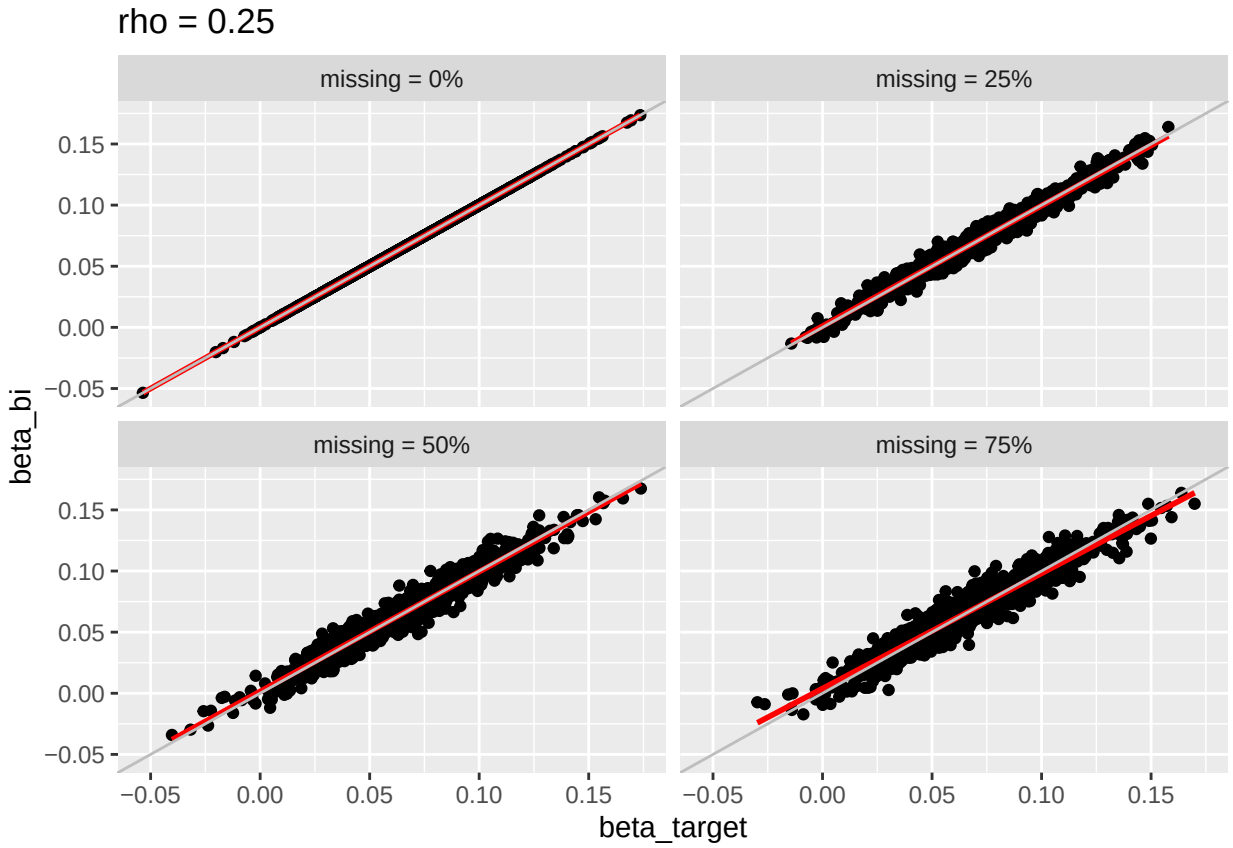
Simulation Set-up

$$\begin{bmatrix} Y_i \\ \hat{Y}_i \end{bmatrix} \mid Z_{ik} \sim N\Big(\begin{bmatrix} \beta_G G + \beta X_i \\ \alpha X_i \end{bmatrix}, \begin{bmatrix} 1 & \rho \\ \rho & 1 \end{bmatrix} \Big)$$

- $G \sim Bin(2, maf)$
- $maf = 0.25, X_i \sim N(0,1)$
- $\alpha = \beta = 0.11$, $\beta_g = 0.11575982$
- missing rate $\in \{0, 0.25, 0.5, 0.75\}$
- $\rho \in \{0, 0.25, 0.5, 0.75\}$
- Number of complete cases $= 10^3$.

Main Figures

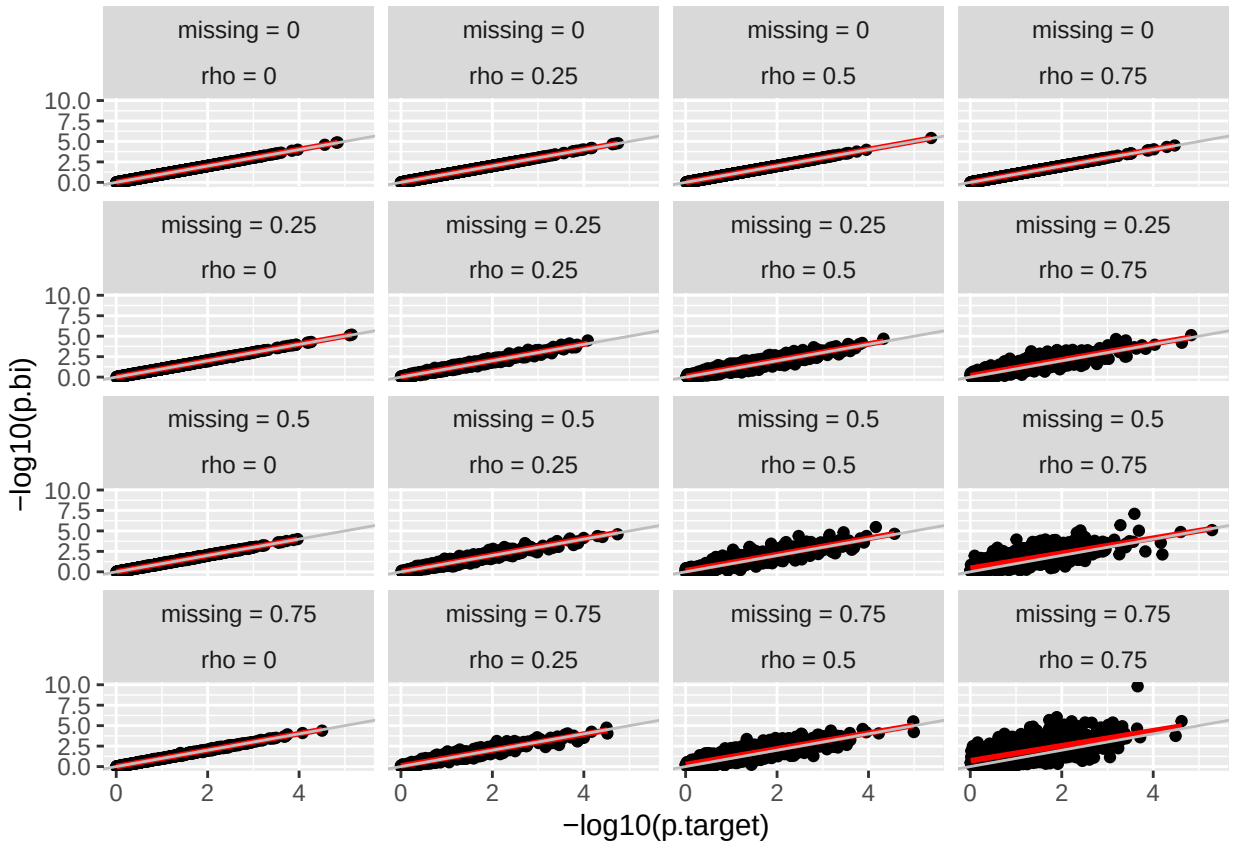




Supplementary Figs/Tables

Table 1: Bivariate Estimation

	missing	rho	beta_g	point est	se	emperical se
65	0.00	0.00	0.1157598	0.0697191	0.0397092	0.0309110
66	0.25	0.00	0.1157598	0.0694879	0.0397151	0.0307663
67	0.50	0.00	0.1157598	0.0695181	0.0397127	0.0297711
68	0.75	0.00	0.1157598	0.0696430	0.0397014	0.0309347
69	0.00	0.25	0.1157598	0.0686581	0.0397103	0.0318338
70	0.25	0.25	0.1157598	0.0691605	0.0393008	0.0312436
71	0.50	0.25	0.1157598	0.0694455	0.0390990	0.0315717
72	0.75	0.25	0.1157598	0.0684193	0.0388008	0.0303511
73	0.00	0.50	0.1157598	0.0681583	0.0396936	0.0314101
74	0.25	0.50	0.1157598	0.0686685	0.0383947	0.0313101
75	0.50	0.50	0.1157598	0.0683728	0.0371665	0.0312167
76	0.75	0.50	0.1157598	0.0693495	0.0358030	0.0291662
77	0.00	0.75	0.1157598	0.0685038	0.0397165	0.0302826
78	0.25	0.75	0.1157598	0.0676915	0.0368032	0.0296063
79	0.50	0.75	0.1157598	0.0685051	0.0336568	0.0279384
80	0.75	0.75	0.1157598	0.0693219	0.0302865	0.0294390


missing = 0
rho = 0
missing = 0
rho = 0.25
missing = 0
rho = 0.5
missing = 0
rho = 0.75
missing = 0.25
rho = 0
missing = 0.25
rho = 0.25
missing = 0.25
rho = 0.5
missing = 0.25
rho = 0.75
missing = 0.5
rho = 0
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rho = 0.5
missing = 0.5
rho = 0.75
missing = 0.75
rho = 0
missing = 0.75
rho = 0.25
missing = 0.75
rho = 0.5
missing = 0.75
rho = 0.75
10.0
7.5
5.0
2.5
0.0
0
2
4
−log10(p.bi)
−log10(p.target)