

S1 Table. Differences between the seven resampling methods compared in the simulation studies.

Method	Feature			
	Binary trait replicate?	Trait variance is function of mean?	Resampling accounts for correlation in \mathbf{Y} ?	Resampling accounts for correlation due to parameter estimation?
BRASS	—	✓	✓	✓
BRASS _{mod}	✓	✓	✓	✓
LogMM-PQL	✓	✓	✓	—
MVNpermute	—	—	✓	✓
MVNpermute _{mod}	✓	—	✓	✓
Naive	—	—	—	—
Naive _{mod}	✓	—	—	—

Check marks (✓) indicate that the method incorporates the specified feature.