

Scenario	Method	$\hat{\beta}_1$	$\hat{\beta}_2$	$\hat{\beta}_3$	$\hat{\beta}_4$
1	glmmlasso	1	1	0	0
1		(0.91,1.06)	(0.93,1.06)	(0,0)	(0,0)
1	lmm	0.8	0.8	0	0
1		(0.48,0.92)	(0.5,0.93)	(0,0)	(0,0)
1	lmmlasso	1	1	0	0
1		(0.92,1.07)	(0.93,1.06)	(-0.07,0.07)	(0,0)
1	penlme	1	1	0	0
1		(0.88,1.04)	(0.91,1.05)	(0,0)	(0,0)
1	scad	1	1	0	0
1		(0.9,1.13)	(0.89,1.09)	(0,0)	(0,0)
2	glmmlasso	1	1	0	0
2		(0.98,1.03)	(0.97,1.03)	(0,0)	(0,0)
2	lmm	1	1	0	0
2		(0.93,1)	(0.92,1)	(0,0)	(0,0)
2	lmmlasso	1	1	0	0
2		(0.98,1.03)	(0.97,1.03)	(-0.02,0.03)	(0,0)
2	penlme	1	1	0	0
2		(0.93,1)	(0.93,0.99)	(0,0)	(0,0)
2	scad	1	1	0	0
2		(0.97,1.03)	(0.96,1.03)	(0,0)	(0,0)
3	lmm	0.8	0	0.9	0
3		(0.56,0.96)	(0,0.01)	(0.86,1.01)	(0,0)
3	lmmlasso	1	0	1	0
3		(0.82,1.19)	(-0.09,0.11)	(0.95,1.06)	(-0.05,0.06)
3	penlme	0	0	0.8	0
3		(0,0.42)	(0,0)	(0.75,0.89)	(0,0)
3	scad	1	0	1	0
3		(0.74,1.17)	(0,0)	(0.9,1.09)	(0,0)
4	lmm	0.2	0.2	0.6	0
4		(0,0.46)	(0,0.49)	(0.35,0.84)	(0,0)
4	lmmlasso	1	1	0	0
4		(0.98,1.03)	(0.97,1.03)	(-0.01,0.02)	(0,0)
4	penlme	0.9	0.9	0	0
4		(0.4,0.97)	(0.52,0.99)	(0,1.07)	(0,0)