Simulations

Michael Seo

16 August 2019

## Simulation 1

## false em mse true em mse treatment mse continuous EM se  
## glmm null 0.0000000000 0.010000000 0.01411028 NaN  
## glmm full 0.0029088463 0.003309855 0.01120842 0.05821760  
## naive step 0.0017782609 0.005088609 0.01129592 0.05392236  
## naive lasso 0.0008840318 0.003653619 0.01129177 0.05167293  
## glmmLasso 0.0029118062 0.003310906 0.01119812 NaN  
## binary EM se treatment se  
## glmm null NaN 0.11860188  
## glmm full NaN 0.10091387  
## naive step NaN 0.05307056  
## naive lasso NaN 0.05342657  
## glmmLasso NaN NaN

## false em mse true em mse treatment mse continuous EM se  
## bayesLASSO 0.001345023 0.002387761 0.01120855 0.05178354  
## SSVS 0.000948006 0.003488781 0.01122300 0.05552384  
## binary EM se treatment se  
## bayesLASSO NaN 0.1837335  
## SSVS NaN 0.1828161

## Simulation 2

## false em mse true em mse treatment mse continuous EM se  
## glmm null 0.0000000000 0.250000000 0.01511758 NaN  
## glmm full 0.0029088463 0.003309855 0.01120842 0.05821760  
## naive step 0.0017288742 0.003217396 0.01130093 0.05423671  
## naive lasso 0.0009504213 0.004174348 0.01129176 0.05804568  
## glmmLasso 0.0029118062 0.003310906 0.01119812 NaN  
## binary EM se treatment se  
## glmm null NaN 0.12775082  
## glmm full NaN 0.10091388  
## naive step NaN 0.05307755  
## naive lasso NaN 0.05344512  
## glmmLasso NaN NaN

## false em mse true em mse treatment mse continuous EM se  
## bayesLASSO 0.0016620322 0.003337717 0.01121045 0.05695370  
## SSVS 0.0009616329 0.003207989 0.01126809 0.05660952  
## binary EM se treatment se  
## bayesLASSO NaN 0.1841207  
## SSVS NaN 0.1825640

## Simulation 3

## false em mse true em mse treatment mse continuous EM se  
## glmm null 0.0000000000 0.025000000 0.01713921 NaN  
## glmm full 0.0031974821 0.003371513 0.01155221 0.05915827  
## naive step 0.0019709600 0.004199241 0.01165930 0.05423029  
## naive lasso 0.0005789478 0.003863200 0.01159524 0.05048118  
## glmmLasso 0.0032129058 0.003381281 0.01157903 NaN  
## binary EM se treatment se  
## glmm null NaN 0.13528104  
## glmm full 0.05388618 0.10048638  
## naive step 0.05336411 0.05311177  
## naive lasso 0.05493702 0.05366728  
## glmmLasso NaN NaN

## false em mse true em mse treatment mse continuous EM se  
## bayesLASSO 0.0014189918 0.002829213 0.01156732 0.05270655  
## SSVS 0.0008252042 0.003977851 0.01154606 0.05677707  
## binary EM se treatment se  
## bayesLASSO 0.05371397 0.1830735  
## SSVS 0.05689462 0.1829337

## Simulation 4

## false em mse true em mse treatment mse continuous EM se  
## glmm null 0.0000000000 0.625000000 0.02450671 NaN  
## glmm full 0.0031974821 0.003371513 0.01155221 0.05915827  
## naive step 0.0019349526 0.003208368 0.01166123 0.05450448  
## naive lasso 0.0006130136 0.004235553 0.01159427 0.05745862  
## glmmLasso 0.0032129058 0.003381281 0.01157903 NaN  
## binary EM se treatment se  
## glmm null NaN 0.18001824  
## glmm full 0.05388618 0.10048637  
## naive step 0.05338785 0.05311882  
## naive lasso 0.05519662 0.05368237  
## glmmLasso NaN NaN

## false em mse true em mse treatment mse continuous EM se  
## bayesLASSO 0.0018895670 0.003309189 0.01153779 0.05799655  
## SSVS 0.0009790495 0.003164857 0.01155250 0.05656208  
## binary EM se treatment se  
## bayesLASSO 0.05410444 0.1824242  
## SSVS 0.05332630 0.1828525