Simulations

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## Simulation 1

## false em mse true em mse treatment mse  
## glmm oracle 0.000000e+00 0.002907829 0.01154284  
## glmm full 3.197482e-03 0.003371513 0.01155221  
## naive step 1.974096e-03 0.004902805 0.01165850  
## naive lasso 6.403569e-04 0.005473430 0.01163829  
## ridge 6.236684e-04 0.005096310 0.01164020  
## glmmLasso 3.179574e-05 0.008693812 0.09286987  
## patient specific trt mse continuous EM se binary EM se  
## glmm oracle 0.008720226 0.05302434 0.05287569  
## glmm full 0.020173163 0.05915827 0.05388618  
## naive step 0.017593094 0.05421748 0.05318570  
## naive lasso 0.013651118 NaN NaN  
## ridge 0.013172092 NaN NaN  
## glmmLasso 0.055435838 NaN NaN  
## treatment se  
## glmm oracle 0.10055948  
## glmm full 0.10048636  
## naive step 0.05310695  
## naive lasso NaN  
## ridge NaN  
## glmmLasso NaN

## false em mse true em mse treatment mse patient specific trt mse  
## bayesLASSO 0.0002401184 0.005845589 0.01158522 0.01246918  
## SSVS 0.0005106872 0.004600497 0.01156404 0.01223118  
## continuous EM se binary EM se treatment se  
## bayesLASSO 0.03526094 0.03571031 0.1573486  
## SSVS 0.04639494 0.04612232 0.1579950

## Simulation 2

## false em mse true em mse treatment mse  
## glmm oracle 0.000000e+00 0.002907829 0.01154284  
## glmm full 3.197482e-03 0.003371513 0.01155221  
## naive step 1.934953e-03 0.003207245 0.01166078  
## naive lasso 9.128853e-04 0.005720673 0.01164194  
## ridge 2.879898e-03 0.005259184 0.01164225  
## glmmLasso 5.895511e-05 0.262565633 0.11294478  
## patient specific trt mse continuous EM se binary EM se  
## glmm oracle 0.008720226 0.05302434 0.05287569  
## glmm full 0.020173163 0.05915827 0.05388618  
## naive step 0.015956222 0.05450465 0.05338846  
## naive lasso 0.014758842 NaN NaN  
## ridge 0.020875015 NaN NaN  
## glmmLasso 0.315819700 NaN NaN  
## treatment se  
## glmm oracle 0.10055940  
## glmm full 0.10048638  
## naive step 0.05311881  
## naive lasso NaN  
## ridge NaN  
## glmmLasso NaN

## false em mse true em mse treatment mse patient specific trt mse  
## bayesLASSO 0.002136513 0.003651211 0.01162494 0.01697848  
## SSVS 0.001318284 0.003191480 0.01158870 0.01380434  
## continuous EM se binary EM se treatment se  
## bayesLASSO 0.05893291 0.05440932 0.1576081  
## SSVS 0.05710974 0.05380942 0.1573218

## Simulation 3

## false em mse true em mse treatment mse  
## glmm oracle 0.0000000000 0.080559049 0.09144639  
## glmm full 0.0935055730 0.104800820 0.13458594  
## naive step 0.0537982477 0.067899919 0.11379982  
## naive lasso 0.0070040261 0.016904500 0.09846033  
## ridge 0.0000614224 0.010090958 0.09653667  
## glmmLasso 0.0006117674 0.008276589 0.29239727  
## patient specific trt mse continuous EM se binary EM se  
## glmm oracle 0.12598189 0.2710886 0.2704668  
## glmm full 0.49616810 0.3100422 0.2860634  
## naive step 0.31763942 0.2849487 0.2767101  
## naive lasso 0.09282225 NaN NaN  
## ridge 0.05908480 NaN NaN  
## glmmLasso 0.15780988 NaN NaN  
## treatment se  
## glmm oracle 0.2774924  
## glmm full 0.3034370  
## naive step 0.2747479  
## naive lasso NaN  
## ridge NaN  
## glmmLasso NaN

## false em mse true em mse treatment mse patient specific trt mse  
## bayesLASSO 0.002679743 0.01065726 0.1379261 0.09092916  
## SSVS 0.012595912 0.02110791 0.1466128 0.14445534  
## continuous EM se binary EM se treatment se  
## bayesLASSO 0.1079070 0.1074840 0.4033411  
## SSVS 0.1643878 0.1608999 0.4094638

## Simulation 4

## false em mse true em mse treatment mse  
## glmm oracle 0.000000e+00 0.1053531 0.1057547  
## glmm full 1.124905e-01 0.1461541 0.1478281  
## naive step 6.567738e-02 0.1648199 0.1409389  
## naive lasso 1.767998e-02 0.2458961 0.1709949  
## ridge 1.000080e-08 0.6796823 0.2684106  
## glmmLasso 7.198114e-05 0.5205826 0.2793064  
## patient specific trt mse continuous EM se binary EM se  
## glmm oracle 0.1577067 0.3089446 0.3088448  
## glmm full 0.6163854 0.3537122 0.3366512  
## naive step 0.4676063 0.3207950 0.3145547  
## naive lasso 0.3937709 NaN NaN  
## ridge 0.8142744 NaN NaN  
## glmmLasso 0.6612961 NaN NaN  
## treatment se  
## glmm oracle 0.3044232  
## glmm full 0.3312640  
## naive step 0.3061246  
## naive lasso NaN  
## ridge NaN  
## glmmLasso NaN

## false em mse true em mse treatment mse patient specific trt mse  
## bayesLASSO 0.01730115 0.3048229 0.2987360 0.5162586  
## SSVS 0.03111141 0.1952888 0.2522788 0.4361960  
## continuous EM se binary EM se treatment se  
## bayesLASSO 0.2403162 0.3188172 0.4419760  
## SSVS 0.3150639 0.3610148 0.4515056