#### case1

data: E with 2 continuous variables and 2 discrete variables

GxE: g[,1]\*e[,1],g[,3]\*e[,2],g[,5]\*e[,3],g[,8]\*e[,4],g[,15]\*e[,1],g[,18]\*e[,2],

g[,24]\*e[,4],g[,25]\*e[,1],g[,35]\*e[,2],g[,36]\*e[,4],g[,40]\*e[,1],g[,43]\*e[,2]

n=200, p=50, seq(0,1,by=0.01), rep=30

coefficients: (0.1, 0.5)

error1: n(0,1)

	BL	BLSS	LADBL	LADBLSS
AUC	0.8307	0.8503	0.8205	0.8383
SD of AUC	0.0075	0.0159	0.0068	0.0141

### error2: t(2)

	BL	BLSS	LADBL	LADBLSS
AUC	0.7666	0.7792	0.8003	0.8154
SD of AUC	0.0112	0.0265	0.0089	0.0116

## error3: laplace(0,2)

	BL	BLSS	LADBL	LADBLSS
AUC	0.7607	0.7754	0.7694	0.7801
SD of AUC	0.0070	0.0222	0.0094	0.0139

	BL	BLSS	LADBL	LADBLSS
AUC	0.7863	0.8090	0.8080	0.8268
SD of AUC	0.0063	0.0192	0.0079	0.0105

n=200, p=500, seq(0,1,by=0.01), rep=30

coefficients: (0.1, 0.5)

error3: laplace(0,2)

	BL	BLSS	LADBL	LADBLSS
AUC	0.7644	0.8186	0.7731	0.8246
SD of AUC	0.0091	0.0297	0.0062	0.0171

error4: lognorm(0,1)

	BL	BLSS	LADBL	LADBLSS
AUC	0.7969	0.8513	0.8199	0.8673
SD of AUC	0.0082	0.0238	0.0074	0.0132

n=200, p=1000, seq(0,1,by=0.01), rep=30

coefficients: (0.1, 0.5)

error3: laplace(0,2)

	BL	BLSS	LADBL	LADBLSS
AUC	0.7664	0.8124	0.7758	0.8248
SD of AUC	0.0069	0.0317	0.0074	0.0172

	BL	BLSS	LADBL	LADBLSS
AUC	0.7959	0.8390	0.8176	0.8671
SD of AUC	0.0077	0.0231	0.0060	0.0154

case2

data: E with 4 continuous variables

GxE: g[,1]\*e[,1],g[,1]\*e[,2],g[,1]\*e[,3],g[,2]\*e[,4],g[,3]\*e[,1],g[,3]\*e[,2],g[,4]\*e[,4],g[,5]\*e[,1],g[,5]\*e[,2],g[,6]\*e[,4],g[,7]\*e[,1],g[,7]\*e[,2]

n=200, p=50, seq(0,1,by=0.01), rep=30

coefficients: (0.1, 0.5)

error1: n(0,1)

	BL	BLSS	LADBL	LADBLSS
AUC	0.9091	0.9759	0.9164	0.9744
SD of AUC	0.0081	0.0016	0.0067	0.0033

error2: t(2)

	BL	BLSS	LADBL	LADBLSS
AUC	0.8233	0.9364	0.8898	0.9673
SD of AUC	0.0128	0.0159	0.0074	0.0035

error3: laplace(0,2)

	BL	BLSS	LADBL	LADBLSS
AUC	0.8149	0.9424	0.8389	0.9436
SD of AUC	0.0119	0.0119	0.0091	0.0096

	BL	BLSS	LADBL	LADBLSS
AUC	0.8575	0.9561	0.9069	0.9713
SD of AUC	0.0087	0.0154	0.0079	0.0042

n=200, p=500, seq(0,1,by=0.01), rep=30

coefficients: (0.1, 0.5)

error3: laplace(0,2)

	BL	BLSS	LADBL	LADBLSS
AUC	0.8202	0.9598	0.8450	0.9622
SD of AUC	0.0083	0.0125	0.0092	0.0055

error4: lognorm(0,1)

	BL	BLSS	LADBL	LADBLSS
AUC	0.8662	0.9762	0.9160	0.9881
SD of AUC	0.0083	0.0079	0.0064	0.0032

n=200, p=1000, seq(0,1,by=0.01), rep=30

coefficients: (0.1, 0.5)

error3: laplace(0,2)

	BL	BLSS	LADBL	LADBLSS
AUC				
SD of AUC				

	BL	BLSS	LADBL	LADBLSS
AUC				
SD of AUC				

**ROC** curves:

case1

data: E with 2 continuous variables and 2 discrete variables

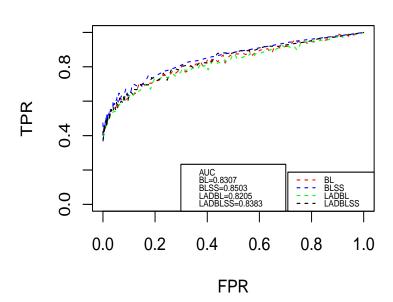
 $\mathsf{GxE} \colon \mathsf{g}[,1] \ast \mathsf{e}[,1], \mathsf{g}[,3] \ast \mathsf{e}[,2], \mathsf{g}[,5] \ast \mathsf{e}[,3], \mathsf{g}[,8] \ast \mathsf{e}[,4], \mathsf{g}[,15] \ast \mathsf{e}[,1], \mathsf{g}[,18] \ast \mathsf{e}[,2],$ 

g[,24]\*e[,4],g[,25]\*e[,1],g[,35]\*e[,2],g[,36]\*e[,4],g[,40]\*e[,1],g[,43]\*e[,2]

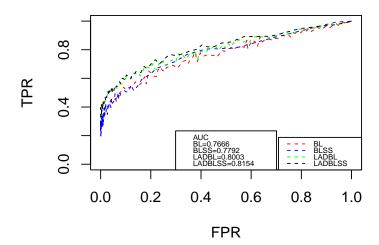
n=200, p=50, seq(0,1,by=0.01), rep=30

coefficients: (0.1, 0.5)

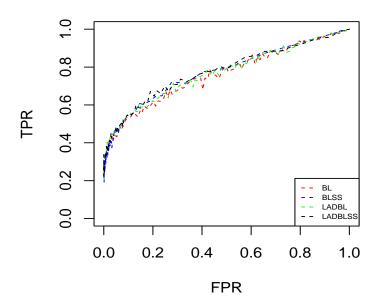
# error=n(0,1)



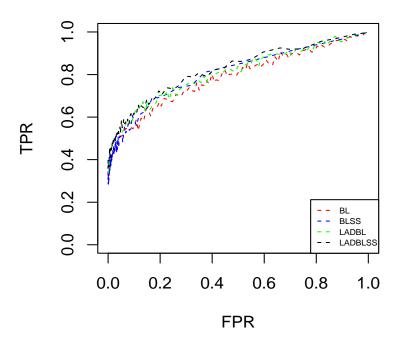
## error=t(2)



## error=rlaplace(0,2)



# error=rlnorm(n)

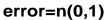


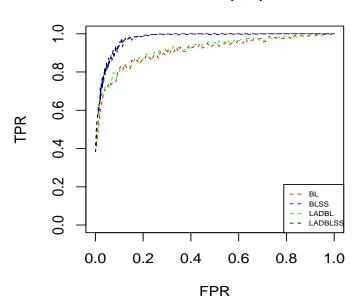
case2

data: E with 4 continuous variables

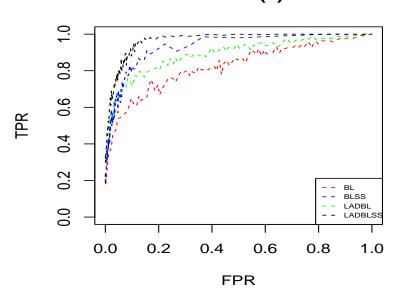
GxE: g[,1]\*e[,1],g[,1]\*e[,2],g[,1]\*e[,3],g[,2]\*e[,4],g[,3]\*e[,1],g[,3]\*e[,2],g[,4]\*e[,4],g[,5]\*e[,1],g[,5]\*e[,2],g[,6]\*e[,4],g[,7]\*e[,1],g[,7]\*e[,2]

n=200, p=50, seq(0,1,by=0.01), rep=30 coefficients: (0.1, 0.5)

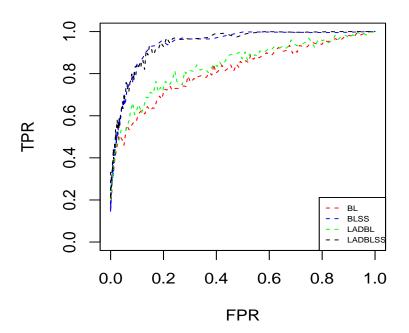




### error=t(2)



# error=laplace(0,2)



# error=Inorm(0,1)

