

**SHIRE May 24, 2009**

No. factors = 25;  $q_{me} = 0.1$ ; Active Eff. Dist  $N(6, 1)$ ; Inactive Eff. Dist  $N(0, 1)$ ;  
Simulation size 500

Averages: for all effects

	Sens	Spec	sPPV	sNPV	FDR	FNPV	Type I	Type II	MSTr	MSEst
DS	0.2541	0.9343	0.1065	0.9713	0.8935	0.0287	0.0657	0.7459	11.104	23.068
SCAD	0.1523	0.9319	0.0646	0.9679	0.9354	0.0321	0.0681	0.8477	11.104	22.798
LASSO	0.1416	0.9815	0.1753	0.9690	0.8247	0.0310	0.0185	0.8584	11.104	7.040
LARS	0.1416	0.9815	0.1752	0.9690	0.8248	0.0310	0.0185	0.8584	11.104	7.046
GSDS	0.8830	0.7487	0.1146	0.9946	0.8854	0.0054	0.2513	0.1170	11.104	88.762
GSR2-r	0.2460	0.9965	0.6800	0.9717	0.3200	0.0283	0.0035	0.7540	11.104	3.098
GSR2	0.2434	0.9964	0.6752	0.9718	0.3248	0.0282	0.0036	0.7566	11.104	3.134

No. factors = 25;  $q_{me} = 0.1$ ; Active Eff. Dist  $N(6, 1)$ ; Inactive Eff. Dist  $N(0, 1)$ ;  
Simulation size 500

Averages: for main effects

	Sens	Spec	sPPV	sNPV	FDR	FNPV	Type I	Type II	MSTr	MSEst
DS	0.2194	0.9470	0.2983	0.9157	0.7017	0.0843	0.0530	0.7806	2.448	1.674
SCAD	0.1324	0.9400	0.1829	0.9074	0.8171	0.0926	0.0600	0.8676	2.448	1.636
LASSO	0.1225	0.9851	0.4177	0.9101	0.5823	0.0899	0.0149	0.8775	2.448	0.584
LARS	0.1225	0.9851	0.4177	0.9101	0.5823	0.0899	0.0149	0.8775	2.448	0.586
GSDS	0.9935	0.6960	0.2704	0.9987	0.7296	0.0013	0.3040	0.0065	2.448	9.322
GSR2-r	0.4997	0.9515	0.5224	0.9376	0.4776	0.0624	0.0485	0.5003	2.448	2.096
GSR2	0.5001	0.9513	0.5156	0.9382	0.4844	0.0618	0.0487	0.4999	2.448	2.114

No. factors = 25;  $q_{me} = 0.1$ ; Active Eff. Dist  $N(6, 1)$ ; Inactive Eff. Dist  $N(0, 1)$ ;  
Simulation size 500

Averages: for interactions

	Sens	Spec	sPPV	sNPV	FDR	FNPV	Type I	Type II	MSTr	MSEst
DS	0.2617	0.9334	0.0930	0.9760	0.9070	0.0240	0.0666	0.7383	8.656	21.394
SCAD	0.1541	0.9312	0.0543	0.9730	0.9457	0.0270	0.0688	0.8459	8.656	21.162
LASSO	0.1432	0.9812	0.1534	0.9739	0.8466	0.0261	0.0188	0.8568	8.656	6.456
LARS	0.1432	0.9812	0.1534	0.9739	0.8466	0.0261	0.0188	0.8568	8.656	6.460
GSDS	0.8520	0.7529	0.0967	0.9943	0.9033	0.0057	0.2471	0.1480	8.656	79.440
GSR2-r	0.1706	1.0000	0.9853	0.9744	0.0147	0.0256	0.0000	0.8294	8.656	1.002
GSR2	0.1684	1.0000	0.9855	0.9744	0.0145	0.0256	0.0000	0.8316	8.656	1.020

**RIVENDELL May 24, 2009**

No. factors = 25;  $q_{me} = 0.1$ ; Active Eff. Dist  $N(6, 1)$ ; Inactive Eff. Dist  $N(0, 1)$ ;  
Simulation size 500

Averages: for all effects

	Sens	Spec	sPPV	sNPV	FDR	FNPV	Type I	Type II	MSTr	MSEst
DS	0.2653	0.9342	0.1070	0.9724	0.8930	0.0276	0.0658	0.7347	10.796	23.138
SCAD	0.1486	0.9312	0.0622	0.9687	0.9378	0.0313	0.0688	0.8514	10.796	22.962
LASSO	0.1497	0.9815	0.1764	0.9700	0.8236	0.0300	0.0185	0.8503	10.796	7.050
LARS	0.1494	0.9815	0.1759	0.9700	0.8241	0.0300	0.0185	0.8506	10.796	7.050
GSDS	0.8869	0.7495	0.1129	0.9948	0.8871	0.0052	0.2505	0.1131	10.796	88.360
GSR2-r	0.2551	0.9965	0.6860	0.9727	0.3140	0.0273	0.0035	0.7449	10.796	3.084
GSR2	0.2481	0.9966	0.6766	0.9725	0.3234	0.0275	0.0034	0.7519	10.796	3.016

No. factors = 25;  $q_{me} = 0.1$ ; Active Eff. Dist  $N(6, 1)$ ; Inactive Eff. Dist  $N(0, 1)$ ;  
Simulation size 500

Averages: for main effects

	Sens	Spec	sPPV	sNPV	FDR	FNPV	Type I	Type II	MSTr	MSEst
DS	0.2003	0.9449	0.2622	0.9152	0.7378	0.0848	0.0551	0.7997	2.44	1.704
SCAD	0.1303	0.9368	0.1750	0.9073	0.8250	0.0927	0.0632	0.8697	2.44	1.706
LASSO	0.1171	0.9864	0.4489	0.9106	0.5511	0.0894	0.0136	0.8829	2.44	0.560
LARS	0.1165	0.9864	0.4489	0.9105	0.5511	0.0895	0.0136	0.8835	2.44	0.558
GSDS	0.9934	0.6780	0.2586	0.9991	0.7414	0.0009	0.3220	0.0066	2.44	9.732
GSR2-r	0.5117	0.9525	0.5354	0.9395	0.4646	0.0605	0.0475	0.4883	2.44	2.106
GSR2	0.4943	0.9534	0.5261	0.9384	0.4739	0.0616	0.0466	0.5057	2.44	2.056

No. factors = 25;  $q_{me} = 0.1$ ; Active Eff. Dist  $N(6, 1)$ ; Inactive Eff. Dist  $N(0, 1)$ ;  
Simulation size 500

Averages: for interactions

	Sens	Spec	sPPV	sNPV	FDR	FNPV	Type I	Type II	MSTr	MSEst
DS	0.2795	0.9334	0.0942	0.9772	0.9058	0.0228	0.0666	0.7205	8.356	21.434
SCAD	0.1516	0.9308	0.0524	0.9739	0.9476	0.0261	0.0692	0.8484	8.356	21.256
LASSO	0.1527	0.9812	0.1525	0.9749	0.8475	0.0251	0.0188	0.8473	8.356	6.490
LARS	0.1525	0.9811	0.1522	0.9749	0.8478	0.0251	0.0189	0.8475	8.356	6.492
GSDS	0.8566	0.7550	0.0949	0.9945	0.9051	0.0055	0.2450	0.1434	8.356	78.628
GSR2-r	0.1755	1.0000	0.9821	0.9753	0.0179	0.0247	0.0000	0.8245	8.356	0.978
GSR2	0.1733	0.9999	0.9733	0.9752	0.0267	0.0248	0.0001	0.8267	8.356	0.960

**GONDOR May 24, 2009**

No. factors = 25;  $q_{me} = 0.1$ ; Active Eff. Dist  $N(6, 1)$ ; Inactive Eff. Dist  $N(0, 1)$ ;  
Simulation size 500

Averages: for all effects

	Sens	Spec	sPPV	sNPV	FDR	FNPV	Type I	Type II	MSTr	MSEst
DS	0.2553	0.9353	0.1074	0.9707	0.8926	0.0293	0.0647	0.7447	11.288	22.720
SCAD	0.1452	0.9307	0.0656	0.9675	0.9344	0.0325	0.0693	0.8548	11.288	23.202
LASSO	0.1430	0.9816	0.1803	0.9685	0.8197	0.0315	0.0184	0.8570	11.288	7.050
LARS	0.1432	0.9816	0.1806	0.9685	0.8194	0.0315	0.0184	0.8568	11.288	7.050
GSDS	0.8924	0.7501	0.1170	0.9948	0.8830	0.0052	0.2499	0.1076	11.288	88.516
GSR2-r	0.2340	0.9966	0.6784	0.9712	0.3216	0.0288	0.0034	0.7660	11.288	3.108
GSR2	0.2402	0.9966	0.6856	0.9713	0.3144	0.0287	0.0034	0.7598	11.288	3.116

No. factors = 25;  $q_{me} = 0.1$ ; Active Eff. Dist  $N(6, 1)$ ; Inactive Eff. Dist  $N(0, 1)$ ;  
Simulation size 500

Averages: for main effects

	Sens	Spec	sPPV	sNPV	FDR	FNPV	Type I	Type II	MSTr	MSEst
DS	0.2107	0.9490	0.3033	0.9124	0.6967	0.0876	0.0510	0.7893	2.534	1.628
SCAD	0.1250	0.9420	0.1901	0.9045	0.8099	0.0955	0.0580	0.8750	2.534	1.604
LASSO	0.1225	0.9874	0.4738	0.9070	0.5262	0.0930	0.0126	0.8775	2.534	0.538
LARS	0.1236	0.9872	0.4739	0.9070	0.5261	0.0930	0.0128	0.8764	2.534	0.544
GSDS	0.9957	0.6858	0.2722	0.9997	0.7278	0.0003	0.3142	0.0043	2.534	9.626
GSR2-r	0.4832	0.9528	0.5199	0.9357	0.4801	0.0643	0.0472	0.5168	2.534	2.106
GSR2	0.5105	0.9533	0.5347	0.9371	0.4653	0.0629	0.0467	0.4895	2.534	2.128

No. factors = 25;  $q_{me} = 0.1$ ; Active Eff. Dist  $N(6, 1)$ ; Inactive Eff. Dist  $N(0, 1)$ ;  
Simulation size 500

Averages: for interactions

	Sens	Spec	sPPV	sNPV	FDR	FNPV	Type I	Type II	MSTr	MSEst
DS	0.2659	0.9343	0.0927	0.9756	0.9073	0.0244	0.0657	0.7341	8.754	21.092
SCAD	0.1512	0.9299	0.0549	0.9728	0.9451	0.0272	0.0701	0.8488	8.754	21.598
LASSO	0.1497	0.9812	0.1563	0.9736	0.8437	0.0264	0.0188	0.8503	8.754	6.512
LARS	0.1497	0.9812	0.1564	0.9736	0.8436	0.0264	0.0188	0.8503	8.754	6.506
GSDS	0.8616	0.7551	0.0985	0.9944	0.9015	0.0056	0.2449	0.1384	8.754	78.890
GSR2-r	0.1595	1.0000	0.9872	0.9740	0.0128	0.0260	0.0000	0.8405	8.754	1.002
GSR2	0.1602	1.0000	0.9902	0.9740	0.0098	0.0260	0.0000	0.8398	8.754	0.988