Supplementary results on the empirical power of adaptive tests for several samples sizes between $n = 15$ and $n = 800$. For details on the simulation study see the manuscript entitled:

An Efficient Method of Computing Adaptive Tests of Significance and Confidence Intervals

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This table gives the empirical power in percent of the partial t test, the adaptive test with computation of weights with each permutation of the residuals (COMP), and the test based on the permutation of the weights (PERM).

There are five predictor variables, including the intercept, and the predictor variables were generated from the Lognormal distribution. The power is probability of rejecting the null hypothesis that the last parameter in the model is zero. In these simulations the slope was set to equal $4/\sqrt{n}$ in order to achieve power near 60% for large n.

We used 10000 data sets for all sample sizes except the simulations with n=800, where only 1000 data sets were used. The table below gives empirical power, which is the number of times the null hypothesis was rejected divided by the number of data sets that were generated, expressed as a percent.

Table of empirical power. (Page 1)

n	Distribution	slope	t	COMP	PERM
15	Normal	1.033	31.80	31.26	30.80
15	Bimodal +-1.5	1.033	31.95	31.52	30.69
15	t with d.f. = 4	1.033	36.18	35.28	35.43
15	RST a3=1 a4=4.2	1.033	33.36	32.97	32.83
15	RST a3=1 a4=8.4	1.033	35.27	34.51	34.60
15	RST a3=2 a4=11.4	1.033	35.86	36.47	36.47
15	RST a3=2 a4=15.6	1.033	36.31	36.19	36.40
15	Bimodal .75N + .25N	1.033	31.70	31.64	31.50
20	Normal	0.894	37.36	36.45	36.29
20	Bimodal +-1.5	0.894	36.53	36.50	36.12
20	t with d.f. = 4	0.894	40.74	41.41	41.66
20	RST a3=1 a4=4.2	0.894	38.10	38.81	38.82
20	RST a3=1 a4=8.4	0.894	40.48	40.91	41.13
20	RST a3=2 a4=11.4	0.894	41.19	43.88	44.68
20	RST a3=2 a4=15.6	0.894	41.90	43.18	43.72
20	Bimodal .75N + .25N	0.894	36.90	38.69	38.62
25	Normal	0.800	42.08	41.53	41.17
25	Bimodal +-1.5	0.800	41.18	41.67	41.36
25	t with d.f. = 4	0.800	45.57	46.85	47.22
25	RST a3=1 a4=4.2	0.800	41.23	43.23	43.34
25	RST a3=1 a4=8.4	0.800	43.21	44.24	44.77
25	RST a3=2 a4=11.4	0.800	44.69	50.07	50.53
25	RST a3=2 a4=15.6	0.800	45.94	49.60	50.07
25	Bimodal .75N + .25N	0.800	41.11	44.20	44.19
50	Normal	0.566	49.90	48.79	48.65
50	Bimodal +-1.5	0.566	49.97	52.10	52.12
50	t with d.f. = 4	0.566	53.15	57.75	58.20
50	RST a3=1 a4=4.2	0.566	50.49	56.43	56.58
50	RST a3=1 a4=8.4	0.566	51.42	55.55	56.02
50	RST a3=2 a4=11.4	0.566	51.91	66.08	66.82
50	RST a3=2 a4=15.6	0.566	53.19	62.18	62.77
50	Bimodal .75N + .25N	0.566	48.88	58.66	58.87

Table of empirical power. (Page 2)

n	Distribution	slope	t	COMP	PERM
100	Normal	0.400	57.25	56.25	56.23
100	Bimodal +-1.5	0.400	56.18	61.39	61.40
100	t with d.f. = 4	0.400	58.39	64.85	65.40
100	RST a3=1 a4=4.2	0.400	57.19	66.32	66.77
100	RST a3=1 a4=8.4	0.400	57.98	64.34	64.75
100	RST a3=2 a4=11.4	0.400	57.65	77.46	77.66
100	RST a3=2 a4=15.6	0.400	57.61	72.59	72.93
100	Bimodal .75N + .25N	0.400	56.87	72.80	72.93
200	Normal	0.283	61.11	60.44	60.38
200	Bimodal +-1.5	0.283	60.90	68.17	68.32
200	t with d.f. = 4	0.283	61.52	70.83	71.30
200	RST a3=1 a4=4.2	0.283	61.68	74.82	74.92
200	RST a3=1 a4=8.4	0.283	60.64	69.03	69.43
200	RST a3=2 a4=11.4	0.283	61.57	85.28	85.35
200	RST a3=2 a4=15.6	0.283	60.56	78.52	78.83
200	Bimodal .75N + .25N	0.283	60.48	82.68	82.63
800	Normal	0.141	63.6	63.0	63.2
800	Bimodal +-1.5	0.141	64.3	74.3	75.0
800	t with d.f. = 4	0.141	65.1	74.5	75.5
800	RST a3=1 a4=4.2	0.141	64.2	80.6	80.4
800	RST a3=1 a4=8.4	0.141	63.8	75.4	76.0
800	RST a3=2 a4=11.4	0.141	65.8	91.0	90.8
800	RST a3=2 a4=15.6	0.141	64.1	86.6	86.7
800	Bimodal .75N + .25N	0.141	64.1	90.0	89.9