

Supplementary Tables

Tong Tong Wu¹
Department of Epidemiology
and Biostatistics¹
University of Maryland
College Park, MD 20742

Yi Fang Chen²
Trevor Hastie³
Departments of Biostatistics³
and Statistics^{2,3} Stanford University
Stanford, CA 94305

Eric Sobel⁴
Kenneth Lange⁵
Departments of Biomathematics⁵,
Human Genetics^{4,5}, and Statistics⁵
University of California
Los Angeles, CA 90095

Research supported in part by USPHS grants
GM53275 and MH59490 to KL.

December 11, 2008

Stage	Predictor	Estimate	Re-Estimate	LOO Index	
stage 1	intercept	0.545595	0.728509	1.43×10^{-33}	
	1	0.453759	0.845769	1.20×10^{-44}	
	2	0.510842	0.861629	1.42×10^{-46}	
	3	0.491764	0.890518	2.61×10^{-49}	
	4	0.454013	0.816184	3.51×10^{-42}	
	5	0.501952	0.878312	4.43×10^{-48}	
	4539	0.011196	0.250380	3.10×10^{-5}	
	11139	0.003566	0.210031	4.74×10^{-4}	
	38488	-0.032609	-0.254051	2.37×10^{-5}	
	40873	0.005486	0.225850	1.69×10^{-4}	
	41940	0.003740	0.251092	3.00×10^{-5}	
	stage 2	intercept	0.773912	0.941361	2.32×10^{-41}
		1	0.756416	1.013921	4.10×10^{-51}
		2	0.786718	1.035628	1.51×10^{-54}
3		0.782830	0.997106	7.53×10^{-52}	
4		0.721151	0.924619	1.41×10^{-46}	
5		0.765849	0.987843	5.45×10^{-51}	
4539		0.139176	0.243901	1.27×10^{-4}	
11139		0.103267	0.173203	7.79×10^{-3}	
38488		-0.153611	-0.252603	9.12×10^{-5}	
40873		0.125567	0.216078	7.79×10^{-4}	
41940		0.149134	0.268759	2.47×10^{-5}	
(1, 2)		0.386519	0.590341	7.85×10^{-18}	
(1, 3)		-0.003071	-0.068879	3.03×10^{-1}	
(1, 40873)		-0.002404	-0.093550	1.47×10^{-1}	
(1, 11139)		-0.083311	-0.155757	1.80×10^{-2}	
(3, 4)		0.333400	0.448477	1.02×10^{-10}	
(3, 5)		-0.028741	-0.147503	3.89×10^{-2}	
(3, 38488)		0.002003	0.082573	2.00×10^{-1}	
(4, 5)		-0.029467	-0.119982	9.00×10^{-2}	
(5, 11139)		0.001000	0.097628	1.32×10^{-1}	
(11139, 38488)		-0.034649	-0.131892	3.85×10^{-2}	

Table 1: Results for one simulated sample with $(p, n) = (50000, 2000)$, $\rho = 0$, and $(s_1, s_2) = (10, 20)$.

SNP	Chr	Position in BP	Univariate p -value
rs13119723	4	123437763	2.57×10^{-7}
rs6822844	4	123728871	3.11×10^{-6}
rs2187668	6	32713862	9.48×10^{-191}
rs9275141	6	32759095	2.29×10^{-34}
rs9357152	6	32772938	1.13×10^{-58}

Table 2: Important SNPs found by van Heel et al. (2007). P-values were computed via simple logistic regression without a penalty.

SNP	Chr	Position in BP	Univariate p -value	LOO Index	Estimate
gender			2.77489e-25	2.51469e-20	0.56017
rs3131379	6	31829012	1.07612e-164	0.054429	-0.39834
rs204999	6	32217957	1.73018e-118	0.079370	-0.24338
rs204991	6	32269344	4.46217e-135	0.909736	-0.01138
rs204990	6	32269408	1.53373e-134	0.852021	0.05620
rs404890	6	32306845	3.82540e-95	0.000181	0.45793
rs2050189	6	32447625	1.55576e-109	0.100375	-0.18849
rs2187668	6	32713862	9.48302e-191	5.90959e-15	-1.49657
rs6457617	6	32771829	2.95796e-94	0.030264	0.26331
rs7756516	6	32831895	3.20700e-64	0.000774	0.38224

Table 3: Ten HLA SNPs on chromosome 6 found under model 2 with 10 mandated predictors.

SNP	Chr	Position in BP	Univariate p -value	LOO Index	Estimate
gender			2.77489e-25	1.63749e-24	0.50054
rs6762743	3	180494694	8.41159e-07	3.41469e-07	0.38930
rs1464510	3	189595248	5.64234e-05	2.24991e-06	-0.33272
rs10505604	8	134096770	4.38312e-06	3.17612e-06	-0.36058
rs1499447	8	138051471	3.90991e-11	2.52467e-11	0.52529
rs4469515	9	1329391	4.21885e-06	0.000185	-0.26789
rs1064891	10	6316580	3.41871e-06	4.65117e-06	-0.31409
rs276892	11	3732947	2.24713e-05	3.42195e-05	0.28150
rs7159238	14	81135391	6.94541e-06	3.22242e-05	-0.28179
rs3809983	18	54353748	3.00546e-06	5.19267e-05	-0.27791

Table 4: The non-HLA predictors found under model 4 with 10 mandated predictors and HLA SNPs excluded.