

Informative Bayesian Model Selection: A Method for Identifying Interactions in Genome-Wide Data

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Electronic Supplementary Information (ESI)

Table S1. Top 50 high-scoring SNPs that interact with SNP rs7412 in the APOE gene.

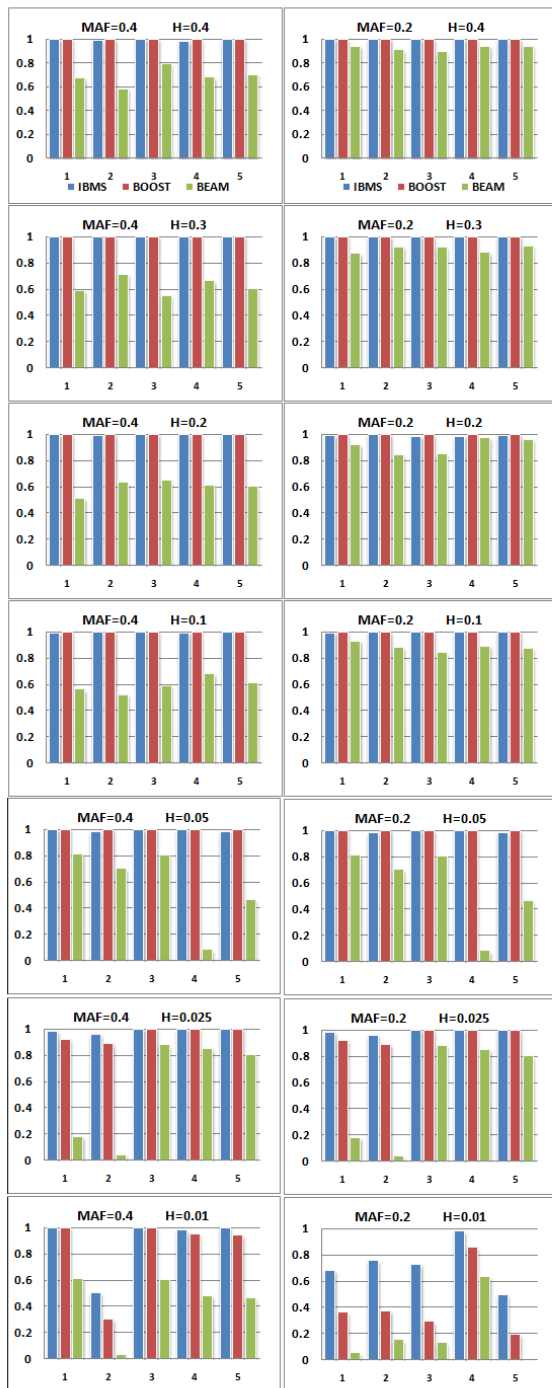
SNP	Associated Gene	IBMS	IBMS
		Rank	Interaction Score
rs7079348	C10orf11	2	-833.573
rs901104	<u>GAB2</u>	53	-840.323
rs4291702	<u>GAB2</u>	73	-841.509
rs7115850	<u>GAB2</u>	25	-841.760
rs4945261	<u>GAB2</u>	8	-841.840
rs2510038	<u>GAB2</u>	39	-841.869
rs7749836	LPA	124	-844.023

rs1866308	CTNNA3	132	-844.071
rs10996618	CTNNA3	78	-844.731
rs10256108	IL6	230	-845.207
rs2671507	CTNNA3	212	-846.094
rs3864432	IL6	75	-846.486
rs1561379	CTNNA3	138	-846.602
rs7916781	CTNNA3	92	-846.604
rs10491071	CTNNA3	234	-846.764
rs10233286	IL6	172	-846.921
rs16918799	CTNNA3	187	-847.065
rs10995933	CTNNA3	93	-847.154
rs2493359	CTNNA3	85	-847.342
rs7917246	CTNNA3	19	-847.357
rs12243555	CTNNA3	192	-847.539
rs16920052	CTNNA3	136	-847.655
rs7797706	IL6	39	-847.676
rs12258211	CTNNA3	25	-847.752
rs7306742	LRP	126	-847.847
rs10996547	CTNNA3	110	-848.030
rs7920723	CTNNA3	43	-848.032
rs12572079	CTNNA3	12	-848.050

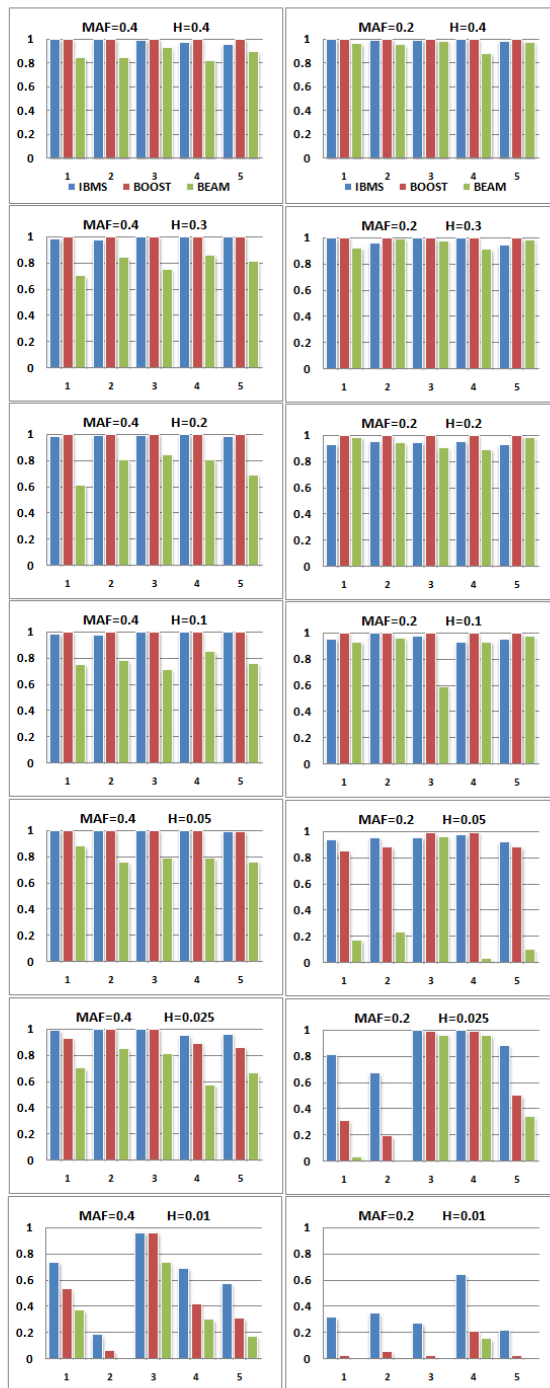
rs4074308	LRP	92	-848.070
rs10995791	CTNNA3	8	-848.071
rs16918796	CTNNA3	58	-848.095
rs4722175	IL6	176	-848.125
rs17831166	CTNNA3	15	-848.253
rs16922000	CTNNA3	157	-848.276
rs10822633	CTNNA3	108	-848.277
rs4517409	CTNNA3	230	-848.402
rs7923933	CTNNA3	47	-848.410
rs1948944	CTNNA3	83	-848.529
rs10995844	CTNNA3	28	-848.552
rs16922054	CTNNA3	11	-848.609
rs1858935	IL6	90	-848.681
rs16919480	CTNNA3	71	-848.708
rs3852434	CTNNA3	56	-848.735
rs12258409	CTNNA3	102	-848.751
rs7095435	CTNNA3	13	-848.806
rs2023718	IL6	139	-848.816
rs2671505	CTNNA3	235	-848.952
rs7916789	CTNNA3	50	-849.016
rs7916789	CTNNA3	67	-849.016

Figure S1. Power of IBMS, BOOST, and BEAM interaction methods. For each sample size (i.e., 1600, 800 and 400), 70 penetrance functions, two MAF values, and seven H values were examined. Then, the highest scoring interactions were examined using IBMS, BOOST, and BEAM.

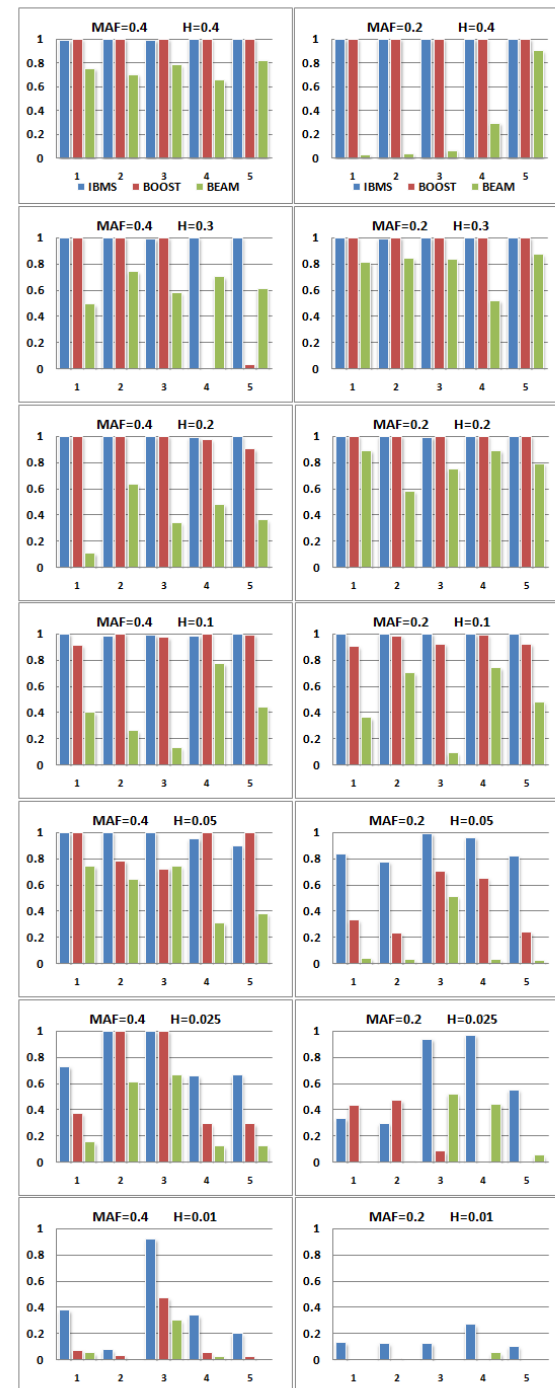
Power



Sample size = 1600



Sample size = 800



Sample size = 400