

ESM Table 1 Quality control of 97 BMI associated genetic variants (1) in the GLACIER Study (n= 5,726)

Original loci	Nearest Gene	Proxy used	R ² (D')	Chr:position	Effect allele	Original	GLACIER	HWE
					/Other	EAF	EAF	<i>p</i> -value
rs17024393	<i>GNAT2</i>			1:109,956,211	C/T	0.04	0.03	0.01
rs543874	<i>SEC16B</i>			1:176,156,103	G/A	0.19	0.22	0.98
rs2820292	<i>NAV1</i>			1:200,050,910	C/A	0.56	0.62	0.18
rs977747	<i>TAL1</i>			1:47,457,264	T/G	0.40	0.37	0.84
rs657452	<i>AGBL4</i>			1:49,362,434	A/G	0.39	0.40	0.07
rs11583200	<i>ELAVL4</i>			1:50,332,407	C/T	0.40	0.41	0.0005
rs3101336	<i>NEGR1</i>			1:72,523,773	C/T	0.61	0.58	0.49
rs12566985	<i>FPGT-TNNI3K</i>	rs1514175	0.97 (1.0)	1:74,764,232	A/G	0.45	0.43	0.60
rs12401738	<i>FUBP1</i>			1:78,219,349	A/G	0.35	0.37	0.04
rs11165643	<i>PTBP2</i>			1:96,696,685	T/C	0.58	0.57	0.03

rs2121279	<i>LRP1B</i>			2:142,759,755	T/C	0.15	0.12	0.64
rs1460676	<i>FIGN</i>			2:164,275,935	C/T	0.18	0.13	0.08
rs1528435	<i>UBE2E3</i>			2:181,259,207	T/C	0.63	0.63	0.33
rs17203016	<i>CREB1</i>			2:207,963,763	G/A	0.19	0.19	0.87
rs7599312	<i>ERBB4</i>			2:213,121,476	G/A	0.72	0.71	0.09
rs492400	<i>USP37</i>			2:219,057,996	C/T	0.42	0.42	0.08
rs2176040	<i>LOC646736</i>	rs2972143	0.96 (1.0)	2:226,824,609	A/G	0.37	0.41	0.48
rs10182181	<i>ADCY3</i>			2:25,003,800	G/A	0.46	0.44	0.28
rs11126666	<i>KCNK3</i>			2:26,782,315	A/G	0.28	0.29	0.20
rs1016287	<i>FLJ30838</i>			2:59,159,129	T/C	0.29	0.27	0.91
rs11688816	<i>EHBPI</i>			2:62,906,552	G/A	0.52	0.53	0.33
rs13021737	<i>TMEM18</i>			2:622,348	G/A	0.83	0.82	0.70
rs6091540	<i>ZFP64</i>			20:50,521,269	C/T	0.72	0.72	0.35
rs2836754	<i>ETS2</i>			21:39,213,610	C/T	0.60	0.67	0.40
rs16851483	<i>RASA2</i>	rs2035935	0.95 (1.0)	3:142,788,703	G/A	0.07	0.06	0.65

rs1516725	<i>ETV5</i>	rs4234589	1.0 (1.0)	3:187,301,576	A/G	0.87	0.87	0.33
rs6804842	<i>RARB</i>			3:25,081,441	G/A	0.57	0.60	0.73
rs2365389	<i>FHIT</i>			3:61,211,502	C/T	0.58	0.59	0.05
rs3849570	<i>GBE1</i>			3:81,874,802	A/C	0.36	0.35	0.44
rs13078960	<i>CADM2</i>	rs7622475	0.95 (1.0)	3:85,912,107	C/T	0.20	0.13	0.04
rs13107325	<i>SLC39A8</i>			4:103,407,732	T/C	0.07	0.03	0.73
rs11727676	<i>HHIP</i>			4:145,878,514	T/C	0.91	0.93	0.70
rs10938397	<i>GNPDA2</i>			4:44,877,284	G/A	0.43	0.38	0.98
rs17001654	<i>SCARB2</i>	rs17001561	1.0 (1.0)	4:77,315,142	A/G	0.15	0.13	0.19
rs7715256	<i>GALNT10</i>			5:153,518,086	G/T	0.42	0.37	0.54
rs2112347	<i>POC5</i>			5:75,050,998	T/G	0.63	0.68	0.15
rs9400239	<i>FOXO3</i>			6:109,084,356	C/T	0.69	0.72	0.02
rs9374842	<i>LOC285762</i>			6:120,227,364	T/C	0.74	0.74	0.98
rs13201877	<i>IFNGR1</i>			6:137,717,234	G/A	0.14	0.15	0.03
rs13191362	<i>PARK2</i>			6:162,953,340	A/G	0.88	0.84	0.37

rs205262	<i>C6orf106</i>			6:34,671,142	G/A	0.27	0.24	0.51
rs2033529	<i>TDRG1</i>			6:40,456,631	G/A	0.29	0.27	0.06
rs2207139	<i>TFAP2B</i>	rs734597	0.90 (1.0)	6:50,944,238	A/G	0.18	0.20	0.95
rs1167827	<i>HIP1</i>			7:75,001,105	G/A	0.55	0.58	0.43
rs2245368	<i>PMS2L11</i>			7:76,446,079	C/T	0.18	0.20	0.29
rs9641123	<i>CALCR</i>	rs5014937	0.67 (0.96)	7:93,017,926	C/A	0.43	0.43	0.16
rs6465468	<i>ASB4</i>			7:95,007,450	T/G	0.31	0.26	0.63
rs17405819	<i>HNF4G</i>			8:76,969,139	T/C	0.70	0.72	0.61
rs16907751	<i>ZBTB10</i>			8:81,538,012	C/T	0.91	0.87	0.49
rs2033732	<i>RALYL</i>			8:85,242,264	C/T	0.75	0.76	0.49
rs6477694	<i>EPB41L4B</i>			9:110,972,163	C/T	0.37	0.39	0.02
rs1928295	<i>TLR4</i>			9:119,418,304	T/C	0.55	0.51	0.63
rs10733682	<i>LMX1B</i>			9:128,500,735	A/G	0.48	0.47	0.62
rs4740619	<i>C9orf93</i>			9:15,624,326	T/C	0.54	0.55	0.74
rs10968576	<i>LINGO2</i>			9:28,404,339	G/A	0.32	0.34	0.12

rs17094222	<i>HIF1AN</i>			10:102,385,430	C/T	0.21	0.21	0.25
rs11191560	<i>NT5C2</i>			10:104,859,028	C/T	0.09	0.08	0.09
rs7903146	<i>TCF7L2</i>			10:114,748,339	C/T	0.71	0.79	0.87
rs7899106	<i>GRID1</i>			10:87,400,884	G/A	0.05	0.04	0.65
rs12286929	<i>CADM1</i>			11:114,527,614	G/A	0.52	0.52	0.35
rs11030104	<i>BDNF</i>	rs7103411	0.95 (1.0)	11:27,656,701	T/C	0.79	0.78	0.09
rs2176598	<i>HSD17B12</i>			11:43,820,854	T/C	0.25	0.22	0.74
rs3817334	<i>MTCH2</i>			11:47,607,569	T/C	0.41	0.43	0.94
rs4256980	<i>TRIM66</i>	rs7113874	1.0 (1.0)	11:8,644,592	C/T	0.65	0.64	0.81
rs11057405	<i>CLIP1</i>			12:121,347,850	G/A	0.90	0.89	0.67
rs7138803	<i>BCDIN3D</i>			12:48,533,735	A/G	0.38	0.45	0.75
rs12016871	<i>MTIF3</i>	rs1885988	0.82 (0.95)	13:26,908,262	C/T	0.20	0.25	0.79
rs12429545	<i>OLFM4</i>			13:53,000,207	A/G	0.13	0.16	0.95
rs9540493	<i>MIR548X2</i>			13:65,103,705	A/G	0.45	0.47	0.98
rs1441264	<i>MIR548A2</i>			13:78,478,920	A/G	0.61	0.65	0.16

rs10132280	<i>STXBP6</i>			14:24,998,019	C/A	0.68	0.72	0.42
rs12885454	<i>PRKD1</i>			14:28,806,589	C/A	0.64	0.64	0.99
rs11847697	<i>PRKD1</i>	rs10134820	0.74 (1.0)	14:29,571,636	T/C	0.04	0.03	0.36
rs7141420	<i>NRXN3</i>			14:78,969,207	T/C	0.53	0.52	0.73
rs3736485	<i>DMXL2</i>			15:49,535,902	A/G	0.45	0.43	0.55
rs16951275	<i>MAP2K5</i>	rs2241420	1.0 (1.0)	15:65,869,870	G/A	0.78	0.83	0.93
rs7164727	<i>LOC100287559</i>			15:70,881,044	T/C	0.67	0.70	0.28
rs12446632	<i>GPRC5B</i>			16:19,842,890	G/A	0.87	0.90	0.86
rs2650492	<i>SBK1</i>			16:28,240,912	A/G	0.30	0.32	0.49
rs3888190	<i>ATP2A1</i>			16:28,796,987	A/C	0.40	0.41	0.58
rs4787491	<i>INO80E</i>			16:29,922,838	G/A	0.51	0.48	0.51
rs758747	<i>NLRC3</i>			16:3,567,359	T/C	0.27	0.26	0.84
rs9925964	<i>KAT8</i>			16:31,037,396	A/G	0.62	0.63	0.89
rs2080454	<i>CBLN1</i>			16:47,620,091	C/A	0.41	0.44	0.28
rs1558902	<i>FTO</i>	rs1421085	1.0 (1.0)	16:52,358,455	C/T	0.42	0.42	0.005

rs9914578	<i>SMG6</i>	17:1,951,886	G/C	0.23	0.24	0.77
rs1000940	<i>RABEP1</i>	17:5,223,976	G/A	0.32	0.34	0.90
rs12940622	<i>RPTOR</i>	17:76,230,166	G/A	0.57	0.57	0.28
rs1808579	<i>Cl8orf8</i>	18:19,358,886	C/T	0.53	0.55	0.55
rs7239883	<i>LOC284260</i>	18:38,401,669	G/A	0.39	0.38	0.30
rs7243357	<i>GRP</i>	18:55,034,299	T/G	0.81	0.81	0.62
rs6567160	<i>MC4R</i>	18:55,980,115	C/T	0.24	0.26	0.03
rs17724992	<i>PGPEP1</i>	19:18,315,825	A/G	0.75	0.77	0.56
rs29941	<i>KCTD15</i>	19:39,001,372	G/A	0.67	0.63	0.84
rs2075650	<i>TOMM40</i>	19:50,087,459	A/G	0.85	0.85	0.04
rs2287019	<i>QPCTL</i>	19:50,894,012	C/T	0.80	0.83	0.63
rs3810291	<i>ZC3H4</i>	19:52,260,843	A/G	0.67	0.69	0.24

Chr: Chromosome. EAF: Effect allele frequency. HWE: Hardy-Weinberg equilibrium