Supplemental Data

Genome-wide Association and Replication Studies Identified *TRHR* as an Important Gene for Lean Body Mass

Xiao-Gang Liu, Li-Jun Tan, Shu-Feng Lei, Yong-Jun Liu, Hui Shen, Liang Wang, Han Yan, Yan-Fang Guo, Dong-Hai Xiong, Xiang-Ding Chen, Feng Pan, Tie-Lin Yang, Yin-Ping Zhang, Yan Guo, Nelson L. Tang, Xue-Zhen Zhu, Hong-Yi Deng, Shawn Levy, Robert R. Recker, Christopher J. Papasian, and Hong-Wen Deng

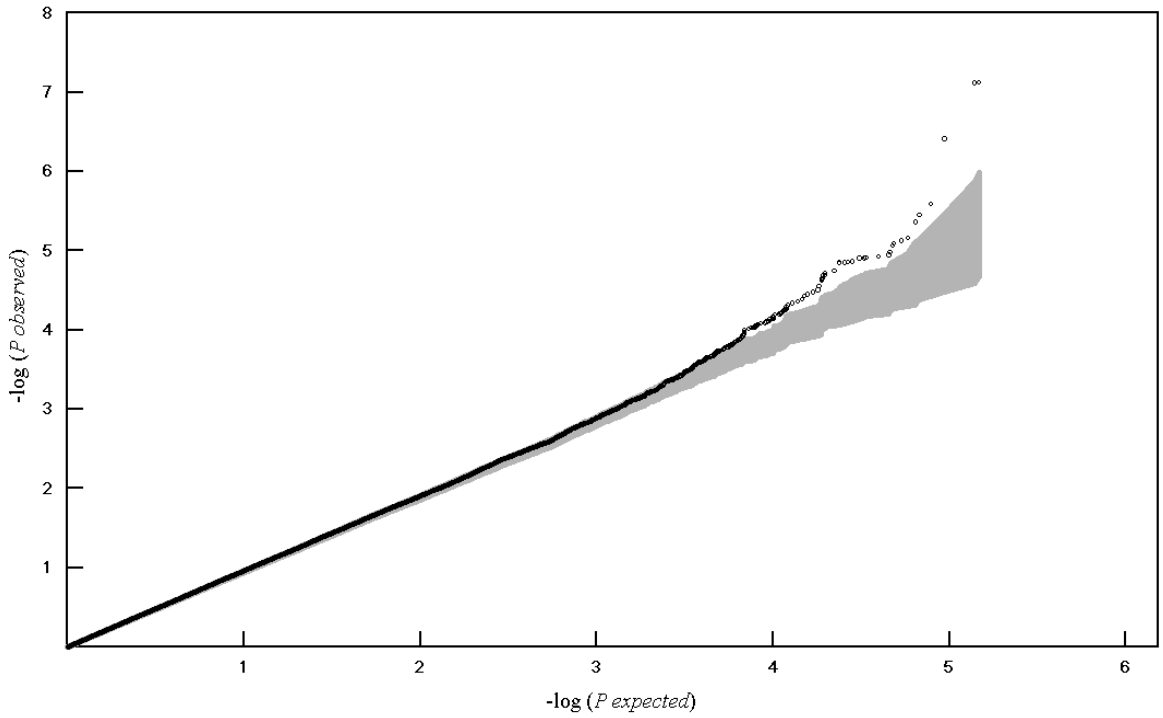

Figure S1. Quantile-quantile plot for GWA analyses of LBM. The vertical axis represents the observed $-\log_{10}P$, while the horizontal axis represents expected $-\log_{10}P$ under the null hypothesis of no association. The shaded region is the 95% concentration band of $-\log_{10}P$ (see the method section).

Table S1. SNPs showing significant and suggestive associations ($p < 1.26\times10^{-4}$) with lean body mass in the GWA scan

SNP [a]	Gene [b]	Location	Alleles [c]	MAF	p value	Effect size [d]	Favorable allele [e]
rs16892496	*TRHR*	8q23.1	G/T	0.32	7.55×10^{-8}	0.107	G
rs7832552	*TRHR*	8q23.1	T/C	0.32	7.58×10^{-8}	0.102	T
rs6544334	*SLC8A1*	2p22.1	A/C	0.34	3.85×10^{-7}	0.079	C
rs4735098	*TRHR*	8q23.1	G/A	0.38	2.57×10^{-6}	0.082	G
rs11836770	*C12orf40*	12q12	T/C	0.14	3.53×10^{-6}	0.064	T
rs3925087	*TRHR*	8q23.1	C/T	0.36	4.34×10^{-6}	0.096	C
rs10486610	*CHN2*	7p15.1	T/C	0.20	6.91×10^{-6}	0.047	C
rs4466373	*TRHR*	8q23.1	T/C	0.21	7.41×10^{-6}	0.061	T
rs6463106	*GLI3*	7p14.1	T/C	0.11	8.11×10^{-6}	0.031	C
rs11170112	*KRT82*	12q13.13	G/A	0.06	8.28×10^{-6}	0.116	G
rs2830395	*ADAMTS1*	21q21.3	T/A	0.45	8.66×10^{-6}	0.082	A
rs4772757	/	13q33.2	T/C	0.20	1.03×10^{-5}	0.034	T
rs2289114	*SLC12A3*	16q13	A/G	0.18	1.19×10^{-5}	0.013	A
rs10241947	*C7orf25*	7p14.1	T/A	0.11	1.22×10^{-5}	0.033	A
rs10502983	*MBD2*	18q21.2	C/T	0.23	1.23×10^{-5}	0.036	C
rs7240087	*MBD2*	18q21.2	A/G	0.23	1.24×10^{-5}	0.045	A
rs13390165	*KCNF1*	2p25.1	T/C	0.06	1.29×10^{-5}	0.130	T
rs4546626	*TRHR*	8q23.1	G/T	0.36	1.37×10^{-5}	0.077	G
rs11077211	*A2BP1*	16p13.2	G/C	0.12	1.40×10^{-5}	0.014	C
rs2926247	*NUDCD1*	8q23.1	G/A	0.40	1.41×10^{-5}	0.075	G
rs11081118	/	18p11.31	G/A	0.14	1.43×10^{-5}	0.065	G
rs12313713	*FLJ90579*	12q21.31	G/A	0.08	1.50×10^{-5}	0.102	G
rs7566764	*FLJ42418*	2p25.2	A/G	0.21	1.79×10^{-5}	0.060	A
rs1918041	*FLJ42418*	2p25.2	T/C	0.19	1.92×10^{-5}	0.072	T
rs1918043	*FLJ42418*	2p25.2	A/T	0.19	2.04×10^{-5}	0.061	A
rs7845815	*TRHR*	8q23.1	A/G	0.35	2.04×10^{-5}	0.075	A
rs242885	*ISX*	22q12.3	T/C	0.02	2.16×10^{-5}	0.041	T
rs12333485	*C7orf25*	7p14.1	G/A	0.11	2.24×10^{-5}	0.027	A
rs3757491	*SYPL1*	7q22.2	C/G	0.46	2.24×10^{-5}	0.062	C
rs2715792	*SPATA8*	15q26.2	C/A	0.48	2.28×10^{-5}	0.069	C
rs10111874	*TRHR*	8q23.1	G/A	0.35	2.35×10^{-5}	0.075	G
rs4734197	*TRHR*	8q23.1	G/A	0.34	2.39×10^{-5}	0.079	G
rs4314624	*TRHR*	8q23.1	C/G	0.35	2.42×10^{-5}	0.078	C
rs9396715	*OFCC1*	6p24.3	T/C	0.48	2.46×10^{-5}	0.047	T
rs2271084	*KRT84*	12q13.13	G/A	0.06	2.47×10^{-5}	0.102	G
rs4607576	*TRHR*	8q23.1	T/C	0.35	2.65×10^{-5}	0.078	T
rs7551656	/	1q23.3	A/G	0.09	2.75×10^{-5}	0.061	A
rs10800006	/	1q23.3	A/T	0.10	2.79×10^{-5}	0.056	A

rs1568209	*SLCO3A1*	15q26.1	C/T	0.49	2.80×10^{-5}	0.042	T
rs2962549	*ESM1*	5q11.2	T/C	0.41	2.84×10^{-5}	0.061	C
rs4628236	*TRHR*	8q23.1	T/C	0.35	3.09×10^{-5}	0.073	T
rs1560617	*C7orf25*	7p14.1	A/C	0.11	3.11×10^{-5}	0.029	C
rs11785243	*TRHR*	8q23.1	A/G	0.36	3.12×10^{-5}	0.075	A
rs907526	*GRPEL1*	4p16.1	G/A	0.29	3.24×10^{-5}	0.064	A
rs7539840	/	1q23.3	G/A	0.09	3.27×10^{-5}	0.063	G
rs7690492	*SLIT2*	4p15.31	A/G	0.20	3.28×10^{-5}	0.072	G
rs17519016	*MBD2*	18q21.2	A/T	0.19	3.32×10^{-5}	0.026	A
rs545170	*CSMD2*	1p35.1	A/G	0.06	3.32×10^{-5}	0.128	A
rs6042222	*TASP1*	20p12.1	G/A	0.30	3.33×10^{-5}	0.063	A
rs751051	*FLJ42418*	2p25.2	A/G	0.19	3.34×10^{-5}	0.059	A
rs9396752	*OFCC1*	6p24.3	T/C	0.25	3.42×10^{-5}	0.085	T
rs1017002	*ICA1*	7p21.3	C/T	0.39	3.53×10^{-5}	0.081	T
rs16945089	*DNAH9*	17p12	C/G	0.18	3.66×10^{-5}	0.037	C
rs853334	*C3orf20*	3p24.3	G/A	0.37	3.66×10^{-5}	0.038	A
rs16857721	/	1q42.2	T/G	0.35	3.69×10^{-5}	0.107	G
rs7481883	*OPCML*	11q25	A/C	0.02	3.70×10^{-5}	0.078	A
rs6539502	*FLJ90579*	12q21.31	G/C	0.09	3.90×10^{-5}	0.104	G
rs2548629	*ESM1*	5q11.2	C/A	0.40	3.97×10^{-5}	0.065	A
rs10955513	*NUDCD1*	8q23.1	T/C	0.41	4.09×10^{-5}	0.075	T
rs6686539	/	1q23.3	A/T	0.10	4.18×10^{-5}	0.060	A
rs16857720	/	1q42.2	C/T	0.35	4.37×10^{-5}	0.107	T
rs4669054	*FLJ42418*	2p25.2	A/T	0.21	4.48×10^{-5}	0.030	A
rs5999191	*ISX*	22q12.3	A/G	0.02	4.53×10^{-5}	0.032	A
rs5999190	*ISX*	22q12.3	G/T	0.02	4.64×10^{-5}	0.031	G
rs6726569	/	2q22.3	G/A	0.39	4.65×10^{-5}	0.098	A
rs1581541	*LRRN3*	7q31.1	G/C	0.12	4.69×10^{-5}	0.065	G
rs2780983	*C9orf103*	9q21.32	G/A	0.21	4.70×10^{-5}	0.031	A
rs1416471	/	6q14.1	A/C	0.13	4.86×10^{-5}	0.122	A
rs10830423	*NAALAD2*	11q14.3	G/T	0.11	5.00×10^{-5}	0.089	G
rs12036860	/	1q42.2	G/C	0.35	5.10×10^{-5}	0.104	C
rs7297298	*OR10AD1*	12q13.11	G/C	0.22	5.12×10^{-5}	0.085	C
rs7230183	*FBXO15*	18q22.3	G/C	0.03	5.23×10^{-5}	0.048	C
rs3024342	*F13A1*	6p25.1	G/A	0.21	5.24×10^{-5}	0.109	G
rs4708220	/	6q14.1	C/G	0.13	5.24×10^{-5}	0.123	C
rs7705202	/	5p15.2	T/C	0.48	5.24×10^{-5}	0.084	T
rs1549905	/	5q34	A/G	0.14	5.29×10^{-5}	0.074	A
rs7186386	*SMG1*	16p12.3	A/G	0.35	5.30×10^{-5}	0.072	A
rs9352266	/	6q14.1	T/C	0.13	5.32×10^{-5}	0.130	T
rs4072864	*DEXI*	16p13.13	A/C	0.20	5.39×10^{-5}	0.037	C
rs1458926	*NUDCD1*	8q23.1	C/G	0.41	5.41×10^{-5}	0.074	C
rs6453855	/	6q14.1	C/G	0.13	5.52×10^{-5}	0.119	C

rs4467744	/	6q14.1	T/C	0.13	5.63×10^{-5}	0.122	T
rs6879343	*CDH12*	5p14.3	A/G	0.14	5.80×10^{-5}	0.045	A
rs10866415	*FIP1L1*	4q12	G/T	0.38	5.95×10^{-5}	0.063	T
rs7852833	/	9q21.13	G/A	0.49	5.96×10^{-5}	0.040	A
rs1673450	*MEIS1*	2p14	A/G	0.48	6.18×10^{-5}	0.088	G
rs2548631	*SNAG1*	5q11.2	G/A	0.41	6.19×10^{-5}	0.059	A
rs10112296	*TRHR*	8q23.1	T/C	0.35	6.20×10^{-5}	0.072	T
rs1597245	*SLC35F5*	2q14.1	G/C	0.37	6.25×10^{-5}	0.076	G
rs1380098	*TRHR*	8q23.1	A/G	0.41	6.28×10^{-5}	0.069	A
rs1548083	*NUDCD1*	8q23.1	T/A	0.41	6.39×10^{-5}	0.069	T
rs3794650	*SLC12A3*	16q13	C/T	0.13	6.45×10^{-5}	0.023	C
rs7581611	*SLC8A1*	2p22.1	T/C	0.42	6.60×10^{-5}	0.070	C
rs4564178	*NFIA*	1p32.1	C/T	0.03	6.73×10^{-5}	0.096	C
rs1542604	*ARHGEF4*	2q21.1	T/C	0.15	6.85×10^{-5}	0.087	T
rs38774	/	7p12.3	T/C	0.40	6.87×10^{-5}	0.071	T
rs4469429	*TMEM74*	8q23.1	C/A	0.21	7.22×10^{-5}	0.058	C
rs12535724	*GLI3*	7p14.1	T/A	0.11	7.34×10^{-5}	0.019	A
rs2542242	*C9orf50*	9q34.11	G/A	0.49	7.37×10^{-5}	0.063	G
rs264607	*TANC1*	2q24.1	T/C	0.39	7.53×10^{-5}	0.104	T
rs17678863	*CHN2*	7p15.1	T/C	0.20	7.58×10^{-5}	0.034	C
rs2740354	*FAM57A*	17p13.3	T/C	0.38	7.85×10^{-5}	0.073	T
rs10266289	/	7p12.3	C/T	0.40	7.86×10^{-5}	0.070	C
rs6736915	*NOL10*	2p25.1	C/T	0.05	7.92×10^{-5}	0.032	T
rs4861722	*MTNR1A*	4q35.2	G/A	0.34	8.01×10^{-5}	0.083	G
rs4978818	*PALM2-AKAP2*	9q31.3	C/G	0.14	8.03×10^{-5}	0.063	C
rs12347532	*MLLT3*	9p22.1	G/T	0.36	8.07×10^{-5}	0.056	T
rs2609103	*FLJ42418*	2p25.2	A/G	0.25	8.07×10^{-5}	0.069	A
rs1422882	*IL12B*	5q33.3	C/T	0.50	8.25×10^{-5}	0.075	C
rs6990979	*RIPK2*	8q21.3	A/G	0.04	8.29×10^{-5}	0.074	A
rs4735116	*TRHR*	8q23.1	G/T	0.41	8.51×10^{-5}	0.075	G
rs2926220	*NUDCD1*	8q23.1	A/G	0.42	8.76×10^{-5}	0.068	A
rs17793705	/	4q34.3	A/G	0.21	8.86×10^{-5}	0.055	G
rs1878315	*SETBP1*	18q12.3	C/T	0.35	8.87×10^{-5}	0.068	C
rs12441195	/	15q26.2	T/G	0.04	8.94×10^{-5}	0.145	T
rs1380099	*NUDCD1*	8q23.1	G/C	0.41	8.97×10^{-5}	0.072	G
rs12548521	*SAMD12*	8q24.12	C/T	0.49	9.05×10^{-5}	0.094	T
rs12453454	*CD300E*	17q25.1	T/C	0.33	9.14×10^{-5}	0.076	C
rs12691747	/	2q22.3	C/T	0.44	9.18×10^{-5}	0.063	T
rs965103	/	5q34	G/A	0.14	9.21×10^{-5}	0.077	G
rs1107533	*PBX1*	1q23.3	C/T	0.27	9.29×10^{-5}	0.074	T
rs11650378	*CD300C*	17q25.1	T/C	0.31	9.29×10^{-5}	0.056	C
rs6469245	*TRHR*	8q23.1	C/G	0.41	9.42×10^{-5}	0.076	C
rs2276443	*GDPD5*	11q13.4	G/T	0.07	9.44×10^{-5}	0.031	T

rs9287107	*ZNF281*	1q32.1	G/A	0.08	9.51×10^{-5}	0.061	A
rs1054260	/	15q23	G/A	0.37	9.60×10^{-5}	0.081	A
rs1532694	*NR2F1*	5q15	C/T	0.49	9.82×10^{-5}	0.064	C
rs9317632	*PCDH9*	13q21.32	G/A	0.20	9.92×10^{-5}	0.079	G
rs10947091	/	6p21.33	A/G	0.29	1.01×10^{-4}	0.020	G
rs27311	*RIOK2*	5q15	C/A	0.14	1.02×10^{-4}	0.088	C
rs2825653	/	21q21.1	G/A	0.11	1.04×10^{-4}	0.079	G
rs3185695	*PBX1*	1q23.3	T/C	0.27	1.04×10^{-4}	0.074	C
rs10515963	*MBD2*	18q21.2	C/T	0.19	1.05×10^{-4}	0.017	C
rs17536109	*ATPBD4*	15q14	G/T	0.43	1.05×10^{-4}	0.043	T
rs10918076	*PBX1*	1q23.3	A/T	0.27	1.08×10^{-4}	0.074	T
rs10875772	*OR10AD1*	12q13.11	T/C	0.20	1.09×10^{-4}	0.099	C
rs10514810	*SLC35F5*	2q14.1	A/G	0.27	1.12×10^{-4}	0.068	A
rs853780	*ABCB11*	2q31.1	G/C	0.46	1.12×10^{-4}	0.088	G
rs11160571	*EVL*	14q32.2	T/C	0.03	1.13×10^{-4}	0.050	T
rs4454609	*C10orf49*	10p13	A/T	0.23	1.13×10^{-4}	0.025	A
rs2926273	*NUDCD1*	8q23.1	G/A	0.40	1.14×10^{-4}	0.067	G
rs729697	*ETV6*	12p13.2	G/A	0.35	1.14×10^{-4}	0.058	G
rs1412461	/	9q21.13	T/C	0.32	1.15×10^{-4}	0.031	T
rs17659764	*WDR72*	15q21.3	A/G	0.11	1.15×10^{-4}	0.056	A
rs4236448	*ACTR3B*	7q36.2	A/G	0.01	1.15×10^{-4}	0.050	A
rs11217872	*ARHGEF12*	11q23.3	C/G	0.22	1.16×10^{-4}	0.061	G

a The SNPs are in the order of the magnitude of p values.

b The associated genes for SNPs are based on the data from NetAffx Analysis Center.

c The minor allele is placed ahead of the slash.

d Per-allele effect size of the favorable allele is expressed by beta coefficients derived from linear regression analyses.

e Subjects with more favorable alleles generally have higher values of lean body mass than subjects having alternative genotypes in the population.

Table S2. The HPTA and GH-IGF1 pathway genes tested in the interaction analyses

Gene	Number of SNPs tested
GH1 (growth hormone 1)	1
GH2 (growth hormone 2)	4
GHITM (growth hormone inducible transmembrane protein)	52
GHR (growth hormone receptor)	91
GHRH (growth hormone releasing hormone)	2
GHRHR (growth hormone releasing hormone receptor)	12
GHRL (ghrelin/obestatin preprohormone)	4
GHSR (growth hormone secretagogue receptor)	8
IGF1 [insulin-like growth factor 1 (somatomedin C)]	97
IGF1R (insulin-like growth factor 1 receptor)	76
IGF2 [insulin-like growth factor 2 (somatomedin A)]	9
IGF2AS (insulin-like growth factor 2 antisense)	4
IGF2BP1 (insulin-like growth factor 2 mRNA binding protein 1)	10
IGF2BP2 (insulin-like growth factor 2 mRNA binding protein 2)	19
IGF2BP3 (insulin-like growth factor 2 mRNA binding protein 3)	22
IGF2R (insulin-like growth factor 2 receptor)	27
IGFALS (insulin-like growth factor binding protein acid labile subunit)	3
IGFBP1 (insulin-like growth factor binding protein 1)	10
IGFBP2 (insulin-like growth factor binding protein 2)	10
IGFBP3 (insulin-like growth factor binding protein 3)	9
IGFBP4 (insulin-like growth factor binding protein 4)	8
IGFBP5 (insulin-like growth factor binding protein 5)	37
IGFBP6 (insulin-like growth factor binding protein 6)	2
IGFBP7 (insulin-like growth factor binding protein 7)	73
IGFBPL1 (insulin-like growth factor binding protein-like 1)	30
IGFL1 (IGF-like family member 1)	8
IGFL2 (IGF-like family member 2)	5
IGFL3 (IGF-like family member 3)	1
IGFL4 (IGF-like family member 4)	5
TRH (thyrotropin-releasing hormone)	11
TRHDE (thyrotropin-releasing hormone degrading enzyme)	223
TSHB (thyroid stimulating hormone beta)	3
TSHR (thyroid stimulating hormone receptor)	36

Table S3. SNPs putatively interacting with rs16892496 of the *TRHR* gene in determination of lean body mass

SNP [a]	Gene	MAF [b]	Alleles [c]	Location	p value	GWA p value [d]
rs12474719	*IGFBP5*	0.12	A/G	2q35	6.04×10^{-11}	6.31×10^{-2}
rs2350142	*GHITM*	0.15	T/C	10q23.1	6.73×10^{-10}	3.33×10^{-2}
rs187985	*IGF2BP3*	0.17	C/T	7p15.3	6.87×10^{-10}	2.54×10^{-3}
rs6585795	*GHITM*	0.15	A/C	10q23.1	7.08×10^{-10}	1.42×10^{-2}
rs769153	*IGFBPL1*	0.27	C/A	9p13.1	7.46×10^{-10}	2.41×10^{-2}
rs7038678	*IGFBPL1*	0.28	G/A	9p13.1	8.99×10^{-10}	4.74×10^{-2}
rs7955640	*IGF1*	0.21	T/C	12q23.2	1.26×10^{-9}	3.64×10^{-2}
rs3743261	*IGF1R*	0.02	T/C	15q26.3	1.46×10^{-9}	0.27
rs10745938	*IGF1*	0.50	G/A	12q23.2	1.99×10^{-9}	0.21
rs1030065	*IGFBP5*	0.30	C/T	2q35	2.29×10^{-9}	1.63×10^{-4}
rs4503597	*IGF1*	0.49	G/A	12q23.2	2.36×10^{-9}	0.13
rs12765881	*GHITM*	0.19	A/G	10q23.1	2.50×10^{-9}	0.23
rs509035	*GHSR*	0.31	A/G	3q26.31	2.98×10^{-9}	0.12
rs1476844	*IGFBP7*	0.29	A/G	4q12	3.11×10^{-9}	0.32
rs4764695	*IGF1*	0.49	A/G	12q23.2	3.14×10^{-9}	0.15
rs687088	*IGF2R*	0.30	T/C	6q25.3	3.42×10^{-9}	0.30
rs11857366	*IGF1R*	0.41	A/G	15q26.3	3.60×10^{-9}	3.01×10^{-2}
rs1317459	*IGF1R*	0.06	C/G	15q26.3	3.77×10^{-9}	0.22
rs2412775	*IGFBP7*	0.45	T/C	4q12	3.88×10^{-9}	3.54×10^{-4}
rs1464433	*IGF1R*	0.03	G/A	15q26.3	3.94×10^{-9}	0.39
rs2350140	*GHITM*	0.19	A/C	10q23.1	4.47×10^{-9}	0.13
rs12582912	*TRHDE*	0.20	A/G	12q21.1	4.54×10^{-9}	4.18×10^{-2}
rs2176235	*TRHDE*	0.20	G/A	12q21.1	4.58×10^{-9}	3.46×10^{-2}
rs2271808	*IGFBP7*	0.40	T/C	4q12	5.16×10^{-9}	6.52×10^{-2}
rs2940919	*GHR*	0.17	G/A	5p12	5.48×10^{-9}	6.23×10^{-2}
rs11111347	*IGF1*	0.04	T/A	12q23.2	5.98×10^{-9}	2.52×10^{-2}
rs2541408	*IGFBP5*	0.17	A/G	2q35	6.12×10^{-9}	4.29×10^{-2}
rs2195103	*TSHR*	0.43	C/T	14q31.1	6.56×10^{-9}	2.44×10^{-2}
rs9341191	*IGFBP2*	0.06	T/C	2q35	6.80×10^{-9}	0.97
rs4802289	*IGFL3*	0.40	G/A	19q13.32	6.97×10^{-9}	2.06×10^{-2}
rs2887021	*TRHDE*	0.01	A/G	12q21.1	6.99×10^{-9}	0.68
rs7137407	*TRHDE*	0.01	A/C	12q21.1	7.20×10^{-9}	0.67
rs12050077	*TSHR*	0.43	A/G	14q31.1	7.23×10^{-9}	2.03×10^{-2}
rs703548	*IGF1*	0.15	T/C	12q23.2	7.28×10^{-9}	0.11
rs4394481	*IGFBPL1*	0.47	A/G	9p13.1	7.35×10^{-9}	9.39×10^{-3}
rs11179614	*TRHDE*	0.10	A/G	12q21.1	7.57×10^{-9}	7.24×10^{-3}
rs6909681	*IGF2R*	0.47	A/T	6q25.3	7.66×10^{-9}	0.67
rs4132296	*IGFBP7*	0.25	T/C	4q12	7.69×10^{-9}	0.27
rs4100646	*IGFALS*	0.26	T/C	16p13.3	7.82×10^{-9}	0.63
rs907801	*IGF1R*	0.16	G/A	15q26.3	7.83×10^{-9}	0.27

rs2311759	*IGF1R*	0.13	A/G	15q26.3	8.03×10^{-9}	0.77
rs11179317	*TRHDE*	0.01	C/T	12q21.1	8.68×10^{-9}	0.70
rs11179583	*TRHDE*	0.16	T/C	12q21.1	8.72×10^{-9}	8.19×10^{-2}
rs12551371	*IGFBPL1*	0.11	A/G	9p13.1	8.79×10^{-9}	1.72×10^{-2}
rs11834071	*TRHDE*	0.01	C/T	12q21.1	8.88×10^{-9}	0.67
rs734351	*IGF2*	0.38	C/T	11p15.5	9.06×10^{-9}	0.27
rs11832784	*TRHDE*	0.01	T/C	12q21.1	9.13×10^{-9}	0.68
rs10866443	*IGFBP7*	0.25	T/C	4q12	9.21×10^{-9}	0.25
rs11200853	*GHITM*	0.01	A/T	10q23.1	9.38×10^{-9}	0.20
rs1467574	*IGFBPL1*	0.25	A/G	9p13.1	9.49×10^{-9}	8.26×10^{-2}
rs12426318	*IGF1*	0.12	A/C	12q23.2	9.66×10^{-9}	6.70×10^{-2}
rs11829367	*IGF1*	0.02	A/G	12q23.2	9.71×10^{-9}	0.87
rs10178069	*IGFBP5*	0.15	G/A	2q35	9.79×10^{-9}	5.84×10^{-2}

[a] Only SNPs with $p < 1.00\times10^{-8}$ in the interaction analyses with rs16892496 are listed.

[b] Minor allele frequency in our GWA sample.

[c] The minor allele is placed ahead of the slash

[d] The p values from the GWA scan