

Supplementary Table 1. Discrete Traits. Significant ($P < 0.05$) Association of SNPs with T2DM¹, Obesity², MS³ (NCEP-ATPIII) and with Individual MS Components. Association analyses were performed using Additive (Measured Genotype), Recessive and Dominant Genetic Models. SNPs with non standard refSNP numbers are not currently in the RefSNP database.

Trait	SNP	MAF (%)	location (bp)	Additive	Dominant	Recessive
T2DM	rs2021966	49.8	21,107	0.041		
T2DM	rs1931009	4.4	85,336	0.044	0.028	
BMI	rs943004	3.7	11,544	0.0060	0.014	
BMI	v24	18.5	29,772			0.0030
BMI	rs858341	35.3	31,123			0.047
BMI	rs858343	13.5	33,115			0.037
BMI	rs858345	42.7	34,285			0.030
BMI	rs6569761	17.1	38,195			0.031
BMI	rs997509	1.3	38,645	0.021	0.021	
BMI	rs1044498	17.3	43,036			0.037
BMI	rs6569762	2.1	45,292			0.040
BMI	rs7769058	5.6	63,662	0.012	0.012	
BMI	rs4371863	0.7	73,065	0.013	0.013	
BMI	rs7768480	17.7	74,100		0.022	
MS	rs858341	35.3	31,123		0.0468	
MS	rs858344	36.7	33,662		0.0152	
MS	v33.21	0.6	52,324	0.0074	0.0074	
MS	rs7768480	17.7	74,100	0.0097	0.0026	
Waist	rs4428518	44.4	3,054	0.029	0.0364	0.0364
Waist	rs6918013	7.9	9,386			0.0381
Waist	rs943004	3.7	11,544	0.0099	0.0072	
Waist	rs1409183	13.3	14,549			0.0154
Waist	rs1409182	13.4	14,611			0.026
Waist	rs858334	12.8	22,644			0.0138
Waist	rs7768480	17.7	74,100		0.0092	
High TG	rs6918013	7.9	9,386			0.0406
High TG	rs943004	3.7	11,544			0.001
High TG	rs2021966	49.3	21,107			0.035
High TG	rs9372999	10.4	23,820		0.0275	
High TG	rs703184	9.3	25,663			0.0417
High TG	v24	18.5	29,772		0.0335	
High TG	rs858342	18.6	31,311		0.042	0.011
Low HDL-C	rs4086314	29.0	3,407			0.0169
Low HDL-C	rs858337	13.9	23,591			0.0464
Low HDL-C	rs9372999	10.4	23,820	0.021	0.023	
Low HDL-C	v33.21	0.6	52,324		0.0043	
HT	rs766592	45.6	2,269			0.040
HT	rs6918013	7.9	9,386	0.027	0.0091	

HT	rs6939185	45.8	9,855			0.023
HT	rs1409182	13.4	14,611	0.029		
HT	rs2021315	40.7	19,922			0.049
HT	rs7771242	17.3	21,714			0.040
HT	rs7771841	12.0	21,773			0.025
HT	rs858334	12.8	22,644			0.039
HT	rs858336	13.8	23,249			0.0068
HT	rs858338	49.5	23,875	0.0065	0.0065	
HT	rs2022337	5.0	25,602	0.046	0.046	
HT	rs703184	9.3	25,663			0.031
HT	rs2327173	11.2	26,038	0.023		0.047
HT	rs6916495	13.8	30,933			0.043
HT	rs4141767	13.2	35,675	0.034	0.011	
HT	rs1044498	17.3	43,036	0.043	0.041	
HT	rs6919751	16.3	43,604	0.0429		
HT	rs6926728	16.3	45,097	0.045		
HT	rs7767502	16.9	45,597	0.038		
HT	rs7749493	14.7	45,727	0.031		
HT	rs9493113	13.3	52,341	0.021		0.011
HT	rs1974201	38.6	81,789	0.047		
HT	rs7754561	44.5	83,362	0.027		
HT	rs7754859	43.8	83,476	0.047		
HFG	rs858344	36.7	33,662		0.031	
HFG	rs7768480	17.7	74,100		0.041	
HFG	rs1974201	38.6	81,789			0.023

¹ Type 2 diabetes Mellitus, by WHO criteria.

² Obesity, BMI \geq 30 kg/m².

³ The Metabolic Syndrome, as defined by NCEP-ATPIII criteria (2001) requires the presence of at least three of the following five risk factors: (1) Increased waist circumference (Waist) \geq 102 cm or 40 inches (male), \geq 88 cm or 36 inches (female); (2) Hypertriglyceridemia (High TG) \geq 1.695 mmol/L (150 mg/dl); (3) Low HDL-C: $<$ 40 mg/dL (male), $<$ 50 mg/dL (female); (3) Hypertension (HT) \geq 130/85 mmHg; (4) High Fasting Plasma Glucose (HFG) \geq 6.1 mmol/L (110 mg/dl).