SUPPLEMENTARY MATERIAL

Supplemental Table I. Top 10 Independent* Genome-wide Associations with Fasting Glucose.

SNP	Chromosome	Position	FUSION Stage 1 p-value	SardiNIA p-value	GWA Meta-analysis p-value†
rs560887	2	169588655	1.7×10^{-3}	4.4×10^{-8}	2.8×10^{-10}
rs9981885	21	19252508	2.7×10^{-2}	1.2×10^{-6}	3.2×10^{-7}
rs1387153	11	92313476	8.5×10^{-3}	3.6×10^{-5}	1.0×10^{-6}
rs2027281	10	29424184	3.0×10^{-2}	2.1×10^{-5}	1.8×10^{-6}
rs420510	21	19226244	3.2×10^{-2}	2.5×10^{-5}	2.3×10^{-6}
rs693793	6	124830968	8.3×10^{-3}	1.1×10^{-4}	3.1×10^{-6}
rs2214108	7	11428183	4.9×10^{-2}	2.8×10^{-5}	3.9×10^{-6}
rs7251204	19	20558498	3.9×10^{-2}	3.7×10^{-5}	4.0×10^{-6}
rs11122355	1	228319928	0.78	3.9×10^{-7}	5.3×10^{-6}
rs6462079	7	28189067	8.6×10^{-6}	6.8×10^{-3}	5.5×10^{-6}

* Defined as a pair-wise D'<0.8

Supplemental Table II. GWA for Fasting Glucose in Non-diabetic Individuals With Meta-analysis p-value≤1.0×10^{-4} on Chromosome 2.

		FUSION Stage 1			SardiNIA			
SNP	Position**	Minor Allele	MAF	p-value	Minor Allele	MAF	p-value	GWA Meta-analysis p-value†
rs477224	169575990	C	0.184*	8.9×10^{-2}	C	0.361	3.4×10^{-4}	7.7×10^{-5}
rs13431652	169578922	C	0.301	6.9×10^{-3}	C	0.412	2.4×10^{-5}	5.6×10^{-7}
rs573225	169583048	G	0.307	2.9×10^{-3}	G	0.436	4.9×10^{-5}	5.7×10^{-7}
rs560887	169588655	T	0.305*	1.7×10^{-3}	T	0.372*	4.4×10^{-8}	2.8×10^{-10}
rs563694	169599578	C	0.339*	8.1×10^{-4}	C	0.455*	7.6×10^{-5}	3.5×10^{-7}
rs537183	169600153	C	0.340	8.6×10^{-4}	C	0.455	6.5×10^{-5}	3.1×10^{-7}
rs502570	169600466	A	0.340	9.3×10^{-4}	A	0.455	6.5×10^{-5}	3.3×10^{-7}
rs475612	169602253	T	0.343	1.1×10^{-3}	T	0.451	5.7×10^{-5}	3.3×10^{-7}
rs557462	169603102	T	0.343	1.1×10^{-3}	C	0.455	6.4×10^{-5}	3.6×10^{-7}
rs486981	169607656	A	0.343	1.6×10^{-3}	A	0.469	1.0×10^{-4}	7.9×10^{-7}
rs484066	169607988	A	0.379	1.9×10^{-2}	A	0.370	9.0×10^{-5}	9.0×10^{-7}
rs569805	169608387	A	0.342	1.6×10^{-3}	A	0.469	1.0×10^{-4}	7.9×10^{-7}
rs579060	169608546	G	0.342	1.6×10^{-3}	G	0.469	1.0×10^{-4}	7.9×10^{-7}
rs508506	169610462	A	0.342	1.6×10^{-3}	A	0.469*	1.0×10^{-4}	7.8×10^{-7}
rs494874	169614813	T	0.342	1.6×10^{-3}	T	0.470*	1.1×10^{-4}	8.7×10^{-7}
rs552976	169616945	A	0.342	1.6×10^{-3}	A	0.472*	3.5×10^{-5}	2.5×10^{-7}
rs567074	169619938	T	0.442	8.0×10^{-2}	C	0.446*	4.1×10^{-4}	8.2×10^{-5}

rs853789	169626995	A	0.350	1.4×10^{-3}	A	0.412*	2.5×10^{-7}	1.4×10^{-9}
rs853787	169627759	G	0.352	1.1×10^{-3}	G	0.412	2.3×10^{-7}	1.0×10^{-9}
rs862662	169627836	C	0.438	4.5×10^{-2}	A	0.449	2.4×10^{-4}	2.9×10^{-5}
rs853781	169631828	A	0.459	2.9×10^{-2}	G	0.449	2.4×10^{-4}	1.9×10^{-5}
rs853773	169639854	A	0.482	2.7×10^{-2}	G	0.480	3.8×10^{-6}	3.2×10^{-7}

* Based on genotyped data

** Based on NCBI build 35

† Meta-analysis for FUSION stage 1 and SardiNIA

Supplemental Table III. Association Between rs563694 and Fasting Glucose in Non-diabetic Individuals Adjusting for SNPs Associated with Type 2 Diabetes from Previous GWA Studies*.

Chr	Covariate SNP	Gene	FUSION p-value	SardiNIA p-value	Meta p-value
	None		8.0×10^{-4}	7.6×10^{-5}	3.5×10^{-7}
3	rs4402960	*IGF2BP2*	6.7×10^{-4}	8.1×10^{-5}	3.3×10^{-7}
3	rs1801282	*PPARG*	8.2×10^{-4}	7.5×10^{-5}	3.5×10^{-7}
6	rs7754840	*CDKAL1*	8.1×10^{-4}	7.8×10^{-5}	3.6×10^{-7}
8	rs13266634	*SLC30A8*	1.1×10^{-3}	6.3×10^{-5}	3.6×10^{-7}
9	rs10811661	*CDKN2A/2B*	1.1×10^{-3}	6.4×10^{-5}	3.7×10^{-7}
10	rs1111875	*HHEX*	1.1×10^{-3}	7.1×10^{-5}	4.1×10^{-7}
10	rs7903146	*TCF7L2*	1.1×10^{-3}	6.8×10^{-5}	3.9×10^{-7}
11	rs9300039	Chr 11 intragenic	6.1×10^{-4}	7.5×10^{-5}	2.8×10^{-7}
11	rs5215	*KCNJ11*	7.1×10^{-4}	7.1×10^{-5}	3.0×10^{-7}
16	rs8050136	*FTO*	1.1×10^{-3}	7.3×10^{-5}	4.2×10^{-7}

* The direction of the effect of rs563694 on fasting glucose was not altered by the addition of these SNPs as covariates.

Supplemental Table IV. Association Between Fasting Glucose in Non-diabetic Individuals and SNPs Associated with Type 2 Diabetes from Previous GWA Studies.

Chr	SNP	Gene	FUSION p-value	SardiNIA p-value	Meta p-value
3	rs4402960	*IGF2BP2*	0.453	0.690	0.751
3	rs1801282	*PPARG*	0.713	0.983	0.160
6	rs7754840	*CDKAL1*	0.780	0.666	0.805
8	rs13266634	*SLC30A8*	0.728	0.738	0.029
9	rs10811661	*CDKN2A/2B*	0.180	0.794	0.060
10	rs1111875	*HHEX*	0.360	0.538	0.582
10	rs7903146	*TCF7L2*	0.816	0.530	0.597
11	rs9300039	Chr 11 intragenic	0.298	0.901	0.851
11	rs5215	*KCNJ11*	0.187	0.596	0.148
16	rs8050136	*FTO*	0.810	0.541	0.582