

ESM Table S3. Associations and Direction of Effect

Chr	Loci	Confirmation in TaiChi p<10E-3	TaiChi								Literature					Direction with TaiChi	
			Literature SNP	Literature SNP or proxy of literature SNP	A1	Frequency A1 (cases)	Frequency A1 (controls)	MAF	OR	SE	P-value	Literature SNP	Literature SNP or proxy of literature SNP	A1	OR or Beta	Ethnicity	
2	GCKR	Yes	rs780094	rs780094	A	0.467	0.491	0.480	0.90	0.029	2.9E-04	rs780094	rs780094	C	1.06	European	Same
	rs1260326		rs1260326		T	0.478	0.504	0.491	0.89	0.030	9.6E-05	rs1260326	rs1260326	T	0.07 (Beta)	European	Same
2	IRS1/LOC646736	Yes	rs7578326	rs7578326	G	0.148	0.147	0.148	1.01	0.041	7.5E-01	rs7578326	rs7578326	A	1.11	European	Different
	rs2943641		rs2943641		T	0.065	0.078	0.071	0.83	0.057	8.6E-04	rs2943641	rs2943640	C	1.19	European	Same
3	UBE2E2 *	Yes	rs7612463	rs7612463	NA	NA	NA	NA	NA	NA	NA	rs7612463	rs7612463	NR	NR	Japanese, European (same direction)	no proxy or NA
	rs4402960		rs4402960		T	0.265	0.239	0.251	1.15	0.034	5.6E-05	rs4402960	rs4402960	T	1.15	European and Japanese	Same
3	IGFBP2	Yes	rs6769511	rs6769511	C	0.277	0.247	0.261	1.17	0.034	5.0E-06	rs6769511	rs6769511	C	1.23	European and Asian	Same
	rs1374910		rs1374910		T	0.088	0.078	0.083	1.15	0.053	7.6E-03	rs1374910	rs1374910	T	1.24	Hispanics and European	Same
	rs9465871		rs9465871		C	0.495	0.471	0.481	1.09	0.029	3.1E-03	rs9465871	rs9465871	C	1.18	European	Same
	rs9295474		rs9295474		G	0.402	0.374	0.386	1.11	0.030	3.7E-04	rs9295474	rs9295474	G	1.16	Asian	Same
	rs766070		rs766070		A	0.381	0.350	0.363	1.13	0.030	4.0E-05	rs766070	rs766070	A	1.21	European	Same
	rs7756992		rs7756992		G	0.486	0.462	0.471	1.09	0.029	3.6E-03	rs7756992	rs7756992	G	1.20	European	Same
6	CDKAL1	Yes	rs754840	rs9460546	C	0.390	0.362	0.374	1.11	0.030	6.3E-04	rs754840	rs9460546	C	1.12	European	Same
	rs6931514		rs6931514		NA	NA	NA	NA	NA	NA	NA	rs6931514	rs6931514	G	1.25	European	NA
	rs4712524		rs4712524		G	0.401	0.373	0.385	1.11	0.030	4.3E-04	rs4712524	rs4712524	G	1.22	European and Asian	Same
	rs4712523		rs4712523		G	0.401	0.373	0.385	1.11	0.030	4.3E-04	rs4712523	rs4712523	G	1.20	European, Japanese	Same
	rs10946398		rs9460546		C	0.390	0.362	0.374	1.11	0.030	6.3E-04	rs10946398	rs9460546	C	1.18	European	Same
	rs10440833		rs9368222		A	0.381	0.350	0.363	1.13	0.030	4.0E-05	rs10440833	rs9368222	A	1.25	European	Same
8	SLC30A8	Yes	rs13266634	rs13266634	C	0.079	0.080	0.079	0.97	0.055	6.1E-01	rs13266634	rs13266634	C	1.16	European and Japanese	Different
	rs3802177		rs3802177		T	0.431	0.459	0.446	0.90	0.029	3.2E-04	rs3802177	rs3802177	G	1.23	European	Same
9	GLIS3	Yes	rs7034200	rs7034200	A	0.460	0.444	0.452	1.07	0.029	2.5E-02	rs7034200	rs7034200	A	1.03	European	Same
	rs7041847		rs7041847		A	0.481	0.468	0.475	1.06	0.029	7.0E-02	rs7041847	rs7041847	A	1.10	Asians	Same
	rs10811661		rs10811661		C	0.388	0.425	0.408	0.85	0.030	5.0E-08	rs10811661	rs10811661	T	1.19	European	Same
9	CDKN2A/B-CDKN2BAS	Yes	rs10965250	rs10811661	C	0.388	0.425	0.408	0.85	0.030	5.0E-08	rs10965250	rs10811661	G	1.20	European	Same
	rs2383208		rs2383208		G	0.375	0.404	0.391	0.88	0.030	1.3E-05	rs2383208	rs2383208	A	1.34	Japanese	Same
	rs7020996		rs7020996		T	0.375	0.403	0.390	0.88	0.030	3.8E-05	rs7020996	rs7020996	C	1.26	European	Same
	rs564398		rs564398		G	0.106	0.103	0.104	1.03	0.048	5.6E-01	rs564398	rs564398	T	1.13	European	Different
	rs7018475		rs7018475 **		G	0.355	0.348	0.352	1.03	0.031	3.1E-01	rs7018475	rs7018475 **	G	0.74	European	Different
10	CDC123/CAMK1D	Yes	rs10906115	rs10906115	G	0.358	0.390	0.373	0.87	0.030	1.1E-05	rs10906115	rs10906115	A	1.13	European and Asian	Same
	rs12779790		rs12779790		NA	0.413	0.448	0.430	NA	0.030	2.3E-06	rs12779790	rs12779790 **	G	1.11	European	no proxy or NA
10	IDE/KIF11/HHEX	Yes	rs1111875	rs1111875	G	0.324	0.299	0.311	1.13	0.032	1.6E-04	rs1111875	rs1111875	C	1.21	European and Japanese	Same/Different
	rs56583826		rs56583826 **		G	0.255	0.237	0.245	1.10	0.034	4.1E-03	rs56583826	rs56583826 **	G	1.18	Asian	Same
	rs5015480		rs5015480		G	0.324	0.299	0.311	1.13	0.032	1.6E-04	rs5015480	rs5015480	C	1.18	European and Japanese	Same
	rs2237897		rs2237897		T	0.313	0.360	0.338	0.80	0.032	5.7E-12	rs2237897	rs2237897	C	1.33	European and Asian	Same
	rs2237892		rs2237892		G	0.346	0.382	0.365	0.86	0.031	5.4E-07	rs2237892	rs2237892	C	1.20	European and Asian	Same
11	KCNQ1 *	Yes	rs163182	rs163182 **	C	0.399	0.358	0.378	1.20	0.030	3.7E-09	rs163182	rs163182 **	C	1.28	Chinese	Same
	rs2237895		rs2237895 **		C	0.378	0.335	0.356	1.23	0.031	6.5E-11	rs2237895	rs2237895 **	C	1.29	Chinese	Same
	rs2283228		rs2283228		C	0.332	0.369	0.352	0.85	0.031	1.6E-07	rs2283228	rs2283228	A	1.26	European and Asian	Same
	rs231362		rs231362		NA	NA	NA	NA	NA	NA	NA	rs231362	rs231362 **	G	1.08	European	no proxy or NA
11	KCNJ1/ABCC8	Yes	rs5219	rs5219	T	0.392	0.358	0.375	1.15	0.030	4.2E-06	rs5219	rs5219	T	1.25	European	Same
	rs5215		rs5215		C	0.392	0.358	0.375	1.15	0.030	3.8E-06	rs5215	rs5215	C	1.16	European	Same
15	PRCI	Yes	rs8042680	rs8042680 **	NA	NA	NA	NA	NA	NA	NA	rs8042680	rs8042680 **	A	1.07	European	no proxy or NA
17	HNF1B (TCF2)	Yes	rs5757210	rs5757210	T	0.277	0.249	0.262	1.14	0.033	5.8E-05	rs5757210	rs5757210	A	1.10	European	Same
1	NOTCH2	No (P=0.114)	rs1092931	rs1092931	T	0.027	0.026	0.027	1.04	0.091	6.4E-01	rs1092931	rs1092931	T	1.13	European	Same
1	PROX1	No (P=0.004) †	rs340874	rs340874	G	0.397	0.376	0.386	1.09	0.030	3.6E-03	rs340874	rs340874	C	1.07	European	Different
2	THADA	No (P=0.021) †	rs7578597	rs7578597 **	NA	NA	NA	NA	NA	NA	NA	rs7578597	rs7578597 **	T	1.15	European	no proxy or NA
2	BCL11A	No (P=0.020) †	rs243083	rs243083	T	0.336	0.349	0.342	0.95	0.031	1.1E-01	rs243083	rs243083	A	1.08	European	Different
2	RBMS1/ITGB6	No (P=0.001) †	rs593730	rs4410242	A	0.173	0.163	0.168	1.08	0.040	5.5E-04	rs593730	rs4410242	A	1.11	European	Same
2	G6PC2/ABCB11	No (P=0.014) †	rs563694	rs563694	C	0.042	0.040	0.041	1.05	0.074	5.1E-01	rs563694	rs563694	A	NR	Chinese	NA
3	PPARG	No (P=0.006) †	rs1801282	rs1801282	T	0.040	0.047	0.044	0.84	0.073	1.6E-02	rs1801282	rs1801282	C	0.70 (Beta)	European	Same
3	PPARG	No (P=0.006) †	rs17036101	rs17036101	A	0.036	0.042	0.039	0.83	0.077	1.9E-02	rs17036101	rs17036101	G	1.15	European	Same
3	PPARG	No (P=0.006) †	rs13081389	rs13081389	G	0.036	0.042	0.039	0.83	0.077	1.7E-02	rs13081389	rs13081389	A	1.24	European	Same
3	ADAMTS9/ADAMTS9-AS2 (LOC728723)	No (P=0.040) †	rs4607103	rs4607103	T	0.346	0.348	0.346	0.99	0.031	7.5E-01	rs4607103	rs4607103	C	1.09	European	Same
3	ADCVS	No (P=0.015) †	rs11708067	rs11708067	NA	NA	NA	NA	NA	NA	NA	rs11708067	rs11708067	A	1.25	European	no proxy or NA
3	SLC2A2	No (P=0.054)	rs11920090	rs11924648	NA	NA	NA	NA	NA	NA	NA	rs11920090	rs11924648	T	NR	European	no proxy or NA
4	WFS1	No (P=0.106)	rs1801214	rs1801214	C	0.055	0.060	0.057	0.93	0.063	2.7E-01	rs1801214	rs1801214	T	1.13	European	Same
4	WFS1	No (P=0.106)	rs4689388	rs4689388	G	0.051	0.058	0.055	0.90	0.065	1.1E-01	rs4689388	rs4689388	T	1.16	European	Same
4	WFS1	No (P=0.106)	rs10010131	rs10010131	T	0.062	0.068	0.065	0.93	0.060	2.1E-01	rs10010131	rs10010131	T	0.90	European	Same
5	ZBED3/ZBED3-ASI (LOC728723)	No (P=0.019) †	rs4457053	rs4457053	G	0.060	0.053	0.057	1.15	0.063	2.7E-02	rs4457053	rs4457053	G	1.08	European	Same
7	DGKB-TMEM195	No (P=0.005) †	rs2191349	rs2191349	G	0.311	0.315	0.313	0.97	0.032	3.2E-01	rs2191349	rs2191349	T	1.06	European	Same
7	JAZF1	No (P=0.010) †	rs604745	rs1635852	C	0.217	0.223	0.219	0.96	0.035	2.2E-01	rs604745	rs1635852	T	1.10	European	Same
7	GCK	No (P=0.104) †	rs4607517	rs2908282	A	0.199	0.200	0.199	0.98	0.037	6.2E-01	rs4607517	rs4607517	A	1.07	European	Different
7	KLF14	No (P=0.178)	rs972823	rs972823	A	0.309	0.314	0.312	0.98	0.032	5.8E-01	rs972823	rs972823	G	1.07	European	Same
8	TP53INP1	No (P=0.063)	rs986854	rs4735337	T	0.291	0.279										