

SUPPLEMENTARY DATA

Supplementary Table 1. T1D SNPs included in the genetic risk score with weights. Effect allele is the risk increasing allele on the positive strand.

SNP	Gene	Odds Ratio	Weight	Effect Allele
rs2187668, rs7454108	DR3/DR4-DQ8	48.18	3.87	
	DR3/DR3	21.12	3.05	
	DR4-DQ8/DR4-DQ8	21.98	3.09	
	DR4-DQ8/X	7.03	1.95	
	DR3/X	4.53	1.51	
rs1264813	HLA_A_24	1.54	0.43	T
rs2395029	HLA_B_5701	2.5	0.92	T
rs3129889	HLA_DRB1_15	14.88	2.70	A
rs2476601	PTPN22	1.96	0.67	A
rs689	INS	1.75	0.56	T
rs12722495	IL2RA	1.58	0.46	T
rs2292239	ERBB3	1.35	0.30	T
rs10509540	C10orf59	1.33	0.29	T
rs4948088	COBL	1.3	0.26	C
rs7202877		1.28	0.25	G
rs12708716	CLEC16A	1.23	0.21	A
rs3087243	CTLA4	1.22	0.20	G
rs1893217	PTPN2	1.2	0.18	G
rs11594656	IL2RA	1.19	0.17	T
rs3024505	IL10	1.19	0.17	G
rs9388489	C6orf173	1.17	0.16	G
rs1465788		1.16	0.15	C
rs1990760	IFIH1	1.16	0.15	T
rs3825932	CTSH	1.16	0.15	C
rs425105		1.16	0.15	T
rs763361	CD226	1.16	0.15	T
rs4788084	IL27	1.16	0.15	C
rs17574546		1.14	0.13	C
rs11755527	BACH2	1.13	0.12	G
rs3788013	UBASH3A	1.13	0.12	A
rs2069762	IL2	1.12	0.11	A
rs2281808		1.11	0.10	C
rs5753037		1.1	0.10	T

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Supplementary Table 2. Sensitivity and specificity for clinically defined T1D and T2D and insulin deficiency and non-insulin deficiency in young adults at a range of T1D GRS cut-offs. Prevalence used in PPV and NPV analyses based on local cohort frequency of severe insulin deficiency of 21%. This is consistent with the prevalence in the Scottish Diabetes Survey 2013 for T1D in this age group (<http://www.diabetesinscotland.org.uk/>).

GRS cut-off	Sensitivity/specificity for T1D in WTCCC	Sensitivity/specificity for insulin deficiency	PPV for insulin deficiency assuming prevalence 21%	NPV for insulin deficiency assuming prevalence 21%	GRS equivalent centile of WTCCC T1D cohort
0.213	99/29	98/31	27	98	3
0.234	95/53	96/56	37	98	5
0.244	90/66	87/66	42	95	13
0.270	64/90	67/87	58	91	36
0.280	50/95	54/92	63	88	50
0.302	19/99	17/99	89	82	77

Supplementary Figure 1. Defining insulin deficiency in our South West England cohort.

