Supplementary Table 13. Associations of identified variants with glycemic and metabolic traits during pregnancy in Chinese women from the HAPO-HK Study

SNP	Nearest gene(s)	Chr	Position (Build 37)	Risk/non-risk allele	Trait measured during pregnancy	Transformation	Model I: PCs and age				Model II: PCs, age, and BMI			
							No.	Risk allele frequency	β±SE	*P* value	No.	Risk allele frequency	β±SE	*P* value
rs117781972	*TBR1-SLC4A10*	2	162,332,226	A/G	Fasting glucose, mmol/L	Winsorization	961	0.212	0.019±0.021	0.3826	960	0.211	0.014±0.021	0.5068
					1-hr glucose, mmol/L	Winsorization	960	0.212	0.200±0.102	0.0495	959	0.211	0.183±0.100	0.0681
					2-hr glucose, mmol/L	Winsorization	961	0.212	0.302±0.080	1.7×10^{-4}	960	0.211	0.288±0.079	2.8×10^{-4}
					AUC_{glu} at 0–120 min	Winsorization	960	0.212	21.82±8.066	7.0×10^{-3}	959	0.211	20.24±7.911	0.0107
					HbA1c, %	Winsorization	886	0.212	−0.006±0.023	0.7944	886	0.212	−0.009±0.023	0.6904
					HOMA2-β	Natural logarithm	956	0.212	0.012±0.014	0.3597	955	0.212	0.007±0.013	0.5774
					HOMA2-IR	Natural logarithm	956	0.212	0.031±0.022	0.1523	955	0.212	0.020±0.019	0.2944
					Fasting C-peptide, pmol/L	Natural logarithm	956	0.212	0.030±0.021	0.1559	955	0.212	0.019±0.018	0.3020
					Body mass index, kg/m^2	Winsorization	960	0.211	0.201±0.184	0.2741	-	-	-	-
					Gestational weight gain, kg/wk	Winsorization	953	0.212	0.003±0.008	0.7224	953	0.212	0.0004±0.008	0.9613
					Systolic blood pressure, mm Hg	Winsorization	960	0.211	0.289±0.602	0.6318	960	0.211	0.095±0.577	0.8687
					Diastolic blood pressure, mm Hg	Winsorization	960	0.211	−0.052±0.456	0.9087	960	0.211	−0.215±0.432	0.6190
rs7754840	*CDKAL1*	6	20,661,250	C/G	Fasting glucose, mmol/L	Winsorization	961	0.374	0.020±0.016	0.2273	960	0.374	0.018±0.016	0.2448
					1-hr glucose, mmol/L	Winsorization	960	0.375	0.174±0.077	0.0245	959	0.375	0.170±0.076	0.0258
					2-hr glucose, mmol/L	Winsorization	961	0.374	0.097±0.061	0.1147	960	0.374	0.093±0.060	0.1237
					AUC_{glu} at 0–120 min	Winsorization	960	0.375	13.80±6.142	0.0249	959	0.375	13.39±6.013	0.0261
					HbA1c, %	Winsorization	886	0.372	0.008±0.017	0.6306	886	0.372	0.007±0.017	0.6950
					HOMA2-β	Natural logarithm	956	0.374	−0.001±0.010	0.9074	955	0.374	−0.003±0.010	0.7912
					HOMA2-IR	Natural logarithm	956	0.374	0.010±0.016	0.5484	955	0.374	0.007±0.015	0.6258
					Fasting C-peptide, pmol/L	Natural logarithm	956	0.374	0.009±0.016	0.5881	955	0.374	0.006±0.014	0.6739
					Body mass index, kg/m^2	Winsorization	960	0.374	0.049±0.140	0.7276	-	-	-	-
					Gestational weight gain, kg/wk	Winsorization	953	0.375	0.010±0.006	0.1084	953	0.375	0.009±0.006	0.1223
					Systolic blood pressure, mm Hg	Winsorization	960	0.374	0.007±0.458	0.9877	960	0.374	−0.040±0.438	0.9277
					Diastolic blood pressure, mm Hg	Winsorization	960	0.374	−0.181±0.347	0.6025	960	0.374	−0.220±0.328	0.5027
rs2237897	*INS-IGF2-KCNQ1*	11	2,858,546	C/T	Fasting glucose, mmol/L	Winsorization	961	0.651	0.033±0.017	0.0501	960	0.651	0.031±0.016	0.0577
					1-hr glucose, mmol/L	Winsorization	960	0.651	0.244±0.080	2.4×10^{-3}	959	0.651	0.237±0.079	2.7×10^{-3}
					2-hr glucose, mmol/L	Winsorization	961	0.651	0.244±0.063	1.2×10^{-4}	960	0.651	0.239±0.062	1.4×10^{-4}
					AUC_{glu} at 0–120 min	Winsorization	960	0.651	23.08±6.349	2.9×10^{-4}	959	0.651	22.49±6.219	3.2×10^{-4}
					HbA1c, %	Winsorization	886	0.650	0.031±0.018	0.0840	886	0.650	0.030±0.018	0.0920
					HOMA2-β	Natural logarithm	956	0.651	0.013±0.011	0.2164	955	0.651	0.010±0.010	0.2965
					HOMA2-IR	Natural logarithm	956	0.651	0.045±0.017	9.0×10^{-3}	955	0.651	0.039±0.015	9.8×10^{-3}
					Fasting C-peptide, pmol/L	Natural logarithm	956	0.651	0.042±0.017	0.0109	955	0.651	0.037±0.015	0.0121
					Body mass index, kg/m^2	Winsorization	960	0.651	0.077±0.145	0.5936	-	-	-	-
					Gestational weight gain, kg/wk	Winsorization	953	0.651	−0.007±0.006	0.2430	953	0.651	-0.008±0.006	0.1821
					Systolic blood pressure, mm Hg	Winsorization	960	0.651	0.459±0.475	0.3342	960	0.651	0.385±0.455	0.3976
					Diastolic blood pressure, mm Hg	Winsorization	960	0.651	0.390±0.360	0.2788	960	0.651	0.328±0.341	0.3364

(*Continued to the next page*)

Supplementary Table 13. Continued

SNP	Nearest gene(s)	Chr	Position (Build 37)	Risk/non-risk allele	Trait measured during pregnancy	Transformation	Model I: PCs and age				Model II: PCs, age, and BMI			
							No.	Risk allele frequency	β±SE	*P* value	No.	Risk allele frequency	β±SE	*P* value
rs7945617	*MTNR1B*	11	92,700,287	C/T	Fasting glucose, mmol/L	Winsorization	961	0.490	0.059±0.017	3.5×10^{-4}	960	0.490	0.057±0.016	4.5×10^{-4}
					1-hr glucose, mmol/L	Winsorization	960	0.490	0.250±0.079	1.5×10^{-3}	959	0.490	0.242±0.078	1.8×10^{-3}
					2-hr glucose, mmol/L	Winsorization	961	0.490	0.241±0.062	1.1×10^{-4}	960	0.490	0.233±0.061	1.5×10^{-4}
					AUC_{glu} at 0–120 min	Winsorization	960	0.490	24.04±6.233	1.2×10^{-4}	959	0.490	23.25±6.111	1.5×10^{-4}
					HbA1c, %	Winsorization	886	0.490	0.007±0.018	0.6731	886	0.490	0.004±0.018	0.8152
					HOMA2-β	Natural logarithm	956	0.491	−0.026±0.010	0.0119	955	0.490	−0.030±0.010	2.4×10^{-3}
					HOMA2-IR	Natural logarithm	956	0.491	0.005±0.017	0.7813	955	0.490	−0.002±0.015	0.8797
					Fasting C-peptide, pmol/L	Natural logarithm	956	0.491	0.00004±0.016	0.9980	955	0.490	−0.007±0.014	0.6411
					Body mass index, kg/m^2	Winsorization	960	0.490	0.110±0.143	0.4415	-	-	-	-
					Gestational weight gain, kg/wk	Winsorization	953	0.490	0.006±0.006	0.3395	953	0.490	0.005±0.006	0.4484
					Systolic blood pressure, mm Hg	Winsorization	960	0.490	0.239±0.468	0.6092	960	0.490	0.133±0.447	0.7656
					Diastolic blood pressure, mm Hg	Winsorization	960	0.490	−0.022±0.354	0.9500	960	0.490	−0.111±0.335	0.7408

β and SE were reported according to the GDM-related risk allele. *P* was obtained from linear regression model with the adjustments of covariates.
HAPO-HK, Hyperglycemia and Adverse Pregnancy Outcome-Hong Kong; SNP, single nucleotide polymorphism; Chr, chromosome; PC, principal component; SE, standard error; BMI, body mass index; *TBR1*, T-box brain transcription factor 1; *SLC4A10*, solute carrier family 4 member 10; AUC_{glu}, glucose area under the curve during OGTT; HbA1c, glycosylated hemoglobin; HOMA2-β, homeostatic model assessment 2 of β-cell function; HOMA2-IR, homeostatic model assessment 2 of insulin resistance; *CDKAL1*, CDK5 regulatory subunit-associated protein 1-like 1; *INS-IGF2*, insulin-insulin-like growth factor 2; *KCNQ1*, potassium voltage-gated channel subfamily Q member 1; *MTNR1B*, melatonin receptor 1B.