

**Supplementary Table 11.** Associations between polygenic risk score and risk of abnormal glucose tolerance at 7-year postpartum in the HAPO-HK Study

Variable	Number		PRS derived from 4 GDM-related variants				PRS derived from 286 T2DM-related variants [12]			
	AGT case	Non-AGT control	Z-score of PRS		Top 20% vs. others		Z-score of PRS		Top 20% vs. others	
			OR (95% CI)	P value	OR (95% CI)	P value	OR (95% CI)	P value	OR (95% CI)	P value
PCs, age, and BMI	129	829	1.40 (1.15–1.71)	6.7×10 <sup>-4</sup>	1.71 (1.08–2.71)	0.0220	1.78 (1.44–2.19)	8.9×10 <sup>-8</sup>	2.12 (1.36–3.29)	8.3×10 <sup>-4</sup>
PCs, age, BMI, and GDM history	129	828	1.22 (0.99–1.50)	0.0571	1.26 (0.77–2.05)	0.3589	1.63 (1.32–2.03)	8.8×10 <sup>-6</sup>	1.81 (1.15–2.87)	0.0108
PCs, age, BMI, and another PRS <sup>a</sup>	129	828	1.24 (1.01–1.53)	0.0408	1.56 (0.98–2.49)	0.0632	1.68 (1.35–2.08)	3.0×10 <sup>-6</sup>	2.01 (1.28–3.13)	2.2×10 <sup>-3</sup>

The T2DM-related PRS was derived based on 286 T2DM-related variants reported by Diabetes Meta-Analysis of Trans-Ethnic association studies (DIAMANTE) consortium [12]. OR and 95% CI, as well as *P* value were obtained from either logistic regression model with the adjustments for covariates.

HAPO-HK, Hyperglycemia and Adverse Pregnancy Outcome-Hong Kong; AGT, abnormal glucose tolerance; PRS, polygenic risk score; GDM, gestational diabetes mellitus; OR, odds ratio; CI, confidence interval; T2DM, type 2 diabetes mellitus; PC, principal component; BMI, body mass index.

<sup>a</sup>In the analysis for GDM-related PRS, the covariates included PCs, age, BMI, and T2DM-related PRS. In the analysis for T2DM-related PRS, the covariates included PCs, age, BMI, and GDM-related PRS.