

**Supplementary Table 1.** Clinical characteristics of all individuals from the three discovery cohorts according to the status of gestational diabetes

Characteristic	HAPO-HK Study (population-based study) HumanOmniZhongHua-8 BeadChip			Tianjin Study (case-control study) Global Screening Array			TGDM-NDM Study (case-control study) HumanOmniZhongHua-8 BeadChip/Infinium Omni2.5+exome array		
	GDM case ( <i>n</i> =149)	Non-GDM control ( <i>n</i> =811)	<i>P</i> value	GDM case ( <i>n</i> =229)	Non-GDM control ( <i>n</i> =226)	<i>P</i> value	GDM case ( <i>n</i> =86)	Non-diabetes control ( <i>n</i> =180)	<i>P</i> value
Gestational age at OGTT, wk	27.6±1.34	27.7±1.30	0.3930	26.6±1.44	-	-	28.0±2.01	-	-
Age, yr	32.8±4.24	30.7±4.65	<0.0001	29.2±2.73	29.2±3.32	0.8522	35.2±3.97	41.4±8.11	<0.0001
Body mass index, kg/m <sup>2</sup>	25.6±2.93	24.4±2.95	<0.0001	27.1±3.66	25.3±3.52	<0.0001	24.8±4.71	22.6±3.77	0.0003
Fasting plasma glucose, mmol/L	4.70±0.56	4.32±0.29	<0.0001	5.21±0.70	-	-	4.82±0.62	4.68±0.42	-
1-hr plasma glucose, mmol/L	9.98±1.68	7.29±1.32	<0.0001	10.1±1.61	-	-	-	-	-
2-hr plasma glucose, mmol/L	8.67±1.09	6.30±1.03	<0.0001	8.37±1.62	-	-	9.10±0.99	5.69±1.30	-
Glucose area under the curve, mmol/L	1,000±112	756±101	<0.0001	1,016±139	-	-	-	-	-
Fasting C-peptide, pmol/L	666 (500–866)	533 (433–674)	<0.0001	-	-	-	-	-	-
Fasting plasma insulin, mU/L	-	-	-	13.07±7.09	-	-	-	-	-
HOMA2-IR	1.45 (1.10–1.89)	1.14 (0.91–1.43)	<0.0001	-	-	-	-	-	-
HOMA2-%β	143 (125–164)	143 (127–167)	0.4908	-	-	-	-	-	-
Maternal smoking during pregnancy	1.4 (11)	2.7 (4)	0.2295	0.9 (2)	0.4 (1)	1.0000	-	-	-

Values are presented as mean±standard deviation, median (interquartile range), or percentage (number). Between-group comparisons were performed by unpaired Student's *t*-test, the Wilcoxon Rank Sum test, or the chi-square test.

HAPO-HK, Hyperglycemia and Adverse Pregnancy Outcome-Hong Kong; TGDM-NDM, Treated GDM Cases vs. Non-diabetes Controls; GDM, gestational diabetes mellitus; OGTT, oral glucose tolerance test; HOMA2-IR, homeostatic model assessment 2 of insulin resistance; HOMA2-%β, homeostatic model assessment 2 of β-cell function.