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Supplemental Table 1 Anthropometric and biochemical characteristics of participants categorized by tertiles of TyG-BMI

Characteristics	Overall (<i>n</i> = 10422)	TyG-BMI tertiles			<i>p</i> -value
		T1 (<i>n</i> = 3475)	T2 (<i>n</i> = 3473)	T3 (<i>n</i> = 3474)	
Maternal age (years)	30.0 ± 3.3	29.5 ± 3.0	30.1 ± 3.2	30.6 ± 3.5	<0.001
Pre-pregnancy BMI (kg/m ²)	21.3 ± 2.7	19.0 ± 1.3	21.0 ± 1.3	24.1 ± 2.5	<0.001
Gravidity [n (%)]					<0.001
1	6047 (58.0)	2294 (66.1)	1998 (57.5)	1755 (50.5)	
≥2	4372 (42.0)	1178 (33.9)	1476 (42.5)	1718 (49.5)	
Parity [n (%)]					<0.001
1	2940 (84.7)	2667 (76.8)	2502 (72.0)	8109 (77.8)	
≥2	533 (15.3)	807 (23.2)	971 (28.0)	2311 (22.2)	
SBP (mmHg)	111.2 ± 10.6	108.7 ± 10.4	110.7 ± 10.2	114.1 ± 10.5	<0.001
DBP (mmHg)	69.8 ± 7.6	67.8 ± 7.3	69.2 ± 7.1	72.3 ± 7.6	<0.001
Waist circumference (cm)	88.4 ± 6.2	83.4 ± 4.0	87.8 ± 4.0	93.8 ± 5.4	<0.001
Waist-to-height ratio	0.5 ± 0	0.5 ± 0	0.5 ± 0	0.6 ± 0	<0.001
OGTT-0h (mmol/L)	4.5 ± 0.3	4.4 ± 0.3	4.4 ± 0.3	4.6 ± 0.4	<0.001
OGTT-1h (mmol/L)	7.7 ± 1.6	7.5 ± 1.6	7.7 ± 1.6	8.1 ± 1.6	<0.001
OGTT-2h (mmol/L)	6.7 ± 1.3	6.5 ± 1.3	6.6 ± 1.3	6.9 ± 1.3	<0.001
ALT (U/L)	14.8 (10.7, 21.8)	18.2 (12.6, 27.7)	17.3 (12.1, 26.5)	15.3 (10.9, 22.1)	<0.001
AST (U/L)	17.4 (14.8, 21.0)	19.9 (16.9, 24.4)	18.9 (15.9, 23.3)	17.0 (14.5, 20.5)	<0.001
TP (g/L)	65.7 ± 3.3	65.4 ± 3.4	65.6 ± 3.3	66.0 ± 3.2	<0.001
ALB (g/L)	39.4 ± 2.4	39.5 ± 2.4	39.3 ± 2.3	39.2 ± 2.3	<0.001
UREA (mmol/L)	3.0 ± 0.7	3.1 ± 0.7	3.1 ± 0.7	2.9 ± 0.7	<0.001
CREA (μmol/L)	39.8 ± 6.2	39.7 ± 6.1	39.8 ± 5.9	40.0 ± 6.4	0.2
UA (μmol/L)	231.3 ± 47.3	221.3 ± 43.4	229.3 ± 45.8	243.3 ± 49.8	<0.001
TC (mmol/L)	6.0 ± 0.9	6.0 ± 0.9	6.1 ± 1.0	6.0 ± 1.0	<0.001
TG (mmol/L)	2.7 (2.4, 3.1)	1.6 (1.3, 2.0)	1.9 (1.6, 2.3)	2.4 (1.9, 2.9)	<0.001
HDL-C (mmol/L)	2.3 ± 0.4	2.4 ± 0.4	2.3 ± 0.4	2.2 ± 0.4	<0.001
LDL-C (mmol/L)	3.0 ± 0.7	3.0 ± 0.7	3.1 ± 0.7	3.0 ± 0.7	<0.001
HbA1c (%)	4.9 ± 0.2	4.9 ± 0.2	4.9 ± 0.2	5.0 ± 0.2	<0.001
TyG	8.9 ± 0.3	8.6 ± 0.3	8.8 ± 0.3	9.1 ± 0.3	<0.001
TyG-BMI	205.5 (188.8, 225.9)	182.4 (174.4, 188.8)	205.5 (199.7, 211.6)	236.2 (226.2, 251.0)	<0.001
TyG-WC	783.4 ± 69.8	721.7 ± 40	776.6 ± 38.9	850.4 ± 56.1	<0.001
TyG-WHtR	4.8 ± 0.4	4.4 ± 0.3	4.8 ± 0.2	5.3 ± 0.4	<0.001

Abbreviations: TyG, triglyceride-glucose index; BMI, body mass index; T, tertiles; SBP, systolic blood pressure; DBP, diastolic blood pressure; OGTT, oral glucose tolerance test; ALT, alanine aminotransferase; AST, aspartate aminotransferase; TP, total protein; ALB, albumin; UREA, urea; CREA, creatinine; UA, uric acid; TC, total cholesterol; TG, triglycerides; HDL-C, high-density lipoprotein cholesterol; LDL-C, low-density lipoprotein cholesterol; HbA1c, glycated hemoglobin; WC: waist circumference; WHtR: waist-to-height ratio.

Supplemental Table 2 Anthropometric and biochemical characteristics of participants categorized by tertiles of TyG-WC

Characteristics	Overall (<i>n</i> = 9042)	TyG-WC tertiles			<i>p</i> -value
		T1 (<i>n</i> = 3014)	T2 (<i>n</i> = 3014)	T3 (<i>n</i> = 3014)	
Maternal age (years)	30.1 ± 3.3	29.4 ± 3	30 ± 3.2	30.8 ± 3.6	<0.001
Pre-pregnancy BMI (kg/m ²)	21.4 ± 2.7	19.5 ± 1.7	21.0 ± 1.9	23.5 ± 2.8	<0.001
Gravidity [n (%)]					<0.001
1	5243 (58.0)	2007 (66.6)	1763 (58.5)	1473 (48.9)	
≥2	3797 (42.0)	1007 (33.4)	1249 (41.5)	1541 (51.1)	
Parity [n (%)]					<0.001
1	7010 (77.5)	2569 (85.2)	2334 (77.5)	2107 (69.9)	
≥2	2031 (22.5)	445 (14.8)	679 (22.5)	907 (30.1)	
SBP (mmHg)	111.2 ± 10.7	108.9 ± 10.5	110.8 ± 10.4	113.9 ± 10.6	<0.001
DBP (mmHg)	69.8 ± 7.6	68.2 ± 7.4	69.3 ± 7.3	72.0 ± 7.6	<0.001
Waist circumference (cm)	88.4 ± 6.2	82.6 ± 3.3	87.8 ± 2.9	94.8 ± 4.7	<0.001
Waist-to-height ratio	0.5 ± 0	0.5 ± 0	0.5 ± 0	0.6 ± 0	<0.001
OGTT-0h (mmol/L)	4.5 ± 0.3	4.4 ± 0.3	4.4 ± 0.3	4.6 ± 0.4	<0.001
OGTT-1h (mmol/L)	7.7 ± 1.6	7.5 ± 1.6	7.7 ± 1.6	8.1 ± 1.6	<0.001
OGTT-2h (mmol/L)	6.7 ± 1.3	6.5 ± 1.3	6.6 ± 1.3	6.9 ± 1.3	<0.001
ALT (U/L)	16.8 (11.8, 25.4)	18.3 (12.7, 28.2)	17.3 (12.1, 26.2)	15.2 (10.8, 22.0)	<0.001
AST (U/L)	18.5 (15.6, 22.7)	19.9 (16.8, 24.6)	18.8 (16.0, 23.0)	17.0 (14.5, 20.5)	<0.001
TP (g/L)	65.7 ± 3.3	65.3 ± 3.4	65.8 ± 3.3	66.0 ± 3.2	<0.001
ALB (g/L)	39.3 ± 2.3	39.4 ± 2.4	39.3 ± 2.3	39.2 ± 2.3	0.001
UREA (mmol/L)	3.0 ± 0.7	3.1 ± 0.7	3.1 ± 0.7	2.9 ± 0.7	<0.001
CREA (μmol/L)	39.5 ± 6.1	39.7 ± 6.1	39.4 ± 6.0	39.5 ± 6.2	0.16
UA (μmol/L)	231.8 ± 47.2	222.9 ± 43.7	229.5 ± 45.8	243.0 ± 49.5	<0.001
TC (mmol/L)	6.0 ± 0.9	6.0 ± 0.9	6.1 ± 1.0	6.0 ± 1.0	<0.001
TG (mmol/L)	1.9 (1.6, 2.4)	1.6 (1.3, 1.9)	2.0 (1.6, 2.3)	2.4 (2.0, 3.0)	<0.001
HDL-C (mmol/L)	2.3 ± 0.4	2.4 ± 0.4	2.3 ± 0.4	2.2 ± 0.4	<0.001
LDL-C (mmol/L)	3.0 ± 0.7	3.0 ± 0.7	3.1 ± 0.7	3.1 ± 0.7	<0.001
HbA1c (%)	4.9 ± 0.2	4.9 ± 0.2	4.9 ± 0.2	5.0 ± 0.2	<0.001
TyG	8.9 ± 0.3	8.6 ± 0.3	8.9 ± 0.3	9.1 ± 0.3	<0.001
TyG-BMI	205.5 (188.8, 225.9)	184.6 (175.1, 194.9)	204.9 (195.1, 215.7)	234.6 (220.5, 250.9)	<0.001
TyG-WC	776.4 (734.1, 827.7)	717 (692.6, 733.7)	776.4 (762.6, 791.8)	851.1 (827.7, 883.9)	<0.001
TyG-WHtR	4.8 (4.5, 5.1)	4.4 (4.3, 4.5)	4.8 (4.7, 4.9)	5.3 (5.1, 5.5)	<0.001

Abbreviations as in Supplemental Table 1.

Supplemental Table 3 Anthropometric and biochemical characteristics of participants categorized by tertiles of TyG-WHtR

Characteristics	Overall (<i>n</i> = 9042)	TyG-WHtR tertiles			<i>p</i> -value
		T1 (<i>n</i> = 3014)	T2 (<i>n</i> = 3014)	T3 (<i>n</i> = 3014)	
Maternal age (years)	30.1 ± 3.3	29.3 ± 3.0	30.1 ± 3.2	30.8 ± 3.6	<0.001
Pre-pregnancy BMI (kg/m ²)	20.9 (19.5, 22.8)	19.4 (18.4, 20.5)	20.8 (19.7, 22.2)	23.1 (21.5, 25.0)	<0.001
Gravidity [n (%)]					<0.001
1	5243 (58.0)	2038 (67.6)	1753 (58.2)	1452 (48.2)	
≥2	3797 (42.0)	976 (32.4)	1260 (41.8)	1561 (51.8)	
Parity [n (%)]					<0.001
1	7010 (77.5)	2568 (85.2)	2349 (77.9)	2093 (69.5)	
≥2	2031 (22.5)	446 (14.8)	665 (22.1)	920 (30.5)	
SBP (mmHg)	111.2 ± 10.7	109.2 ± 10.5	110.8 ± 10.4	113.5 ± 10.6	<0.001
DBP (mmHg)	69.8 ± 7.6	68.3 ± 7.4	69.3 ± 7.4	71.8 ± 7.6	<0.001
Waist circumference (cm)	88.0 (84.0, 92.0)	83.0 (80.0, 86.0)	88.0 (85.0, 90.0)	94.0 (91.0, 97.0)	<0.001
Waist-to-height ratio	0.5 (0.5, 0.6)	0.5 (0.5, 0.5)	0.5 (0.5, 0.6)	0.6 (0.6, 0.6)	<0.001
OGTT-0h (mmol/L)	4.5 ± 0.3	4.4 ± 0.3	4.4 ± 0.3	4.6 ± 0.4	<0.001
OGTT-1h (mmol/L)	7.7 ± 1.6	7.4 ± 1.6	7.7 ± 1.6	8.1 ± 1.6	<0.001
OGTT-2h (mmol/L)	6.7 ± 1.3	6.4 ± 1.3	6.6 ± 1.3	6.9 ± 1.3	<0.001
ALT (U/L)	16.8 (11.8, 25.4)	18.6 (12.8, 28.7)	17.4 (12.1, 26.1)	14.9 (10.8, 21.6)	<0.001
AST (U/L)	18.5 (15.6, 22.7)	19.9 (16.8, 24.7)	18.9 (15.9, 23.1)	17 (14.6, 20.4)	<0.001
TP (g/L)	65.7 ± 3.3	65.4 ± 3.4	65.7 ± 3.3	66 ± 3.2	<0.001
ALB (g/L)	39.3 ± 2.3	39.5 ± 2.3	39.3 ± 2.3	39.2 ± 2.3	<0.001
UREA (mmol/L)	3.0 ± 0.7	3.2 ± 0.7	3.0 ± 0.7	3.0 ± 0.7	<0.001
CREA (μmol/L)	39.5 ± 6.1	39.9 ± 6.1	39.4 ± 6	39.3 ± 6.3	0.001
UA (μmol/L)	231.8 ± 47.2	223.5 ± 43.5	229.3 ± 46.6	242.6 ± 49.1	<0.001
TC (mmol/L)	6.0 ± 0.9	6.0 ± 0.9	6.1 ± 1.0	6.0 ± 1.0	<0.001
TG (mmol/L)	1.9 (1.6, 2.4)	1.6 (1.3, 1.9)	2.0 (1.6, 2.3)	2.4 (2.0, 3.0)	<0.001
HDL-C (mmol/L)	2.3 ± 0.4	2.4 ± 0.4	2.3 ± 0.4	2.2 ± 0.4	<0.001
LDL-C (mmol/L)	3.0 ± 0.7	3.0 ± 0.7	3.1 ± 0.7	3.1 ± 0.7	<0.001
HbA1c (%)	4.9 ± 0.2	4.9 ± 0.2	4.9 ± 0.2	5.0 ± 0.2	<0.001
TyG	8.9 ± 0.3	8.6 ± 0.3	8.9 ± 0.3	9.1 ± 0.3	<0.001
TyG-BMI	209.5 ± 28.5	185.1 ± 15.1	206.4 ± 15.9	236.9 ± 24.6	<0.001
TyG-WC	783.4 ± 69.8	715.1 ± 33.8	777.7 ± 28.2	857.4 ± 49.9	<0.001
TyG-WHtR	4.8 (4.5, 5.1)	4.4 (4.3, 4.5)	4.8 (4.7, 4.9)	5.3 (5.1, 5.5)	<0.001

Abbreviations as in Supplemental Table 1.

Supplemental Table 4 Maternal and neonatal outcomes of participants according to tertiles of TyG index

Outcomes	TyG index tertiles				p-value
	Overall (n = 10422)	T1 (n = 3475)	T2 (n = 3473)	T3 (n = 3474)	
Maternal outcomes [n (%)]					
Gestational diabetes mellitus	1590 (15.3)	346 (10.0)	507 (14.6)	737 (21.2)	<0.001
Hypertensive disorders of pregnancy	677 (6.5)	150 (4.3)	205 (5.9)	322 (9.3)	<0.001
Cesarean delivery	3337 (32.0)	990 (28.5)	1084 (31.2)	1263 (36.4)	<0.001
Gestational anemia	2882 (27.7)	936 (26.9)	992 (28.6)	954 (27.5)	0.302
Oligohydramnios (<300 ml)	204 (2.0)	78 (2.2)	68 (2.0)	58 (1.7)	0.224
Polyhydramnios (>2000 ml)	281 (2.7)	88 (2.5)	93 (2.7)	100 (2.9)	0.670
Postpartum anemia	2790 (26.8)	943 (27.1)	898 (25.9)	949 (27.3)	0.325
Neonatal outcomes [n (%)]					
Preterm birth	338 (3.2)	82 (2.4)	119 (3.4)	137 (3.9)	0.001
Fetal distress	586 (5.6)	208 (6.0)	193 (5.6)	185 (5.3)	0.480
Large for gestational age	1406 (13.5)	348 (10.0)	457 (13.2)	601 (17.3)	<0.001
Small for gestational age	558 (5.4)	249 (7.2)	163 (4.7)	146 (4.2)	<0.001
Fetal growth restriction	163 (1.6)	57 (1.6)	56 (1.6)	50 (1.4)	0.765
NICU admission	1960 (18.8)	619 (17.8)	670 (19.3)	671 (19.3)	0.185
Low Apgar score	57 (0.5)	17 (0.5)	16 (0.5)	24 (0.7)	0.366

Abbreviations:T, tertiles; TyG, triglyceride-glucose index; NICU, neonatal intensive care unit.

Supplemental Table 5 Maternal and neonatal outcomes of participants according to tertiles of TyG-BMI

Outcomes	TyG-BMI tertiles				<i>p</i> -value
	Overall (<i>n</i> = 10422)	T1 (<i>n</i> = 3473)	T2 (<i>n</i> = 3474)	T3 (<i>n</i> = 3475)	
Maternal outcomes [n (%)]					
Gestational diabetes mellitus	1590 (15.3)	384 (11.1)	491 (14.1)	715 (20.6)	<0.001
Hypertensive disorders of pregnancy	677 (6.5)	120 (3.5)	171 (4.9)	386 (11.1)	<0.001
Cesarean delivery	3337 (32.0)	879 (25.3)	1049 (30.2)	1409 (40.5)	<0.001
Gestational anemia	2882 (27.7)	999 (28.8)	987 (28.4)	896 (25.8)	0.010
Oligohydramnios (<300 ml)	204 (2.0)	80 (2.3)	60 (1.7)	64 (1.8)	0.185
Polyhydramnios (>2000 ml)	281 (2.7)	76 (2.2)	84 (2.4)	121 (3.5)	0.002
Postpartum anemia	2790 (26.8)	921 (26.5)	923 (26.6)	946 (27.2)	0.761
Neonatal outcomes [n (%)]					
Preterm birth	338 (3.2)	106 (3.1)	103 (3.0)	129 (3.7)	0.157
Fetal distress	586 (5.6)	186 (5.4)	179 (5.2)	221 (6.4)	0.065
Large for gestational age	1406 (13.5)	233 (6.7)	427 (12.3)	746 (21.5)	<0.001
Small for gestational age	558 (5.4)	282 (8.1)	161 (4.6)	115 (3.3)	<0.001
Fetal growth restriction	163 (1.6)	67 (1.9)	51 (1.5)	45 (1.3)	0.088
NICU admission	1960 (18.8)	599 (17.2)	641 (18.5)	720 (20.7)	0.001
Low Apgar score	57 (0.5)	16 (0.5)	18 (0.5)	23 (0.7)	0.504

Abbreviations: TyG, triglyceride-glucose index; BMI, body mass index; NICU, neonatal intensive care unit.

Supplemental Table 6 Maternal and neonatal outcomes of participants according to tertiles of TyG-WC

Outcomes	TyG-WC tertiles				<i>p</i> -value
	Overall (<i>n</i> = 9042)	T1 (<i>n</i> = 3014)	T2 (<i>n</i> = 3014)	T3 (<i>n</i> = 3014)	
Maternal outcomes [n (%)]					
Gestational diabetes mellitus	1368 (15.1)	320 (10.6)	413 (13.7)	635 (21.1)	<0.001
Hypertensive disorders of pregnancy	596 (6.6)	116 (3.8)	160 (5.3)	320 (10.6)	<0.001
Cesarean delivery	2916 (32.2)	775 (25.7)	927 (30.8)	1214 (40.3)	<0.001
Gestational anemia	2511 (27.8)	870 (28.9)	838 (27.8)	803 (26.6)	0.156
Oligohydramnios (<300 ml)	184 (2.0)	76 (2.5)	56 (1.9)	52 (1.7)	0.064
Polyhydramnios (>2000 ml)	240 (2.7)	66 (2.2)	74 (2.5)	100 (3.3)	0.017
Postpartum anemia	2433 (26.9)	802 (26.6)	817 (27.1)	814 (27.0)	0.899
Neonatal outcomes [n (%)]					
Preterm birth	299 (3.3)	85 (2.8)	96 (3.2)	118 (3.9)	0.053
Fetal distress	485 (5.4)	178 (5.9)	140 (4.6)	167 (5.5)	0.082
Large for gestational age	1229 (13.6)	203 (6.7)	383 (12.7)	643 (21.3)	<0.001
Small for gestational age	479 (5.3)	251 (8.3)	160 (5.3)	68 (2.3)	<0.001
Fetal growth restriction	144 (1.6)	65 (2.2)	44 (1.5)	35 (1.2)	0.007
NICU admission	1694 (18.7)	500 (16.6)	603 (20.0)	591 (19.6)	0.001
Low Apgar score	47 (0.5)	14 (0.5)	10 (0.3)	23 (0.8)	0.058

Abbreviations: TyG, triglyceride-glucose index; WC: waist circumference; NICU, neonatal intensive care unit.

Supplemental Table 7 Maternal and neonatal outcomes of participants according to tertiles of TyG-WHtR

Outcomes	TyG-WHtR tertiles				<i>p</i> -value
	Overall (<i>n</i> = 9042)	T1 (<i>n</i> = 3014)	T2 (<i>n</i> = 3014)	T3 (<i>n</i> = 3014)	
Maternal outcomes [n (%)]					
Gestational diabetes mellitus	1368 (15.1)	306 (10.2)	420 (13.9)	642 (21.3)	<0.001
Hypertensive disorders of pregnancy	596 (6.6)	120 (4.0)	166 (5.5)	310 (10.3)	<0.001
Cesarean delivery	2916 (32.2)	716 (23.8)	918 (30.5)	1282 (42.5)	<0.001
Gestational anemia	2511 (27.8)	891 (29.6)	822 (27.3)	798 (26.5)	0.021
Oligohydramnios (<300 ml)	184 (2.0)	71 (2.4)	60 (2.0)	53 (1.8)	0.254
Polyhydramnios (>2000 ml)	240 (2.7)	61 (2.0)	68 (2.3)	111 (3.7)	<0.001
Postpartum anemia	2433 (26.9)	779 (25.8)	835 (27.7)	819 (27.2)	0.246
Neonatal outcomes [n (%)]					
Preterm birth	299 (3.3)	86 (2.9)	93 (3.1)	120 (4.0)	0.035
Fetal distress	485 (5.4)	157 (5.2)	155 (5.1)	173 (5.7)	0.529
Large for gestational age	1229 (13.6)	234 (7.8)	390 (13.0)	605 (20.0)	<0.001
Small for gestational age	479 (5.3)	224 (7.4)	164 (5.4)	91 (3.0)	<0.001
Fetal growth restriction	144 (1.6)	56 (1.9)	46 (1.5)	42 (1.4)	0.333
NICU admission	1694 (18.7)	507 (16.8)	581 (19.3)	606 (20.1)	0.003
Low Apgar score	47 (0.5)	9 (0.3)	16 (0.5)	22(0.7)	0.066

Abbreviations: TyG, triglyceride-glucose index; WHtR: waist-to-height ratio; NICU, neonatal intensive care unit.

Supplemental Table 8 Subgroup analysis for the association of the TyG index tertiles with adverse maternal and neonatal outcomes.

Subgroups	Number	Cases [n (%)]	TyG	OR (95% CI)	<i>p</i> for interaction
GDM					
Age					0.244
< 35 y	3283	320 (9.75)	T1	Ref.	
	3214	450 (14.00)	T2	1.37 (1.17 - 1.61)	
	3085	619 (20.06)	T3	1.84 (1.55 - 2.18)	
≥ 35 y	192	26 (13.54)	T1	Ref.	
	259	57 (22.01)	T2	1.82 (1.06 - 3.14)	
	389	118 (30.33)	T3	2.72 (1.56 - 4.75)	
Pre-pregnancy BMI					0.067
< 24 kg/m ²	3200	322 (10.06)	T1	Ref.	
	2970	406 (13.67)	T2	1.31 (1.11 - 1.55)	
	2654	527 (19.86)	T3	1.83 (1.54 - 2.18)	
≥ 24 kg/m ²	275	24 (8.73)	T1	Ref.	
	503	101 (20.08)	T2	2.45 (1.50 - 4.02)	
	820	210 (25.61)	T3	2.90 (1.77 - 4.76)	
HDP					
Age					<0.001
< 35 y	3283	142 (4.33)	T1	Ref.	
	3214	184 (5.72)	T2	0.96 (0.75 - 1.22)	
	3085	274 (8.88)	T3	1.14 (0.88 - 1.47)	
≥ 35 y	192	8 (4.17)	T1	Ref.	
	259	21 (8.11)	T2	2.08 (0.77 - 5.62)	
	389	48 (12.34)	T3	2.15 (0.80 - 5.81)	
Pre-pregnancy BMI					0.538
< 24 kg/m ²	3200	119 (3.72)	T1	Ref.	
	2970	141 (4.75)	T2	1.04 (0.79 - 1.36)	
	2654	197 (7.42)	T3	1.35 (1.02 - 1.79)	
≥ 24 kg/m ²	275	31 (11.27)	T1	Ref.	
	503	64 (12.72)	T2	0.76 (0.45 - 1.27)	
	820	125 (15.24)	T3	0.72 (0.43 - 1.20)	
CD					
Age					0.031
< 35 y	3283	882 (26.87)	T1	Ref.	
	3214	948 (29.50)	T2	1.01 (0.90 - 1.14)	
	3085	1053 (34.13)	T3	1.10 (0.97 - 1.25)	
≥ 35 y	192	108 (56.25)	T1	Ref.	
	259	136 (52.51)	T2	0.83 (0.55 - 1.25)	
	389	210 (53.98)	T3	0.87 (0.57 - 1.33)	
Pre-pregnancy BMI					0.78
< 24 kg/m ²	3200	872 (27.25)	T1	Ref.	
	2970	875 (29.46)	T2	1.02 (0.91 - 1.15)	
	2654	896 (33.76)	T3	1.12 (0.98 - 1.28)	
≥ 24 kg/m ²	275	118 (42.91)	T1	Ref.	
	503	209 (41.55)	T2	0.85 (0.62 - 1.17)	

	820	367 (44.76)	T3	0.86 (0.62 - 1.20)	
LGA					
Age					0.222
< 35 y	3042	318 (10.45)	T1	Ref.	
	3059	419 (13.70)	T2	1.19 (1.01 - 1.40)	
	2953	536 (18.15)	T3	1.43 (1.20 - 1.70)	
≥ 35 y	184	30 (16.30)	T1	Ref.	
	251	38 (15.14)	T2	0.92 (0.53 - 1.59)	
	375	65 (17.33)	T3	1.02 (0.58 - 1.81)	
Pre-pregnancy BMI					0.265
< 24 kg/m ²	2960	291 (9.83)	T1	Ref.	
	2821	360 (12.76)	T2	1.19 (1.01 - 1.42)	
	2540	404 (15.91)	T3	1.40 (1.16 - 1.68)	
≥ 24 kg/m ²	266	57 (21.43)	T1	Ref.	
	489	97 (19.84)	T2	0.89 (0.61 - 1.32)	
	788	197 (25.00)	T3	1.17 (0.80 - 1.73)	

Abbreviations: TyG, triglyceride-glucose index; OR, odds ratio; CI, confidence interval; T, tertiles; Ref., reference; BMI, body mass index; GDM, gestational diabetes mellitus; HDP, hypertensive disorders of pregnancy; CD, cesarean delivery; LGA: large for gestational age.

Supplemental Table 9 Subgroup analysis for the association of the TyG-BMI index tertiles with adverse maternal and neonatal outcomes.

Subgroups	Number	Cases [n (%)]	TyG-BMI	OR (95% CI)	<i>p</i> for interaction
GDM					
Age					0.524
< 35 y	3310	359 (10.85)	T1	Ref.	
	3212	439 (13.67)	T2	1.08 (0.92 - 1.26)	
	3060	591 (19.31)	T3	1.17 (0.99 - 1.38)	
≥ 35 y	163	25 (15.34)	T1	Ref.	
	262	52 (19.85)	T2	1.10 (0.63 - 1.91)	
	415	124 (29.88)	T3	1.63 (0.95 - 2.80)	
HDP					
Age					<0.001
< 35 y	3310	117 (3.53)	T1	Ref.	
	3212	156 (4.86)	T2	1.08 (0.84 - 1.40)	
	3060	327 (10.69)	T3	1.37 (1.06 - 1.77)	
≥ 35 y	163	3 (1.84)	T1	Ref.	
	262	15 (5.73)	T2	2.48 (0.66 - 9.29)	
	415	59 (14.22)	T3	4.77 (1.33 - 17.17)	
CD					
Age					0.003
< 35 y	3310	790 (23.87)	T1	Ref.	
	3212	925 (28.80)	T2	1.20 (1.07 - 1.34)	
	3060	1168 (38.17)	T3	1.67 (1.48 - 1.90)	
≥ 35 y	163	89 (54.60)	T1	Ref.	
	262	124 (47.33)	T2	0.82 (0.54 - 1.26)	
	415	241 (58.07)	T3	1.22 (0.79 - 1.88)	
LGA					
Age					0.662
< 35 y	3039	213 (7.01)	T1	Ref.	
	3060	395 (12.91)	T2	1.87 (1.57 - 2.24)	
	2955	665 (22.50)	T3	3.49 (2.90 - 4.19)	
≥ 35 y	152	20 (13.16)	T1	Ref.	
	253	32 (12.65)	T2	0.89 (0.48 - 1.64)	
	405	81 (20.00)	T3	1.56 (0.86 - 2.83)	

Abbreviations: TyG, triglyceride-glucose index; BMI, body mass index; OR, odds ratio; CI, confidence interval; T, tertiles; Ref., reference; GDM, gestational diabetes mellitus; HDP, hypertensive disorders of pregnancy; CD, cesarean delivery; LGA, large for gestational age.

Supplemental Table 10 Subgroup analysis for the association of the TyG-WC index tertiles with adverse maternal and neonatal outcomes.

Subgroups	Number	Cases [n (%)]	TyG-WC	OR (95% CI)	<i>p</i> for interaction	
GDM						
Age						
< 35 y	2895	305 (10.54)	T1	Ref.	0.292	
	2778	369 (13.28)	T2	1.13 (0.95 - 1.35)		
	2617	515 (19.68)	T3	1.42 (1.16 - 1.74)		
≥ 35 y	119	15 (12.61)	T1	Ref.		
	236	44 (18.64)	T2	1.31 (0.67 - 2.56)		
	397	120 (30.23)	T3	2.61 (1.31 - 5.19)		
Pre-pregnancy BMI						
< 24 kg/m ²	2974	315 (10.59)	T1	Ref.		0.363
	2803	381 (13.59)	T2	1.15 (0.96 - 1.36)		
	1869	377 (20.17)	T3	1.51 (1.23 - 1.85)		
≥ 24 kg/m ²	40	5 (12.50)	T1	Ref.		
	211	32 (15.17)	T2	1.25 (0.44 - 3.58)		
	1145	258 (22.53)	T3	1.58 (0.58 - 4.29)		
HDP						
Age						
< 35 y	2895	114 (3.94)	T1	Ref.	<0.001	
	2778	144 (5.18)	T2	1.01 (0.77 - 1.32)		
	2617	267 (10.20)	T3	1.08 (0.80 - 1.46)		
≥ 35 y	119	2 (1.68)	T1	Ref.		
	236	16 (6.78)	T2	2.41 (0.51 - 11.49)		
	397	53 (13.35)	T3	2.88 (0.60 - 13.89)		
Pre-pregnancy BMI						
< 24 kg/m ²	2974	109 (3.67)	T1	Ref.		0.749
	2803	144 (5.14)	T2	1.16 (0.88 - 1.54)		
	1869	153 (8.19)	T3	1.36 (0.98 - 1.89)		
≥ 24 kg/m ²	40	7 (17.50)	T1	Ref.		
	211	16 (7.58)	T2	0.38 (0.13 - 1.07)		
	1145	167 (14.59)	T3	0.42 (0.17 - 1.08)		
CD						
Age						
< 35 y	2895	713 (24.63)	T1	Ref.	0.004	
	2778	819 (29.48)	T2	1.10 (0.97 - 1.25)		
	2617	982 (37.52)	T3	1.25 (1.07 - 1.46)		
≥ 35 y	119	62 (52.10)	T1	Ref.		
	236	108 (45.76)	T2	0.85 (0.53 - 1.38)		
	397	232 (58.44)	T3	1.20 (0.71 - 2.02)		
Pre-pregnancy BMI						
< 24 kg/m ²	2974	762 (25.62)	T1	Ref.		0.175
	2803	856 (30.54)	T2	1.13 (0.99 - 1.28)		
	1869	692 (37.03)	T3	1.29 (1.11 - 1.51)		
≥ 24 kg/m ²	40	13 (32.50)	T1	Ref.		
	211	71 (33.65)	T2	1.03 (0.48 - 2.18)		

	1145	522 (45.59)	T3	1.36 (0.66 - 2.78)	
LGA					
Age					0.718
< 35 y	2650	190 (7.17)	T1	Ref.	
	2631	357 (13.57)	T2	1.81 (1.49 - 2.19)	
	2557	563 (22.02)	T3	2.67 (2.15 - 3.31)	
≥ 35 y	113	13 (11.50)	T1	Ref.	
	223	26 (11.66)	T2	0.96 (0.46 - 2.02)	
	389	80 (20.57)	T3	1.82 (0.87 - 3.84)	
Pre-pregnancy BMI					0.313
< 24 kg/m ²	2724	197 (7.23)	T1	Ref.	
	2657	357 (13.44)	T2	1.78 (1.47 - 2.17)	
	1833	371 (20.24)	T3	2.67 (2.14 - 3.35)	
≥ 24 kg/m ²	39	6 (15.38)	T1	Ref.	
	197	26 (13.20)	T2	0.87 (0.32 - 2.33)	
	1113	272 (24.44)	T3	1.56 (0.62 - 3.90)	

Abbreviations: TyG, triglyceride-glucose index; WC: waist circumference; **OR, odds ratio; CI, confidence interval;** T, tertiles; **Ref., reference;** BMI, body mass index; GDM, gestational diabetes mellitus; HDP, hypertensive disorders of pregnancy; CD, cesarean delivery; LGA, large for gestational age.

Supplemental Table 11 Subgroup analysis for the association of the TyG-WHtR index tertiles with adverse maternal and neonatal outcomes.

Subgroups	Number	Cases [n (%)]	TyG-WHtR	OR (95% CI)	<i>p</i> for interaction	
GDM						
Age						
< 35 y	2892	290 (10.03)	T1	Ref.	0.225	
	2788	382 (13.70)	T2	1.29 (1.09 - 1.54)		
	2610	517 (19.81)	T3	1.60 (1.31 - 1.96)		
≥ 35 y	122	16 (13.11)	T1	Ref.		
	226	38 (16.81)	T2	1.09 (0.56 - 2.13)		
	404	125 (30.94)	T3	2.59 (1.32 - 5.10)		
Pre-pregnancy BMI						
< 24 kg/m ²	2974	301 (10.12)	T1	Ref.		0.471
	2782	380 (13.66)	T2	1.27 (1.07 - 1.52)		
	1890	392 (20.74)	T3	1.77 (1.44 - 2.18)		
≥ 24 kg/m ²	40	5 (12.50)	T1	Ref.		
	232	40 (17.24)	T2	1.59 (0.56 - 4.52)		
	1124	250 (22.24)	T3	1.59 (0.58 - 4.35)		
HDP						
Age						
< 35 y	2892	116 (4.01)	T1	Ref.	<0.001	
	2788	150 (5.38)	T2	1.03 (0.79 - 1.36)		
	2610	259 (9.92)	T3	1.12 (0.83 - 1.52)		
≥ 35 y	122	4 (3.28)	T1	Ref.		
	226	16 (7.08)	T2	1.06 (0.31 - 3.61)		
	404	51 (12.62)	T3	1.34 (0.39 - 4.59)		
Pre-pregnancy BMI						
< 24 kg/m ²	2974	113 (3.80)	T1	Ref.		0.674
	2782	144 (5.18)	T2	1.14 (0.86 - 1.51)		
	1890	149 (7.88)	T3	1.39 (1.00 - 1.92)		
≥ 24 kg/m ²	40	7 (17.50)	T1	Ref.		
	232	22 (9.48)	T2	0.46 (0.17 - 1.26)		
	1124	161 (14.32)	T3	0.42 (0.17 - 1.08)		
CD						
Age						
< 35 y	2892	659 (22.79)	T1	Ref.	0.002	
	2788	809 (29.02)	T2	1.22 (1.07 - 1.38)		
	2610	1046 (40.08)	T3	1.74 (1.50 - 2.02)		
≥ 35 y	122	57 (46.72)	T1	Ref.		
	226	109 (48.23)	T2	1.16 (0.72 - 1.88)		
	404	236 (58.42)	T3	1.65 (0.98 - 2.78)		
Pre-pregnancy BMI						
< 24 kg/m ²	2974	704 (23.67)	T1	Ref.		0.141
	2782	842 (30.27)	T2	1.28 (1.12 - 1.45)		
	1890	764 (40.42)	T3	1.84 (1.57 - 2.15)		
≥ 24 kg/m ²	40	12 (30.00)	T1	Ref.		
	232	76 (32.76)	T2	1.10 (0.51 - 2.36)		

	1124	518 (46.09)	T3	1.51 (0.73 - 3.14)	
LGA					
Age					0.478
< 35 y	2675	219 (8.19)	T1	Ref.	
	2635	363 (13.78)	T2	1.48 (1.23 - 1.79)	
	2528	528 (20.89)	T3	1.86 (1.51 - 2.30)	
≥ 35 y	115	15 (13.04)	T1	Ref.	
	215	27 (12.56)	T2	0.88 (0.43 - 1.77)	
	395	77 (19.49)	T3	1.33 (0.65 - 2.74)	
Pre-pregnancy BMI					0.120
< 24 kg/m ²	2752	230 (8.36)	T1	Ref.	
	2627	342 (13.02)	T2	1.37 (1.13 - 1.66)	
	1835	353 (19.24)	T3	1.86 (1.50 - 2.31)	
≥ 24 kg/m ²	38	4 (10.53)	T1	Ref.	
	223	48 (21.52)	T2	2.03 (0.67 - 6.11)	
	1088	252 (23.16)	T3	1.85 (0.63 - 5.40)	

Abbreviations: TyG, triglyceride-glucose index; WHtR: waist-to-height ratio; **OR, odds ratio; CI, confidence interval;** T, tertiles; **Ref., reference;** BMI, body mass index; GDM, gestational diabetes mellitus; HDP, hypertensive disorders of pregnancy; CD, cesarean delivery; LGA, large for gestational age.