

**S3 Table. Description of factors explored for association with term LGA at 14-16 and 19-21 weeks in the training dataset.**

	Non-LGA at term (N=3421; 91.2%) Mean (SD) or n (%)	LGA at term (N=331; 8.8%) Mean (SD) or n (%)	p
<b>Clinical factors at 14-16 weeks</b>			
Maternal birthweight	3296 (553)	3422 (601)	<0.001
Maternal preterm birth	154 (4.5)	14 (4.2)	0.84
FH of diabetes	453 (13.2)	54 (16.3)	0.12
BMI	25.3 (4.9)	25.5 (4.9)	0.39
Height (cm)	165.0 (6.2)	164.5 (6.8)	0.20
Weight (kg)	68.9 (14.1)	69.2 (14.5)	0.64
Waist (cm)	84.0 (11.1)	84.8 (12.1)	0.21
Hip (cm)	101 (11)	102 (11)	0.34
Waist hip ratio	0.8 (0.1)	0.8 (0.1)	0.46
Waist height ratio	0.5 (0.1)	0.5 (0.1)	0.11
Arm circumference (cm)	28.1 (3.9)	28.2 (3.9)	0.68
Head circumference (cm)	55.7 (1.7)	56.0 (1.7)	0.004
Pulse	77 (11)	79 (11)	0.03
Systolic blood pressure (mmHg)	107 (11)	106 (11)	0.02
Never exercised	302 (8.8)	36 (10.9)	0.20
<b>Clinical factors at 19-21 weeks</b>			
Gestational weight gain (kg/week)	0.5 (0.4)	0.6 (0.4)	<0.001
Smoking	361 (10.6)	22 (6.6)	0.03
Never exercised	267 (7.8)	22 (6.6)	0.45
<b>Ultrasound at 19-21 weeks</b>			
HC z-score	-0.04 (0.98)	0.46 (1.03)	<0.001
AC z-score	-0.05 (0.96)	0.55 (1.17)	<0.001
FL z-score	-0.02 (0.99)	0.24 (1.06)	<0.001
Mean uterine artery RI *	1.01 (0.18)	0.95 (0.16)	<0.001
Umbilical artery RI *	1.00 (0.09)	0.99 (0.08)	0.03
<b>Candidate biomarkers</b>			
<i>14-16 weeks</i>			
Random glucose (mmol/L)	5.3 (1.0)	5.5 (1.0)	<0.001
Total cholesterol * †	1.00 (0.90 - 1.10)	1.02 (0.92 - 1.13)	0.006
HDL cholesterol * †	1.00 (0.87 - 1.15)	1.01 (0.84 - 1.15)	0.72
LDL cholesterol * †	0.99 (0.83 - 1.18)	1.04 (0.85 - 1.23)	0.008
Triglycerides † ‡	0.99 (0.79 - 1.26)	1.02 (0.81 - 1.29)	0.07

Adiponectin (ng/ml) †	4345 (3260 - 5598)	4290 (3207 - 5415)	0.43
Insulin (µIU/ml) †	16.4 (9.5 - 27.4)	16.4 (9.7 - 28.9)	0.89
<i>19-21 weeks</i>			
Random glucose (mmol/L)	5.4 (1.0)	5.6 (1.1)	<0.001
<b>Additional biomarkers</b>			
<i>14-16 weeks</i>			
NGAL (ng/ml) †	40.3 (30.8 - 53.5)	38.5 (28.7 - 48.9)	0.002
PAPP-A * †	0.97 (0.58 - 1.73)	1.21 (0.64 – 1.99)	<0.001
VEGFR1 (ng/ml) †	0.32 (0.21 - 0.52)	0.40 (0.26 - 0.63)	<0.001

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Abbreviations: AC - abdominal circumference, BMI - body mass index, FH - family history, FL - femur length, HC - head circumference, LGA - large for gestational age, NGAL - neutrophil gelatinase-associated lipocalin, PAPP-A - pregnancy associated plasma protein A, RI - resistance index, VEGFR1 - vascular endothelial growth factor receptor type 1.

\* Multiple of Median (MoM) for gestational age.

† Median (IQR) shown and Mann Whitney test used.