

SUPPLEMENTARY DATA

**Supplementary Table 1.** Maternal characteristics at enrolment and 36 weeks gestation.

Variable	Enrolment	36 weeks	P
Weight (kg) [n]	90.3 (88.2-92.5) [432]	90.6 (88.4-92.9) [395]	< 0.001
BMI (kg/m <sup>2</sup> ) [n]	34.1 (33.4-34.9) [432]	34.2 (33.5-34.9) [395]	< 0.001
SBP (mmHg) [n]	112.5 (111.3-113.8) [426]	115.4 (114.1-116.7) [427]	< 0.001
DBP (mmHg) [n]	68.2 (67.3-69.0) [426]	70.6 (69.7-71.5) [427]	< 0.001
Fasting plasma triglycerides (mmol/L) [n]	2.4 (2.4-2.5) [432]	2.8 (2.7-2.9) [432]	< 0.001
Fasting plasma glucose (mmol/L) [n]	5.1 (5.0-5.2) [415]	4.3 (4.3-4.4) [414]	< 0.001
HbA1c ( %) [n]	5.7 (5.6-5.7) [423]	5.6 (5.6-5.7) [417]	0.004

Data is presented as (mean (95% CI)) except where indicated

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**Supplementary Table 2.** Measures of maternal glucose control and triglycerides, stratified by treatment received.

	Metformin Alone (n=122)	Metformin and Insulin (n=97)	Insulin Alone (n=213)	P
Maternal age	32.9 (32.0 – 33.8)	32.9 (32.2 – 33.5)	33.7 (32.6 – 34.8)	0.38
Caucasian n(%)	74 (60.7)	49 (50.5)	114 (53.5)	0.009
Indian n(%)	15 (12.3)	12 (12.4)	39 (18.3)	
Polynesian n(%)	10 (8.2)	25 (25.8)	31 (14.6)	
Asian n(%)	23 (18.9)	11 (11.3)	29 (13.6)	
Smoking during pregnancy n(%)	23 (18.9)	17 (17.5)	26 (12.2)	0.21
Tertiary education n(%)	63 (51.6)	41 (42.7)	108 (50.9)	0.34
<b>Enrolment</b>				
Fasting plasma glucose (mmol/L)	4.83 (4.73 – 4.94)	5.50 (5.29 – 5.72)	5.07 (4.95 – 5.20)	<0.001
HbA1c (%)	5.50 (5.40 – 5.60)	5.82 (5.70 – 5.94)	5.68 (5.59 – 5.77)	0.001
Fasting plasma triglycerides (mmol/L)	2.47 (2.31 – 2.64)	2.50 (2.30 – 2.71)	2.37 (2.28 – 2.48)	0.41
<b>36 weeks gestation</b>				
Fasting plasma glucose (mmol/L)	4.34 (4.25 – 4.43)	4.44 (4.31 – 4.57)	4.25 (4.17 – 4.33)	0.02
HbA1c (%)	5.48 (5.39 – 5.56)	5.73 (5.63 – 5.83)	5.62 (5.54 – 5.71)	0.003
Fasting plasma triglycerides (mmol/L)	2.97 (2.79 – 3.17)	2.90 (2.69 – 3.12)	2.65 (2.54 – 2.77)	0.007
<b>Percentage change from enrolment to 36 weeks gestation (%)</b>				
Fasting plasma glucose (%)	-10.0(-12.3 – 7.7)	-17.5 (-20.5 – 14.4)	-15.2 (-17.2 – 13.2)	<0.001
HbA1c (%)	-0.2 (-1.5 – 1.2)	-1.4 (-2.8 – -0.1)	-0.9 (-2.0 – 0.3)	0.49
Fasting plasma triglycerides (%)	23.7 (18.4 – 29.0)	20.1 (13.4 – 27.0)	14.6 (11.1 – 18.1)	0.02

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**Supplementary Table 3.** Variables significantly associated with maternal triglycerides at enrolment and at 36 weeks gestation, on univariate analyses.

Parameter	Geometric mean or regression coefficient *	95 % Confidence Interval		P
		Lower Bound	Upper Bound	
Enrolment				
Gestation at randomisation (weeks)	1.02	1.01	1.03	< 0.001
Ethnicity				0.32
Asian	2.59	2.37	2.82	
Polynesian	2.31	2.12	2.52	
Indian	2.45	2.25	2.67	
Caucasian	2.41	2.31	2.52	
Smoking	2.75	2.53	2.99	0.002
No smoking	2.37	2.29	2.46	
Enrolment HbA1c (%)	1.11	1.05	1.16	< 0.001
Enrolment Glucose	1.04	1.01	1.08	0.01
Enrolment DBP	1.00	1.00	1.01	0.05
36 weeks gestation				
Treatment (Insulin)	2.65	2.54	2.78	0.002
Treatment (Metformin)	2.94	2.81	3.08	
Ethnicity				0.001
Asian	3.15	2.89	3.43	
Polynesian	2.45	2.25	2.67	
Indian	2.71	2.49	2.94	
Caucasian	2.82	2.69	2.95	

\* The data represent geometric mean and 95% CI for categorical variables and geometric regression coefficient and 95% CI for continuous variables

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**Supplementary Table 4.** Variables significantly associated with maternal triglycerides at 36 weeks gestation, on univariate analyses, stratified by treatment received.

Parameter	Geometric mean or regression coefficient *	95 % Confidence Interval		P
		Lower Bound	Upper Bound	
<b>Treatment</b>				0.01
Metformin alone	2.97	2.80	3.16	
Metformin and insulin	2.90	2.71	3.10	
Insulin alone	2.65	2.54	2.78	
<b>Insulin alone</b>				
Ethnicity				0.21
Asian	2.98	2.65	3.34	
Polynesian	2.55	2.28	2.86	
Indian	2.65	2.40	2.93	
Caucasian	2.61	2.46	2.76	
Gestation at randomisation (weeks)	2.65	2.54	2.77	0.40
36 week HbA1c (%)	2.66	2.54	2.78	0.03
<b>Metformin Alone</b>				
Ethnicity				0.02
Asian	3.49	3.03	4.01	
Polynesian	2.48	2.01	3.07	
Indian	2.59	2.18	3.08	
Caucasian	2.98	2.76	3.22	
Gestation at randomisation (weeks)	2.97	2.79	3.16	0.17
36 week HbA1c (%)	2.94	2.76	3.13	0.31
<b>Metformin and Insulin</b>				
Ethnicity				0.19
Asian	3.13	2.51	3.90	
Polynesian	2.53	2.18	2.92	
Indian	2.91	2.36	3.59	
Caucasian	3.05	2.75	3.39	
Gestation at randomisation (weeks)	2.90	2.69	3.12	0.02
36 week HbA1c (%)	2.89	2.68	3.12	0.30

\* The data represent geometric mean and 95% CI for categorical variables and geometric regression coefficient and 95% CI for continuous variables.

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**Supplementary Table 5.** Associations with maternal triglycerides at 36 weeks gestation, in multivariate analysis, stratified by treatment received.

<b>Insulin</b>	Geometric mean or regression coefficient *	95 % Confidence Interval		P
		Lower Bound	Upper Bound	
<b>Ethnicity</b>				0.14
Asian	2.96	2.63	3.33	
Polynesian	2.43	2.15	2.74	
Indian	2.69	2.43	2.98	
Caucasian	2.64	2.48	2.81	
36 week HbA1c	1.10	1.02	1.18	0.02
<b>Metformin alone</b>				
<b>Ethnicity</b>				0.02
Asian	3.45	3.00	3.98	
Polynesian	2.47	1.99	3.05	
Indian	2.54	2.12	3.04	
Caucasian	2.94	2.71	3.19	
36 week HbA1c	1.07	0.93	1.23	0.32
<b>Metformin and insulin</b>				
<b>Ethnicity</b>				0.33
Asian	3.06	2.42	3.87	
Polynesian	2.53	2.16	2.97	
Indian	2.92	2.35	3.62	
Caucasian	3.05	2.72	3.42	
36 week HbA1c	0.99	0.83	1.19	0.93

\* The data represent geometric mean and 95% CI for categorical variables and geometric regression coefficient and 95% CI for continuous variables