

**Table S1.** Adjusted mean (95% CI) for neonatal birthweight by glucose metabolism indicators among PCOS women undergoing their first IVF/ICSI cycles<sup>a</sup>.

Glucose metabolism indicators	Mean birthweight (95% CI)	
	Singletons <sup>b</sup> N=190	Twins <sup>c</sup> N=79
<b>FPG</b>		
T1	2979 (2861, 3097)	2353 (2209, 2497)
T2	2919 (2795, 3043)	2318 (2154, 2482)
T3	2818 (2683, 2953)	2305 (2115, 2494)
<i>P</i> for trend	0.04	0.49
<b>2hPG</b>		
T1	2996 (2868, 3123)	2319 (2163, 2475)
T2	2891 (2775, 3006)	2432 (2288, 2576)
T3	2856 (2721, 2991)	2250 (2091, 2410)
<i>P</i> for trend	0.08	0.44
<b>FPI</b>		
T1	2929 (2800, 3058)	2360 (2195, 2525)
T2	2951 (2827, 3076)	2346 (2195, 2498)
T3	2859 (2726, 2991)	2285 (2119, 2451)
<i>P</i> for trend	0.42	0.35
<b>2hPI</b>		
T1	2960 (2834, 3085)	2271 (2110, 2432)
T2	2886 (2767, 3005)	2384 (2225, 2543)
T3	2895 (2757, 3033)	2342 (2177, 2507)
<i>P</i> for trend	0.41	0.30
<b>HbA1c</b>		
T1	2980 (2861, 3098)	2294 (2148, 2441)
T2	2929 (2806, 3052)	2297 (2151, 2442)
T3	2814 (2681, 2947)	2476 (2291, 2661)
<i>P</i> for trend	0.04	0.07
<b>HOMA2-IR</b>		
T1	2928 (2798, 3057)	2364 (2194, 2535)
T2	2930 (2807, 3053)	2297 (2144, 2449)
T3	2879 (2740, 3017)	2341 (2159, 2524)
<i>P</i> for trend	0.58	0.71
<b>Gutt Index</b>		
T3	2975 (2844, 3105)	2314 (2164, 2464)
T2	2885 (2767, 3003)	2441 (2287, 2594)
T1	2885 (2748, 3023)	2257 (2104, 2411)
<i>P</i> for trend	0.28	0.58
<b>QUICKI</b>		
T3	2947 (2820, 3073)	2363 (2197, 2530)
T2	2944 (2817, 3071)	2328 (2168, 2488)

T1	2844 (2706, 2982)	2294 (2122, 2467)
<i>P</i> for trend	0.27	0.37

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<sup>a</sup> Adjusted for preconception BMI (continuous), duration of infertility (continuous), ovarian stimulation regimen, gestational age, and delivery mode.

<sup>b</sup> Based on generalized linear models.

<sup>c</sup> Based on generalized estimating equations.

**Table S2.** Regression coefficients (95% CI) for neonatal birthweight by glucose metabolism indicators among PCOS women with preconception BMI  $\geq 18.5\text{kg/m}^2$  undergoing their first IVF/ICSI cycles<sup>a</sup>.

Glucose metabolism indicators	$\beta$ (95% CI)	
	Singletons <sup>b</sup> N=186	Twins <sup>c</sup> N=77
<b>FPG</b>		
T1	Ref.	Ref.
T2	-53.56 (-200.27, 93.15)	-31.15 (-180.92, 118.60)
T3	-155.59 (-310.47, -0.72)	-43.09 (-189.01, 102.80)
<i>P</i> for trend	0.05	0.54
<b>2hPG</b>		
T1	Ref.	Ref.
T2	-81.21 (-230.24, 67.80)	137.27 (-12.73, 287.30)
T3	-122.86 (-281.68, 36.00)	-53.41 (-209.98, 103.20)
<i>P</i> for trend	0.13	0.54
<b>FPI</b>		
T1	Ref.	Ref.
T2	45.30 (-110.90, 201.50)	-2.52 (-166.41, 161.40)
T3	-54.78 (-227.65, 118.10)	-69.72 (-224.55, 85.10)
<i>P</i> for trend	0.52	0.38
<b>2hPI</b>		
T1	Ref.	Ref.
T2	-65.65 (-213.32, 82.00)	136.26 (-5.59, 278.10)
T3	-56.09 (-220.13, 108.00)	88.43 (-60.86, 237.70)
<i>P</i> for trend	0.48	0.22
<b>HbA1c</b>		
T1	Ref.	Ref.
T2	-50.66 (-192.54, 91.22)	18.88 (-118.18, 155.90)
T3	-151.24 (-306.49, 4.01)	196.01 (21.68, 370.30)
<i>P</i> for trend	0.06	0.04
<b>HOMA2-IR</b>		
T1	Ref.	Ref.
T2	21.99 (-132.41, 176.40)	-58.77 (-222.17, 104.60)
T3	-37.19 (-216.52, 142.10)	-17.85 (-173.14, 137.40)
<i>P</i> for trend	0.69	0.77
<b>Gutt Index</b>		
T3	Ref.	Ref.
T2	-82.10 (-233.74, 69.50)	153.76 (6.11, 301.40)
T1	-81.97 (-249.65, 85.70)	-41.63 (-186.04, 102.80)
<i>P</i> for trend	0.33	0.71
<b>QUICKI</b>		
T3	Ref.	Ref.
T2	16.57 (-137.68, 170.80)	-28.33 (-200.97, 144.30)

T1	-92.14 (-270.10, 85.80)	-63.24 (-216.29, 89.80)
<i>P</i> for trend	0.33	0.42

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<sup>a</sup> Adjusted for preconception BMI (continuous), duration of infertility (continuous), ovarian stimulation regimen, gestational age, and delivery mode.

<sup>b</sup> Based on generalized linear models.

<sup>c</sup> Based on generalized estimating equations.

**Table S3.** Regression coefficients (95% CI) for neonatal birthweight by glucose metabolism indicators among PCOS women undergoing their first stimulated IVF/ICSI cycles<sup>a</sup>.

Glucose metabolism indicators	$\beta$ (95% CI)	
	Singletons <sup>b</sup> N=182	Twins <sup>c</sup> N=77
<b>FPG</b>		
T1	Ref.	Ref.
T2	-59.50 (-209.91, 90.90)	-37.24 (-186.53, 112.10)
T3	-141.60 (-303.14, 19.90)	-24.73 (-170.69, 121.20)
<i>P</i> for trend	0.09	0.69
<b>2hPG</b>		
T1	Ref.	Ref.
T2	-86.43 (-240.14, 67.30)	100.89 (-42.93, 244.70)
T3	-128.72 (-290.93, 33.50)	-92.04 (-246.69, 62.60)
<i>P</i> for trend	0.12	0.27
<b>FPI</b>		
T1	Ref.	Ref.
T2	34.73 (-123.96, 193.40)	-32.27 (-200.48, 135.90)
T3	-79.30 (-257.35, 98.80)	-103.46 (-256.46, 49.50)
<i>P</i> for trend	0.39	0.19
<b>2hPI</b>		
T1	Ref.	Ref.
T2	-64.23 (-216.68, 88.20)	90.87 (-47.03, 228.80)
T3	-80.66 (-249.29, 88.00)	53.70 (-97.11, 204.50)
<i>P</i> for trend	0.33	0.44
<b>HbA1c</b>		
T1	Ref.	Ref.
T2	-40.40 (-186.23, 105.40)	-24.46 (-159.81, 110.90)
T3	-168.94 (-326.56, -11.30)	149.21 (-29.42, 327.80)
<i>P</i> for trend	0.04	0.17
<b>HOMA2-IR</b>		
T1	Ref.	Ref.
T2	10.69 (-146.88, 168.30)	-89.98 (-256.83, 76.90)
T3	-47.73 (-230.45, 135.00)	-52.30 (-204.88, 100.30)
<i>P</i> for trend	0.62	0.45
<b>Gutt Index</b>		
T3	Ref.	Ref.
T2	-82.41 (-239.94, 75.10)	110.15 (-33.76, 254.10)
T1	-84.21 (-256.21, 87.80)	-79.04 (-222.05, 64.00)
<i>P</i> for trend	0.33	0.36
<b>QUICKI</b>		
T3	Ref.	Ref.
T2	3.60 (-153.51, 160.70)	-50.07 (-230.37, 130.20)

T1	-100.49 (-283.76, 82.80)	-100.28 (-251.07, 50.50)
<i>P</i> for trend	0.31	0.19

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<sup>a</sup> Adjusted for preconception BMI (continuous), duration of infertility (continuous), ovarian stimulation regimen, gestational age, and delivery mode.

<sup>b</sup> Based on generalized linear models.

<sup>c</sup> Based on generalized estimating equations.

**Table S4.** Regression coefficients (95% CI) for neonatal birthweight by glucose metabolism indicators among PCOS women with Day 3 embryos transferred undergoing their first IVF/ICSI cycles<sup>a</sup>.

Glucose metabolism indicators	$\beta$ (95% CI)	
	Singletons <sup>b</sup> N=180	Twins <sup>c</sup> N=79
<b>FPG</b>		
T1	Ref.	Ref.
T2	-36.70 (-186.69, 113.28)	-34.86 (-183.44, 113.70)
T3	-175.65 (-338.16, -13.14)	-48.13 (-193.74, 97.50)
<i>P</i> for trend	0.04	0.49
<b>2hPG</b>		
T1	Ref.	Ref.
T2	-86.92 (-239.91, 66.07)	113.31 (-27.58, 254.20)
T3	-129.35 (-294.55, 35.85)	-68.91 (-224.15, 86.30)
<i>P</i> for trend	0.12	0.44
<b>FPI</b>		
T1	Ref.	Ref.
T2	42.77 (-117.95, 203.50)	-13.46 (-177.19, 150.30)
T3	-60.35 (-238.94, 118.25)	-74.70 (-228.99, 79.60)
<i>P</i> for trend	0.50	0.35
<b>2hPI</b>		
T1	Ref.	Ref.
T2	-54.68 (-208.58, 99.23)	113.05 (-24.87, 251.00)
T3	-51.87 (-220.91, 117.16)	71.46 (-76.82, 219.70)
<i>P</i> for trend	0.52	0.30
<b>HbA1c</b>		
T1	Ref.	Ref.
T2	-49.67 (-196.71, 97.38)	2.10 (-129.80, 134.00)
T3	-154.27 (-314.92, 6.39)	181.39 (8.60, 354.20)
<i>P</i> for trend	0.06	0.07
<b>HOMA2-IR</b>		
T1	Ref.	Ref.
T2	18.33 (-140.13, 176.79)	-67.49 (-230.66, 95.70)
T3	-40.25 (-225.25, 144.75)	-22.90 (-177.09, 131.30)
<i>P</i> for trend	0.69	0.71
<b>Gutt Index</b>		
T3	Ref.	Ref.
T2	-79.13 (-235.50, 77.24)	126.38 (-15.69, 268.50)
T1	-89.07 (-263.20, 85.06)	-56.93 (-200.07, 86.20)
<i>P</i> for trend	0.30	0.58
<b>QUICKI</b>		
T3	Ref.	Ref.
T2	10.68 (-147.24, 168.60)	-35.11 (-208.07, 137.80)

T1	-94.98 (-280.21, 90.26)	-69.03 (-221.26, 83.20)
<i>P</i> for trend	0.34	0.37

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<sup>a</sup> Adjusted for preconception BMI (continuous), duration of infertility (continuous), ovarian stimulation regimen, gestational age, and delivery mode.

<sup>b</sup> Based on generalized linear models.

<sup>c</sup> Based on generalized estimating equations.