

# Twin Research and Human Genetics

## A comparison of perinatal outcomes and growth between in vitro fertilization and spontaneous twins

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**Supplementary Table S1. Maternal, perinatal and feeding characteristics in dichorionic twins conceived with IVF and spontaneously**

Variables	Dichorionic twins				<i>p</i>
	IVF		SC		
	<i>n</i>	%	<i>n</i>	%	
Maternal age <sup>c</sup>	31.74±4.01		28.36±4.39		<.001 <sup>a</sup>
Cesarean section					<.001
No	12	2.43	1112	17.61	
Yes	482	97.57	5204	82.39	
Artificial feeding					.185
No	365	74.49	4880	77.22	
Yes	125	25.51	1440	22.78	
Gender					1.000
Female	247	50.00	3169	50.00	
Male	247	50.00	3169	50.00	
PTB					<.001
No	258	54.89	3724	65.84	
Yes	212	45.10	1932	34.16	
Birth weight					.751 <sup>b</sup>
LBW	187	41.10	2052	40.35	
Normal birthweight	268	58.90	3020	59.39	
macrosomia	0	0.00	13	0.26	

Note: <sup>a</sup>tested by Mann-Whitney U test; <sup>b</sup>tested by Fisher's exact test; others were tested by chi-squared test; <sup>c</sup>stated as mean ± standard deviation.

**Supplementary Table S2. Sensitivity analysis for comparison of preterm birth and birthweight level in all twins conceived with IVF and spontaneously**

Perinatal outcome	All twins				Adjusted OR	Adjusted 95% CI	<i>p</i> value
	IVF		SC				
	<i>n</i>	%	<i>n</i>	%			
PTB	510	45.95	8330	36.10	8.21	3.19, 21.13	<.001
Not PTB	600	54.05	14742	63.90			
LBW	455	43.09	9442	44.21	1.04	0.83, 1.29	.741
Macrosomia	0	0	51	0.24	–	–	–
Normal birthweight	601	56.91	11866	55.56			

Note: Adjusting for maternal age, delivery mode, and preterm birth (only for LBW and macrosomia). LBW and macrosomia both take normal birth weight (2500 g–3999 g) as reference.

**Supplementary Table S3. Sensitivity analysis for comparison of preterm birth and birthweight level in dichorionic twins (only including opposite gender twins) conceived with IVF and spontaneously**

Perinatal outcome	Dichorionic twins				Adjusted OR	Adjusted 95% CI	<i>p</i> value
	IVF		SC				
	<i>n</i>	%	<i>n</i>	%			
PTB	212	45.10	1932	34.16	10.12	2.32, 44.04	.002
Not PTB	258	54.89	3724	65.84			
LBW	187	41.10	2052	40.35	1.13	0.83, 1.52	.441
Macrosomia	0	0.00	13	0.26	–	–	–
Normal birthweight	268	58.90	3020	59.39			

Note: Adjusting for maternal age, delivery mode, and preterm birth (only for LBW and macrosomia). LBW and macrosomia both took normal birth weight (2500 g–3999 g) as reference.