

Appendix 1.

This study was conducted on behalf of the investigators from the 3D-Study (Découvrir, Développer, Dévenir) from the “Integrated Research Network in Perinatology of Quebec and Eastern Ontario”:

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Balayla J, Sheehy O, Fraser WD, Séguin JR, Trasler J, Monnier P, et al. Neurodevelopmental outcomes after assisted reproductive technologies. *Obstet Gynecol* 2017; 129.

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Appendix 2. Adjusted Linear Regressions for Specific ART Techniques Relative to Natural Conception*

Variable	OS (n = 36)	IUI (n = 55)	IVF (n = 21)	ICSI (n = 56)	IVM (n = 7)	Subfertile conception (n = 330)	Natural conception (n = 1,015)
Cognitive Composite Score - B ₁ (SE)	-0.11 (1.1)	-1.44 (1.5)	-0.16 (2.5)	-0.86 (1.6)	0.85 (4.2)	0.20 (0.7)	Reference
p-value	0.1447	0.3465	0.9463	0.5783	0.8406	0.7759	
Motor Composite Score - B ₁ (SE)	-2.82 (2.1)	-0.90 (1.7)	-2.59 (2.7)	-0.70 (1.7)	2.24 (4.5)	-1.35 (0.8)	
p-value	0.1733	0.5919	0.3299	0.6802	0.6213	0.0906	
Fine Motor – Scaled Score - B ₁ (SE)	-0.70 (0.5)	0.01 (0.4)	-0.17 (0.6)	-0.37 (0.4)	0.89 (1.0)	-0.29 (0.2)	
p-value	0.1233	0.9813	0.7769	0.3197	0.3698	0.0962	
Gross Motor – Scaled Score - B ₁ (SE)	-0.20 (0.4)	-0.30 (0.3)	-0.68 (0.5)	0.14 (0.3)	-0.18 (0.9)	-0.15 (0.1)	
p-value	0.6183	0.3465	0.1707	0.6741	0.8272	0.3014	
MacArthur-Bates Scale Score - B ₁ (SE)	-0.12 (4.5)	3.67 (3.7)	9.61 (6.3)	-6.11 (3.3)	10.35 (10.5)	1.04 (1.7)	
p-value	0.9774	0.3178	0.4062	0.0667	0.3257	0.5394	

*Adjusted for maternal age, paternal age, maternal education, income, ethnicity, marital status, smoking intake, alcohol consumption during pregnancy, history of depression, antidepressant use and folic acid intake.

ART = assisted reproductive technology

OS = Ovarian Stimulation

IUI = Intrauterine insemination

IVF = In-vitro fertilization

ICSI = Intra-cytoplasmic sperm injection

IVM = In-vitro maturation

Subfertile conception: natural conception after 6 months or longer of having tried to conceive

B₁ = Linear regression beta coefficient

β' = standardized linear regression beta coefficient

SE = standard error

95% CI = 95% confidence interval

β' = standardized beta coefficient. Whereas B₁ (Beta 1) represents the change in the score units of each scale for ART conception relative to a natural conception, β' represents that change as a factor of standard deviation units. Both are interchangeable.

Non-ART/Natural conception as reference.

Statistical tests used: Adjusted linear regression

All unadjusted beta coefficients did not show any statistical significance (results not shown)

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Page 3 of 4

Appendix 3. Baseline Patient Characteristics Among Tested vs. Lost to Follow-up According to Exposure						
	ART (n = 278)			No ART (n = 2,088)		
Variable	Tested (n = 175)	Not tested (n = 103)	p-value	Tested (n = 1,345)	Not tested (n = 743)	p-value
Maternal age, y; mean ± SD	34.5 ± 4.5	34.6 ± 4.9	0.8627	31.8 ± 4.3	31.2 ± 4.8	0.0035
Paternal age, y; mean ± SD	36.4 ± 5.7	36.2 ± 6.9	0.7943	33.5 ± 5.5	33.3 ± 6.2	0.4475
Maternal Ethnicity, n (%)			0.0355			<0.0001
Caucasian	137 (78.3)	65 (63.1)		1,129 (83.9)	552 (74.3)	
Black	12 (6.9)	11 (10.9)		66 (4.9)	69 (9.3)	
Latin American	11 (6.3)	6 (5.9)		56 (4.2)	45 (6.1)	
Asian	10 (5.7)	15 (14.6)		55 (4.1)	45 (6.1)	
Other	5 (2.9)	6 (5.8)		39 (2.9)	32 (4.3)	
Maternal Education, n (%)						
Post-secondary	168 (96.0)	99 (96.1)	0.9616	1,239 (92.8)	625 (84.8)	<0.0001
Household income (\$CAD), n (%)			0.0136			<0.0001
< 40,000	24 (13.7)	24 (23.3)		177 (13.1)	175 (23.6)	
40,000-80,000	44 (25.1)	36 (34.9)		395 (29.4)	239 (32.2)	
>80,000	92 (52.6)	39 (37.9)		731 (54.4)	272 (36.6)	
Refused to disclose	15 (8.6)	4 (3.9)		42 (3.1)	57 (7.7)	
Mother living alone, n (%)	8 (4.6)	2 (1.9)	0.2220	55 (4.1)	68 (9.2)	0.2318
Pre-pregnancy weight, kg; mean (SD)	65.4 ± 14.4	65.5 ± 15.6	0.9568	65.1 ± 24.4	65.0 ± 14.9	0.9190
Gravidity, n (%)			0.9608			<0.0001
1	82 (46.9)	50 (48.4)		516 (38.4)	212 (28.5)	
2	54 (30.9)	31 (30.1)		428 (31.8)	248 (33.4)	
>2	39 (22.3)	22 (21.4)		401 (29.8)	283 (38.1)	

ART = assisted reproductive technology

Legend = Gravidity: total lifetime number of confirmed pregnancies including the current one.
SD: standard deviation. Values are rounded up.

Statistical tests used: Chi-Square, Fisher's exact test, ANOVA/t-test

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