

**Supplementary Table S1** Mixed linear modeling of maternal periconceptional smoking and Carnegie stages in female and male embryos.

		Model 1 <sup>a</sup>	P	Model 2 <sup>b</sup>	P
		Effect estimate ( $\beta$ ), 95% CI		Effect estimate ( $\beta$ ), 95% CI	
Female embryo (N = 344)	<b>Smoking</b>				
	No (N = 301)	0 (Reference)		0 (Reference)	
	Yes (N = 43)	-0.215 (-0.496; 0.066)	0.133	-0.173 (-0.469; 0.122)	0.250
	<b>Cigarettes/day</b>	-0.114 (-0.213; -0.014)	<b>0.025*</b>	-0.093 (-0.198; 0.012)	0.082
	<b>Smoking, categorical</b>				
	None (N = 301)	0 (Reference)		0 (Reference)	
Male embryo (N = 336)	<b>Smoking</b>				
	No (N = 283)	0 (Reference)		0 (Reference)	
	Yes (N = 53)	0.005 (-0.235; 0.246)	0.965	0.059 (-0.202; 0.322)	0.653
	<b>Cigarettes/day</b>	-0.037 (-0.114; 0.040)	0.351	-0.026 (-0.109; 0.056)	0.529
	<b>Smoking, categorical</b>				
	None (N = 283)	0 (Reference)		0 (Reference)	
1–9 cigarettes/day (N = 29)	0.288 (-0.022; 0.598)	0.069	0.355 (0.025; 0.687)	<b>0.035*</b>	
≥10 cigarettes/day (N = 24)	-0.338 (-0.677; 0.001)	0.051	-0.279 (-0.629; 0.071)	0.118	

\*P &lt; 0.05 (bold text).

<sup>a</sup>Model with gestational age as time predictor.<sup>b</sup>Fully adjusted model with gestational age as time predictor; adjusted for alcohol use, educational level, folic acid supplement use, maternal age, mode of conception, ethnicity, maternal BMI, parity and vitamin use.