

**Supplementary Table S1** Models using different population mean specific gravity (SG) to adjust for dilution of urinary bisphenol A concentrations in relation to implantation<sup>a</sup> per embryo transfer in 242 women in the Environment and Reproductive Health Study (EARTH) contributing to 337 IVF cycles.

Urinary BPA concentration ( $\mu\text{g/l}$ )	Unadjusted model <sup>b</sup>	Adjusted model 1	Adjusted model 2	Adjusted model 3
Covariates	–	Age, BMI, smoking status, race, infertility diagnosis	Age, BMI, smoking status, race, infertility diagnosis	Protocol type, number of embryo transferred and Day 3 FSH levels
SG <sup>c</sup>		1.015	1.024	1.024
Q1 [ $<\text{LOD}-0.96$ ]	0.59 (0.48, 0.70)	0.59 (0.48, 0.70)	0.59 (0.48, 0.70)	0.69 (0.48, 0.70)
Q2 [0.97–1.37]	0.66 (0.55, 0.76)	0.66 (0.55, 0.76)	0.66 (0.55, 0.76)	0.65 (0.53, 0.75)
Q3 [1.38–2.20]	0.60 (0.49, 0.71)	0.62 (0.50, 0.72)	0.62 (0.50, 0.72)	0.60 (0.48, 0.70)
Q4 [2.24–16.55]	0.54 (0.43, 0.64)	0.55 (0.43, 0.66)	0.55 (0.43, 0.66)	0.57 (0.46, 0.68)
P, trend <sup>d</sup>	0.21	0.32	0.32	0.56

<sup>a</sup>Implantation was defined as a serum  $\beta$ -hCG level  $>6$  mIU/ml typically measured 17 days (range 15–20 days) after egg retrieval. Data are presented as rates (95% CI).

<sup>b</sup>Same results were found using a SG = 1.015 based in our study population and SG = 1.024 based in previous literature.

<sup>c</sup>Mean SG used in equation to adjust for urinary dilution (SG of 1.015 used in current analysis and 1.024 used in previous publication, Ehrlich *et al.* 2012). LOD = 0.4  $\mu\text{g/l}$ .

<sup>d</sup>Tests for trend were performed using the median concentration of urinary bisphenol A in each group as a continuous variable in the model.