Supplemental Figure Legends

Supplemental Figure S1. Effect of BPA on growth of antral follicles from FVB mice

Antral follicles were mechanically isolated from FVB mice and exposed *in vitro* to DMSO or BPA (1, 10, or 100µg/mL). Growth of follicles was monitored during culture, recorded in micrometers, and reported as percent change at each subsequent time-point compared to 0h of each appropriate treatment group. The graphs represent means \pm SEMs from at least three separate experiments. Lines with asterisks (*) are significantly different from DMSO controls (n= 8-16 follicles per treatment per experiment from at least three separate experiments; p≤ 0.05). Data previously published in Peretz J, Gupta RK, Singh J, Hernandez-Ochoa I, Flaws JA. Bisphenol A impairs follicle growth, inhibits steroidogenesis, and down-regulates rate-limiting enzymes in the estradiol biosynthesis pathway. Toxicological Sciences 2011; 119: 209-217 [9].

Supplemental Figure S2. Effect of BPA on cell cycle regulators in antral follicles from

FVB mice. After exposure of antral follicles from FVB mice to DMSO control or BPA (1-100µg/mL) for 24-96h in vitro, the follicles were collected and subjected to qPCR analysis for *Cdk4*, *Ccne1*, and *Trp53* mRNA expression levels. All values were normalized to beta-actin (*Actb*) as a loading control. The graphs represent means \pm SEMs from at least three separate experiments. Asterisk (*) indicates p≤ 0.05 from DMSO control. GE= genomic equivalent. Data previously published in Peretz J, Craig ZR, Flaws JA. Bisphenol A inhibits follicle growth and induces atresia in cultured mouse antral follicles independently of the genomic estrogenic pathway. Biology of Reproduction 2012; 87:63,1-11 [28].

Supplemental Figure S3. Effect of BPA on atresia factors in antral follicles from FVB

mice. After exposure of antral follicles from FVB mice to DMSO control or BPA (1-100µg/mL) for 24-96h in vitro, the follicles were collected and subjected to qPCR analysis for *Bax* and *Bcl2* mRNA expression levels. All values were normalized to beta-actin (*Actb*) as a loading control. The graphs represent means ± SEMs from at least three separate experiments. Asterisk (*) indicates $p \le 0.05$ from DMSO control. GE = genomic equivalent. Data previously published in Peretz J, Craig ZR, Flaws JA. Bisphenol A inhibits follicle growth and induces atresia in cultured mouse antral follicles independently of the genomic estrogenic pathway. Biology of Reproduction 2012; 87:63,1-11 [28].

Supplemental Figure S4. Effect of BPA on hormone production by antral follicles from CD-1 mice. After exposure of antral follicles from CD-1 mice to DMSO control or BPA (1- $100\mu g/mL$) for 24-96h in vitro, the media were collected at each time-point, pooled per treatment group, and subjected to enzyme-linked immunosorbent assays (ELISA) for progesterone, androstenedione, testosterone, and estradiol. The graphs represent means ± SEMs from at least three separate experiments. Asterisks (*) indicate p≤ 0.05 from DMSO control. Data previously published in Peretz J, Flaws JA. Bisphenol A down-regulates rate-limiting Cyp11a1 to acutely inhibit steroidogenesis in cultured mouse antral follicles. Toxicology and Applied Pharmacology 2013; 271(2): 249-56 [10].

Supplemental Figure S5. Effect of BPA on *Star* expression in antral follicles from CD-1 mice. After exposure of antral follicles from CD-1 mice to DMSO control or BPA (1-100µg/mL) for 24-96h in vitro, the follicles were collected and subjected to qPCR analysis for *Star* mRNA expression levels. All values were normalized to beta-actin (*Actb*) as a loading control. The graphs represent means ± SEMs from at least three separate experiments. Asterisk (*) indicates $p \le 0.05$ from DMSO control. GE = genomic equivalent. Data previously published in Peretz J, Flaws JA. Bisphenol A down-regulates rate-limiting Cyp11a1 to acutely inhibit

steroidogenesis in cultured mouse antral follicles. Toxicology and Applied Pharmacology 2013; 271(2): 249-56 [10].

Supplemental Figure S6. Effect of BPA on *Cyp11a1* **expression in antral follicles from CD-1 mice.** After exposure of antral follicles from CD-1 mice to DMSO control or BPA (1-100µg/mL) for 24-96h in vitro, the follicles were collected and subjected to qPCR analysis for *Cyp11a1*

mRNA expression levels. All values were normalized to beta-actin (*Actb*) as a loading control. The graphs represent means ± SEMs from at least three separate experiments. Asterisk (*) indicates p≤ 0.05 from DMSO control. GE = genomic equivalent. Data previously published in Peretz J, Flaws JA. Bisphenol A down-regulates rate-limiting Cyp11a1 to acutely inhibit steroidogenesis in cultured mouse antral follicles. Toxicology and Applied Pharmacology 2013; 271(2): 249-56 [10].





48h

24h

72h

96h

FVB follicles





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