

### Supplementary Tables and Figures

**Table S1** Primer sequences used in the real-time PCR.

Gene	Sequence (5'–3')	GenBank accession number
Placental Function-Associated Genes		
<i>syncytin-A</i>	F: CTGGGAATGAACCCACTGTTA	NM_001013751.2
	R: GAGTTGAGGCAGAAGGAGTATG	
<i>syncytin-B</i>	F : CCACCACCCATACGTTCAAA	XM_030247799.1
	R : GGTTATAGCAGGTGCCGAAGAG	
<i>FGF15</i>	F : GAGGACCAAACGAACGAAATT	NM_008003.2
	R : ACGTCCTTGATGGCAATCG	
<i>IGF2</i>	F : CTTGTTGACACGCTTCAGTTTG	NM_001315488.1
	R : GGGTGGCACAGTATGTCTCC	
<i>PIGF</i>	F : TGAGGAACCCACCTGTGATGCT	XM_021202404.1
	R : CATTGAGCAGGGACGAGTTGGCT	
Antioxidant-related genes		
<i>Nrf2</i>	F : CTGGCTGATACTACCGCTGTT	NM_010902.5
	R : GTGGAGAGGATGCTGCTGAA	
<i>Keap1</i>	F : TCGAAGGCATCCACCCTAAG	NM_016679.4
	R : CTCGAACCACGCTGTCAATCT	
<i>NQO1</i>	F : ACTCGGAGAACTTTCAGTACC	NM_008706.5

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	R : TTGGAGCAAAGTAGAGTGGT	
<i>CAT</i>	F : GGAGCAGGTGCTTTTGGATA	NM_009804.2
	R : GAGGGTCACGAACTGTGTCA	
<i>SOD1</i>	F : TTTTTCGCGGGTCCTTTC	XM_021185540.2
	R : CCATACTGATGGACGTGGAA	
<i>SOD2</i>	F : GGCCAAGGGAGATGTTACAA	XM_021221177.1
	R : GAACCTTGGACTCCCACAGA	
Inflammatory Cytokine -related genes		
IL-6	F : ACCACGGCCTTCCCTACTT	NM_031168.2
	R : CACAACCTCTTTTCTCATTCCAC	
IL-8	F : CCTACTTCAGCATCCTCTACTGG	NM_001382458.1
	R : AGGGTTTCTTGAGAAGGGGAC	
IL-1 $\beta$	F : CTCGCAGCAGCACATCAACAAG	NM_008361.4
	R : GGAAGGTCCACGGGAAAGACAC	
IL-10	F : AAAGAAGGCATGCACAGCTC	NM_000572.3
	R : AAGCATGTTAGGCAGGTTGC	
TNF- $\alpha$	F : TCAGAATGAGGCTGGATAAG	NM_001278601.1
	R : AGAGGTTTCAGTGATGTAGCG	
PPAR- $\gamma$	F : GTACTGTCCGGTTTCAGAAGTGCC	XM_021164281.2
	R : ATCTCCGCCAACAGCTTCTCCT	
Bile acid synthesis -related genes		
FXR	F : GCTAATGAGGACGACAGCGAAGG	NM_001163700.1

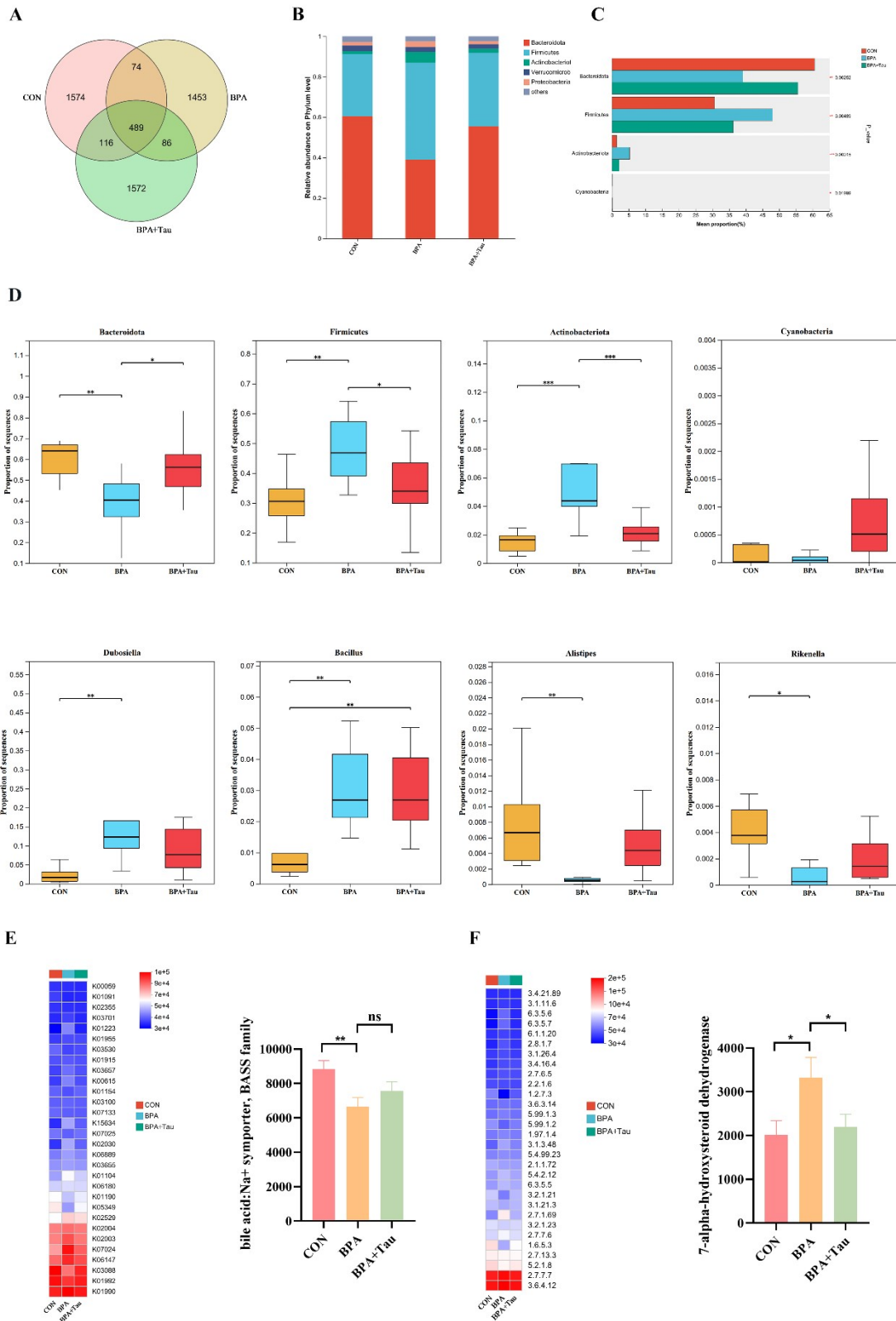
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	R : GTCTGTTGGTCTGCCGTGAGTTC	
Cyp7a1	F : GGGCAGGCTTGGAATTTTG	NM_007824.3
	R : ACAGCTACTAGGGGGCTTCA	
Cyp7b1	F : GCCTTTTGGACTCGGAACAAG	XM_006535383.3
	R : AATCGGGGTGCTGAATACCTAA	
Cyp27a1	F : GAGAGTGAATCAGGGGACCA	XM_006495607.4
	R : TCAGGAATGGAGGGTTTCAG	
$\beta$ -actin	F : TGGAATCCTGTGGCATCCATGAAAC	NM_007393.5
	R : TAAAACGCAGCTCAGTAACAGTCCG	

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PIGF, Placental Growth Factor; FGF15, Fibroblast Growth Factor 15; IGF2, Insulin-like Growth Factor 2; Nrf2, nuclear factor erythroid 2-related factor 2; Keap1, Kelch-Like ECH-Associated Protein 1; NQO1, NAD(P)H:Quinone Oxidoreductase 1; CAT, Catalase; SOD1, Superoxide Dismutase 1; SOD2, superoxide dismutase 2; IL-6, Interleukin-6; IL-8, Interleukin-8; IL-1 $\beta$ , Interleukin- 1 Beta; IL-10, Interleukin-10; TNF- $\alpha$ , Tumor Necrosis Factor-Alpha; PPAR- $\gamma$ , Peroxisome Proliferator-Activated Receptor Gamma; FXR, Farnesoid X Receptor; Cyp7a1, Cytochrome P450 Family 7 Subfamily A Member 1; Cyp7b1, Cytochrome P450 Family 7 Subfamily B Member 1; Cyp27a1, Cytochrome P450 Family 27 Subfamily A Member 1;  $\beta$ -actin, Beta-Actin.



**Fig S1. Maternal taurine supplementation on fecal microbiota in BPA-exposed pregnant mice.** (A) Venn diagram of shared ASVs; (B) Microbial composition at the phylum level; (C) Differential analysis of microbial composition at the phylum level;

(D) Differential analysis of microbial composition at the genus level, (E) KEGG-based functional prediction-bile acid: Na<sup>+</sup> symporter (BASS family); (F) Functional prediction of enzyme abundance: 7 $\alpha$ -hydroxysteroid dehydrogenase (7 $\alpha$ -HSDH). CON, control group; BPA, bisphenol A-exposed group; BPA+Tau, bisphenol A-exposed+ taurine. ns, no significance; \* $P < 0.05$ ; \*\* $P < 0.01$ ; \*\*\* $P < 0.001$ .