Table 1. Percentage of Detectable Prolactin Values

Sex	Treatment	N[1]	Percent[2]
F	Vehicle 0.0	19	31.6
	BPA 2.5	23	30.4
	BPA 8.0	18	50.0
	BPA 25.0	20	50.0
	BPA 80.0	20	50.0
	BPA 260.0	20	40.0
	BPA 840.0	20	40.0
	BPA 2700.0	20	45.0
	BPA 100000.0	19	52.6
	BPA 300000.0	19	57.9
	EE2 0.5	20	65.0
	EE2 5.0	19	73.7
	Naive Control	20	20.0
M	Vehicle 0.0	20	40.0
	BPA 2.5	23	52.2
	BPA 8.0	18	44.4
	BPA 25.0	21	57.1
	BPA 80.0	20	40.0
	BPA 260.0	20	50.0
	BPA 840.0	20	45.0
	BPA 2700.0	20	35.0
	BPA 100000.0	20	60.0
	BPA 300000.0	18	61.1
	EE2 0.5	20	25.0
	EE2 5.0	20	50.0
	Naive Control	20	40.0

1. Vehicle, BPA 25.0, and EE2 5.0 µg/kg treatment groups each had one female animal with QNS (not counted in non-missing N).
2. Percent is defined as the number of detectable measurements divided by the number of non-missing measurements times 100.

Table 2. Summary Statistics for Females

	Treatment																					
	Vehicle			BPA 2.5 (µg/kg)			BPA 8 (µg/kg)			BPA 25 (µg/kg)			BPA 80 (µg/kg)			BPA 260 (µg/kg)			BPA 840 (µg/kg)			BPA 2700 (µg/kg)		
Clinical Chemistry	N	Mean	S.E.	N	Mean	S.E.	N	Mean	S.E.	N	Mean	S.E.	N	Mean	S.E.	N	Mean	S.E.	N	Mean	S.E.	N	Mean	S.E.
Estradiol	20	10.26	1.30	23	9.72	1.12	18	10.16	1.29	21	11.09	1.24	20	12.69	1.42	20	12.63	1.34	20	10.50	1.24	20	10.96	1.48
FSH	19	5.85	1.42	23	9.35	2.70	18	6.75	2.19	20	5.87	1.23	20	7.58	1.53	20	5.29	0.80	20	8.46	2.40	20	7.03	2.42
LH	20	0.63	0.08	23	0.65	0.07	18	0.65	0.10	21	0.70	0.07	20	0.58	0.07	20	0.88	0.28	20	0.81	0.24	20	0.53	0.07
Progesterone	20	16.63	3.26	23	13.19	2.29	18	17.35	3.79	21	13.04	2.64	20	10.76	0.96	20	12.50	1.91	20	12.73	1.56	20	14.16	2.55
Prolactin	19	0.37	0.14	23	0.20	0.08	18	1.22	0.42	20	0.72	0.27	20	0.57	0.16	20	0.57	0.19	20	0.35	0.10	20	1.02	0.39

Table 2. Summary Statistics for Females

	Treatment														
	BPA 100,000 (µg/kg)			BPA 300,000 (µg/kg)			EE_2 0.5 (µg/kg)			EE_2 5.0 (µg/kg)			Naïve Control		
Clinical Chemistry	N	Mean	S.E.	N	Mean	S.E.	N	Mean	S.E.	N	Mean	S.E.	N	Mean	S.E.
Estradiol	19	17.11	1.44	19	21.87	1.24	20	13.76	1.33	20	13.21	0.90	20	11.29	1.42
FSH	19	5.14	0.60	19	9.87	2.99	20	9.03	2.76	20	4.75	0.73	20	7.30	2.75
LH	19	0.48	0.06	19	0.61	0.06	20	1.06	0.32	20	0.59	0.07	20	0.59	0.06
Progesterone	19	11.61	2.42	19	8.10	1.15	20	4.98	0.74	20	3.30	0.29	20	12.53	1.97
Prolactin	19	1.12	0.46	19	1.59	0.41	20	1.37	0.33	19	1.08	0.22	20	0.26	0.14

Table 3. Summary Statistics for Males

	Treatment																					
	Vehicle			BPA 2.5 (µg/kg)			BPA 8 (µg/kg)			BPA 25 (µg/kg)			BPA 80 (µg/kg)			BPA 260 (µg/kg)			BPA 840 (µg/kg)			BPA 2700 (µg/kg)	
Clinical Chemistry	N	Mean	S.E.	N	Mean	S.E.	N	Mean	S.E.	N	Mean	S.E.	N	Mean	S.E.	N	Mean	S.E.	N	Mean	S.E.	N	Mean	S.E.
FSH	20	1.05	0.03	23	1.02	0.03	18	1.05	0.03	21	1.00	0.02	20	0.99	0.04	20	1.04	0.04	20	1.01	0.04	20	0.95	0.05
LH	19	1.52	0.03	23	1.50	0.03	18	1.46	0.02	21	1.48	0.02	20	1.45	0.02	19	1.51	0.04	20	1.47	0.03	20	1.51	0.04
Prolactin	20	0.27	0.09	23	0.83	0.59	18	0.35	0.15	21	0.58	0.16	20	0.30	0.11	20	0.97	0.42	20	0.50	0.16	20	0.20	0.05
Testosterone	20	121.60	13.65	23	141.02	28.52	18	161.30	20.42	21	164.63	21.32	20	132.89	15.51	20	113.08	10.24	20	114.14	17.61	20	122.02	34.85

Table 3. Summary Statistics for Males

	Treatment														
	BPA 100,000 (µg/kg)			BPA 300,000 (µg/kg)			EE_2 0.5 (µg/kg)			EE_2 5.0 (µg/kg)			Naïve Control		
Clinical Chemistry	N	Mean	S.E.	N	Mean	S.E.	N	Mean	S.E.	N	Mean	S.E.	N	Mean	S.E.
FSH	20	1.03	0.02	18	1.00	0.04	20	0.95	0.04	20	1.14	0.10	20	1.09	0.02
LH	20	1.67	0.16	18	1.53	0.03	20	1.44	0.01	20	1.47	0.03	20	1.47	0.02
Prolactin	20	0.40	0.13	18	1.97	1.35	20	0.32	0.13	20	0.52	0.18	20	0.17	0.05
Testosterone	20	105.42	10.84	18	86.55	13.08	20	96.81	13.93	20	102.22	18.17	20	123.01	18.62

Table 4. Nonparametric Statistics for Females

	Treatment																							
	Vehicle			BPA 2.5 (µg/kg)			BPA 8 (µg/kg)			BPA 25 (µg/kg)			BPA 80 (µg/kg)			BPA 260 (µg/kg)			BPA 840 (µg/kg)			BPA 2700 (µg/kg)		
Clinical Chemistry	Median	Min	Max	Median	Min	Max	Median	Min	Max	Median	Min	Max	Median	Min	Max	Median	Min	Max	Median	Min	Max	Median	Min	Max
Estradiol	8.10	5.47	29.51	8.97	0.50	22.46	9.47	2.91	26.30	9.85	2.97	25.80	10.64	4.92	30.10	11.22	3.73	24.67	9.52	1.78	24.84	10.51	1.96	27.51
FSH	3.48	0.45	23.99	5.08	0.10	51.55	3.18	0.10	38.37	4.18	1.02	24.44	5.26	0.98	28.50	4.32	1.01	13.30	5.23	0.10	49.39	4.20	0.79	49.20
LH	0.65	0.13	1.44	0.64	0.07	1.26	0.62	0.07	1.62	0.70	0.07	1.17	0.52	0.18	1.22	0.70	0.07	6.05	0.66	0.07	5.15	0.67	0.07	0.89
Progesterone	11.52	5.63	57.64	10.09	4.29	55.70	10.07	6.42	58.46	8.97	5.38	59.78	9.37	4.67	21.47	9.54	4.17	38.30	11.05	5.16	37.56	8.58	4.66	44.24
Prolactin	0.05	0.05	2.24	0.05	0.05	1.61	0.25	0.05	5.44	0.08	0.05	5.01	0.19	0.05	2.12	0.05	0.05	3.03	0.05	0.05	1.65	0.05	0.05	6.30

Table 4. Nonparametric Statistics for Females

	Treatment														
	BPA 100,000 (µg/kg)			BPA 300,000 (µg/kg)			EE_2 0.5 (µg/kg)			EE_2 5.0 (µg/kg)			Naïve Control		
Clinical Chemistry	Median	Min	Max	Median	Min	Max	Median	Min	Max	Median	Min	Max	Median	Min	Max
Estradiol	14.43	9.76	31.50	21.63	11.62	31.39	13.47	0.50	26.79	12.12	4.22	20.09	9.39	3.48	30.04
FSH	5.51	0.88	10.49	6.29	1.26	52.50	4.22	1.98	52.50	4.24	0.95	11.82	3.65	0.18	56.70
LH	0.49	0.07	0.92	0.61	0.26	1.08	0.71	0.30	6.83	0.65	0.07	1.06	0.61	0.07	1.01
Progesterone	8.33	3.82	43.36	7.47	3.09	21.26	3.72	2.10	17.09	3.08	1.37	5.89	11.58	4.59	45.96
Prolactin	0.11	0.05	7.51	0.67	0.05	5.07	0.91	0.05	4.85	1.00	0.05	3.02	0.05	0.05	2.40

Table 5. Nonparametric Statistics for Males

	Treatment																							
	Vehicle			BPA 2.5 (µg/kg)			BPA 8 (µg/kg)			BPA 25 (µg/kg)			BPA 80 (µg/kg)			BPA 260 (µg/kg)			BPA 840 (µg/kg)			BPA 2700 (µg/kg)		
Clinical Chemistry	Median	Min	Max	Median	Min	Max	Median	Min	Max	Median	Min	Max	Median	Min	Max	Median	Min	Max	Median	Min	Max	Median	Min	Max
FSH	1.01	0.91	1.42	1.03	0.40	1.24	1.02	0.95	1.39	0.98	0.93	1.25	1.00	0.40	1.23	1.03	0.40	1.45	0.99	0.40	1.30	0.97	0.40	1.19
LH	1.48	1.32	1.88	1.46	1.33	2.09	1.43	1.35	1.70	1.46	1.35	1.79	1.41	1.35	1.78	1.46	1.32	1.98	1.42	1.33	1.83	1.44	1.38	2.13
Prolactin	0.05	0.05	1.36	0.10	0.05	13.70	0.05	0.05	2.53	0.31	0.05	2.83	0.05	0.05	2.14	0.12	0.05	7.66	0.05	0.05	2.46	0.05	0.05	0.64
Testosterone	115.68	19.70	252.63	108.83	10.77	655.56	158.85	38.60	340.09	141.87	42.30	419.91	117.78	23.89	257.50	111.48	45.72	185.69	91.45	21.47	364.98	73.49	29.31	745.73

Table 5. Nonparametric Statistics for Males

	Treatment														
	BPA 100,000 (µg/kg)			BPA 300,000 (µg/kg)			EE_2 0.5 (µg/kg)			EE_2 5.0 (µg/kg)			Naïve Control		
Clinical Chemistry	Median	Min	Max	Median	Min	Max	Median	Min	Max	Median	Min	Max	Median	Min	Max
FSH	0.99	0.92	1.25	1.00	0.40	1.35	0.99	0.40	1.16	1.03	0.91	3.02	1.09	0.92	1.41
LH	1.47	1.37	4.64	1.49	1.35	1.83	1.42	1.37	1.61	1.44	1.31	1.79	1.42	1.35	1.74
Prolactin	0.17	0.05	2.64	0.33	0.05	24.60	0.05	0.05	1.85	0.12	0.05	2.78	0.05	0.05	0.71
Testosterone	108.88	19.21	191.37	63.80	18.26	190.04	77.81	37.43	315.54	71.60	0.50	337.05	88.59	34.96	318.72

Table 6. Female Percent Treatment Median of Vehicle Control

	Treatment											
Clinical Chemistry	BPA 2.5 (µg/kg)	BPA 8 (µg/kg)	BPA 25 (µg/kg)	BPA 80 (µg/kg)	BPA 260 (µg/kg)	BPA 840 (µg/kg)	BPA 2700 (µg/kg)	BPA 100,000 (µg/kg)	BPA 300,000 (µg/kg)	EE_2 0.5 (µg/kg)	EE_2 5.0 (µg/kg)	Naïve Control
Estradiol	110.7	116.8	121.5	131.3	138.4	117.5	129.7	178.0	266.9	166.2	149.5	115.8
FSH	146.0	91.5	120.1	151.2	124.3	150.3	120.7	158.4	180.8	121.3	121.8	105.0
LH	98.9	95.7	107.4	79.5	108.1	102.2	102.3	75.7	93.0	108.8	100.3	94.2
Progesterone	87.5	87.4	77.8	81.3	82.8	95.9	74.4	72.3	64.8	32.3	26.7	100.5
Prolactin	100.0	500.0	160.0	380.0	100.0	100.0	100.0	220.0	1340.0	1810.0	2000.0	100.0

Table 7. Male Percent Treatment Median of Vehicle Control

	Treatment											
Clinical Chemistry	BPA 2.5 (µg/kg)	BPA 8 (µg/kg)	BPA 25 (µg/kg)	BPA 80 (µg/kg)	BPA 260 (µg/kg)	BPA 840 (µg/kg)	BPA 2700 (µg/kg)	BPA 100,000 (µg/kg)	BPA 300,000 (µg/kg)	EE_2 0.5 (µg/kg)	EE_2 5.0 (µg/kg)	Naïve Control
FSH	101.7	101.6	97.2	99.5	102.7	98.3	96.0	98.1	99.3	98.3	102.1	107.7
LH	98.5	96.5	98.5	95.4	98.5	96.0	97.2	98.9	100.4	95.9	97.4	95.9
Prolactin	200.0	100.0	620.0	100.0	230.0	100.0	100.0	340.0	650.0	100.0	240.0	100.0
Testosterone	94.1	137.3	122.6	101.8	96.4	79.1	63.5	94.1	55.2	67.3	61.9	76.6

Table 8. Nonparametric ANOVA for Females and Males

Sex	Clinical Chemistry	NumDF	DenDF	FValue	ProbF
F	Estradiol	10.860	221.386	7.094	0.000
	FSH	11.481	229.407	0.551	0.873
	LH	11.635	236.355	0.735	0.712
	Progesterone	10.914	220.245	11.051	0.000
	Prolactin	10.942	215.300	2.489	0.006
M	FSH	11.529	232.626	1.721	0.066
	LH	11.460	230.206	0.921	0.524
	Prolactin	11.529	233.374	1.051	0.403
	Testosterone	11.694	238.521	2.074	0.020

Table 9. Pairwise Comparisons (P-Values) to the Vehicle Group for Females[1]

Clinical Chemistry	Vehicle	BPA 2.5 (µg/kg)	BPA 8 (µg/kg)	BPA 25 (µg/kg)	BPA 80 (µg/kg)	BPA 260 (µg/kg)	BPA 840 (µg/kg)	BPA 2700 (µg/kg)
Estradiol	0.948	1.000	0.999	0.929	0.391	0.334	0.997	0.965
FSH	0.867	0.952	1.000	1.000	0.810	0.998	0.766	1.000
LH	0.210	1.000	1.000	0.960	0.999	1.000	1.000	0.945
Progesterone	0.767	0.906	1.000	0.664	0.867	0.972	1.000	0.886
Prolactin	0.581	0.993	0.520	0.768	0.775	0.978	0.999	0.762

1 All p-values are relative to the control group, except p-values for the linear trend presented under the control group.

Table 9. Pairwise Comparisons (P-Values) to the Vehicle Group for Females[1]

Clinical Chemistry	BPA 100,000 (µg/kg)	BPA 300,000 (µg/kg)	EE_2 0.5 (µg/kg)	EE_2 5.0 (µg/kg)	Naïve Control
Estradiol	0.000	0.000	0.008	0.004	0.462
FSH	0.687	0.450	0.494	0.999	0.984
LH	0.249	0.969	0.513	0.973	0.834
Progesterone	0.089	0.008	0.000	0.000	0.547
Prolactin	0.297	0.049	0.016	0.006	0.394

1 All p-values are relative to the control group.

Table 10. Pairwise Comparisons (Unadjusted P-Values) to the Vehicle Group for Females

Clinical Chemistry	BPA 2.5 (µg/kg)	BPA 8 (µg/kg)	BPA 25 (µg/kg)	BPA 80 (µg/kg)	BPA 260 (µg/kg)	BPA 840 (µg/kg)	BPA 2700 (µg/kg)
Estradiol	0.889	0.683	0.395	0.096	0.079	0.642	0.464
FSH	0.434	0.793	0.731	0.282	0.647	0.253	0.892
LH	0.766	0.940	0.451	0.682	0.913	0.984	0.421
Progesterone	0.367	0.877	0.199	0.326	0.483	0.920	0.344
Prolactin	0.583	0.140	0.254	0.259	0.503	0.702	0.251

Table 10. Pairwise Comparisons (Unadjusted P-Values) to the Vehicle Group for Females

Clinical Chemistry	BPA 100,000 (µg/kg)	BPA 300,000 (µg/kg)	EE_2 0.5 (µg/kg)	EE_2 5.0 (µg/kg)	Naïve Control
Estradiol	0.000	0.000	0.004	0.002	0.462
FSH	0.467	0.279	0.311	0.967	0.984
LH	0.145	0.837	0.326	0.846	0.834
Progesterone	0.049	0.004	0.000	0.000	0.547
Prolactin	0.176	0.027	0.009	0.003	0.394

Table 11. Pairwise Comparisons (P-Values) to the Vehicle Group[1] for Males[1]

Clinical Chemistry	Vehicle	BPA 2.5 (µg/kg)	BPA 8 (µg/kg)	BPA 25 (µg/kg)	BPA 80 (µg/kg)	BPA 260 (µg/kg)	BPA 840 (µg/kg)	BPA 2700 (µg/kg)
FSH	0.139	0.998	1.000	0.513	0.991	0.969	1.000	0.643
LH	0.709	0.952	0.660	0.969	0.243	0.998	0.522	0.997
Prolactin	0.236	0.955	1.000	0.499	1.000	0.804	0.963	1.000
Testosterone	0.008	0.999	0.649	0.753	1.000	1.000	0.956	0.443

1 All p-values are relative to the control group, except p-values for the linear trend presented under the control group.

Table 11. Pairwise Comparisons (P-Values) to the Vehicle Group[1] for Males[1]

Clinical Chemistry	BPA 100,000 (µg/kg)	BPA 300,000 (µg/kg)	EE_2 0.5 (µg/kg)	EE_2 5.0 (µg/kg)	Naïve Control
FSH	0.917	0.735	0.409	0.851	0.092
LH	0.993	0.941	0.147	0.498	0.178
Prolactin	0.360	0.172	0.808	0.633	0.746
Testosterone	0.743	0.089	0.155	0.205	0.577

1 All p-values are relative to the control group.

Table 12. Pairwise Comparisons (Unadjusted P-Values) to the Vehicle Group[1] for Males							
Clinical Chemistry	BPA 2.5 (µg/kg)	BPA 8 (µg/kg)	BPA 25 (µg/kg)	BPA 80 (µg/kg)	BPA 260 (µg/kg)	BPA 840 (µg/kg)	BPA 2700 (µg/kg)
FSH	0.653	0.943	0.137	0.567	0.474	0.768	0.190
LH	0.433	0.198	0.475	0.054	0.658	0.141	0.637
Prolactin	0.440	0.860	0.132	0.787	0.278	0.459	0.749
Testosterone	0.693	0.193	0.245	0.726	0.747	0.442	0.113

Table 12. Pairwise Comparisons (Unadjusted P-Values) to the Vehicle Group[1] for Males					
Clinical Chemistry	BPA 100,000 (µg/kg)	BPA 300,000 (µg/kg)	EE_2 0.5 (µg/kg)	EE_2 5.0 (µg/kg)	Naïve Control
FSH	0.730	0.511	0.251	0.637	0.092
LH	0.923	0.773	0.083	0.315	0.178
Prolactin	0.218	0.098	0.586	0.420	0.746
Testosterone	0.519	0.049	0.088	0.118	0.577