

**l-Table 4-3 Physical development test; Preputial separation of offspring -group mean values**

<b>Exp.group (mg/kg/day)</b>	<b>n</b>	<b>Age at PPS(day)</b>	<b>Body weights at PPS(g)</b>
<b>Vehicle control</b>	8 (41)	39.8 ± 1.2	204.5 ± 13.0
<b>BPA 0.005</b>	10 (48)	40.0 ± 1.0	206.8 ± 35.0
<b>BPA 0.05</b>	10 (56)	40.3 ± 1.5	204.7 ± 13.3
<b>BPA 40</b>	10 (49)	40.3 ± 1.6	209.7 ± 17.0
<b>BPA 400</b>	9 (45)	40.5 ± 1.5	202.9 ± 14.2
<b>EE 0.05</b>	10 (50)	41.5 ± 1.8 **	200.8 ± 14.7

Mean ± S.D.

\*\*p<0.01 (Dunnett's test)

n: The numbers without parenthesis represent number of dams and the numbers in parenthesis represent number of pups

I-Table 4-4 Physical development test; Vaginal opening of offspring - group mean values

Exp.group (mg/kg/day)	n	Age at VO(day)	Body weight at VO(g)
Vehicle control	8 (39)	34.1 ± 3.0	129.5 ± 18.5
BPA 0.005	10 (39)	33.8 ± 2.5	127.0 ± 18.0
BPA 0.05	10 (43)	33.5 ± 2.0	123.0 ± 13.4
BPA 40	10 (50)	33.9 ± 2.3	127.6 ± 14.6
BPA 400	9 (45)	33.9 ± 1.8	123.8 ± 14.0
EE 0.05	10 (50)	33.3 ± 1.7	118.2 ± 12.2 **

Mean ± S.D.

\*\*p<0.01 (Dunnnett's test)

n: The numbers without parenthesis represent number of dams and the numbers in parenthesis represent number of pups

**I-Table 5-1 Reproduction test of F1; Copulative confirmation**

<b>Exp.group (mg/kg/day)</b>	<b>n</b>	<b>Copulation</b>	<b>(%)</b>
Vehicle control	16	16/16	100.0
BPA 0.005	13	13/13	100.0
BPA 0.05	17	17/17	100.0
BPA 40	18	17/18	94.4
BPA 400	18	18/18	100.0
EE 0.05	19	15/19	78.9

I-Table 5-2 Reproduction test of F1; fertility and general reproductive performance - group mean values

Exp.group (mg/kg/day)	Vehicle control	BPA 0.005	BPA 0.05	BPA 40	BPA 400	EE 0.05
Number of dams	15	12	17	16	17	16
Number of corpora lutea <sup>a)</sup>	259 (17.3 ± 2.31)	189 (15.8 ± 1.60)	283 (16.6 ± 1.84)	276 (17.3 ± 2.41)	311 (18.3 ± 3.57)	286 (17.9 ± 3.20)
Number of implantations <sup>a)</sup>	231 (15.4 ± 1.80)	178 (14.8 ± 2.52)	253 (14.9 ± 1.45)	246 (15.4 ± 1.41)	263 (15.5 ± 1.77)	231 (14.4 ± 1.79)
Number of pre-implant losses <sup>b)</sup>	28(10.8)	11(5.8)	30(10.6)	30(10.9)	48(15.4)	55(19.2)
Number of resorptions <sup>c)</sup>	15(6.5)	23(12.9)	21(8.3)	23(9.3)	12(4.6)	16(6.9)
Early resorptions	15(6.5)	23(12.9)	21(8.3)	23(9.3)	12(4.6)	16(6.9)
Late resorptions	0	0	0	0	0	0
Dead fetuses	0	0	0	0	0	0
Number of live fetuses <sup>a)</sup>	216 (14.4 ± 1.68)	155 (12.9 ± 2.81)	232 (13.6 ± 1.17)	223 (13.9 ± 2.02)	251 (14.8 ± 2.44)	215 (13.4 ± 2.00)
<b>Live fetuses</b>						
Sex ratio (male/female)	104 / 112	75 / 80	125 / 107	109 / 114	115 / 136	116 / 99
<b>Body weights <sup>d)</sup></b>						
Male	3.98 ± 0.24	4.05 ± 0.66	4.24 ± 0.64	4.14 ± 0.62	3.85 ± 0.33	4.33 ± 0.92
Female	3.80 ± 0.27	3.96 ± 0.54	4.00 ± 0.68	3.96 ± 0.52	3.68 ± 0.27	4.05 ± 0.92
<b>Placental weights <sup>d)</sup></b>						
Male	0.45 ± 0.03	0.45 ± 0.07	0.45 ± 0.04	0.45 ± 0.06	0.47 ± 0.10	0.46 ± 0.08
Female	0.44 ± 0.03	0.44 ± 0.07	0.42 ± 0.04	0.43 ± 0.04	0.45 ± 0.07	0.44 ± 0.10

a) Value in parentheses represents mean ± S.D. per dam.

b) Value in parentheses represents percentage of the number of corpora lutea.

c) Value in parentheses represents percentage of the number of implantations.

d) Value is mean ± S.D. per dam.

I-Table 6 Morphometry of the female external genitalia at 10 weeks of age

Exp.group (mg/kg/day)		A	B	C
		Length (mm)		
vehicle control	Mean	1.27	1.14	10.15
	S.D.	0.14	0.15	0.88
	n	6	6	6
BPA 0.005	Mean	1.30	1.22	10.62
	S.D.	0.14	0.24	0.57
	n	6	6	6
BPA 0.05	Mean	1.33	1.16	11.07
	S.D.	0.16	0.14	0.61
	n	7	7	7
BPA 40	Mean	1.16	1.22	10.63
	S.D.	0.21	0.13	1.01
	n	8	8	8
BPA 400	Mean	1.18	1.10	10.19
	S.D.	0.27	0.22	0.82
	n	9	9	9
EE 0.05	Mean	1.79 **	1.91 **	7.92 **
	S.D.	0.44	0.46	1.26
	n	9	9	9

A; Size of urethral slit

B: Distance between tip of phallus and urethral orifice

C: Distance between urethral orifice and vagina

\*\*p<0.01(Dnnnett's test)

I-Table 7-1 Serum T3 & T4 of male offspring at 10 weeks of age

Exp.group (mg/kg/day)		T4	T3	FT4	FT3
		nmol/L	nmol/L	pmol/L	pmol/L
Vehicle control	Mean	79.43	0.56	9.19	4.49
	S.D.	11.22	0.10	1.68	0.43
	n	7	7	7	7
BPA 0.005	Mean	71.88	0.55	8.20	4.39
	S.D.	6.51	0.22	0.84	0.83
	n	6	6	6	6
BPA 0.05	Mean	71.41	0.61	8.41	4.62
	S.D.	12.13	0.19	1.95	0.72
	n	9 <sup>a)</sup>	9 <sup>a)</sup>	9 <sup>a)</sup>	9 <sup>a)</sup>
BPA 40	Mean	73.69	0.56	8.78	4.68
	S.D.	6.01	0.20	1.13	0.73
	n	9	9	9	9
BPA 400	Mean	70.83	0.57	7.88	4.65
	S.D.	7.33	0.11	1.01	0.46
	n	9	9	9	9
EE 0.05	Mean	73.62	0.55	8.19	4.67
	S.D.	8.18	0.10	0.92	0.71
	n	9	9	9	9

a) The data of ID-No.215 were missing

I-Table 7-2 Serum T3 & T4 of female offspring at 10 weeks of age

Exp.group (mg/kg/day)		T4	T3	FT4	FT3
		nmol/L	nmol/L	pmol/L	pmol/L
Vehicle control	Mean	58.52	0.58	6.39	4.61
	S.D.	8.54	0.14	1.15	0.44
	n	6	6	6	6
BPA 0.005	Mean	53.90	0.62	6.07	4.62
	S.D.	9.67	0.18	1.19	0.65
	n	6	6	6	6
BPA 0.05	Mean	65.53	0.60	8.12	5.02
	S.D.	5.28	0.13	1.19	0.42
	n	7	7	7	7
BPA 40	Mean	59.94	0.55	5.93	4.25
	S.D.	11.97	0.23	2.67	1.73
	n	8	7 a)	7 a)	7 a)
BPA 400	Mean	57.69	0.68	6.75	5.32
	S.D.	14.61	0.09	2.02	0.55
	n	9	9	9	9
EE 0.05	Mean	60.13	0.73	6.69	5.42 *
	S.D.	9.45	0.13	1.28	0.73
	n	9	9	9	9

a) Lack of quantity

\*p<0.05 (Dunnett's test)

I-Table 8-1 Estrus cycle - individual findings

Vehicle control	Months of age						
	3	4	5	6	7		
Animal ID No.							
501	N	N	N	N	N	N	N
502	N	CD	PD	PD	PD	PD	N
506	N	N	N	N	N	N	Irreg.
507	N	N	N	N	N	N	N
510	N	N	N	N	N	N	N
511	N	N	N	N	N	Irreg.	Irreg.
512	N	N	N	N	N	N	N
516	N	Irreg.	PD	CD	CD	N	N
517	N	N	PE	PE	PE	CE	CE
521	N	Irreg.	N	N	N	N	N
522	N	N	N	N	N	N	N
526	N	N	N	N	CD	N	N
527	N	PD	N	N	N	N	N
531	N	Irreg.	N	N	N	N	N
532	N	N	N	N	N	N	N
536	N		dead (13wk)				
537	N	PD	N	PD	PD	Irreg.	Irreg.

N, normal.

Irreg. Irregular estrus cycle (Unclassifiable)

PD, persistent diestrus (prolonged diestrus periods lasting 5-9 days)

CD, constant diestrus (prolonged diestrus periods lasting 10 days or more)

PE, persistent estrus (prolonged estrus periods lasting 3-7 days)

CE, constant estrus (prolonged estrus periods lasting 8 days or more)

	3M	4M	5M	6M	7M
n	16	16	16	16	16
Normal cycle	16	10	13	10	12
Abnormal cycle	0	6	3	6	4
Irregular cycle	0	3	0	1	3
Persistent diestrus	0	2	2	2	0
Constant diestrus	0	1	0	2	0
Persistent estrus	0	0	1	1	0
Constant estrus	0	0	0	0	1

I-Table 8-1 Estrus cycle - individual findings

continued

Animal ID No.	Months of age						
	3	4	5	6	7		
540	N	N	N	N	N	N	N
541	N	N	N	N	N	N	N
545	N	N	N	N	N	N	N
546	Irreg.	CD	CD	CD	CD	Irreg.	Irreg.
547	N	N	N	PE	PE	PE	PE
551	N	N	N	CD	CD	PE	PE
552	Irreg.	PD	PD	CD	CD	Irreg.	Irreg.
553	N	N	PE	CD	PE	PE	PE
554	N	N	Irreg.	CD	PE	PE	PE
556	N	N	PD	CD	CE	CE	CE
557	N	PD	PD	PD	PE	PE	PE
561	N	N	PD	PD	PE	PE	PE
562	N	N		dead (25wk)			
563	N	N	N	N	N	PE	PE
564	N	N	N	N	N	Irreg.	Irreg.
565	N	N	PD	N	N	Irreg.	Irreg.
569	N	N	N	PD	N	N	N
570	N	N	N	N	N	N	N
574	N	N	N	N	N	N	N
575	N	N	N	N	N	PD	PD

N, normal.

Irreg. Irregular estrus cycle (Unclassifiable)

PD, persistent diestrus (prolonged diestrus periods lasting 5-9 days)

CD, constant diestrus (prolonged diestrus periods lasting 10 days or more)

PE, persistent estrus (prolonged estrus periods lasting 3-7 days)

CE, constant estrus (prolonged estrus periods lasting 8 days or more)

	3M	4M	5M	6M	7M
n	20	20	19	19	19
Normal cycle	18	17	11	9	6
Abnormal cycle	2	3	8	10	13
Irregular cycle	2	0	1	0	4
Persistent diestrus	0	2	5	3	1
Constant diestrus	0	1	1	6	0
Persistent estrus	0	0	1	1	7
Constant estrus	0	0	0	0	1

I-Table 8-1 Estrus cycle - individual findings

continued

BPA 0.05mg/kg/day

Animal ID No.	Months of age						
	3	4	5	6	7		
579	N	N	N	N	N	N	7
580	N	N	N	N	N	N	N
581	N	N	N	N	N	N	N
584	N	N	N	N	N	N	N
585	N	N	N	N	N	N	N
589	N	N	PD	PD	PD	PD	N
590	N	N	N	PD	PD	PD	Irreg.
593	N	N	N	N	N	N	N
594	N	N	N	N	N	N	N
598	N	N	N	N	N	N	PE
599	N	N	N	N	N	N	N
603	N	N	N	N	N	N	Irreg.
604	N	N	N	N	N	N	Irreg.
608	PD	PD	PD	PD	PD	PD	Irreg.
609	Irreg.	Irreg.	Irreg.	PD	PD	PD	Irreg.
613	N	N	CD	CD	CD	CD	PE
614	N	N	N	N	N	N	Irreg.
618	N	N	N	N	N	N	Irreg.
619	N	N	N	N	N	N	N

N, normal.

Irreg. Irregular estrus cycle (Unclassifiable)

PD, persistent diestrus (prolonged diestrus periods lasting 5-9 days)

CD, constant diestrus (prolonged diestrus periods lasting 10 days or more)

PE, persistent estrus (prolonged estrus periods lasting 3-7 days)

CE, constant estrus (prolonged estrus periods lasting 8 days or more)

	3M	4M	5M	6M	7M
n	19	19	19	19	19
Normal cycle	17	17	15	12	10
Abnormal cycle	2	2	4	7	9
Irregular cycle	1	1	1	1	7
Persistent diestrus	1	1	2	5	0
Constant diestrus	0	0	1	1	0
Persistent estrus	0	0	0	0	2
Constant estrus	0	0	0	0	0

I-Table 8-1 Estrus cycle - individual findings

continued

BPA 40mg/kg/day

Animal ID No.	Months of age						
	3	4	5	6	7	7	7
623	PD	N	N	N	N	N	Irreg.
624	N	N	N	N	N	N	N
627	N	N	N	N	N	N	N
628	N	N	CD	CD	CD	CD	Irreg.
631	PD	N	N	N	N	N	Irreg.
632	N	N	N	N	N	N	CE
636	N	Irreg.	CD	CD	CD	CD	PE
637	N	CD	CD	CD	CD	CD	Irreg.
638	CD	CD	CD	CD	CD	CD	Irreg.
639	N	N	N	N	N	N	Irreg.
643	N	N	N	N	N	N	N
644	N	N	N	N	N	N	N
648	N	N	N	N	PD	PD	Irreg.
649	N	CD	N	N	N	N	N
653	N	N	N	N	N	N	Irreg.
654	N	N	CD	CD	CD	CD	Irreg.
658	N	N	N	N	N	N	N
659	N	N	CD	N	N	N	N
663	N	N	N	N	N	N	PE
664	N	N	N	N	N	N	N
666	N	N	PD	N	N	N	N
668	N	N	N	N	N	N	N
669	N	CD	N	N	CD	CD	Irreg.
671	N	N	N	N	N	N	N

N, normal.

Irreg. Irregular estrus cycle (Unclassifiable)

PD, persistent diestrus (prolonged diestrus periods lasting 5-9 days)

CD, constant diestrus (prolonged diestrus periods lasting 10 days or more)

PE, persistent estrus (prolonged estrus periods lasting 3-7 days)

CE, constant estrus (prolonged estrus periods lasting 8 days or more)

	3M	4M	5M	6M	7M
n	24	24	24	24	24
Normal cycle	21	19	17	17	11
Abnormal cycle	3	5	7	7	13
Irregular cycle	0	1	0	0	10
Persistent diestrus	2	0	1	2	0
Constant diestrus	1	4	6	5	0
Persistent estrus	0	0	0	0	2
Constant estrus	0	0	0	0	1

I-Table 8-1 Estrus cycle - individual findings

continued

BPA 400mg/kg/day

Animal ID No.	Months of age						
	3	4	5	6	7		
673	N	N	CD	N	Ireg		7
674	N	N	Ireg.	Irreg.	PE		
678	N	PD	CD	PD	PD		
679	Irreg.	N	PD	N	N		
683	N	N	PD	CD	PE		
684	N	N	N	N	Irreg.		
688	N	N	N	N	PE		
689	N	N	Irreg.	PD	PE		
693	N	Irreg.		dead (22 wk)			
694	N	N	N	N	CD		
698	N	N	PD	N	N		
699	N	CD	CD	CD	PE		
703	N	N	N	N	N		
704	CE	PD	CD	PD	PE		
708	PD	N	PD	PD	N		
709	N	N	PD	CD	Irreg.		
713	N	CD	PD	N	PE		
714	N	N	N	N	N		

N, normal.

Irreg. Irregular estrus cycle (Unclassifiable)

PD, persistent diestrus (prolonged diestrus periods lasting 5-9 days)

CD, constant diestrus (prolonged diestrus periods lasting 10 days or more)

PE, persistent estrus (prolonged estrus periods lasting 3-7 days)

CE, constant estrus (prolonged estrus periods lasting 8 days or more)

	3M	4M	5M	6M	7M
n	18	18	17	17	17
Normal cycle	15	13	5	9	5
Abnormal cycle	3	5	12	8	12
Irregular cycle	1	1	2	1	3
Persistent diestrus	1	2	6	4	1
Constant diestrus	0	2	4	3	1
Persistent estrus	0	0	0	0	7
Constant estrus	1	0	0	0	0

I-Table 8-1 Estrus cycle - individual findings

continued

EE 0.05mg/kg/day

Animal ID No.	Months of age						
	3	4	5	6	7		
718	N	N	PD	CD	PE		
719	N	N	PD	Irreg.	PE		
723	CD	CD	PD	CD	Irreg.		
724	CD	CD	CD	CD	PE		
728	N	N	N	N	PE		
729	N	N	N	N	PE		
733	PD	N	PD	CD	CD		
734	N	CD	PD	PD	CD		
738	N	N	PE	CD	CD		
739	N	N	PD	CD	PD		
743	PD	CD	PE	CE	CE		
744	Irreg.	CD	CD	CD	PE		
748	N	N	N	CD	PE		
749	N	N	N	PE	PE		
753	PD	N	N	PD	CE		
754	N	PD	CD	PD	PE		
758	PD	PD	CD	CD	CD		
759	N	PD	CD	N	PD		
760	N	N	N	N	N		
761	N	N	N	PD	N		
765	N	CD	Irreg.	CD	CD		
766	CD	N	CD	PD	CD		

N, normal.

Irreg. Irregular estrus cycle (Unclassifiable)

PD, persistent diestrus (prolonged diestrus periods lasting 5-9 days)

CD, constant diestrus (prolonged diestrus periods lasting 10 days or more)

PE, persistent estrus (prolonged estrus periods lasting 3-7 days)

CE, constant estrus (prolonged estrus periods lasting 8 days or more)

	3M	4M	5M	6M	7M
n	22	22	22	22	22
Normal cycle	14	13	8	4	2
Abnormal cycle	8	9	14	18	20
Irregular cycle	1	0	1	1	1
Persistent diestrus	4	3	5	5	2
Constant diestrus	3	6	6	10	7
Persistent estrus	0	0	2	1	8
Constant estrus	0	0	0	1	2

I-Table 8-2 Summary of estrus cycle

	mg/kg/day											
	Vehicle control		BPA 0.005		BPA 0.05		BPA 40		BPA 400		EE 0.05	
<b>3 months of age</b>												
Normal cycle	16 / 16	100.0	18 / 20	90.0	17 / 19	89.5	21 / 24	87.5	15 / 18	83.3	14 / 22	63.6
Abnormal cycle	0 / 16	0.0	2 / 20	10.0	2 / 19	10.5	3 / 24	12.5	3 / 18	16.7	8 / 22**	36.4
irregular cycle	0 / 16	0.0	2 / 20	10.0	1 / 19	5.3	0 / 24	0.0	1 / 18	5.6	1 / 22	4.5
Persistent diestrus	0 / 16	0.0	0 / 20	0.0	1 / 19	5.3	2 / 24	8.3	1 / 18	5.6	4 / 22	18.2
Constant diestrus	0 / 16	0.0	0 / 20	0.0	0 / 19	0.0	1 / 24	4.2	0 / 18	0.0	3 / 22	13.6
Persistent estrus	0 / 16	0.0	0 / 20	0.0	0 / 19	0.0	0 / 24	0.0	0 / 18	0.0	0 / 22	0.0
Constant estrus	0 / 16	0.0	0 / 20	0.0	0 / 19	0.0	0 / 24	0.0	1 / 18	5.6	0 / 22	0.0
<b>4 months of age</b>												
Normal cycle	10 / 16	62.5	17 / 20	85.0	17 / 19	89.5	19 / 24	79.2	13 / 18	72.2	13 / 22	59.1
Abnormal cycle	6 / 16	37.5	3 / 20	15.0	2 / 19	10.5	5 / 24	20.8	5 / 18	27.8	9 / 22	40.9
irregular cycle	3 / 16	18.8	0 / 20	0.0	1 / 19	5.3	1 / 24	4.2	1 / 18	5.6	0 / 22	0.0
Persistent diestrus	2 / 16	12.5	2 / 20	10.0	1 / 19	5.3	0 / 24	0.0	2 / 18	11.1	3 / 22	13.6
Constant diestrus	1 / 16	6.3	1 / 20	5.0	0 / 19	0.0	4 / 24	16.7	2 / 18	11.1	6 / 22	27.3
Persistent estrus	0 / 16	0.0	0 / 20	0.0	0 / 19	0.0	0 / 24	0.0	0 / 18	0.0	0 / 22	0.0
Constant estrus	0 / 16	0.0	0 / 20	0.0	0 / 19	0.0	0 / 24	0.0	0 / 18	0.0	0 / 22	0.0
<b>5 months of age</b>												
Normal cycle	13 / 16	81.3	11 / 19	57.9	15 / 19	78.9	17 / 24	70.8	5 / 17	29.4	8 / 22	36.4
Abnormal cycle	3 / 16	18.8	8 / 19	42.1	4 / 19	21.1	7 / 24	29.2	12 / 17**	70.6	14 / 22**	63.6
irregular cycle	0 / 16	0.0	1 / 19	5.3	1 / 19	5.3	0 / 24	0.0	2 / 17	11.8	1 / 22	4.5
Persistent diestrus	2 / 16	12.5	5 / 19	26.3	2 / 19	10.5	1 / 24	4.2	6 / 17	35.3	5 / 22	22.7
Constant diestrus	0 / 16	0.0	1 / 19	5.3	1 / 19	5.3	6 / 24	25.0	4 / 17	23.5	6 / 22	27.3
Persistent estrus	1 / 16	6.3	1 / 19	5.3	0 / 19	0.0	0 / 24	0.0	0 / 17	0.0	2 / 22	9.1
Constant estrus	0 / 16	0.0	0 / 19	0.0	0 / 19	0.0	0 / 24	0.0	0 / 17	0.0	0 / 22	0.0
<b>6 months of age</b>												
Normal cycle	10 / 16	62.5	9 / 19	47.4	12 / 19	63.2	17 / 24	70.8	9 / 17	52.9	4 / 22	18.2
Abnormal cycle	6 / 16	37.5	10 / 19	52.6	7 / 19	36.8	7 / 24	29.2	8 / 17	47.1	18 / 22**	81.8
irregular cycle	1 / 16	6.3	0 / 19	0.0	1 / 19	5.3	0 / 24	0.0	1 / 17	5.9	1 / 22	4.5
Persistent diestrus	2 / 16	12.5	3 / 19	15.8	5 / 19	26.3	2 / 24	8.3	4 / 17	23.5	5 / 22	22.7
Constant diestrus	2 / 16	12.5	6 / 19	31.6	1 / 19	5.3	5 / 24	20.8	3 / 17	17.6	10 / 22	45.5
Persistent estrus	1 / 16	6.3	1 / 19	5.3	0 / 19	0.0	0 / 24	0.0	0 / 17	0.0	1 / 22	4.5
Constant estrus	0 / 16	0.0	0 / 19	0.0	0 / 19	0.0	0 / 24	0.0	0 / 17	0.0	1 / 22	4.5
<b>7 months of age</b>												
Normal cycle	12 / 16	75.0	6 / 19	31.6	10 / 19	52.6	11 / 24	45.8	5 / 17	29.4	2 / 22	9.1
Abnormal cycle	4 / 16	25.0	13 / 19*	68.4	9 / 19	47.4	13 / 24	54.2	12 / 17*	70.6	20 / 22**	90.9
irregular cycle	3 / 16	18.8	4 / 19	21.1	7 / 19	36.8	10 / 24	41.7	3 / 17	17.6	1 / 22	4.5
Persistent diestrus	0 / 16	0.0	1 / 19	5.3	0 / 19	0.0	0 / 24	0.0	1 / 17	5.9	2 / 22	9.1
Constant diestrus	0 / 16	0.0	0 / 19	0.0	0 / 19	0.0	0 / 24	0.0	1 / 17	5.9	7 / 22	31.8
Persistent estrus	0 / 16	0.0	7 / 19 #	36.8	2 / 19	10.5	2 / 24	8.3	7 / 17 #	41.2	8 / 22 ##	36.4
Constant estrus	1 / 16	6.3	1 / 19	5.3	0 / 19	0.0	1 / 24	4.2	0 / 17	0.0	2 / 22	9.1

N, normal

Irreg. irregular estrus cycle (Unclassifiable)

PD, persistent diestrus (prolonged diestrus periods lasting 5-9 days)

CD, constant diestrus (prolonged diestrus periods lasting 10 days or more)

PE, persistent estrus (prolonged estrus periods lasting 3-7 days)

CE, constant estrus (prolonged estrus periods lasting 8 days or more)

\*p<0.05, \*\*p<0.01 (χ-square test)

#p<0.05, ##p<0.01, (Chi square test); Combined persistent estrus and constant estrus

I-Table 8-3 Estrus cycle, ovary weight and histopathological examinations

Category		Body weight	Ovary weight		Increased follicular atresia
			Absolute mg	Relative mg/100g	
Normal cycle	Mean	393.2	74.6	18.9	12/49(24.5)
	SD	42.9	19.8	4.1	
	n	49	49	49	
Irregular estrus cyce	Mean	365.9	76.3	20.8	2/5(40.0)
	SD	19.2	14.4	3.6	
	n	5	5	5	
Persistent estrus cycle constant estrus cycle persistent proestrus cycle	Mean	403.9	50.5 **	12.6 **	49/51(96.1)
	SD	45.2	12.6	3.2	
	n	51	51	51	
Persistent diestrus cycle constant diestrus cycle	Mean	432.6	86.5	20.1	1/12(8.3)
	SD	41.7	12.7	3.1	
	n	12	12	12	

\*\*\*p<0.01 (T test)

I-Table 9-1 Absolute organ weights of male offspring at 10 weeks of age - group mean values

Exp.group (mg/kg/day)	Number of animals	Brain		Pituitary		Thyroid		Liver		Kidney		Adrenal		Testis		Epididymis		Seminal vesicle		Ventral prostate		Body weight	
		mg	mg	mg	mg	mg	g	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	mg	g	g
Vehicle Control	7	Mean	2007.9	13.6	17.7	17.7	17.7	3027.7	58.2	3453.2	917.3	1246.6	440.2	430.3									
		S.D.	71.3	1.6	4.8	4.8	2.6	388.2	7.8	250.6	62.2	194.9	75.5	42.2									
BPA 0.005	6	Mean	2014.1	13.0	17.4	15.5	2848.9	53.8	3310.1	892.1	1085.4	431.8	403.6										
		S.D.	66.4	1.6	2.8	1.9	302.5	6.0	284.5	88.5	103.4	76.6	41.9										
BPA 0.05	10	Mean	2007.8	13.5	18.3	16.9	2978.9	58.8	3158.0 *	862.4	1170.6	393.5	428.5										
		S.D.	89.8	1.3	2.9	2.2	332.5	4.8	169.4	57.2	179.0	103.1	38.6										
BPA 40	9	Mean	1962.6	12.9	18.2	16.2	2979.5	59.1	3349.9	902.7	1252.3	449.2	425.4										
		S.D.	71.2	1.1	2.6	1.0	191.6	10.2	186.7	84.3	123.2	82.3	26.7										
BPA 400	9	Mean	2004.5	12.7	16.0	16.2	2804.7	55.6	3267.2	913.9	1129.8	409.6	416.5										
		S.D.	70.2	1.3	1.8	1.9	279.1	9.9	267.5	105.0	167.7	73.5	28.4										
EE 0.05	9	Mean	1990.3	13.3	17.5	15.7	2703.5	53.3	3216.1	862.4	1153.5	414.6	396.7										
		S.D.	74.9	1.3	2.5	1.4	225.4	10.0	195.9	51.8	187.8	67.5	26.8										

\* p<0.05 (Dunnett's test)

I-Table 9-2 Relative organ weights of male offspring at 10 weeks of age - group mean values

Exp.group (mg/kg/day)	Number of animals	Brain mg/100g	Pituitary mg/100g	Thyroid mg/100g	Liver g/100g	Kidney mg/100g	Adrenal mg/100g	Testis mg/100g	Epididymis mg/100g	Seminal vesicle mg/100g	Ventral prostate mg/100g	Body weight g
Vehicle Control	7	Mean	470.8	4.1	4.1	702.7	13.6	807.8	214.5	289.1	102.2	430.3
		S.D.	51.6	0.4	0.9	46.8	1.4	80.5	18.9	30.0	13.3	42.2
BPA 0.005	6	Mean	503.0	4.4	3.9	706.6	13.4	823.2	221.3	271.0	106.8	403.6
		S.D.	49.4	0.3	0.9	40.4	1.2	64.1	11.1	34.2	14.3	41.9
BPA 0.05	10	Mean	471.6	4.3	3.9	695.5	13.8	741.3	201.9	276.2	91.7	428.5
		S.D.	42.7	0.2	0.5	54.4	1.8	65.4	12.5	52.3	20.7	38.6
BPA 40	9	Mean	463.0	4.3	3.8 *	701.5	13.9	789.9	212.9	295.4	105.3	425.4
		S.D.	33.7	0.3	0.8	40.7	2.2	61.0	23.5	33.9	16.2	26.7
BPA 400	9	Mean	482.8	3.1	3.9	672.9	13.3	784.9	219.5	271.1	98.3	416.5
		S.D.	29.5	0.4	0.4	40.0	1.9	46.1	22.2	35.2	15.3	28.4
EE 0.05	9	Mean	503.2	3.4	4.5	681.7	13.5	812.1	218.0	292.1	104.5	396.7
		S.D.	30.2	0.3	0.8	40.9	2.5	48.1	16.7	53.4	16.1	26.8

\* p<0.05 (Dunnnett's test)

I-Table 9-3 Absolute organ weights of female offspring at 10 weeks of age - group mean values

Exp.group (mg/kg/day)	Number of animals	Brain mg	Pituitary mg	Thyroid mg	Liver g	Kidney mg	Adrenal mg	Uterus mg	Ovary mg	Body weight g	
Vehicle Control	6	Mean	14.9	15.3	10.8	1975.9	66.1	423.5	91.2	286.1	
		S.D.	63.0	1.5	2.6	1.7	176.0	4.2	59.4	12.9	29.3
BPA 0.005	6	Mean	1913.7	15.5	16.0	10.4	1851.8	66.0	384.9	89.0	291.9
		S.D.	71.0	1.9	2.8	1.1	162.1	8.9	43.6	16.1	33.7
BPA 0.05	7	Mean	1913.1	15.6	14.8	10.4	1957.8	76.8	407.1	87.1	293.5
		S.D.	71.3	2.1	2.3	1.1	221.9	9.6	44.8	10.8	29.9
BPA 40	8	Mean	1891.4	14.8	14.8	10.9	1977.3	68.5	388.5	90.0	291.4
		S.D.	52.5	1.9	1.9	1.5	169.7	9.7	58.1	16.6	26.6
BPA 400	9	Mean	1927.6	14.5	14.2	10.7	1899.3	69.8	368.6	101.9	295.3
		S.D.	507.0	3.9	4.0	2.8	506.9	18.4	102.9	28.8	76.1
EE 0.05	9	Mean	1879.3	15.9	14.9	10.9	1942.6	69.9	355.0	90.8	289.9
		S.D.	448.9	3.9	4.3	2.5	463.0	16.9	96.8	27.5	68.8

I-Table 9-4 Relative organ weights of female offspring at 10 weeks of age - group mean values

Exp.group (mg/kg/day)	Number of animals	Brain mg/100g	Pituitary mg/100g	Thyroid mg/100g	Liver g/100g	Kidney mg/100g	Adrenal mg/100g	Uterus mg/100g	Ovary mg/100g	Body weight g
Vehicle Control	6	Mean	5.2	5.3	3.8	692.7	23.2	148.1	32.0	286.1
		S.D.	47.9	0.5	0.3	51.1	1.8	15.7	4.5	29.3
BPA 0.005	6	Mean	5.4	5.6	3.6	637.8	22.7	133.9	30.4	291.9
		S.D.	82.4	0.9	1.2	54.5	3.0	24.4	3.3	33.7
BPA 0.05	7	Mean	5.4	5.1	3.6	666.9	26.3	139.5	29.8	293.5
		S.D.	68.8	0.8	0.7	27.9	3.3	17.1	3.2	29.9
BPA 40	8	Mean	5.1	5.1	3.7	680.1	23.5	134.6	30.9	291.4
		S.D.	56.5	0.5	0.7	45.8	2.0	26.5	4.8	26.6
BPA 400	9	Mean	4.9	4.8	3.6	643.8	23.7	125.6	34.3	295.3
		S.D.	45.5	0.7	1.1	44.0	2.0	19.3	7.4	21.9
EE 0.05	9	Mean	5.5	5.1	3.8	669.9	24.1	122.2	31.3	289.9
		S.D.	48.0	0.9	1.3	31.3	2.2	23.5	5.1	22.2

I-Table 9-5 Absolute organ weights of male offspring at 7 months of age - group mean values

Exp.group (mg/kg/day)	Number of animals	Brain mg	Pituitary mg	Thyroid mg	Liver g	Kidney mg	Adrenal mg	Testis mg	Epididymis mg	Seminal vesicle mg	Ventral prostate mg	Body weight g
Vehicle Control	18	Mean	2297.3	15.9	26.1	23.5	4246.7	3934.4	1469.6	2344.7	705.9	777.5
		S.D.	82.3	1.6	4.0	3.6	572.7	297.1	119.8	310.2	154.2	76.2
BPA 0.005	27	Mean	2288.0	15.7	26.0	20.7 *	3995.8	3857.5	1424.6	2029.2 **	626.7	716.7 *
		S.D.	106.1	2.0	5.7	3.3	511.5	497.5	193.1	284.8	219.6	81.0
BPA 0.05	29	Mean	2221.6 *	15.1	24.3	20.0 **	3896.2 *	3710.4	1391.8	1981.5 **	555.4 *	712.6 *
		S.D.	70.7	1.7	4.7	3.2	422.2	310.4	114.7	350.4	141.1	80.7
BPA 40	22	Mean	2224.0 *	16.2	22.6	21.6	4023.7	3873.3	1418.4	2123.2	715.6	720.0 *
		S.D.	75.1	2.2	3.9	3.5	466.7	240.2	96.2	206.6	160.0	73.1
BPA 400	17	Mean	2186.7 **	14.9	22.0 *	19.5 **	3651.5 **	3690.3	1372.9	2098.5	642.0	662.1 **
		S.D.	103.8	1.1	2.6	1.8	361.7	209.9	100.1	322.2	157.2	38.2
EE 0.05	22	Mean	2185.2 **	14.5 *	23.5	20.8 *	3672.5 **	3556.3 *	1301.0 **	2008.3 **	533.5 **	682.1 **
		S.D.	84.9	1.6	4.7	3.7	375.7	589.8	168.4	266.3	150.5	53.0

\* p<0.05, \*\*p<0.01 (Dunnett's test)