

Table 5-1. Estrus cycle - summary

	$\mu\text{g/kg/day}$							
	VC		BPA 0.5		BPA 5		BPA 50	
3 months of age								
Normal cycle	31 / 31	100.00	23 / 23	100.00	22 / 22	100.00	29 / 30	96.67
Abnormal cycle	0 / 31	0.00	0 / 23	0.00	0 / 22	0.00	1 / 30	3.33
Persistent diestrus	0 / 31	0.00	0 / 23	0.00	0 / 22	0.00	1 / 30	3.33
Constant diestrus	0 / 31	0.00	0 / 23	0.00	0 / 22	0.00	0 / 30	0.00
Persistent estrus	0 / 31	0.00	0 / 23	0.00	0 / 22	0.00	0 / 30	0.00
Constant estrus	0 / 31	0.00	0 / 23	0.00	0 / 22	0.00	0 / 30	0.00
Irregular estrus	0 / 31	0.00	0 / 23	0.00	0 / 22	0.00	0 / 30	0.00
4 months of age								
Normal cycle	31 / 31	100.00	22 / 23	95.65	20 / 22	90.91	30 / 30	100.00
Abnormal cycle	0 / 31	0.00	1 / 23	4.35	2 / 22	9.09	0 / 30	0.00
Persistent diestrus	0 / 31	0.00	0 / 23	0.00	0 / 22	0.00	0 / 30	0.00
Constant diestrus	0 / 31	0.00	0 / 23	0.00	2 / 22	9.09	0 / 30	0.00
Persistent estrus	0 / 31	0.00	0 / 23	0.00	0 / 22	0.00	0 / 30	0.00
Constant estrus	0 / 31	0.00	1 / 23	4.35	0 / 22	0.00	0 / 30	0.00
Irregular estrus	0 / 31	0.00	0 / 23	0.00	0 / 22	0.00	0 / 30	0.00
5 months of age								
Normal cycle	28 / 31	90.32	20 / 23	86.95	21 / 22	95.45	29 / 30	96.67
Abnormal cycle	3 / 31	9.68	3 / 23	13.05	1 / 22	4.55	1 / 30	3.33
Persistent diestrus	1 / 31	3.23	1 / 23	4.35	1 / 22	4.55	1 / 30	3.33
Constant diestrus	2 / 31	6.45	1 / 23	4.35	0 / 22	0.00	0 / 30	0.00
Persistent estrus	0 / 31	0.00	1 / 23	4.35	0 / 22	0.00	0 / 30	0.00
Constant estrus	0 / 31	0.00	0 / 23	0.00	0 / 22	0.00	0 / 30	0.00
Irregular estrus	0 / 31	0.00	0 / 23	0.00	0 / 22	0.00	0 / 30	0.00
6 months of age								
Normal cycle	31 / 31	100.00	21 / 23	91.30	15 / 22	68.18	27 / 30	90.00
Abnormal cycle	0 / 31	0.00	2 / 23	8.70	7 / 22	31.82	3 / 30	10.00
Persistent diestrus	0 / 31	0.00	1 / 23	4.35	4 / 22	18.18	0 / 30	0.00
Constant diestrus	0 / 31	0.00	0 / 23	0.00	1 / 22	4.55	0 / 30	0.00
Persistent estrus	0 / 31	0.00	0 / 23	0.00	1 / 22	4.55	0 / 30	0.00
Constant estrus	0 / 31	0.00	1 / 23	4.35	1 / 22	4.55	3 / 30	10.00
Irregular estrus	0 / 31	0.00	0 / 23	0.00	0 / 22	0.00	0 / 30	0.00
7 months of age								
Normal cycle	26 / 31	83.87	17 / 23	73.91	16 / 22	72.73	21 / 30	70.00
Abnormal cycle	5 / 31	16.13	6 / 23	26.09	6 / 22	27.27	9 / 30	30.00
Persistent diestrus	3 / 31	9.68	1 / 23	4.35	1 / 22	4.55	2 / 30	6.67
Constant diestrus	1 / 31	3.23	0 / 23	0.00	2 / 22	9.09	0 / 30	0.00
Persistent estrus	1 / 31	3.23	1 / 23	4.35	1 / 22	4.55	0 / 30	0.00
Constant estrus	0 / 31	0.00	4 / 23	17.39	2 / 22	9.09	6 / 30	20.00
Irregular estrus	0 / 31	0.00	0 / 23	0.00	0 / 22	0.00	1 / 30	3.33

Persistent diestrus : prolonged diestrus periods lasting 5-9 days

Constant diestrus : prolonged diestrus periods lasting 10 days or more

Persistent estrus : prolonged estrus periods lasting 3-7 days

Constant estrus : prolonged estrus periods lasting 8 days or more

IE; irregular estrus cycle (unclassifiable)

*p<0.05, **p<0.01, ***p<0.001(Fisher's exact probability test)

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

**Table 5-1. Estrus cycle - summary
continued**

	VC	$\mu\text{g/kg/day}$						
		BPA 0.5		BPA 5		BPA 50		
8 months of age								
Normal cycle	11 / 19	57.89	13 / 23	56.52	13 / 22	59.09	6 / 18	33.33
Abnormal cycle	8 / 19	42.11	10 / 23	43.48	9 / 22	40.91	12 / 18	66.67
Persistent diestrus	3 / 19	15.79	1 / 23	4.35	2 / 22	9.09	1 / 18	5.56
Constant diestrus	2 / 19	10.53	0 / 23	0.00	5 / 22	22.73	1 / 18	5.56
Persistent estrus	1 / 19	5.26	2 / 23	8.70	0 / 22	0.00	2 / 18	11.11
Constant estrus	1 / 19	5.26	7 / 23	30.43	2 / 22	9.09	8 / 18	44.44
Irregular estrus	1 / 19	5.26	0 / 23	0.00	0 / 22	0.00	0 / 18	0.00
9 months of age								
Normal cycle	10 / 19	52.63	10 / 23	43.48	11 / 22	50.00	6 / 18	33.33
Abnormal cycle	9 / 19	47.37	13 / 23	56.52	11 / 22	50.00	12 / 18	66.67
Persistent diestrus	3 / 19	15.79	0 / 23	0.00	2 / 22	9.09	5 / 18	27.78
Constant diestrus	5 / 19	26.32	1 / 23	4.35	2 / 22	9.09	1 / 18	5.56
Persistent estrus	1 / 19	5.26	4 / 23	17.39	5 / 22	22.73	2 / 18	11.11
Constant estrus	0 / 19	0.00	8 / 23	34.78	2 / 22	9.09	4 / 18	22.22
Irregular estrus	0 / 19	0.00	0 / 23	0.00	0 / 22	0.00	0 / 18	0.00
10 months of age								
Normal cycle	13 / 19	68.42	7 / 23	30.43	12 / 22	54.55	4 / 18	22.22
Abnormal cycle	6 / 19	31.58	16 / 23	69.57	10 / 22	45.45	14 / 18	77.78
Persistent diestrus	1 / 19	5.26	5 / 23	21.74	1 / 22	4.55	1 / 18	5.56
Constant diestrus	4 / 19	21.05	0 / 23	0.00	5 / 22	22.73	1 / 18	5.56
Persistent estrus	1 / 19	5.26	1 / 23	4.35	1 / 22	4.55	3 / 18	16.67
Constant estrus	0 / 19	0.00	10 / 23	43.48	3 / 22	13.64	9 / 18	50.00
Irregular estrus	0 / 19	0.00	0 / 23	0.00	0 / 22	0.00	0 / 18	0.00
11 months of age								
Normal cycle	8 / 18	44.44	6 / 23	26.09	5 / 22	22.73	4 / 18	22.22
Abnormal cycle	10 / 18	55.56	17 / 23	73.91	17 / 22	77.27	14 / 18	77.78
Persistent diestrus	3 / 18	16.67	3 / 23	13.04	2 / 22	9.09	0 / 18	0.00
Constant diestrus	4 / 18	22.22	3 / 23	13.04	6 / 22	27.27	2 / 18	11.11
Persistent estrus	1 / 18	5.56	2 / 23	8.70	3 / 22	13.64	4 / 18	22.22
Constant estrus	2 / 18	11.11	8 / 23	34.78	6 / 22	27.27	6 / 18	33.33
Irregular estrus	0 / 18	0.00	1 / 23	4.35	0 / 22	0.00	2 / 18	11.11
12 months of age								
Normal cycle	13 / 18	72.22	4 / 23	17.39	2 / 22	9.09	2 / 18	11.11
Abnormal cycle	5 / 18	27.78	19 / 23	82.61	20 / 22	90.91	16 / 18	88.89
Persistent diestrus	1 / 18	5.56	6 / 23	26.09	7 / 22	31.82	2 / 18	11.11
Constant diestrus	3 / 18	16.67	1 / 23	4.35	3 / 22	13.64	0 / 18	0.00
Persistent estrus	0 / 18	0.00	6 / 23	26.09	4 / 22	18.18	3 / 18	16.67
Constant estrus	1 / 18	5.56	5 / 23	21.74	5 / 22	22.73	9 / 18	50.00
Irregular estrus	0 / 18	0.00	1 / 23	4.35	1 / 22	4.55	2 / 18	11.11

Persistent diestrus : prolonged diestrus periods lasting 5-9 days

Constant diestrus : prolonged diestrus periods lasting 10 days or more

Persistent estrus : prolonged estrus periods lasting 3-7 days

Constant estrus : prolonged estrus periods lasting 8 days or more

IE; irregular estrus cycle (unclassifiable)

*p<0.05, **p<0.01, ***p<0.001(Fisher's exact probability test)

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

Table 5-2. Estrus cycle - individual findings

Animal No.	Vehicle control									
	Months of age									
	3	4	5	6	7	8	9	10	11	12
101	N	N	N	N	CD	N	CD	CD	CD	CD
102	N	N	N	N	N	-	-	-	-	-
104	N	N	CD	N	PE	PE	N	PE	PE	N
105	N	N	N	N	N	N	PD	CD	PD	N
107	N	N	N	N	N	-	-	-	-	-
109	N	N	CD	N	N	N	N	N	N	N
110	N	N	N	N	N	-	-	-	-	-
111	N	N	N	N	N	N	PE	N	N	N
112	N	N	N	N	N	N	N	N	N	N
114	N	N	N	N	PD	N	N	N	N	N
115	N	N	N	N	N	-	-	-	-	-
117	N	N	N	N	N	CD	N	N	N	N
118	N	N	N	N	N	PD	CD	N	PD	CD
120	N	N	N	N	N	-	-	-	-	-
121	N	N	N	N	N	-	-	-	-	-
123	N	N	N	N	N	-	-	-	-	-
124	N	N	N	N	PD	CE	N	N	CE	CE
125	N	N	N	N	PD	IE	PD	N	N	N
127	N	N	N	N	N	-	-	-	-	-
128	N	N	PD	N	N	-	-	-	-	-
129	N	N	N	N	N	N	CD	N	N	N
131	N	N	N	N	N	CD	CD	PD	CD	PD
133	N	N	N	N	N	N	N	N	N	N
134	N	N	N	N	N	-	-	-	-	-
137	N	N	N	N	N	-	-	-	-	-
138	N	N	N	N	N	N	N	N	PD	N
139	N	N	N	N	N	-	-	-	-	-
142	N	N	N	N	N	PD	PD	CD	Dead	-
143	N	N	N	N	N	N	N	N	CD	N
145	N	N	N	N	N	PD	CD	CD	CD	CD
146	N	N	N	N	N	N	N	N	CE	N

N, normal.

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)

IE; irregular estrus cycle (unclassifiable)

**Table 5-2. Estrus cycle - individual findings
continued**

BPA 0.5 μ g/kg/day

Animal No.	Months of age									
	3	4	5	6	7	8	9	10	11	12
147	N	N	N	N	N	N	PE	PD	N	N
149	N	N	N	N	CE	PE	N	CE	CE	CE
150	N	N	N	N	N	N	N	PD	CD	PD
151	N	N	N	N	N	CE	N	PE	PD	PE
152	N	N	PD	N	CE	CE	CE	N	CE	PE
154	N	N	N	N	N	PE	PE	CE	CE	N
155	N	N	N	N	N	N	N	PD	PD	PD
157	N	N	N	N	PD	N	N	N	CD	PD
159	N	N	N	N	PE	CE	CE	CE	CE	PE
160	N	N	N	N	N	N	N	N	N	PD
162	N	N	N	N	N	N	CD	N	CD	PD
164	N	N	N	N	N	CE	CE	CE	CE	CE
165	N	N	N	N	N	N	N	N	IE	CD
166	N	N	N	N	N	N	CE	CE	CE	CE
167	N	N	N	N	N	N	CE	CE	PE	N
170	N	CE	N	CE	CE	CE	CE	PD	PE	PD
171	N	N	PE	PD	CE	CE	CE	CE	CE	CE
172	N	N	CD	N	N	CE	PE	CE	N	PE
173	N	N	N	N	N	PD	PE	N	PD	PE
175	N	N	N	N	N	N	N	N	N	N
176	N	N	N	N	N	N	CE	CE	CE	CE
177	N	N	N	N	N	N	N	PD	N	N
180	N	N	N	N	N	N	N	CE	N	PE

N, normal.

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)

IE; irregular estrus cycle (unclassifiable)

**Table 5-2. Estrus cycle - individual findings
continued**

BPA 5 μ g/kg/day

Animal No.	Months of age									
	3	4	5	6	7	8	9	10	11	12
181	N	N	N	N	N	N	N	N	CD	PD
182	N	N	N	PD	N	PD	N	N	PD	N
184	N	N	N	PD	N	N	PE	CD	PD	CD
185	N	N	N	PD	CD	CD	CD	CD	CD	PD
189	N	N	N	N	N	N	N	CE	CE	CE
190	N	N	N	N	N	N	N	N	CD	PD
191	N	N	N	N	N	N	CE	PE	CE	PE
193	N	N	N	N	N	CD	PD	N	PE	PE
194	N	N	N	CE	CE	PD	PE	N	PE	IE
195	N	N	N	N	N	CD	N	N	N	PE
198	N	CD	N	N	N	CD	N	N	N	CD
199	N	N	N	N	N	N	N	N	N	N
201	N	N	N	N	N	N	N	CD	CD	PD
202	N	N	N	N	N	N	N	PE	N	CE
204	N	N	N	N	N	N	N	N	CE	CE
206	N	N	N	N	N	N	PE	N	CE	PE
208	N	N	N	N	PE	CE	CE	CE	PE	CE
209	N	CD	N	CD	CD	CD	CD	CD	CD	PD
210	N	N	N	PE	CE	CE	PE	CE	CE	CE
212	N	N	N	N	N	N	N	N	N	CE
213	N	N	N	N	N	N	N	PD	N	CD
214	N	N	PD	PD	PD	N	PD	CD	CD	PD

N, normal.

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)

IE; irregular estrus cycle (unclassifiable)

**Table 5-2. Estrus cycle - individual findings
continued**

BPA 50 μ g/kg/day

Animal No.	Months of age									
	3	4	5	6	7	8	9	10	11	12
217	N	N	N	CE	CE	CE	PD	CE	CE	CE
218	N	N	N	N	CE	-	-	-	-	-
219	N	N	N	N	N	-	-	-	-	-
220	N	N	N	N	N	PE	N	CE	CE	CE
223	N	N	N	CE	CE	CE	CE	CE	CE	PE
224	N	N	N	CE	CE	CE	CE	CE	CE	CE
226	N	N	N	N	N	-	-	-	-	-
227	N	N	N	N	N	-	-	-	-	-
229	N	N	N	N	N	CE	PE	PE	PE	PE
230	N	N	PD	N	IE	PE	PD	CD	IE	PE
232	N	N	N	N	N	-	-	-	-	-
233	N	N	N	N	N	-	-	-	-	-
235	N	N	N	N	N	N	N	N	CD	IE
236	N	N	N	N	N	CE	PE	CE	PE	CE
237	N	N	N	N	N	CE	CE	CE	CE	CE
238	N	N	N	N	N	-	-	-	-	-
241	N	N	N	N	CE	-	-	-	-	-
242	N	N	N	N	N	N	N	N	N	N
243	N	N	N	N	PD	N	PD	PE	PE	CE
244	N	N	N	N	N	PD	N	N	PE	PD
245	N	N	N	N	N	-	-	-	-	-
248	N	N	N	N	N	CE	PD	PE	N	IE
250	N	N	N	N	N	N	N	CE	CE	CE
251	N	N	N	N	N	-	-	-	-	-
252	N	N	N	N	N	-	-	-	-	-
254	N	N	N	N	N	CE	CE	CE	IE	CE
256	PD	N	N	N	N	CD	PD	PD	CD	PD
258	N	N	N	N	CE	-	-	-	-	-
260	N	N	N	N	PD	N	CD	N	N	CE
261	N	N	N	N	N	N	N	CE	N	N

N, normal.

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)

IE; irregular estrus cycle (unclassifiable)

Table 6-1. Organ weights of dams - group mean values

Sex	Exp.group ($\mu\text{g/kg/day}$)	Number of animals	Ovary (mg)	Uterus (g)	Body weight a) (g)
Female	Vehicle control	10	98.4 \pm 12.8	0.43 \pm 0.10	323.3 \pm 9.9
	0.5	6b)	100.1 \pm 15.6	0.45 \pm 0.09	328.2 \pm 14.5
	5	7b)	104.7 \pm 10.4	0.42 \pm 0.07	323.9 \pm 13.8
	50	9b)	102.2 \pm 10.2	0.45 \pm 0.09	332.6 \pm 20.8

Mean \pm S.D.

a) Statistical analysis was not applied.

b) The data were excluded because dam all her pups were dead or dam was dead
Not significant

Table 6-1. Organ weights of dams - group mean values continued

Sex	Exp.group ($\mu\text{g/kg/day}$)	Number of animals	Ovary (mg/100g)	Uterus (g/100g)	Body weight a) (g)
Female	Vehicle control	10	30.5 \pm 4.1	0.13 \pm 0.03	323.3 \pm 9.9
	0.5	6b)	30.6 \pm 5.4	0.14 \pm 0.03	328.2 \pm 14.5
	5	7b)	32.3 \pm 2.9	0.13 \pm 0.02	323.9 \pm 13.8
	50	9b)	30.8 \pm 3.5	0.14 \pm 0.03	332.6 \pm 20.8

Mean \pm S.D.

a) Statistical analysis was not applied.

b) The data were excluded because dam all her pups were dead or dam was dead
Not significant

Table 6-2. Organ weights of offspring at 3 months after birth - group mean values

Sex	Exp.group ($\mu\text{g/kg/day}$)	Number of animals	Liver (g)	Kidney (g)	Ovary (mg)	Uterus (g)	Brain (g)	Pituitary (mg)	Thyroid (mg)	Adrenal (mg)	Body weight a) (g)	
Female	Vehicle control	15	10.06 \pm 0.94	2.01 \pm 0.18	85.3 \pm 15.2	0.61 \pm 0.09	1.99 \pm 0.06	18.5 \pm 2.5	21.1 \pm 4.2	70.7 \pm 8.1	293.6 \pm 21.6	
		11	10.29 \pm 1.01	1.94 \pm 0.26	78.4 \pm 11.4	0.59 \pm 0.09	1.98 \pm 0.05	18.0 \pm 2.6	22.3 \pm 6.0	69.5 \pm 9.6	303.6 \pm 31.6	
	5	13	10.45 \pm 1.15	2.01 \pm 0.12	89.7 \pm 10.1	0.57 \pm 0.10	1.96 \pm 0.08	18.7 \pm 1.9	21.6 \pm 3.6	76.5 \pm 11.5	312.6 \pm 24.4	
		16	9.64 \pm 1.22	1.98 \pm 0.33	79.0 \pm 9.9	0.59 \pm 0.10	1.95 \pm 0.07	18.4 \pm 2.2	17.7 \pm 3.3	72.4 \pm 6.3	293.6 \pm 28.5	
	Mean \pm S.D.											

Mean \pm S.D.

a) Statistical analysis was not applied.

Table 6-2. Organ weights of offspring at 3 months after birth - group mean values continued

Sex	Exp.group (μ g/kg/day)	Number of animals	Liver (g/100g)	Kidney (g/100g)	Ovary (mg/100g)	Uterus (g/100g)	Brain (g/100g)	Pituitary (mg/100g)	Thyroid (mg/100g)	Adrenal (mg/100g)	Body weight a) (g)	
Female	Vehicle control	15	3.43 ± 0.30	0.69 ± 0.06	29.2 ± 6.0	0.21 ± 0.04	0.68 ± 0.05	6.3 ± 0.9	7.2 ± 1.6	24.3 ± 3.9	293.6 ± 21.6	
	0.5	11	3.39 ± 0.17	0.64 ± 0.03	25.9 ± 3.1	0.19 ± 0.03	0.66 ± 0.06	5.9 ± 0.7	7.3 ± 1.4	23.0 ± 3.4	303.6 ± 31.6	
	5	13	3.34 ± 0.22	0.64 ± 0.04	28.8 ± 3.6	0.18 ± 0.04	0.63 ± 0.04	6.0 ± 0.4	6.9 ± 0.8	24.6 ± 4.4	312.6 ± 24.4	
	50	16	3.28 ± 0.23	0.67 ± 0.08	27.1 ± 3.7	0.20 ± 0.04	0.67 ± 0.06	6.3 ± 0.7	6.0* ± 1.0	24.8 ± 2.5	293.6 ± 28.5	
	Mean ± S.D.											
	a) Statistical analysis was not applied.											
* Significantly different from vehicle control at P<0.05.												

Table 6-3. Organ weights of offspring at 7 months after birth - group mean values

Sex	Exp.group (μ g/kg/day)	Number of animals	Liver (g)	Kidney (g)	Ovary (mg)	Uterus (g)	Brain (g)	Pituitary (mg)	Thyroid (mg)	Adrenal (mg)	Body weight a) (g)
	Vehicle control	12	11.13 \pm 1.51	2.28 \pm 0.25	80.3 \pm 16.5	0.77 \pm 0.11	2.08 \pm 0.05	24.6 \pm 5.4	24.3 \pm 3.7	70.9 \pm 10.2	360.8 \pm 41.0
Female	0.5	0	-	-	-	-	-	-	-	-	-
	5	0	-	-	-	-	-	-	-	-	-
	50	12	10.83 \pm 2.27	2.14 \pm 0.28	72.1 \pm 15.3	0.77 \pm 0.15	2.01 * \pm 0.08	24.9 \pm 4.6	25.3 \pm 6.6	66.7 \pm 6.6	371.8 \pm 60.3

Mean \pm S.D.

a) Statistical analysis was not applied.

* Significantly different from vehicle control at P<0.05.

**Table 6-3. Organ weights of offspring at 7 months after birth - group mean values
continued**

Sex	Exp.group (μ g/kg/day)	Number of animals	Liver (g/100g)	Kidney (g/100g)	Ovary (mg/100g)	Uterus (g/100g)	Brain (g/100g)	Pituitary (mg/100g)	Thyroid (mg/100g)	Adrenal (mg/100g)	Body weight a) (g)
	Vehicle control	12	3.08 \pm 0.20	0.64 \pm 0.07	22.4 \pm 4.6	0.21 \pm 0.03	0.58 \pm 0.07	6.8 \pm 1.3	6.8 \pm 1.0	19.8 \pm 2.5	360.8 \pm 41.0
Female	0.5	0	-	-	-	-	-	-	-	-	-
	5	0	-	-	-	-	-	-	-	-	-
	50	12	2.90 * \pm 0.22	0.58 * \pm 0.05	19.8 \pm 4.4	0.21 \pm 0.03	0.55 \pm 0.08	6.8 \pm 1.1	6.8 \pm 1.1	18.3 \pm 2.8	371.8 \pm 60.3

Mean \pm S.D.

a) Statistical analysis was not applied.

* Significantly different from vehicle control at P<0.05.

Table 6-4. Organ weights of male offspring at 12 months after birth - group mean values

Sex	Exp.group (μ g/kg/day)	Number of animals	Liver (g)	Kidney (g)	Testis (g)	Epididymis (g)	Ventral		Seminal vesicle (g)	La-bc muscles (mg)	Brain (g)	Pituitary (mg)	Thyroid (mg)	Adrenal (mg)	Body weight a) (g)	
							prostate (g)	prostate (g)								
Male	Vehicle control	19	23.82 ± 3.34	4.35 ± 0.46	3.98 ± 0.36	1.50 ± 0.19	0.64 ± 0.15	2.21 ± 0.30	1407.4 ± 168.8	2.34 ± 0.08	17.5 ± 1.7	39.1 ± 5.8	53.7 ± 8.1	784.1 ± 83.7		
		12	23.63 ± 3.64	3.91* ± 0.51	3.84 ± 0.24	1.54 ± 0.15	0.61 ± 0.26	2.06 ± 0.42	1331.7 ± 232.6	2.30 ± 0.09	16.5 ± 2.5	40.5 ± 12.0	55.6 ± 10.2	764.5 ± 104.3		
	5	14	24.16 ± 3.80	4.32 ± 0.50	4.29* ± 0.40	1.61 ± 0.15	0.53 ± 0.18	1.98 ± 0.41	1409.3 ± 246.0	2.33 ± 0.09	16.1 ± 1.7	41.8 ± 7.5	56.3 ± 6.8	792.7 ± 87.4		
		18	23.20 ± 3.78	4.13 ± 0.35	3.86 ± 0.37	1.48 ± 0.19	0.62 ± 0.21	2.15 ± 0.39	1365.6 ± 256.4	2.34 ± 0.10	18.2 ± 2.9	41.9 ± 9.6	62.1 ± 22.9	795.1 ± 78.8		
	Mean ± S.D.															

a) Statistical analysis was not applied.

* Significantly different from vehicle control at P<0.05.

Table 6-4. Organ weights of male offspring at 12 months after birth - group mean values
continued

Sex	Exp.group (μ g/kg/day)	Number of animals	Liver (g/100g)	Kidney (g/100g)	Testis (g/100g)	Epididymis (g/100g)	Ventral		Seminal	La-bc		Brain (g/100g)	Pituitary (mg/100g)	Thyroid (mg/100g)	Adrenal (mg/100g)	Body weight a) (g)
							prostate (g/100g)	vesicle (g/100g)	muscles (mg/100g)							
Male	Vehicle control	19	3.05 ± 0.39	0.56 ± 0.06	0.51 ± 0.06	0.19 ± 0.02	0.08 ± 0.02	0.28 ± 0.05	181.5 ± 28.4	0.30 ± 0.03	2.2 ± 0.2	5.0 ± 0.8	6.9 ± 1.2	784.1 ± 83.7		
	0.5	12	3.09 ± 0.17	0.51 ± 0.04	0.51 ± 0.06	0.20 ± 0.02	0.08 ± 0.03	0.27 ± 0.06	179.0 ± 48.0	0.31 ± 0.03	2.2 ± 0.3	5.3 ± 1.4	7.3 ± 1.2	764.5 ± 104.3		
	5	14	3.04 ± 0.27	0.55 ± 0.05	0.55 ± 0.09	0.21 ± 0.03	0.07 ± 0.03	0.25 ± 0.06	179.8 ± 37.8	0.30 ± 0.04	2.0 ± 0.3	5.3 ± 1.0	7.2 ± 1.0	792.7 ± 87.4		
	50	18	2.91 ± 0.32	0.52 ± 0.05	0.49 ± 0.06	0.19 ± 0.03	0.08 ± 0.03	0.28 ± 0.06	173.1 ± 34.6	0.30 ± 0.04	2.3 ± 0.3	5.3 ± 1.2	7.8 ± 2.7	795.1 ± 78.8		

Mean ± S.D.

a) Statistical analysis was not applied.

* Significantly different from vehicle control at P<0.05.

** Significantly different from vehicle control at P<0.01.

Table 6-5. Organ weights of female offspring at 12 months after birth - group mean values

Sex	Exp.group ($\mu\text{g/kg/day}$)	Number of animals	Liver (g)	Kidney (g)	Ovary (mg)	Uterus (g)	Brain (g)	Pituitary (mg)	Thyroid (mg)	Adrenal (mg)	Body weight a) (g)	
Female	Vehicle control	18	13.10 \pm 1.94	2.61 \pm 0.29	79.3 \pm 34.4	0.83 \pm 0.21	2.06 \pm 0.06	34.7 \pm 11.4	29.7 \pm 6.9	84.9 \pm 18.6	454.5 \pm 54.5	
	0.5	23	13.13 \pm 2.21	2.55 \pm 0.23	65.4 \pm 23.9	0.86 \pm 0.15	2.05 \pm 0.08	50.1 \pm 43.5	31.4 \pm 9.6	82.4 \pm 15.3	473.8 \pm 60.3	
	5	22	12.76 \pm 2.58	2.54 \pm 0.30	83.1 \pm 26.6	0.82 \pm 0.22	2.08 \pm 0.08	61.5 \pm 107.1	32.1 \pm 7.3	88.1 \pm 13.7	466.2 \pm 85.6	
	50	18	13.04 \pm 1.53	2.57 \pm 0.21	69.1 \pm 27.3	0.88 \pm 0.16	2.09 \pm 0.12	34.9 \pm 8.6	28.2 \pm 5.4	86.0 \pm 16.6	459.1 \pm 72.6	
	Mean \pm S.D.											
	a) Statistical analysis was not applied.											

Table 6-5. Organ weights of female offspring at 12 months after birth - group mean values
continued

Sex	Exp.group (μ g/kg/day)	Number of animals	Liver (g/100g)	Kidney (g/100g)	Ovary (mg/100g)	Uterus (g/100g)	Brain (g/100g)	Pituitary (mg/100g)	Thyroid (mg/100g)	Adrenal (mg/100g)	Body weight a) (g)	
Female	Vehicle control	18	2.89 ± 0.28	0.58 ± 0.07	17.4 ± 7.0	0.19 ± 0.05	0.46 ± 0.06	7.7 ± 2.6	6.6 ± 1.4	18.9 ± 4.6	454.5 ± 54.5	
	0.5	23	2.77 ± 0.24	0.54 ± 0.05	14.0 ± 5.2	0.19 ± 0.04	0.44 ± 0.05	10.7 ± 9.6	6.6 ± 2.0	17.7 ± 4.0	473.8 ± 60.3	
	5	22	2.74 ± 0.21	0.55 ± 0.08	18.0 ± 5.3	0.18 ± 0.05	0.46 ± 0.10	18.0 ± 44.8	7.0 ± 1.5	19.4 ± 4.7	466.2 ± 85.6	
	50	18	2.87 ± 0.30	0.57 ± 0.08	15.4 ± 6.6	0.20 ± 0.05	0.46 ± 0.07	7.8 ± 2.3	6.2 ± 1.0	19.2 ± 4.7	459.1 ± 72.6	
	Mean ± S.D.											
	a) Statistical analysis was not applied.											

Table 7-1. Macroscopic examinations of dams - group distribution of findings

Findings	Female									
	Vehicle control		0.5		5		50		(µg/kg/day)	
	ta	ia-pd	ta	ia-pd	ta	ia-pd	ta	ia-pd	ta	ia-pd
No abnormalities detected	10 ^{a)}	6	2	2	7	2	1	9	1	0
Trachea	10	6	0	0	7	0	0	9	0	0
Whitish foamy substance in lumen	0	0	0	1	0	0	0	0	0	0
Lung										
Dark reddish change	0	0	0	1	0	0	0	0	0	0
Edematous change	0	0	0	1	0	0	0	0	0	0
Foamy substance from cut surface	0	0	0	1	0	0	0	0	0	0
Glandular stomach										
Blackish region of mucosa	0	0	0	0	0	0	1	0	0	0
Recessed region of mucosa	0	0	0	1	0	0	0	0	0	0
Kidney										
Pale	0	0	1	0	0	0	0	0	0	1
Spleen										
Enlargement	0	0	0	0	0	0	0	0	0	1
Adrenal										
Enlargement	0	0	0	2	0	0	1	0	0	0
Mammary gland										
Poorly developed	0	0	2	0	0	2	0	0	0	1

ta, terminal autopsy; ia-pd, dam all her pups were dead; fd, found dead.

a) Number of animals examined.

Table 7-2. Macroscopic examinations of offspring at 3 months after birth - group distribution of findings

Findings	Female					
	Vehicle control		0.5		5	
	ta	15 ^{a)}	ta	11	ta	13
No abnormalities detected	13	11	13	15	16	15
Kidney						
Enlargement	0	0	0	0	1	1
Pelvic dilatation	1	0	0	0	1	1
Ureter						
Dilatation	0	0	0	0	1	1
Uterus						
Nodule	1	0	0	0	0	0

ta, terminal autopsy.

a) Number of animals examined.

Table 7-3. Macroscopic examinations of offspring at 7 months after birth -group distribution of findings

Findings	Female		50 ta	(µg/kg/day)
	Vehicle control			
	12 ^{a)}	11		
No abnormalities detected	12	11	8	
Ovary				
Small	0	0	3	
Sternum				
Deformity	0	0	1	
Subcutis				
Mass	1	1	0	

ta, terminal autopsy.

a) Number of animals examined.

Table 7-4. Macroscopic examinations of offspring at 12 months after birth -group distribution of findings

Findings	Male						Female							
	Vehicle control		5		50		Vehicle control		0.5		5		50	
	ta	fd	ta	ta	ta	ta	ta	fd	ta	ta	ta	ta	ta	ta
No abnormalities detected	15	0	12	14	18	18	18	1	23	4	9	22	18	8
19 ^{a)}														
Lung														
Atelectasis of middle lobe of right lung	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Dark reddish region	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Forestomach														
Edematous change of wall	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Recessed region of mucosa	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Glandular stomach														
Blackish region of mucosa	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Kidney														
Calculi	1	0	0	0	2	0	0	0	0	0	0	0	0	0
Cyst	0	0	0	1	1	0	0	0	0	0	0	0	0	0
Pelvic dilatation	1	0	0	2	1	0	0	0	0	0	0	0	0	0
Testis														
Dark reddish change	0	1	0	0	0	0	0							
Enlargement	1	0	0	0	0	0								
Epididymis														
Whitish region	1	0	0	0	1									
Ovary														
Cyst							1	0	2	1	1	0	0	0
Small							4	0	6	3	4	0	0	0
Uterus														
Cyst							0	0	1	0	0	0	0	0
Polyp							1	0	0	1	0	0	0	0
Vagina														
Cyst							1	0	0	0	0	0	0	0

ta, terminal autopsy; fd, found dead.

a) Number of animals examined.