

**Addendum 4-2. Physical development test; preputial separation of offspring - individual values  
continued**

<b>BPA 50 µg/kg/day</b>																<b>B.W. at complete separation (g)</b>	
<b>Animal No.</b>	<b>PND</b>	<b>PND</b>	<b>PND</b>	<b>PND</b>	<b>PND</b>	<b>PND</b>	<b>PND</b>	<b>PND</b>	<b>PND</b>	<b>PND</b>	<b>PND</b>	<b>PND</b>	<b>PND</b>	<b>PND</b>	<b>PND</b>	<b>Complete separation (days)</b>	
	35	36	37	38	39	40	41	42	43	44							
547	W	W	W	W	W	W	U									41	206.5
548	W	W	W	W	W	W	W	U								42	242.8
549	W	W	W	W	W	W	W	W	U							43	207.2
550	W	W	W	W	W	W	W	U								42	208.3
551	W	W	W	W	W	W	W	U								42	223.9
552	W	W	W	W	W	W	W	U								42	214.8
553	W	W	W	W	W	W	W	W	U							43	235.5
554	W	W	W	W	W	W	U									41	234.1
555	W	W	W	W	W	W	U									41	221.0
556	W	W	W	W	W	W	W	W	U							43	224.8
557	W	W	W	W	W	W	W	U								42	243.8
558	W	W	W	W	W	U										40	255.0
559	W	W	W	U												38	209.7
560	W	W	W	W	W	U										40	206.9
561	W	W	W	W	U											39	203.0
562	W	W	W	W	U											39	180.9
563	W	W	W	W	W	W	W	W	W	U						44	218.1
564	W	W	W	W	W	W	W	W	U							43	189.0

V-Type: V      W-Type: W      U-Type: U

**Addendum 5-1. Estrus cycle - individual findings following the time course at 3 months**

**Vehicle control**

Animal ID- No.	Days of observation														Classifications
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
101	E	M	D	D	E	M	D	D	E	M	D	D	E	M	N
102	E	M	D	D	E	E	M	D	D	E	E	M	D	D	N
104	P	E	M	D	D	E	E	M	D	D	P	E	M	D	N
105	E	M	D	P	E	M	D	D	E	M	D	D	E	M	N
107	P	E	M	D	P	E	M	D	P	E	M	D	D	E	N
109	E	M	D	P	E	M	D	P	E	M	D	D	E	M	N
110	D	E	M	D	D	E	M	D	P	E	M	D	D	E	N
111	D	D	E	M	D	D	E	M	D	P	E	M	D	D	N
112	M	D	D	E	M	D	D	E	M	D	D	E	M	D	N
114	P	E	M	D	D	E	M	D	D	E	M	D	D	E	N
115	M	D	D	E	M	D	D	E	M	D	D	E	M	D	N
117	E	M	D	D	E	M	D	D	E	M	D	P	E	M	N
118	D	E	M	D	D	E	M	D	D	E	M	D	D	E	N
120	D	P	E	M	D	P	E	M	D	P	E	M	D	D	N
121	D	D	E	M	D	P	E	M	D	D	E	M	D	D	N
123	D	P	E	M	D	D	P	E	M	D	D	E	M	D	N
124	P	E	M	D	P	E	M	D	D	E	M	D	D	E	N
125	E	M	D	D	D	E	E	M	D	D	E	M	D	D	N
127	M	D	D	E	M	D	D	E	M	D	D	E	M	D	N
128	D	D	E	M	D	D	E	M	D	D	E	M	D	D	N
129	E	M	D	D	E	M	D	D	E	M	D	D	E	M	N
131	M	D	D	P	E	M	D	D	E	M	D	D	D	E	N
133	D	P	E	M	D	P	E	M	D	P	E	M	D	D	N
134	D	D	E	M	D	P	E	M	D	D	E	M	D	D	N
137	M	D	E	M	D	P	E	M	D	P	E	M	D	D	N
138	E	M	D	P	E	M	D	P	E	M	D	P	E	M	N
139	M	D	D	E	M	D	D	E	M	D	D	E	M	D	N
142	E	M	D	P	E	M	D	D	E	M	D	P	E	M	N
143	E	M	D	P	E	M	D	P	E	M	D	P	E	M	N
145	P	E	M	D	P	E	M	D	D	E	M	D	D	E	N
146	D	P	E	M	D	P	E	M	D	P	E	M	D	P	N
														Total	31
														Normal	31
														Abnormal	0
														PD	0
														CD	0
														PE	0
														CE	0
														IE	0

D: diestrus, P: proestrus, E: estrus, M: metestrus

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 )

**Addendum 5-1. Estrus cycle - individual findings following the time course at 3 months continued**

**BPA 0.5  $\mu$ g/kg/day**

Animal ID- No.	Days of observation														Classifications
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
147	D	E	M	D	D	E	M	D	D	E	M	D	D	E	N
149	M	D	P	E	M	D	D	P	E	M	D	D	E	M	N
150	E	E	M	D	D	P	E	M	D	D	E	E	M	D	N
151	P	E	M	D	D	P	E	M	D	D	E	M	D	D	N
152	D	E	M	D	D	P	E	M	D	D	E	M	D	D	N
154	M	D	D	E	M	D	D	E	M	D	D	E	M	D	N
155	M	D	E	M	D	D	E	M	D	D	E	M	D	D	N
157	M	D	D	E	M	D	D	E	M	D	P	E	M	D	N
159	M	D	E	M	D	P	E	M	D	D	E	M	D	P	N
160	E	M	D	D	E	M	D	D	E	M	D	D	E	M	N
162	D	E	M	D	D	E	M	D	D	E	M	D	P	E	N
164	E	M	D	P	E	M	D	D	E	M	D	P	E	M	N
165	D	E	M	D	D	E	M	D	D	E	M	D	D	E	N
166	E	M	D	D	E	M	D	P	E	M	D	P	E	M	N
167	M	D	D	E	M	D	D	E	M	D	D	E	M	D	N
170	M	D	E	M	D	D	E	M	D	P	E	M	D	P	N
171	D	E	M	D	D	E	M	D	D	E	M	D	D	D	N
172	M	D	P	E	M	D	P	E	M	D	P	E	M	D	N
173	D	D	E	M	D	D	E	M	D	D	E	M	D	D	N
175	D	E	M	D	P	E	M	D	D	E	M	D	D	E	N
176	M	D	D	E	M	D	D	E	M	D	P	E	M	D	N
177	D	E	M	D	D	E	M	D	P	E	M	D	D	E	N
180	P	E	M	D	P	E	M	D	D	E	M	D	D	E	N
													Total	23	
													Normal	23	
													Abnormal	0	
													PD	0	
													CD	0	
													PE	0	
													CE	0	
													IE	0	

D: diestrus, P: proestrus, E: estrus, M: metestrus

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 )

**Addendum 5-1. Estrus cycle - individual findings following the time course at 3 months  
continued**

**BPA 5 µg/kg/day**

Animal ID- No.	Days of observation														Classifications
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
181	E	M	D	P	E	M	D	D	E	M	D	D	E	M	N
182	D	D	E	M	D	D	E	M	D	D	E	M	D	D	N
184	P	E	M	D	D	P	E	M	D	D	E	M	D	D	N
185	D	D	E	M	D	D	E	M	D	D	E	M	D	D	N
189	M	D	P	E	M	D	P	E	M	D	P	E	M	D	N
190	D	D	E	M	D	P	E	M	D	P	E	M	D	D	N
191	D	E	M	D	P	E	M	D	P	E	M	D	D	E	N
193	M	D	D	E	M	D	D	E	M	D	D	E	M	D	N
194	E	M	D	D	P	E	M	D	D	E	M	D	D	D	N
195	M	D	P	E	M	D	D	E	M	D	D	D	E	M	N
198	D	D	E	M	D	D	E	M	D	D	E	M	D	D	N
199	M	D	P	E	M	D	P	E	M	D	P	E	M	D	N
201	M	D	D	E	M	D	P	E	M	D	D	E	M	D	N
202	E	M	D	D	E	M	D	D	E	M	D	D	E	M	N
204	D	D	E	M	D	D	E	M	D	D	E	M	D	D	N
206	E	M	D	P	E	M	D	P	E	M	D	D	E	M	N
208	M	D	D	E	M	D	D	E	M	D	D	P	E	M	N
209	D	E	E	M	D	D	P	E	M	D	D	P	E	M	N
210	D	D	E	M	D	P	E	M	D	P	E	M	D	D	N
212	E	M	D	D	E	M	D	P	E	M	D	P	E	M	N
213	D	E	M	D	D	E	M	D	D	E	M	D	D	E	N
214	E	M	D	D	E	M	D	D	E	E	M	D	D	D	N
Total														22	
Normal														22	
Abnormal														0	
PD														0	
CD														0	
PE														0	
CE														0	
IE														0	

D: diestrus, P: proestrus, E: estrus, M: metestrus

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 )

**Addendum 5-1. Estrus cycle - individual findings following the time course at 3 months continued**

**BPA 50 µg/kg/day**

Animal ID- No.	Days of observation														Classifications
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
217	E	M	D	P	E	M	D	P	E	M	D	D	E	M	N
218	M	D	P	E	M	D	P	E	M	D	P	E	M	D	N
219	D	D	E	M	D	P	E	M	D	D	E	M	D	D	N
220	P	E	M	D	P	E	M	D	D	E	M	D	D	E	N
223	M	D	E	M	D	P	E	M	D	D	E	M	D	D	N
224	M	D	E	M	D	P	E	M	D	D	E	M	D	D	N
226	D	D	E	M	D	P	E	M	D	D	E	M	D	D	N
227	E	M	D	P	E	M	D	D	E	M	D	D	E	M	N
229	D	E	M	D	D	D	P	E	M	D	D	P	E	M	N
230	M	D	D	P	E	M	D	D	P	E	M	D	D	E	N
232	E	M	D	P	E	M	D	P	E	M	D	D	E	M	N
233	D	E	M	D	P	E	M	D	D	E	M	D	D	E	N
235	M	D	P	E	M	D	P	E	M	D	D	E	M	D	N
236	M	D	P	E	M	D	P	E	M	D	P	E	M	D	N
237	E	M	D	P	E	M	D	P	E	M	D	P	E	M	N
238	D	P	E	M	D	P	E	M	D	P	E	M	D	D	N
241	P	E	M	D	D	P	E	M	D	D	E	M	D	P	N
242	M	D	P	E	M	D	D	E	M	D	D	E	M	D	N
243	D	D	E	M	D	P	E	M	D	P	E	M	D	P	N
244	M	D	P	E	M	D	P	E	M	D	P	E	M	D	N
245	D	E	M	D	P	E	M	D	D	E	M	D	D	E	N
248	D	E	M	D	D	E	M	D	P	E	M	D	D	E	N
250	D	D	P	E	M	D	P	E	M	D	P	E	M	D	N
251	P	E	M	D	P	E	M	D	P	E	M	D	P	E	N
252	D	D	E	M	D	P	E	M	D	D	E	M	D	D	N
254	M	D	P	E	M	D	P	E	M	D	P	E	M	D	N
256	M	D	P	E	M	D	P	E	M	D	D	D	D	D	PD
258	M	D	P	E	M	D	P	E	M	D	D	E	M	D	N
260	E	M	D	D	E	M	D	P	E	M	D	D	E	M	N
261	D	D	E	M	D	D	E	M	D	D	E	M	D	D	N
Total														30	
Normal														29	
Abnormal														1	
PD														1	
CD														0	
PE														0	
CE														0	
IE														0	

D: diestrus, P: proestrus, E: estrus, M: metestrus

N; normal.

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

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

IE; irregular estrus cycle (unclassifiable )

**Addendum 5-2. Estrus cycle - individual findings following the time course at 4 months**

**Vehicle control**

Animal ID- No.	Days of observation														Classifications
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
101	E	M	D	D	E	M	D	D	E	M	D	D	E	M	N
102	E	M	D	D	D	P	E	M	D	D	P	E	M	D	N
104	D	D	E	M	D	P	E	M	D	D	P	E	M	D	N
105	E	M	D	D	E	M	D	D	E	M	D	P	E	M	N
107	E	M	D	D	E	M	D	D	E	M	D	P	E	M	N
109	E	M	D	P	P	E	M	D	P	E	M	D	P	E	N
110	P	E	M	D	D	E	M	D	D	E	M	D	D	E	N
111	D	D	E	M	D	D	E	M	D	D	E	M	D	P	N
112	M	D	D	E	M	D	D	E	M	D	D	E	M	D	N
114	D	E	M	D	D	E	M	D	P	E	M	D	D	E	N
115	D	D	P	E	M	D	P	E	M	D	D	E	M	D	N
117	E	M	D	D	E	M	D	D	E	M	D	P	E	M	N
118	D	E	M	D	D	E	M	D	D	D	E	M	D	D	N
120	D	P	E	M	D	D	E	M	D	P	E	M	D	D	N
121	D	P	E	M	D	D	E	M	D	D	E	M	D	P	N
123	D	D	E	M	D	D	D	D	E	M	D	D	D	E	N
124	P	E	M	D	D	E	M	D	P	E	M	D	P	E	N
125	D	D	E	M	D	D	D	D	E	M	D	P	E	M	N
127	M	D	D	E	M	D	D	E	M	D	D	E	M	D	N
128	D	D	E	M	D	D	E	M	D	D	E	M	D	P	N
129	E	M	D	D	E	M	D	D	E	M	D	D	E	M	N
131	M	D	P	E	M	D	D	E	M	D	D	D	E	M	N
133	M	D	E	M	D	D	E	M	D	D	E	M	D	D	N
134	D	D	E	M	D	P	E	M	D	D	E	M	D	P	N
137	D	P	E	M	D	D	E	M	D	P	E	M	D	P	N
138	E	M	D	P	E	M	D	P	E	M	D	P	E	M	N
139	M	D	P	E	M	D	P	E	M	D	P	E	M	D	N
142	E	M	D	D	E	M	D	D	E	M	D	P	E	M	N
143	E	M	D	P	E	M	D	P	E	M	D	P	E	M	N
145	D	P	E	M	D	P	E	M	D	P	E	M	D	D	N
146	D	P	E	M	D	P	E	M	D	P	E	M	D	P	N
Total														31	
Normal														31	
Abnormal														0	
PD														0	
CD														0	
PE														0	
CE														0	
IE														0	

D: diestrus, P: proestrus, E: estrus, M: metestrus

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 )

**Addendum 5-2. Estrus cycle - individual findings following the time course at 4 months  
continued**

**BPA 0.5  $\mu$ g/kg/day**

Animal ID- No.	Days of observation														Classifications
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
147	D	E	M	D	D	E	M	D	D	E	M	D	D	E	N
149	E	M	D	D	P	E	M	D	D	P	E	M	D	D	N
150	D	D	E	M	D	D	D	E	E	M	D	D	E	E	N
151	E	M	D	D	D	D	E	M	D	D	P	E	M	D	N
152	D	E	M	D	D	E	M	D	D	E	M	D	P	E	N
154	M	D	D	E	M	D	D	E	M	D	D	E	M	D	N
155	D	D	E	M	D	D	E	M	D	D	E	M	D	D	N
157	M	D	D	E	M	D	D	D	E	M	D	D	D	E	N
159	M	D	D	P	E	M	D	D	E	M	D	D	D	P	N
160	E	M	D	D	P	E	M	D	D	P	E	M	D	P	N
162	P	E	M	D	D	E	M	D	D	E	M	D	D	E	N
164	D	D	D	D	E	M	D	D	E	E	M	D	D	D	N
165	E	M	D	P	E	M	D	D	E	M	D	D	D	D	N
166	E	M	D	E	E	M	D	D	E	M	D	P	E	M	N
167	M	D	D	D	P	E	M	D	D	D	D	E	M	D	N
170	P	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
171	M	D	E	M	D	P	M	D	D	D	P	M	D	D	N
172	M	D	P	E	M	D	D	E	M	D	D	E	M	D	N
173	D	D	E	M	D	D	E	M	D	D	E	M	D	D	N
175	D	E	M	D	D	E	M	D	D	E	M	D	D	E	N
176	M	D	D	E	M	D	D	E	M	D	P	E	M	D	N
177	P	E	M	D	D	E	M	D	D	E	M	D	D	E	N
180	D	E	M	D	P	E	M	D	D	E	M	D	P	E	N
Total														23	
Normal														22	
Abnormal														1	
PD														0	
CD														0	
PE														0	
CE														1	
IE														0	

D: diestrus, P: proestrus, E: estrus, M: metestrus

N; normal.

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

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

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IE; irregular estrus cycle (unclassifiable )

**Addendum 5-2. Estrus cycle - individual findings following the time course at 4 months  
continued**

**BPA 5 µg/kg/day**

Animal ID- No.	Days of observation														Classifications
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
181	E	M	D	D	E	M	D	D	E	M	D	D	E	M	N
182	M	D	E	M	D	D	E	M	D	D	E	M	D	D	N
184	D	D	E	M	D	D	D	D	E	M	D	D	D	E	N
185	D	D	P	E	M	D	D	E	M	D	D	E	M	D	N
189	M	D	D	E	M	D	D	E	M	D	P	E	M	D	N
190	D	D	E	M	D	D	E	M	D	P	E	M	D	P	N
191	D	P	E	M	D	D	E	M	D	P	E	M	D	P	N
193	M	D	D	E	M	D	D	E	M	D	D	E	M	D	N
194	D	P	E	M	D	D	P	E	M	D	D	P	E	M	N
195	E	M	D	D	E	M	D	D	E	M	D	D	E	M	N
198	D	D	D	D	D	D	D	D	D	D	D	D	D	D	CD
199	M	D	P	E	M	D	D	E	M	D	P	E	M	D	N
201	M	D	D	E	M	D	D	E	M	D	D	E	M	D	N
202	E	M	D	D	E	M	D	P	E	M	D	P	E	M	N
204	D	D	E	M	D	D	E	M	D	P	E	M	D	D	N
206	E	M	D	D	E	M	D	D	E	M	D	D	E	M	N
208	D	D	P	E	M	D	D	E	M	D	D	E	M	D	N
209	D	P	E	M	D	D	D	D	D	D	D	D	D	D	CD
210	M	D	E	M	D	D	E	M	D	D	E	M	D	D	N
212	E	M	D	D	E	M	D	P	E	M	D	P	E	M	N
213	D	E	M	D	P	E	M	D	D	E	M	D	P	E	N
214	P	E	M	D	D	E	M	D	D	E	M	D	D	E	N
Total														22	
Normal														20	
Abnormal														2	
PD														0	
CD														2	
PE														0	
CE														0	
IE														0	

D: diestrus, P: proestrus, E: estrus, M: metestrus

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 )



**Addendum 5-2. Estrus cycle - individual findings following the time course at 4 months continued**

**BPA 50 µg/kg/day**

Animal ID- No.	Days of observation														Classifications
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
217	E	M	D	D	E	M	D	P	E	M	D	D	E	M	N
218	M	D	P	E	M	D	P	E	M	D	P	E	M	D	N
219	D	D	E	M	D	D	E	M	D	P	E	M	D	P	N
220	P	E	M	D	P	E	M	D	P	E	M	D	D	E	N
223	D	D	E	M	D	D	E	M	D	D	E	M	D	P	N
224	D	D	P	E	M	D	D	E	M	D	D	E	M	D	N
226	D	D	E	M	D	D	E	M	D	D	E	M	D	D	N
227	E	M	D	D	E	M	D	D	E	M	D	D	E	M	N
229	D	D	D	P	E	M	D	D	E	M	D	D	D	P	N
230	P	E	M	D	D	P	E	M	D	D	P	E	M	D	N
232	E	M	D	P	E	M	D	P	E	M	D	D	E	M	N
233	P	E	M	D	P	E	M	D	D	E	M	D	D	E	N
235	M	D	D	E	M	D	D	E	M	D	P	E	M	D	N
236	M	D	P	E	M	D	P	E	M	D	P	E	M	D	N
237	E	M	D	P	E	M	D	P	E	M	D	P	E	M	N
238	D	D	E	M	D	P	E	M	D	P	E	M	D	P	N
241	E	M	D	D	P	E	M	D	P	E	M	D	D	P	N
242	M	D	P	E	M	D	P	E	M	D	P	E	M	D	N
243	D	P	E	M	D	P	E	M	D	P	E	M	D	D	N
244	D	D	P	E	M	D	P	E	M	D	P	E	M	D	N
245	D	E	M	D	D	E	M	D	D	E	M	D	D	E	N
248	P	E	M	D	D	E	M	D	P	E	M	D	D	E	N
250	M	D	P	E	M	D	P	E	M	D	D	E	M	D	N
251	D	E	M	D	P	E	M	D	P	E	M	D	P	E	N
252	D	P	E	M	D	P	E	M	D	P	E	M	D	P	N
254	M	D	P	E	M	D	P	E	M	D	D	E	M	D	N
256	D	E	M	D	D	E	M	D	P	E	M	D	P	E	N
258	M	D	D	E	M	D	D	E	M	D	D	E	M	D	N
260	E	M	D	D	E	M	D	D	E	M	D	D	E	M	N
261	M	D	D	E	M	D	D	E	M	D	D	D	E	M	N
Total														30	
Normal														30	
Abnormal														0	
PD														0	
CD														0	
PE														0	
CE														0	
IE														0	

D: diestrus, P: proestrus, E: estrus, M: metestrus

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 )

**Addendum 5-3. Estrus cycle - individual findings following the time course at 5 months**

**Vehicle control**

Animal ID- No.	Days of observation														Classifications
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
101	E	M	D	P	E	M	D	D	E	M	D	P	E	M	N
102	D	D	P	E	M	D	D	P	E	M	D	D	P	E	N
104	D	P	E	M	D	D	D	D	D	D	D	D	D	D	CD
105	D	E	M	D	D	E	M	D	D	E	M	D	D	E	N
107	D	D	D	D	E	M	D	D	P	E	M	D	D	P	N
109	D	D	D	D	D	D	D	D	D	D	D	D	D	D	CD
110	D	E	M	D	D	E	M	D	D	E	M	D	D	E	N
111	M	D	E	M	D	D	E	M	D	D	E	M	D	D	N
112	M	D	P	E	M	D	D	E	M	D	D	E	M	D	N
114	D	E	M	D	D	E	M	D	D	E	M	D	D	E	N
115	M	D	P	E	M	D	D	E	M	D	D	E	M	D	N
117	E	M	D	D	E	M	D	P	E	M	D	D	E	M	N
118	D	D	E	M	D	D	E	M	D	D	E	M	D	D	N
120	D	P	E	M	D	D	E	M	D	P	E	M	D	D	N
121	M	D	D	P	M	D	D	E	M	D	D	E	M	D	N
123	D	E	M	D	D	P	E	M	D	D	P	E	M	D	N
124	P	E	M	D	D	E	M	D	D	E	M	D	P	E	N
125	E	M	D	P	E	M	D	D	E	M	D	D	D	E	N
127	M	D	D	E	M	D	D	E	M	D	E	E	M	D	N
128	M	D	E	M	D	D	E	M	D	D	D	D	D	D	PD
129	E	M	D	D	E	M	D	D	E	M	D	D	E	M	N
131	M	D	P	E	M	D	D	D	E	M	D	D	D	E	N
133	D	P	E	M	D	D	E	M	D	P	E	M	D	D	N
134	M	D	E	M	D	P	E	M	D	P	E	M	D	D	N
137	D	P	E	M	D	P	E	M	D	P	E	M	D	P	N
138	E	M	D	P	E	M	D	P	E	M	D	P	E	M	N
139	M	D	P	E	M	D	D	E	M	D	D	E	M	D	N
142	E	M	D	D	E	M	D	D	E	M	D	P	E	M	N
143	E	M	D	P	E	M	D	P	E	M	D	P	E	M	N
145	E	M	D	D	E	M	D	D	D	E	M	D	D	P	N
146	D	D	E	M	D	P	E	M	D	P	E	M	D	P	N
Total														31	
Normal														28	
Abnormal														3	
PD														1	
CD														2	
PE														0	
CE														0	
IE														0	

D: diestrus, P: proestrus, E: estrus, M: metestrus

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 )

**Addendum 5-3. Estrus cycle - individual findings following the time course at 5 months continued**

**BPA 0.5 µg/kg/day**

Animal ID- No.	Days of observation														Classifications
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
147	D	E	M	D	D	D	E	E	M	D	D	E	M	D	N
149	D	P	E	M	D	D	P	M	D	D	P	D	D	D	N
150	E	M	D	P	E	M	D	D	D	E	E	M	D	D	N
151	M	D	D	P	E	M	D	D	D	E	M	D	D	E	N
152	D	P	M	D	P	M	D	D	D	D	D	D	D	D	PD
154	M	D	D	E	M	D	D	E	M	D	D	E	M	D	N
155	M	D	E	M	D	D	E	M	D	D	E	M	D	D	N
157	D	E	M	D	D	D	D	E	M	D	D	D	E	M	N
159	D	P	E	M	D	P	E	M	D	P	E	M	D	P	N
160	D	P	M	D	P	M	D	D	E	M	D	P	M	D	N
162	D	E	M	D	D	E	M	D	P	E	M	D	P	E	N
164	D	P	M	D	D	P	M	D	P	M	D	P	E	M	N
165	D	P	E	M	D	D	E	M	D	P	M	D	D	E	N
166	E	M	D	D	E	M	D	P	E	M	D	D	E	M	N
167	M	D	D	E	M	D	D	E	M	D	D	E	M	D	N
170	E	M	M	D	E	M	D	P	E	M	D	P	E	M	N
171	P	M	D	P	P	P	P	P	P	P	M	D	D	D	PE
172	D	D	D	D	D	D	D	D	D	D	D	D	D	D	CD
173	M	D	P	M	D	P	E	M	D	D	D	P	E	M	N
175	D	E	M	D	P	E	M	D	D	E	M	D	D	E	N
176	M	D	D	E	M	D	P	E	M	D	D	E	M	D	N
177	D	E	M	D	D	E	M	D	D	E	M	D	P	E	N
180	P	E	M	D	P	E	M	D	D	E	M	D	D	E	N
Total														23	
Normal														20	
Abnormal														3	
PD														1	
CD														1	
PE														1	
CE														0	
IE														0	

D: diestrus, P: proestrus, E: estrus, M: metestrus

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 )

**Addendum 5-3. Estrus cycle - individual findings following the time course at 5 months  
continued**

**BPA 5 µg/kg/day**

Animal ID- No.	Days of observation														Classifications
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
181	E	M	D	D	E	M	D	D	E	M	D	D	E	M	N
182	D	D	E	M	D	D	E	M	D	P	E	M	D	D	N
184	D	E	M	D	D	E	M	D	D	E	M	D	D	E	N
185	M	D	D	P	E	M	D	D	E	M	D	D	D	D	N
189	M	D	D	E	M	D	P	E	M	D	D	E	M	D	N
190	D	D	E	M	D	P	E	M	D	D	E	M	D	D	N
191	D	P	E	M	D	P	E	M	D	D	E	M	D	D	N
193	M	D	P	E	M	D	D	E	M	D	D	E	M	D	N
194	D	P	E	M	D	P	M	D	P	E	M	D	P	E	N
195	E	M	D	P	E	M	D	D	E	M	D	D	E	M	N
198	M	D	P	E	M	D	P	E	M	D	D	E	M	D	N
199	M	D	P	E	M	D	D	E	M	D	P	E	M	D	N
201	M	D	D	E	M	D	D	E	M	D	D	E	M	D	N
202	E	M	D	D	E	M	D	P	E	M	D	D	E	M	N
204	M	D	E	M	D	D	E	M	D	D	E	M	D	D	N
206	E	M	D	D	E	M	D	D	E	M	D	D	E	M	N
208	D	E	M	D	D	E	M	D	D	P	E	M	D	D	N
209	D	P	E	M	D	D	E	M	D	D	P	E	M	D	N
210	M	D	D	P	E	M	D	D	E	M	D	D	D	D	N
212	E	M	D	D	E	M	D	D	E	M	D	D	E	M	N
213	P	E	M	D	P	E	M	D	D	E	M	D	D	E	N
214	D	D	D	D	D	D	D	D	E	M	D	P	E	M	PD
Total														22	
Normal														21	
Abnormal														1	
PD														1	
CD														0	
PE														0	
CE														0	
IE														0	

D: diestrus, P: proestrus, E: estrus, M: metestrus

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)

**Addendum 5-3. Estrus cycle - individual findings following the time course at 5 months  
continued**

**BPA 50 µg/kg/day**

Animal ID- No.	Days of observation														Classifications
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
217	E	M	D	P	E	M	D	P	E	M	D	D	P	M	N
218	M	D	P	E	M	D	P	E	M	D	P	E	M	D	N
219	D	P	E	M	D	D	E	M	D	D	E	M	D	D	N
220	P	E	M	D	P	E	M	D	P	E	M	D	P	E	N
223	D	D	E	M	D	P	E	M	D	P	E	M	D	P	N
224	D	D	P	M	D	P	E	M	D	P	E	M	D	P	N
226	M	D	E	M	D	D	E	M	D	D	E	M	D	D	N
227	E	M	D	P	E	M	D	D	E	M	D	P	E	M	N
229	P	E	M	D	D	P	E	M	D	D	P	E	M	D	N
230	D	D	E	M	D	D	P	M	D	D	D	D	D	D	PD
232	E	M	D	P	E	M	D	P	E	M	D	D	E	M	N
233	D	E	M	D	P	E	M	D	D	E	M	D	P	E	N
235	M	D	P	E	M	D	P	E	M	D	D	E	M	D	N
236	D	D	P	E	M	D	P	E	M	D	D	E	M	D	N
237	E	M	D	P	E	M	D	P	E	M	D	P	E	M	N
238	M	D	E	M	D	P	E	M	D	D	E	M	D	P	N
241	P	E	E	M	D	D	D	E	M	D	D	D	E	M	N
242	M	D	P	E	M	D	D	E	M	D	D	E	M	D	N
243	E	M	D	P	E	M	D	D	P	E	M	D	D	D	N
244	D	D	P	E	M	D	P	E	M	D	P	E	M	D	N
245	D	P	E	M	D	D	E	E	M	D	D	P	E	M	N
248	D	E	M	D	P	E	M	D	D	E	M	D	D	E	N
250	M	D	P	E	M	D	P	E	M	D	P	E	M	D	N
251	P	E	M	D	P	E	M	D	P	E	M	D	D	E	N
252	D	P	E	M	D	P	E	M	D	P	E	M	D	D	N
254	M	D	P	E	M	D	P	E	M	D	P	E	M	D	N
256	P	E	M	D	P	E	M	D	P	E	M	D	P	E	N
258	M	D	D	E	M	D	D	E	M	D	D	E	M	D	N
260	E	M	D	D	E	M	D	D	E	M	D	D	E	M	N
261	M	D	D	P	E	M	D	D	P	E	M	D	D	P	N
														Total	30
														Normal	29
														Abnormal	1
														PD	1
														CD	0
														PE	0
														CE	0
														IE	0

D: diestrus, P: proestrus, E: estrus, M: metestrus

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 )

**Addendum 5-4. Estrus cycle - individual findings following the time course at 6 months**

**Vehicle control**

Animal ID- No.	Days of observation														Classifications
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
101	E	M	D	P	E	M	D	D	E	M	D	D	E	M	N
102	E	M	D	D	P	E	M	D	D	E	E	M	D	D	N
104	E	M	D	D	E	M	D	P	E	M	D	D	E	M	N
105	D	D	E	M	D	P	E	M	D	E	M	E	M	P	N
107	D	P	E	M	D	P	E	M	D	P	M	D	P	M	N
109	D	P	M	D	P	M	D	D	P	P	M	D	D	P	N
110	P	E	M	D	D	E	M	D	D	E	M	D	P	E	N
111	D	P	M	D	P	E	M	D	P	M	D	E	M	D	N
112	D	E	M	D	D	E	M	D	D	D	P	E	M	D	N
114	D	E	E	M	D	D	D	P	E	M	D	D	E	M	N
115	D	D	P	E	M	D	P	E	M	D	D	E	M	D	N
117	E	M	D	P	E	M	D	D	E	M	D	P	E	M	N
118	D	D	E	M	D	P	E	M	D	D	E	M	D	D	N
120	D	D	E	M	D	D	E	M	D	D	E	M	D	D	N
121	M	D	D	E	M	D	D	E	M	D	P	E	M	D	N
123	D	P	E	M	D	P	M	D	P	E	M	D	P	M	N
124	P	E	M	D	P	E	M	D	P	E	M	D	P	E	N
125	E	M	D	E	M	D	D	P	M	D	D	P	M	D	N
127	M	D	P	E	M	D	D	E	M	D	D	E	M	D	N
128	M	D	P	E	M	D	P	M	D	P	E	M	D	D	N
129	E	M	D	D	E	M	D	D	E	M	D	D	E	M	N
131	D	D	D	P	E	M	D	D	E	M	D	D	E	N	N
133	D	P	E	M	D	D	E	M	D	D	E	M	D	P	N
134	D	D	E	M	D	D	E	M	D	D	E	M	D	D	N
137	D	D	E	M	D	P	E	M	D	P	E	M	D	D	N
138	E	M	D	D	E	M	D	D	D	E	M	D	D	D	N
139	M	D	P	E	M	D	D	E	M	D	P	E	M	D	N
142	E	M	D	P	E	M	D	P	E	M	D	D	E	M	N
143	E	M	D	P	E	M	D	D	E	M	D	D	E	M	N
145	M	D	D	E	M	D	D	D	P	E	M	D	D	P	N
146	D	P	E	M	D	P	E	M	D	P	E	M	D	P	N
														Total	31
														Normal	31
														Abnormal	0
														PD	0
														CD	0
														PE	0
														CE	0
														IE	0

D: diestrus, P: proestrus, E: estrus, M: metestrus

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 )

**Addendum 5-4. Estrus cycle - individual findings following the time course at 6 months  
continued**

**BPA 0.5 µg/kg/day**

Animal ID- No.	Days of observation														Classifications
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
147	M	D	D	P	E	M	D	D	E	M	D	P	M	D	N
149	M	D	D	D	P	E	M	D	P	E	M	D	D	D	N
150	D	E	E	M	D	D	E	M	D	D	D	P	E	M	N
151	P	E	M	D	D	E	M	D	D	D	D	E	M	D	N
152	M	D	E	M	D	P	M	D	E	M	D	P	M	D	N
154	D	P	E	M	D	D	E	M	D	D	D	D	E	E	N
155	M	D	D	E	M	D	D	D	E	E	M	D	D	P	N
157	M	D	D	E	M	D	D	D	P	E	M	D	D	P	N
159	M	D	D	E	M	D	D	P	E	M	D	D	E	M	N
160	D	P	E	M	D	E	M	D	P	E	M	D	P	M	N
162	P	E	M	D	D	E	M	D	D	E	M	D	D	E	N
164	D	P	E	M	D	E	M	D	P	E	M	D	D	D	N
165	E	M	D	D	E	M	D	D	D	D	E	M	D	D	N
166	E	M	D	D	E	M	D	D	P	E	M	D	D	E	N
167	M	D	D	E	M	D	D	E	M	D	D	E	M	D	N
170	P	P	P	P	P	E	P	P	P	P	P	P	P	P	CE
171	D	D	D	D	D	D	P	D	D	P	M	D	D	D	PD
172	E	M	D	P	E	M	D	P	E	M	D	P	M	D	N
173	D	D	D	D	P	E	M	D	P	E	M	D	D	P	N
175	D	E	M	D	D	E	M	D	D	E	M	D	D	E	N
176	D	D	D	E	M	D	D	E	M	D	D	E	M	D	N
177	D	E	M	D	D	E	M	D	D	E	M	D	D	E	N
180	P	E	M	D	D	E	M	D	D	E	M	D	P	E	N
Total														23	
Normal														21	
Abnormal														2	
PD														1	
CD														0	
PE														0	
CE														1	
IE														0	

D: diestrus, P: proestrus, E: estrus, M: metestrus

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 )

**Addendum 5-4. Estrus cycle - individual findings following the time course at 6 months  
continued**

**BPA 5 µg/kg/day**

Animal ID- No.	Days of observation														Classifications	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14		
181	E	M	D	D	E	M	D	P	E	M	D	D	E	M	N	
182	D	E	M	D	D	D	D	D	E	M	D	D	P	E	PD	
184	D	D	D	D	D	D	D	D	P	M	D	P	E	M	PD	
185	D	P	E	M	D	D	E	M	D	D	D	D	D	D	PD	
189	M	D	P	E	M	D	D	E	M	D	P	E	M	D	N	
190	D	D	E	M	D	P	E	M	D	P	E	M	D	D	N	
191	D	P	E	M	D	D	E	M	D	P	E	M	D	D	N	
193	M	D	D	E	M	D	D	E	M	D	D	E	M	D	N	
194	M	D	P	P	P	P	P	P	P	P	M	M	D	D	CE	
195	E	M	D	D	E	M	D	D	E	M	D	P	E	M	N	
198	M	D	P	E	M	D	D	E	M	D	P	E	M	D	N	
199	M	D	P	E	M	D	P	E	M	D	D	E	M	D	N	
201	M	D	P	E	M	D	D	E	M	D	D	E	M	D	N	
202	E	M	D	P	E	M	D	D	E	M	D	D	E	M	N	
204	D	D	E	M	D	P	E	M	D	D	E	M	D	D	N	
206	E	M	D	P	E	M	D	D	E	M	D	P	E	M	N	
208	M	D	P	E	M	D	D	D	P	E	M	D	D	P	N	
209	M	D	D	D	D	D	D	D	D	D	D	D	D	D	CD	
210	P	P	P	P	P	E	M	P	P	M	D	E	M	M	PE	
212	E	M	D	D	E	M	D	D	D	D	D	E	E	M	N	
213	D	E	M	D	D	E	M	D	D	E	M	D	D	E	N	
214	D	D	D	D	P	E	M	D	D	D	D	D	D	D	PD	
															Total	22
															Normal	15
															Abnormal	7
															PD	4
															CD	1
															PE	1
															CE	1
															IE	0

D: diestrus, P: proestrus, E: estrus, M: metestrus

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 )



**Addendum 5-4. Estrus cycle - individual findings following the time course at 6 months continued**

**BPA 50 µg/kg/day**

Animal ID- No.	Days of observation														Classifications
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
217	P	P	P	P	P	P	P	P	P	P	M	D	P	M	CE
218	M	D	D	P	E	M	D	D	E	M	D	P	E	M	N
219	M	D	E	M	D	D	E	M	D	D	E	M	D	D	N
220	P	E	M	D	D	E	M	D	D	E	M	D	D	E	N
223	E	E	P	P	E	E	E	P	E	P	P	P	E	P	CE
224	P	E	P	P	P	E	E	P	E	E	P	M	M	P	CE
226	D	D	E	M	D	P	E	M	D	D	E	M	D	D	N
227	E	M	D	P	E	M	D	D	E	M	D	D	E	M	N
229	M	D	D	D	E	M	D	D	E	M	D	D	E	M	N
230	M	D	P	M	D	D	P	M	D	P	M	D	D	D	N
232	E	M	D	P	E	M	D	P	E	M	D	D	E	M	N
233	D	P	E	M	D	D	E	M	D	D	E	M	D	D	N
235	D	D	D	E	M	D	D	E	M	D	D	E	M	D	N
236	D	D	P	E	M	D	D	E	M	D	D	E	M	D	N
237	E	M	D	P	E	M	D	P	E	M	D	P	E	M	N
238	M	D	E	M	D	P	E	M	D	P	E	M	D	D	N
241	D	D	E	M	D	P	E	M	D	P	E	M	D	D	N
242	M	D	E	M	D	P	P	E	M	D	D	E	M	D	N
243	D	E	M	D	D	E	M	D	D	D	D	E	M	D	N
244	D	D	P	E	M	D	P	E	M	D	P	E	M	D	N
245	D	D	D	P	E	M	D	D	P	E	M	D	D	D	N
248	P	E	M	D	D	E	M	D	D	D	D	E	M	D	N
250	D	D	D	E	M	D	P	E	M	D	E	E	M	D	N
251	P	E	M	D	P	E	M	D	D	D	E	M	D	D	N
252	D	D	E	M	D	P	E	M	D	P	E	M	D	P	N
254	D	D	P	E	M	D	P	E	M	D	P	E	M	D	N
256	D	E	M	D	P	E	M	D	P	E	M	D	P	E	N
258	M	D	D	D	D	P	M	D	P	E	M	D	P	M	N
260	M	D	P	E	M	D	D	E	M	E	M	D	D	D	N
261	P	E	M	D	D	P	E	M	D	D	D	E	M	D	N
Total														30	
Normal														27	
Abnormal														3	
PD														0	
CD														0	
PE														0	
CE														3	
IE														0	

D: diestrus, P: proestrus, E: estrus, M: metestrus

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 )

**Addendum 5-5. Estrus cycle - individual findings following the time course at 7 months**

**Vehicle control**

Animal ID- No.	Days of observation														Classifications	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14		
101	P	E	M	D	D	D	D	D	D	D	D	D	D	D	CD	
102	P	E	E	M	D	D	P	E	M	D	P				N	
104	D	P	M	D	P	P	M	P	M	P	P	P	P	P	PE	
105	P	P	M	D	D	D	E	M	D	D	D	P	M	D	N	
107	M	D	P	E	M	D	E	M	D	P					N	
109	E	M	D	P	E	M	D	P	M	D	D	P	P	M	N	
110	P	E	M	D	D	D	D	P							N	
111	M	D	D	E	E	M	D	D	D	P	E	M	D	P	N	
112	M	D	D	D	E	M	D	D	E	M	D	D	E	M	N	
114	D	P	E	M	D	D	D	D	D	P	E	M	D	D	PD	
115	D	D	D	E	M	D	D	P							N	
117	D	E	M	D	D	D	E	M	D	P	E	M	D	D	N	
118	D	D	D	D	P	E	M	D	D	P	E	M	D	P	N	
120	D	D	E	M	D	P	E	M	D	P					N	
121	M	D	E	M	D	D	D	D	P						N	
123	D	P	E	M	D	D	P	M	D	P					N	
124	D	E	M	D	D	D	D	D	P	E	M	D	D	E	PD	
125	M	D	P	M	D	D	P	M	D	D	D	D	D	D	PD	
127	D	D	E	M	D	D	D	E	M	D	D	P			N	
128	D	P	E	M	D	P	E	M	D	P					N	
129	E	M	D	D	E	M	D	D	E	M	D	D	E	M	N	
131	D	E	M	D	D	D	P	E	M	D	D	P	E	M	N	
133	D	D	E	M	D	P	E	M	D	P	E	M	D	D	N	
134	D	D	D	D	E	M	D	D	E	M	D	P			N	
137	D	P	E	M	D	P	E	M	D	P					N	
138	E	M	D	D	P	E	M	D	P	E	M	D	D	E	N	
139	M	D	P	E	M	D	P	E	M	D	P				N	
142	E	M	D	D	E	M	D	D	E	M	D	D	E	M	N	
143	E	M	D	P	E	M	D	D	E	M	D	P	E	M	N	
145	P	E	M	D	D	E	M	D	D	D	E	M	D	D	N	
146	D	D	E	M	D	D	P	E	M	D	D	D	D	P	N	
															Total	31
															Normal	26
															Abnormal	5
															PD	3
															CD	1
															PE	1
															CE	0
															IE	0

D: diestrus, P: proestrus, E: estrus, M: metestrus

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 )

**Addendum 5-5. Estrus cycle - individual findings following the time course at 7 months continued**

**BPA 0.5 µg/kg/day**

Animal ID- No.	Days of observation														Classifications
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
147	D	P	M	D	M	D	P	P	D	D	D	P	M	D	N
149	P	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
150	M	D	D	P	E	M	D	D	E	E	M	D	D	P	N
151	D	D	P	E	M	D	D	P	E	M	D	D	P	E	N
152	P	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
154	M	D	P	M	D	D	P	E	M	D	D	D	D	E	N
155	P	E	E	M	D	D	P	E	M	D	D	P	M	M	N
157	E	M	D	D	D	E	M	D	D	D	D	D	D	D	PD
159	M	D	P	M	P	P	P	M	D	P	P	P	P	M	PE
160	M	D	P	M	D	D	D	D	E	M	D	E	M	M	N
162	D	D	P	M	D	P	E	M	D	D	E	M	D	D	N
164	P	E	M	P	M	D	D	P	M	D	D	P	M	D	N
165	M	D	D	P	E	M	D	D	E	M	D	D	D	D	N
166	E	E	M	D	D	E	M	D	D	D	P	E	M	D	N
167	M	D	D	E	M	D	D	E	M	D	D	E	M	D	N
170	P	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
171	P	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
172	D	P	E	M	D	P	M	D	D	P	P	D	D	P	N
173	D	P	M	D	D	E	M	D	P	M	D	D	D	P	N
175	P	E	M	D	D	E	M	D	D	E	M	D	D	E	N
176	M	D	P	E	M	D	D	E	M	D	D	E	M	D	N
177	M	D	P	E	M	D	D	E	M	D	D	E	M	D	N
180	P	E	M	D	P	E	M	D	D	E	M	D	D	E	N
Total														23	
Normal														17	
Abnormal														6	
PD														1	
CD														0	
PE														1	
CE														4	
IE														0	

D: diestrus, P: proestrus, E: estrus, M: metestrus

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 )

**Addendum 5-5. Estrus cycle - individual findings following the time course at 7 months  
continued**

**BPA 5 µg/kg/day**

Animal ID- No.	Days of observation														Classifications
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
181	E	M	D	D	E	M	D	P	E	M	D	D	E	M	N
182	E	M	D	D	P	E	M	D	D	P	E	M	D	D	N
184	M	D	D	D	E	M	D	D	P	E	M	D	D	D	N
185	D	D	D	D	D	D	D	D	D	D	D	D	D	D	CD
189	D	D	P	E	M	D	P	E	M	D	D	E	M	D	N
190	D	P	E	M	D	P	E	M	D	D	E	M	D	D	N
191	D	P	E	M	D	P	E	M	D	P	E	M	D	P	N
193	D	D	E	M	D	P	E	M	D	D	E	M	D	D	N
194	P	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
195	E	M	D	D	E	M	D	D	E	M	D	D	P	E	N
198	M	D	D	E	M	D	D	D	E	M	D	D	D	E	N
199	M	D	P	E	M	D	D	E	M	D	P	E	M	D	N
201	M	D	D	E	M	D	D	E	M	D	D	E	M	D	N
202	E	M	D	P	E	M	D	D	E	M	D	D	E	M	N
204	P	E	M	D	P	E	M	D	P	E	M	D	D	E	N
206	E	M	D	E	M	P	E	M	D	D	E	M	D	D	N
208	D	P	P	M	D	P	M	E	M	D	P	P	P	M	PE
209	P	E	M	D	D	D	D	D	D	D	D	D	D	D	CD
210	P	P	P	P	P	P	P	P	P	P	P	P	P	P	CE
212	D	P	E	M	D	D	P	M	D	D	D	E	M	D	N
213	P	E	M	D	P	E	M	D	D	E	M	D	D	E	N
214	D	D	P	E	M	D	D	E	M	D	D	D	D	D	PD
Total														22	
Normal														16	
Abnormal														6	
PD														1	
CD														2	
PE														1	
CE														2	
IE														0	

D: diestrus, P: proestrus, E: estrus, M: metestrus

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 )