

【添付図表内訳】

- I-Figure 1 Mean body weights of dams
- I-Figure 2 Mean body weights of offspring (birth to weaning)
- I-Figure 3 Mean body weights of offspring (4–34 weeks of age)
- 
- I-Table 1-1 Body weights of dams – group mean values
- I-Table 1-2 Body weights of offspring during postpartum period - group mean values
- I-Table 1-3 Body weights of offspring (4-10 weeks of age) - group mean values
- I-Table 1-4 Body weights of offspring (11-34 weeks of age) - group mean values
- I-Table 1-5 Body weights of offspring during gestation period in a reproduction test
- I-Table 2 Litter sizes and implantations - group mean values
- I-Table 3 General appearance of offspring at birth - Summary
- I-Table 4-1 Physical development test;  
Anogenital distance (AGD) and body weights of male offspring on PND4 - group mean values
- I-Table 4-2 Physical Development test;  
Anogenital distance (AGD) and body weights of female offspring on PND4 - group mean values
- I-Table 4-3 Physical development test; Preputial separation of offspring - group mean values
- I-Table 4-4 Physical development test; Vaginal opening of offspring - group mean values
- I-Table 5-1 Reproduction test of F1; copulative confirmation
- I-Table 5-2 Reproduction test of F1; fertility and general reproductive performance - group mean values
- I-Table 6 Morphometry of the female external genitalia at 10 weeks of age
- I-Table 7-1 Serum T3 & T4 of male offspring at 10 weeks of age
- I-Table 7-2 Serum T3 & T4 of female offspring at 10 weeks of age
- I-Table 8-1 Estrus cycle - individual findings
- I-Table 8-2 Summary of estrus cycle
- I-Table 8-3 Estrus cycle, ovary weight and histopathological examinations
- I-Table 9-1 Absolute organ weights of male offspring at 10 weeks of age - group mean values
- I-Table 9-2 Relative organ weights of male offspring at 10 weeks of age - group mean values
- I-Table 9-3 Absolute organ weights of female offspring at 10 weeks of age - group mean values
- I-Table 9-4 Relative organ weights of female offspring at 10 weeks of age - group mean values
- I-Table 9-5 Absolute organ weights of male offspring at 7 months of age - group mean values
- I-Table 9-6 Relative organ weights of male offspring at 7 months of age - group mean values
- I-Table 9-7 Absolute organ weights of female offspring at 7 months of age - group mean values
- I-Table 9-8 Relative organ weights of female offspring at 7 months of age - group mean values
- I-Table 10-1 Macroscopic examinations of dams - group distribution of findings
- I-Table 10-2 Macroscopic examinations of male offspring at 10 weeks of age - group distribution of findings
- I-Table 10-3 Macroscopic examinations of female offspring at 10 weeks of age - group distribution of findings
- I-Table 10-4 Macroscopic examinations of male offspring at 7 months of age - group distribution of findings
- I-Table 10-5 Macroscopic examinations of female offspring at 7 months of age - group distribution of findings
- I-Table 11 Histopathological examinations of offspring - group distribution of findings
- 
- I-Addendum 1-1 Body weights of dams - individual values
- I-Addendum 1-2 Body weights of offspring during postpartum period - individual values
- I-Addendum 1-3 Body weights of male offspring (4-10 weeks of age)

I-Addendum 1-4	Body weights of female offspring (4-10 weeks of age)
I-Addendum 1-5	Body weights of male offspring (11-34 weeks of age)
I-Addendum 1-6	Body weights of female offspring (11-34 weeks of age)
I-Addendum 1-7	Body weights of offspring during gestation period in a reproduction test - individual values
I-Addendum 2	Litter sizes and implantations - individual values
I-Addendum 3	General appearance of offspring - individual findings
I-Addendum 4-1	Physical development test; AGD of male offspring rat on PND4 - individual values
I-Addendum 4-2	Physical development test; Relative AGD of male offspring rat on PND4 - individual values
I-Addendum 4-3	Physical development test; AGD of female offspring rat on PND4 - individual values
I-Addendum 4-4	Physical development test; Relative AGD of female offspring rat on PND4 - individual values
I-Addendum 4-5	Physical development test; Body weights of male offspring rat on PND4 - individual values
I-Addendum 4-6	Physical development test; Body weights of female offspring rat on PND4 - individual values
I-Addendum 4-7	Physical development test; Preputial separation of offspring- individual values
I-Addendum 4-8	Physical development test; A penis head type classification of offspring- individual values
I-Addendum 4-9	Physical development test; Vaginal opening of offspring - individual values
I-Addendum 5-1	Reproduction test of F1; Copulative confirmation- individual values
I-Addendum 5-2	Reproduction test of F1; fertility and general reproductive performance - individual values
I-Addendum 6	Morphometry of the female external genitalia at 10 weeks of age - individual values
I-Addendum 7-1	Serum T3 & T4 of male offspring at 10 weeks of age - individual values
I-Addendum 7-2	Serum T3 & T4 of female offspring at 10 weeks of age - individual values
I-Addendum 8-1	Estrus cycle - individual findings following the time course at 3 months
I-Addendum 8-2	Estrus cycle - individual findings following the time course at 4 months
I-Addendum 8-3	Estrus cycle - individual findings following the time course at 5 months
I-Addendum 8-4	Estrus cycle - individual findings following the time course at 6 months
I-Addendum 8-5	Estrus cycle - individual findings following the time course at 7 months
I-Addendum 8-6	Estrus cycle summary - individual findings following the time course from 3 through 7 months
I-Addendum 8-7	Estrus cycle, ovary weight and histopathological examinations - individual findings
I-Addendum 9-1	Absolute organ weights of male offspring at 10 weeks of age - individual values
I-Addendum 9-2	Relative organ weights of male offspring at 10 weeks of age - individual values
I-Addendum 9-3	Absolute organ weights of female offspring at 10 weeks of age - individual values
I-Addendum 9-4	Relative organ weights of female offspring at 10 weeks of age - individual values
I-Addendum 9-5	Absolute organ weights of male offspring at 7 months of age - individual values
I-Addendum 9-6	Relative organ weights of male offspring at 7 months of age - individual values
I-Addendum 9-7	Absolute organ weights of female offspring at 7 months of age - individual values
I-Addendum 9-8	Relative organ weights of female offspring at 7 months of age - individual values
I-Addendum 10-1	Macroscopic examinations of dams - individual findings
I-Addendum 10-2	Macroscopic examinations of male offspring at 10 weeks of age - individual findings
I-Addendum 10-3	Macroscopic examinations of female offspring at 10 weeks of age - individual findings
I-Addendum 10-4	Macroscopic examinations of male offspring at 7 months of age - individual findings
I-Addendum 10-5	Macroscopic examinations of female offspring at 7 months of age - individual findings
I-Addendum 11	Histopathological examinations of offspring - individual findings

II-Figure 1. Mean body weights of dams

II-Figure 2. Mean body weights of offspring - birth to weaning

II-Figure 3. Mean body weights of offspring - twenty eight to 182 days of age

II-Table 1-1. Body weights of dams - group mean values

II-Table 1-2. Body weights of offspring during postpartum period - group mean values

II-Table 1-3. Body weights of offspring in post weaning development - group mean values

II-Table 2-1. Litter sizes and implantations - group mean values

II-Table 3-1. General appearance of offspring at birth – summary

II-Table 4-1. Physical development test; vaginal opening of offspring - summary

II-Table 4-2. Physical development test; preputial separation of offspring - summary

II-Table 5-1. Estrus cycle - summary

II-Table 5-2. Estrus cycle - individual findings

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

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

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

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

II-Addendum 1-1. Body weights of dams - individual values

II-Addendum 1-2. Body weights of offspring during postpartum period - litter mean values

II-Addendum 1-3. Body weights of male offspring in post weaning development - individual values

II-Addendum 1-4. Body weights of female offspring in post weaning development - individual values

II-Addendum 2-1. Litter sizes and implantations - individual values

II-Addendum 3-1. General appearance of offspring at birth - individual findings

II-Addendum 4-1. Physical development test; Vaginal opening of offspring - individual values

II-Addendum 4-2. Physical development test; Preputial separation of offspring - individual values

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

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

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

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

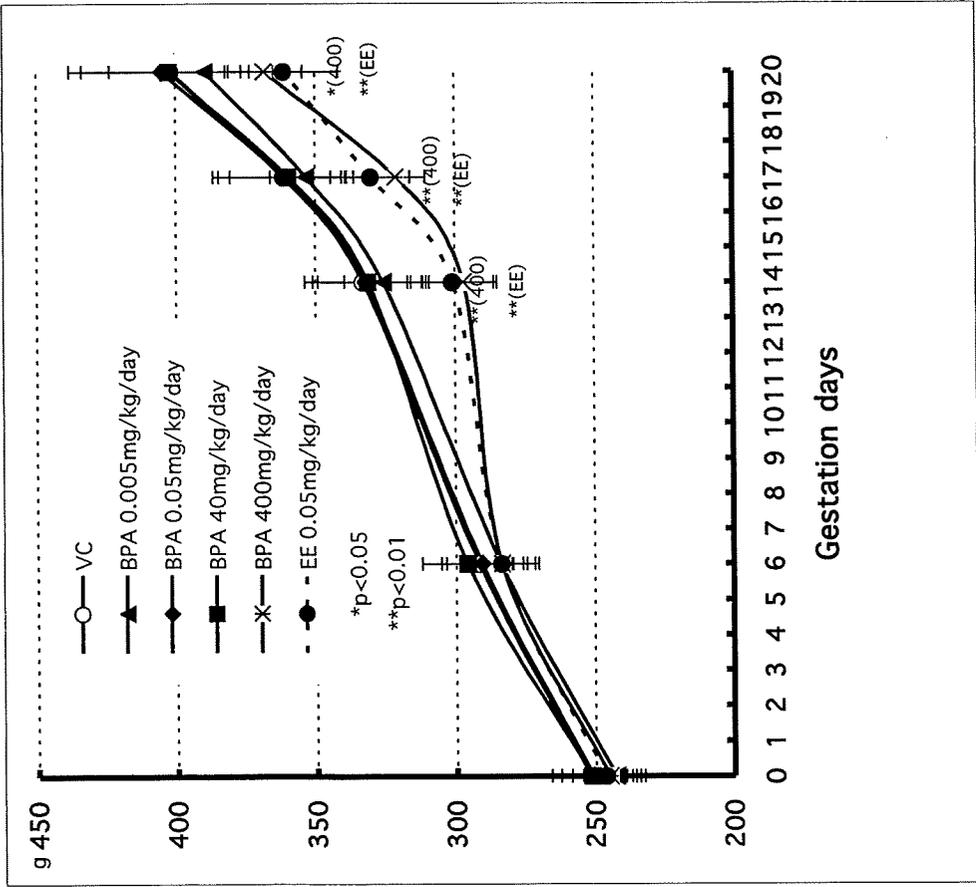
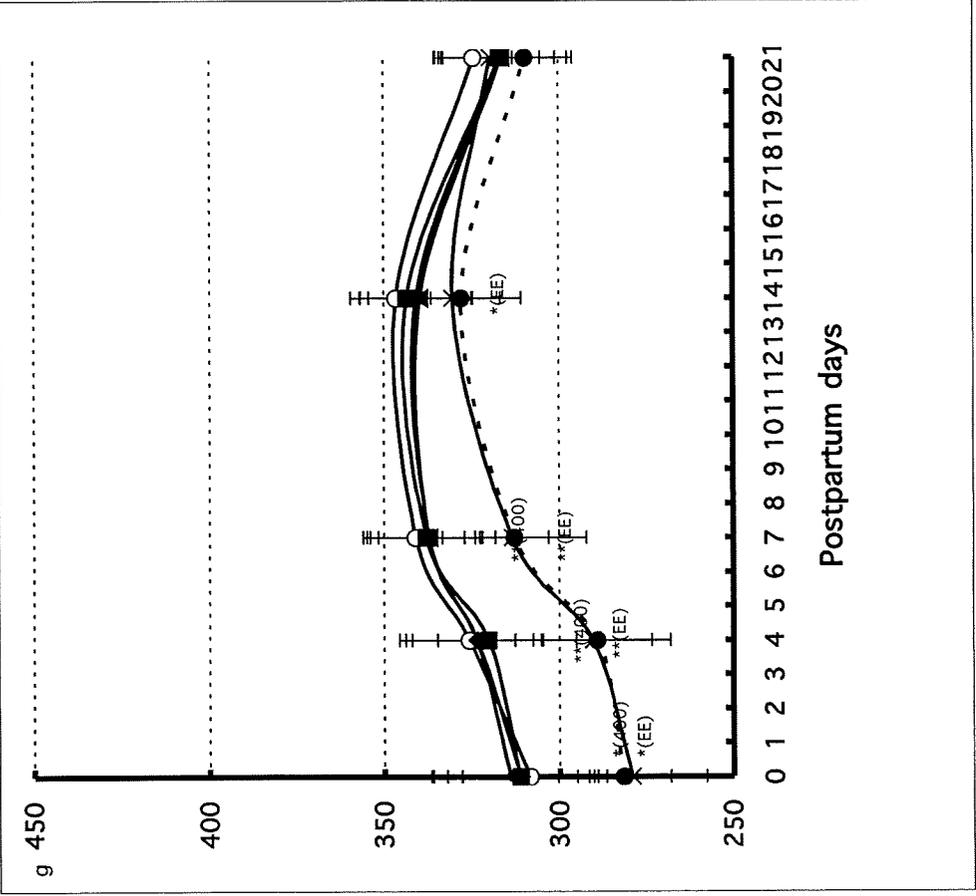
II-Addendum 5-5. Estrus cycle summary

II-Addendum 6-1. Organ weights of dams - individual values

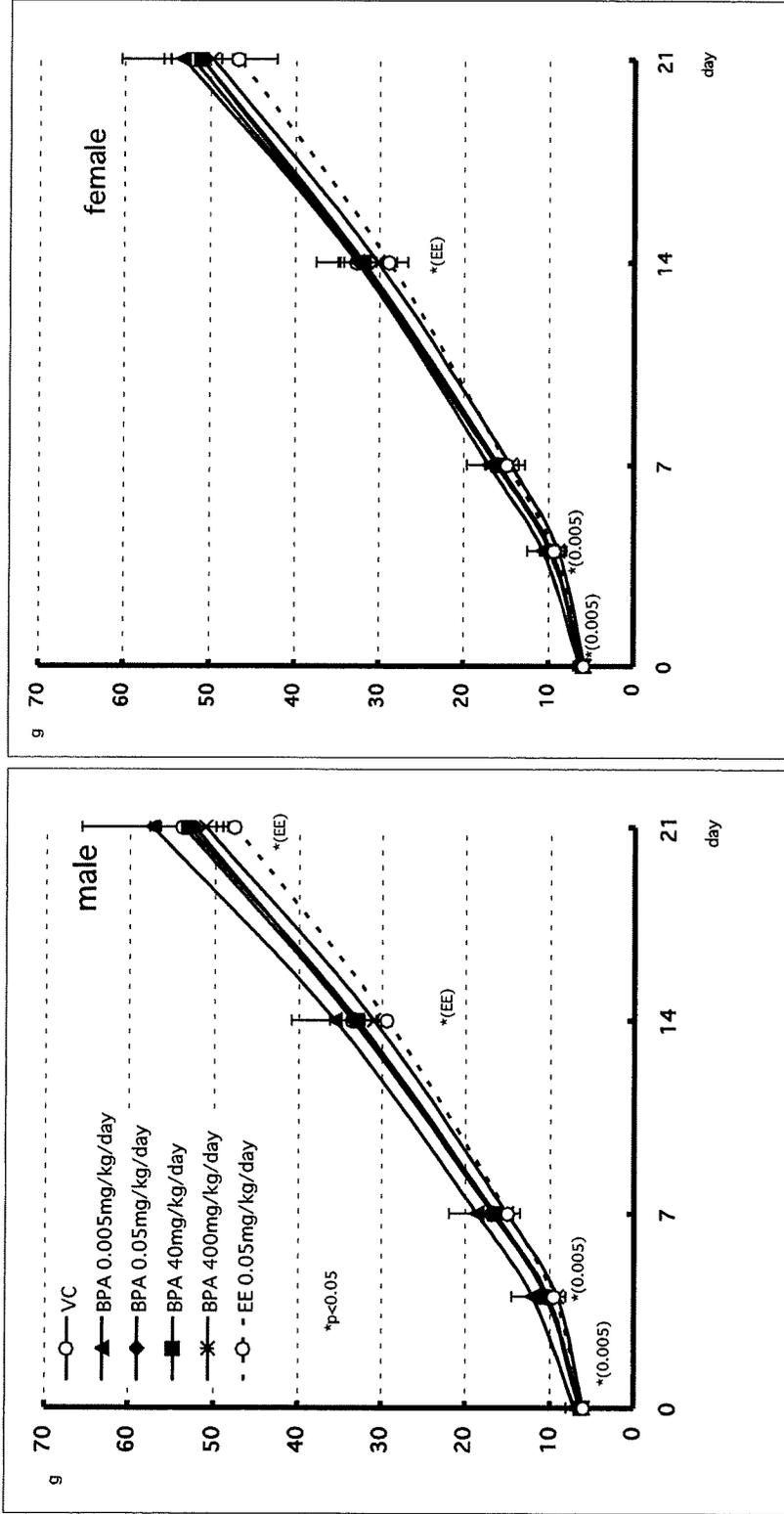
II-Addendum 6-2. Organ weights of female offspring at 3 months after birth - individual values

II-Addendum 7-1. Macroscopic examinations of dams - individual findings

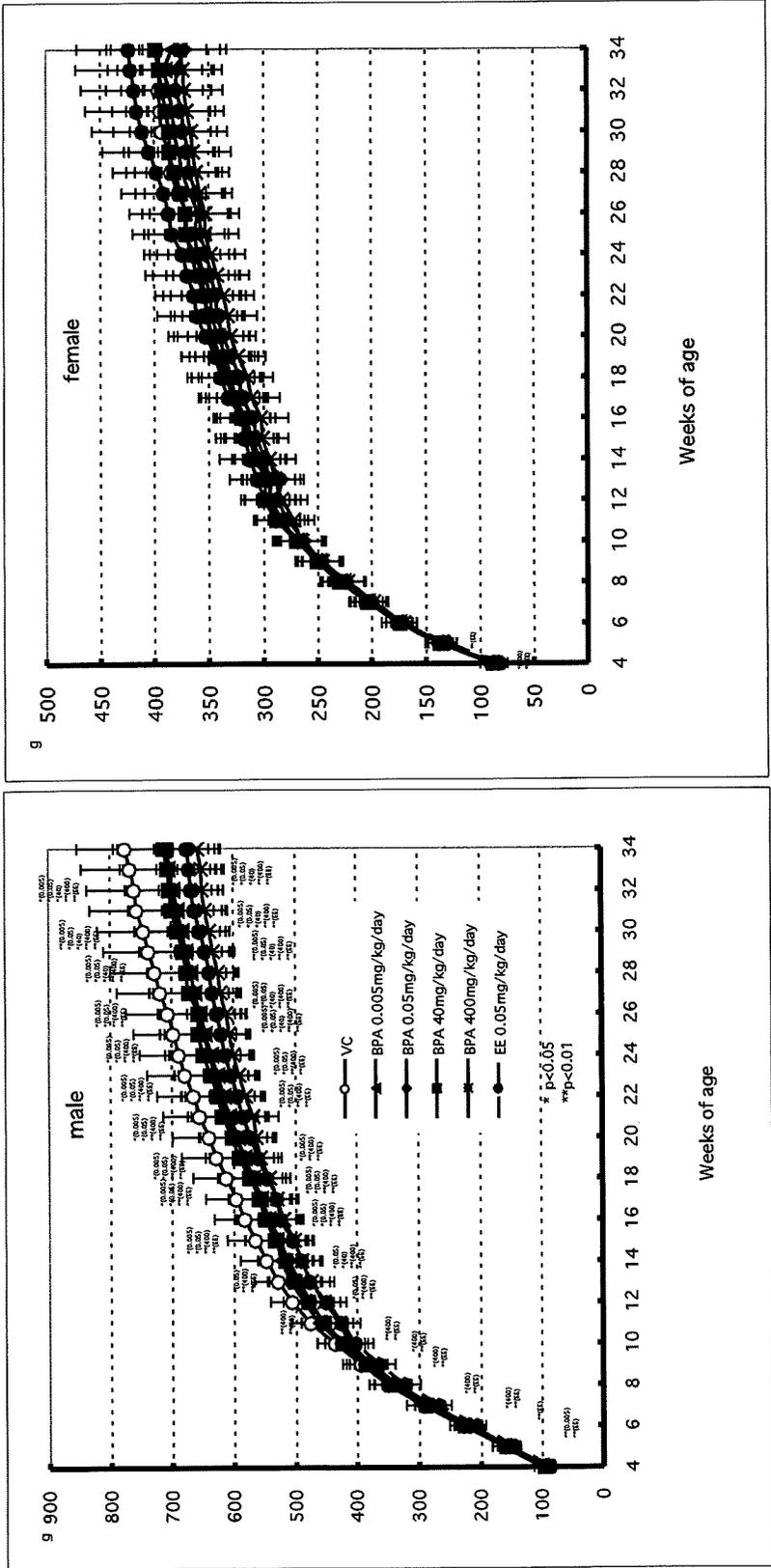
II-Addendum 7-2. Macroscopic examinations of offspring at 3 months after birth - individual findings



I-Figure 1 Mean body weights of dams



I-Figure 2 Mean body weights of offspring - birth to weaning



I-Figure 3 Mean body weights of offspring (4-34 weeks of age)

I-Table 1-1 Body weights of dams - group mean values

Exp. Group (mg/kg/day)	Gestational period (days)						Postpartum period (days)					
	0	6	14	17	20	0	4	7	14	21		
Vehicle control	Mean	251.8	291.5	332.9	361.4	401.8	308.4	325.7	340.9	346.6	324.4	
	S.D.	6.9	12.0	16.1	25.3	36.5	19.6	18.2	13.9	10.1	11.2	
	n	10	10	10	10	10	9 <sup>a)</sup>	9 <sup>a)</sup>	8 <sup>b)</sup>	8 <sup>b)</sup>	8 <sup>b)</sup>	
BPA 0.005	Mean	242.7	283.9	325.7	353.3	389.6	314.1	323.8	337.2	339.7	316.3	
	S.D.	10.3	12.2	13.8	12.9	16.3	22.5	11.1	14.5	14.7	18.9	
	n	10	10	10	10	10	10	10	10	10	10	
BPA 0.05	Mean	250.9	290.6	332.0	361.6	405.1	311.1	323.6	337.2	340.7	317.1	
	S.D.	11.7	14.6	21.8	22.9	28.7	21.0	18.5	18.8	16.1	16.2	
	n	10	10	10	10	10	10	10	10	10	10	
BPA 40	Mean	251.4	296.0	331.1	359.7	402.4	311.3	320.3	337.9	343.4	316.9	
	S.D.	14.4	16.1	19.7	20.7	21.4	24.8	25.3	16.0	16.2	15.9	
	n	10	10	10	10	10	10	10	10	10	10	
BPA 400	Mean	245.1	283.7	297.0 <sup>**</sup>	321.2 <sup>**</sup>	368.3 <sup>*</sup>	279.1 <sup>*</sup>	290.3 <sup>**</sup>	313.5 <sup>**</sup>	330.5	319.6	
	S.D.	9.4	9.2	12.1	10.7	13.8	21.3	22.2	10.6	13.8	14.5	
	n	10	10	10	10	10	10	10	9 <sup>b)</sup>	9 <sup>b)</sup>	9 <sup>b)</sup>	
EE 0.05	Mean	246.4	283.7	300.9 <sup>**</sup>	330.1 <sup>**</sup>	361.3 <sup>**</sup>	281.5 <sup>*</sup>	289.1 <sup>**</sup>	312.8 <sup>**</sup>	328.0 <sup>*</sup>	309.7	
	S.D.	12.3	13.5	14.8	14.2	19.6	13.4	15.6	20.6	17.3	13.7	
	n	10	10	10	10	10	10	10	10	10	10	

Unit: gram

a) One animal was sterile

b) One animal was neglect nursing

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

I-Table1-2 Body weights of offspring during postpartum period - group mean values

Exp. Group (mg/kg/day)	Postpartum period (days)											
	Male						Female					
	0	4	7	14	21	21	0	4	7	14	21	
Vehicle control	Mean	6.46	10.29	16.82	33.54	53.83	6.01	9.92	16.22	32.68	52.10	
	S.D.	0.55	1.06	1.42	2.77	3.90	0.45	0.99	1.32	2.26	3.37	
	n	9 (67)	9 (59)	8 (41)	8 (41)	8 (41)	9 (63) <sup>a)</sup>	9 (55) <sup>a)</sup>	8 (39) <sup>b)</sup>	8 (39) <sup>b)</sup>	8 (39) <sup>b)</sup>	
BPA 0.005	Mean	7.12 *	12.15 *	18.67	35.69	57.45	6.33 *	10.71 *	17.05	32.73	53.20	
	S.D.	0.95	2.43	3.29	5.16	8.35	0.74	1.86	2.56	4.78	7.17	
	n	10 (54)	10 (54)	10 (48)	10 (48)	10 (48)	10 (56)	10 (56)	10 (39)	10 (39)	10 (39)	
BPA 0.05	Mean	6.49	10.46	16.88	33.39	52.50	6.14	9.87	16.08	32.52	51.06	
	S.D.	0.65	1.28	1.52	2.01	3.97	0.67	1.19	1.42	2.17	3.52	
	n	10 (73)	10 (73)	10 (56)	10 (56)	10 (56)	10 (63)	10 (60)	10 (43)	10 (43)	10 (43)	
BPA 40	Mean	6.37	10.29	16.59	32.97	53.16	5.95	9.74	15.92	31.91	51.07	
	S.D.	0.55	1.21	1.63	2.33	4.02	0.55	1.04	1.42	2.33	3.60	
	n	10 (72)	10 (70)	10 (49)	10 (49)	10 (49)	10 (66)	10 (63)	10 (50)	10 (50)	10 (50)	
BPA 400	Mean	6.05	9.19	15.16	31.07	51.14	5.73	8.93	14.54	30.23	49.75	
	S.D.	0.38	1.05	1.55	1.78	2.60	0.37	1.06	1.71	1.91	2.97	
	n	10 (72)	10 (65)	9 (45)	9 (45)	9 (45)	10 (66)	10 (58)	9 (45) <sup>b)</sup>	9 (45) <sup>b)</sup>	9 (45) <sup>b)</sup>	
EE 0.05	Mean	6.02	9.51	15.00	29.39 *	47.69 *	5.83	9.37	14.93	28.86 *	46.71	
	S.D.	0.64	1.33	1.58	2.73	4.65	0.58	1.20	1.33	2.24	4.46	
	n	10 (67)	10 (67)	10 (50)	10 (50)	10 (50)	10 (66)	10 (66)	10 (50)	10 (50)	10 (50)	

Unit: gram

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

a) One animal was sterile

b) One animal was neglect nursing

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

1-Table1-3 Body weights of offspring (4-10 weeks of age) - group mean values

Exp. Group (mg/kg/day)	Postpartum period (weeks)																													
	Male										Female																			
	4	5	6	7	8	9	10	4	5	6	7	8	9	10	4	5	6	7	8	9	10									
Vehicle control	Mean	95.8	159.6	227.2	290.8	349.4	393.0	435.7	89.6	138.2	175.3	203.2	223.4	247.6	268.6	Mean	95.8	159.6	227.2	290.8	349.4	393.0	435.7	89.6	138.2	175.3	203.2	223.4	247.6	268.6
	S.D.	6.1	9.8	12.9	16.2	23.0	25.2	30.5	5.1	10.0	11.9	13.2	17.1	17.5	22.1	S.D.	6.1	9.8	12.9	16.2	23.0	25.2	30.5	5.1	10.0	11.9	13.2	17.1	17.5	22.1
	n	41	41	41	41	41	41	41	41	39	39	39	39	39	39	n	41	41	41	41	41	41	41	39	39	39	39	39	39	39
BPA 0.005	Mean	102.0 **	164.2	229.6	293.6	350.2	388.9	426.5	89.8	136.6	174.7	203.4	225.8	248.5	267.0	Mean	102.0 **	164.2	229.6	293.6	350.2	388.9	426.5	89.8	136.6	174.7	203.4	225.8	248.5	267.0
	S.D.	12.0	17.3	22.2	26.7	31.4	35.1	38.2	10.4	14.2	16.2	17.8	19.8	21.3	23.5	S.D.	12.0	17.3	22.2	26.7	31.4	35.1	38.2	10.4	14.2	16.2	17.8	19.8	21.3	23.5
	n	48	48	48	48	48	48	48	48	39	39	39	39	39	39	n	48	48	48	48	48	48	48	39	39	39	39	39	39	39
BPA 0.05	Mean	94.6	157.0	220.4	283.7	342.1	383.6	421.6	87.7	134.8	171.5	199.3	223.0	245.8	263.5	Mean	94.6	157.0	220.4	283.7	342.1	383.6	421.6	87.7	134.8	171.5	199.3	223.0	245.8	263.5
	S.D.	5.8	9.6	13.4	16.8	18.3	21.5	24.6	5.0	7.1	9.1	12.2	16.1	19.4	20.9	S.D.	5.8	9.6	13.4	16.8	18.3	21.5	24.6	5.0	7.1	9.1	12.2	16.1	19.4	20.9
	n	56	56	56	56	56	56	56	56	43	43	43	43	43	43	n	56	56	56	56	56	56	56	43	43	43	43	43	43	
BPA 40	Mean	96.4	159.2	226.3	287.7	345.9	386.3	424.1	88.1	136.9	174.4	204.3	229.9	250.6	269.9	Mean	96.4	159.2	226.3	287.7	345.9	386.3	424.1	88.1	136.9	174.4	204.3	229.9	250.6	269.9
	S.D.	7.4	14.2	18.4	20.4	27.3	27.2	28.9	6.7	12.2	12.6	14.9	18.1	20.4	21.9	S.D.	7.4	14.2	18.4	20.4	27.3	27.2	28.9	6.7	12.2	12.6	14.9	18.1	20.4	21.9
	n	49	49	49	49	49	49	49	50	50	50	50	50	50	50	n	49	49	49	49	49	49	49	50	50	50	50	50	50	
BPA 400	Mean	92.6	154.7	216.8 *	278.7 *	334.8 *	376.2 *	411.7 **	85.7 *	133.9	170.0	198.2	222.1	245.7	265.2	Mean	92.6	154.7	216.8 *	278.7 *	334.8 *	376.2 *	411.7 **	85.7 *	133.9	170.0	198.2	222.1	245.7	265.2
	S.D.	5.1	10.1	13.7	15.7	21.4	24.9	27.8	5.1	8.9	11.2	13.4	14.8	18.7	21.6	S.D.	5.1	10.1	13.7	15.7	21.4	24.9	27.8	5.1	8.9	11.2	13.4	14.8	18.7	21.6
	n	45	45	45	45	45	45	45	45	45	45	45	45	45	45	n	45	45	45	45	45	45	45	45	45	45	45	45		
EE 0.05	Mean	86.9 **	145.4 **	206.7 **	266.8 **	322.0 **	364.6 **	401.8 **	82.0 **	130.4 **	170.8	200.5	224.1	248.5	267.5	Mean	86.9 **	145.4 **	206.7 **	266.8 **	322.0 **	364.6 **	401.8 **	82.0 **	130.4 **	170.8	200.5	224.1	248.5	267.5
	S.D.	7.2	9.7	14.0	18.1	24.3	25.3	27.1	6.8	8.8	12.1	14.3	16.7	19.9	21.9	S.D.	7.2	9.7	14.0	18.1	24.3	25.3	27.1	6.8	8.8	12.1	14.3	16.7	19.9	21.9
	n	50	50	50	50	50	50	50	50	50	50	50	50	50	50	n	50	50	50	50	50	50	50	50	50	50	50	50		

Unit; gram

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

**i-Table1-4 Body weights of offspring (11 - 34 weeks of age) - group mean values**

Male Exp.group (mg/kg/day)	Postpartum period (weeks)												
	11	12	13	14	15	16	17	18	19	20	21	22	
Vehicle control	Mean	476.1	505.4	528.3	547.5	564.9	582.4	596.0	611.8	627.5	640.4	655.1	664.3
	S.D.	32.0	36.4	40.3	42.6	46.4	49.1	49.7	53.8	57.2	58.9	59.3	59.6
	n	18	18	18	18	18	18	18	18	18	18	18	18
BPA 0.005	Mean	462.0	486.7	507.4	523.8	531.1 *	544.3 *	556.7 *	569.7 *	583.2 *	593.5 *	607.4 *	615.8 *
	S.D.	30.1	34.1	35.6	38.3	51.1	51.1	51.0	52.9	54.7	56.2	60.8	62.2
	n	22	22	22	22	29	28	28	28	28	28	28	28
BPA 0.05	Mean	453.7	477.1 *	495.0 *	511.8 *	526.8 *	541.1 *	556.2 *	568.4 *	584.0 *	595.8 *	611.4 *	619.8 *
	S.D.	27.2	30.7	35.0	38.0	43.9	45.6	49.2	53.3	56.0	58.7	61.7	63.5
	n	26	26	26	26	29	29	29	29	29	29	29	29
BPA 40	Mean	453.5	479.8	502.0	516.6 *	533.1	549.4	559.5	573.9	590.6	601.6	617.7	626.0
	S.D.	37.4	40.5	44.5	44.9	48.1	49.6	49.5	52.1	54.7	55.2	56.7	59.5
	n	22	22	22	22	22	22	22	22	22	22	22	22
BPA 400	Mean	429.2 **	453.5 **	475.0 **	491.2 **	503.1 **	519.8 **	530.2 **	542.4 **	557.4 **	564.4 **	569.0 **	581.6 **
	S.D.	21.7	25.6	29.7	29.9	29.4	30.1	30.2	32.9	33.5	30.3	41.6	32.6
	n	18	18	18	18	18	18	18	18	18	18	18	17
EE 0.05	Mean	424.8 **	449.8 **	477.0 **	489.4 **	504.3 **	524.2 **	530.6 **	546.6 **	561.5 **	571.7 **	584.9 **	594.5 **
	S.D.	29.5	31.2	38.8	32.8	33.1	36.9	34.6	37.7	39.3	40.6	42.0	44.4
	n	22	22	22	22	22	22	22	22	22	22	22	22

Unit: gram

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

I-Table1-4 Body weights of offspring (11 - 34 weeks of age) - group mean values

continued Male		Postpartum period (weeks)												
		23	24	25	26	27	28	29	30	31	32	33	34	
Exp.group (mg/kg/day)	Vehicle	678.2	688.9	697.5	705.9	717.9	727.1	737.1	745.2	756.1	759.9	766.9	774.4	
	S.D.	61.9	63.5	64.8	67.7	70.6	72.3	73.4	75.4	76.0	78.0	79.0	79.1	
	n	18	18	18	18	18	18	18	18	18	18	18	18	
BPA 0.005	Mean	626.2 *	636.1 *	645.4 *	653.4 *	662.3 *	668.3 *	676.6 *	682.3 **	690.7 **	697.6 *	705.2 *	708.2 *	
	S.D.	63.3	64.7	66.1	65.8	67.7	69.4	71.0	70.5	73.7	73.9	77.6	85.4	
	n	28	28	28	28	28	27	27	27	27	27	27	27	
BPA 0.05	Mean	630.5 *	639.2 *	648.1 *	653.7 *	663.4 *	667.4 **	677.9 *	685.4 *	694.0 *	699.1 *	702.0 **	707.8 *	
	S.D.	65.3	65.4	69.7	68.0	71.8	72.0	73.7	74.4	75.8	76.2	76.0	78.7	
	n	29	29	29	29	29	29	29	29	29	29	29	29	
BPA 40	Mean	636.5	649.2	657.0	656.7 *	671.3	675.0 *	681.9 *	690.0 *	698.8 *	702.9 *	706.4 *	712.7 *	
	S.D.	60.1	61.4	61.9	59.5	64.6	64.4	64.6	69.2	68.2	69.5	70.4	74.0	
	n	22	22	22	22	22	22	22	22	22	22	22	22	
BPA 400	Mean	591.3 **	600.3 **	607.2 **	611.8 **	621.1 **	624.7 **	632.3 **	639.2 **	646.0 **	650.7 **	651.5 **	657.8 **	
	S.D.	33.0	33.2	34.1	31.9	33.2	33.9	32.4	33.0	36.9	34.4	37.9	38.4	
	n	17	17	17	17	17	17	17	17	17	17	17	17	
EE 0.05	Mean	604.1 **	613.8 **	619.8 **	626.4 **	633.8 **	639.1 **	645.7 **	655.1 **	663.0 **	667.1 **	670.5 **	674.7 **	
	S.D.	44.2	45.0	45.9	48.0	47.1	48.5	48.4	49.9	50.9	52.1	53.1	52.4	
	n	22	22	22	22	22	22	22	22	22	22	22	22	

Unit: gram

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

I-Table1-4 Body weights of offspring (11 - 34 weeks of age) - group mean values

continued Female		Postpartum period (weeks)													
		11	12	13	14	15	16	17	18	19	20	21	22		
<b>Exp.group (mg/kg/day)</b>	Vehicle	283.0	294.1	295.5	303.6	313.8	318.7	327.9	334.1	343.2	347.9	352.4	354.1		
	S.D.	23.8	23.4	24.6	23.3	25.8	25.3	29.6	31.6	31.9	34.3	32.9	37.8		
	n	17	17	16	16	16	16	16	16	16	16	16	16		
<b>BPA 0.005</b>	Mean	285.3	294.7	293.2	302.9	311.4	316.8	325.4	330.1	335.4	341.3	347.0	348.4		
	S.D.	22.5	23.4	22.3	23.3	23.2	23.1	24.7	26.9	27.2	28.1	27.1	26.5		
	n	20	20	20	20	20	20	20	20	20	20	20	20		
<b>BPA 0.05</b>	Mean	277.4	286.3	284.3	297.9	306.7	310.2	319.4	322.5	329.6	337.1	342.0	343.6		
	S.D.	18.3	20.1	21.2	18.9	20.3	20.9	23.2	22.2	24.7	24.1	24.8	23.6		
	n	19	19	19	19	19	19	19	19	19	19	19	19		
<b>BPA 40</b>	Mean	288.3	298.5	298.6	307.6	313.3	320.0	328.6	332.0	339.4	347.1	351.0	353.6		
	S.D.	19.6	19.5	20.6	21.4	23.0	22.9	24.1	27.8	27.9	31.9	30.9	31.6		
	n	22	22	22	22	24	24	24	24	24	24	24	24		
<b>BPA 400</b>	Mean	272.4	283.3	289.0	294.6	300.8	302.9	310.9	315.3	323.6	330.1	333.4	336.9		
	S.D.	19.5	23.2	22.9	24.3	23.7	25.5	25.5	23.6	25.3	22.9	27.1	28.0		
	n	18	18	18	18	18	18	18	18	18	18	18	17		
<b>EE 0.05</b>	Mean	288.1	298.5	306.1	312.8	317.4	320.4	331.9	339.0	344.3	352.7	360.9	363.4		
	S.D.	21.2	22.4	25.2	27.8	26.3	25.9	27.8	30.9	31.1	34.5	36.7	35.6		
	n	22	22	22	22	22	22	22	22	22	22	22	22		

Unit: gram

I-Table1-4 Body weights of offspring (11 - 34 weeks of age) - group mean values

continued Female	Exp.group (mg/kg/day)	Postpartum period (weeks)												
		23	24	25	26	27	28	29	30	31	32	33	34	
Vehicle control	Mean	361.5	365.0	370.8	370.3	377.5	384.5	385.9	392.7	394.0	395.8	394.7	397.7	
	S.D.	39.9	39.4	38.6	40.6	39.8	40.9	42.0	44.9	44.3	48.4	47.5	45.8	
	n	16	16	16	16	16	16	16	16	16	16	16	16	
BPA 0.005	Mean	354.3	359.5	362.9	361.0	366.7	374.0	377.7	381.4	384.1	386.7	390.2	383.9	
	S.D.	28.3	28.0	27.5	30.2	29.6	32.8	32.1	33.7	35.5	31.8	34.5	44.3	
	n	20	20	19	19	19	19	19	19	19	19	19	19	
BPA 0.05	Mean	348.3	352.1	358.0	357.7	362.1	367.3	368.5	372.4	375.0	379.1	378.7	372.2	
	S.D.	26.1	25.8	26.1	25.1	27.2	29.4	27.9	30.4	31.3	31.3	33.8	38.3	
	n	19	19	19	19	19	19	19	19	19	19	19	19	
BPA 40	Mean	356.8	363.3	370.8	371.6	375.5	381.8	386.0	386.3	389.7	393.0	395.5	399.2	
	S.D.	32.4	34.1	34.2	32.5	33.2	35.9	37.4	35.6	35.9	36.8	38.2	40.5	
	n	24	24	24	24	24	24	24	24	24	24	24	24	
BPA 400	Mean	342.8	348.6	353.5	353.2	358.5	362.1	364.6	366.5	370.6	372.9	373.9	376.3	
	S.D.	29.2	31.6	30.8	31.1	30.2	30.6	34.8	33.2	34.6	35.6	36.2	36.9	
	n	17	17	17	17	17	17	17	17	17	17	17	17	
EE 0.05	Mean	369.9	374.5	384.0	386.8	391.1	398.2	404.9	410.7	415.8	418.4	421.7	423.5	
	S.D.	38.0	35.0	35.8	36.1	38.8	39.8	42.7	46.3	47.3	49.2	50.5	47.7	
	n	22	22	22	22	22	22	22	22	22	22	22	22	

Unit: gram

I-Table1-5 Body weights of offspring during gestation period in a reproduction test

Exp.group (mg/kg/day)	Gestation period (day)													
	P0	P4	P7	P14	P17	P20	P0	P4	P7	P14	P17	P20		
Vehicle control	Mean	313.8	336.9	350.8	386.6	417.0	466.6	Mean	313.8	336.9	350.8	386.6	417.0	466.6
	S.D.	23.7	22.1	22.7	22.8	22.6	25.7	S.D.	23.7	22.1	22.7	22.8	22.6	25.7
	n	15	15	15	15	15	15	n	15	15	15	15	15	15
BPA 0.005	Mean	297.0	319.3	330.3	360.8	389.9	435.1	Mean	297.0	319.3	330.3	360.8	389.9	435.1
	S.D.	19.9	20.6	19.4	20.9	21.4	24.0	S.D.	19.9	20.6	19.4	20.9	21.4	24.0
	n	13	13	13	13	13	13	n	13	13	13	13	13	13
BPA 0.05	Mean	296.9	318.7	330.8	363.0	391.3	440.0	Mean	296.9	318.7	330.8	363.0	391.3	440.0
	S.D.	22.9	22.1	23.4	25.4	27.1	29.0	S.D.	22.9	22.1	23.4	25.4	27.1	29.0
	n	17	17	17	17	17	17	n	17	17	17	17	17	17
BPA 40	Mean	310.5	334.6	347.8	379.6	409.3	456.5	Mean	310.5	334.6	347.8	379.6	409.3	456.5
	S.D.	33.5	32.8	34.0	35.7	39.9	51.0	S.D.	33.5	32.8	34.0	35.7	39.9	51.0
	n	16	16	16	16	16	16	n	16	16	16	16	16	16
BPA 400	Mean	303.4	323.6	334.9	368.1	397.0	442.7	Mean	303.4	323.6	334.9	368.1	397.0	442.7
	S.D.	21.3	21.7	22.9	25.0	31.4	41.3	S.D.	21.3	21.7	22.9	25.0	31.4	41.3
	n	18	18	18	18	18	18	n	18	18	18	18	18	18
EE 0.05	Mean	302.6	323.6	335.6	372.4	398.5	452.4	Mean	302.6	323.6	335.6	372.4	398.5	452.4
	S.D.	32.2	35.1	35.7	44.2	44.7	47.7	S.D.	32.2	35.1	35.7	44.2	44.7	47.7
	n	14	14	14	14	14	14	n	14	14	14	14	14	14

Unit: g

i-Table 2 Litter sizes and implantations - group mean values

Dams	Exp.group (mg/kg/day)	Vehicle control			BPA 0.005			
		Sex	Male	Female	Total	Male	Female	Total
Newborns Period I (Birth day)	Number of animals mated		10			10		
	Number of delivering animals <sup>a)</sup>		9 (90)			10 (100)		
	Number of dams delivering live newborns <sup>a)</sup>		9 (90)			10 (100)		
	Duration of pregnancy (days, mean ± SD)		21.9 ± 0.6			22.1 ± 0.6		
	Number of implantation sites		141 [15.7 ± 1.0]			115 [11.5 ± 4.1] **		
Period I (From birth to day 4)	Number of newborns		67 [7.4 ± 2.6]		65 [7.2 ± 2.5]		54 [5.4 ± 1.5]	
	Number of stillborns <sup>b)</sup>		0		2 (1.5)		0	
	Number of live newborns at birth <sup>b)</sup>		67 [7.4 ± 2.6]		63 [7.0 ± 2.3]		54 [5.4 ± 1.5]	
	Sex ratio of live newborns at birth (male/female)				106.3 (67/63)			96.4 (54/56)
Period II (From day 4 to day 21)	Number of deads <sup>c)</sup>		8 (11.9)		8 (12.7)		0 (0)	
	Number of live newborns on day 4 <sup>c)</sup>		59 (88.1)		55 (87.3)		54 (100)	
Period III (After weaning)	Number of live newborns just after culling		41 [5.1 ± 0.6]		39 [4.9 ± 0.6]		48 [4.8 ± 0.9]	
	Number of deads <sup>d)</sup>		0 (0)		0 (0)		0 (0)	
	Number of weanings <sup>d)</sup>		41 (100)		39 (100)		48 (100)	
Period IV (After weaning)	Number of deads <sup>e)</sup>		0 (0)		0 (0)		0 (0)	
	Number of live animals <sup>e)</sup>		41 (100)		39 (100)		48 (100)	

EE, Ethinyl estradiol.

Value in brackets represents mean ± S.D.

a), Value in parenthesis represents the percentage to the number of animals mated.

b), Value in parenthesis represents the percentage to the number of implantation sites.

c), Value in parenthesis represents the percentage to the number of live newborns at birth.

d), Value in parenthesis represents the percentage to the number of live newborns just after culling.

e), Value in parenthesis represents the percentage to the number of weanings.

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

I-Table 2 Litter sizes and implantations - group mean values

		BPA 0.05		BPA 40	
		Exp.group (mg/kg/day)			
Dams		Sex		Total	
		Male	Female	Male	Female
	Number of animals mated	10	10	10	10
	Number of delivering animals <sup>a)</sup>	10 (100)	10 (100)	10 (100)	10 (100)
	Number of dams delivering live newborns <sup>a)</sup>	10 (100)	10 (100)	10 (100)	10 (100)
	Duration of pregnancy (days, mean ± SD)	21.7 ± 0.5	21.7 ± 0.5	21.6 ± 0.5	21.6 ± 0.5
	Number of implantation sites	148 [14.8 ± 1.4]	148 [14.8 ± 1.4]	148 [14.8 ± 1.0]	148 [14.8 ± 1.0]
<b>Newborns</b>					
<b>Period I (Birth day)</b>					
	Number of newborns	76 [7.6 ± 1.7]	64 [6.4 ± 2.5]	140 [14.0 ± 1.8]	138 [13.8 ± 1.8]
	Number of stillborns <sup>b)</sup>	3	1	4 (2.9)	0 (0)
	Number of live newborns at birth <sup>b)</sup>	73 [7.3 ± 1.7]	63 [6.3 ± 2.5]	136 (97.1)	138 (100)
	Sex ratio of live newborns at birth (male/female)		115.9 (73/63)		109.1 (72/66)
<b>Period II (From birth to day 4)</b>					
	Number of deads <sup>c)</sup>	0 (0.0)	3 (4.8)	3 (2.2)	5 (3.6)
	Number of live newborns on day 4 <sup>c)</sup>	73 (100)	60 (95.2)	133 (97.8)	133 (96.4)
<b>Period III (From day 4 to day 21)</b>					
	Number of live newborns just after culling	56 [5.6 ± 1.3]	44 [4.4 ± 1.3]	100 [10 ± 0.0]	99 [9.9 ± 0.3]
	Number of deads <sup>d)</sup>	0 (0)	1 (2.3)	1 (1)	0 (0)
	Number of weanlings <sup>e)</sup>	56 (100) [5.6 ± 1.3]	43 (97.7) [4.4 ± 1.3]	99 (99)	99 (100)
<b>Period IV (After weaning)</b>					
	Number of deads <sup>e)</sup>	0 (0)	0 (0)	0 (0)	0 (0)
	Number of live animals <sup>e)</sup>	56 (100)	43 (100)	99 (100)	99 (100)

EE, Ethinyl estradiol.

Value in brackets represents mean ± S.D.

a), Value in parenthesis represents the percentage to the number of animals mated.

b), Value in parenthesis represents the percentage to the number of implantation sites.

c), Value in parenthesis represents the percentage to the number of live newborns at birth.

d), Value in parenthesis represents the percentage to the number of live newborns just after culling.

e), Value in parenthesis represents the percentage to the number of weanlings.

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

1-Table 2 Litter sizes and implantations - group mean values

Dams	Exp.group (mg/kg/day)		BPA 400		EE 0.05	
	Male	Female	Male	Female	Male	Female
<b>Newborns</b>						
<b>Period I (Birth day)</b>						
Number of animals mated		10				10
Number of delivering animals <sup>a)</sup>		10 (100)				10 (100)
Number of dams delivering live newborns <sup>a)</sup>		10 (100)				10 (100)
Duration of pregnancy (days, mean ± SD)		21.6 ± 0.5				21.8 ± 0.4
Number of implantation sites		148 [14.8 ± 1.0]				142 [14.2 ± 1.3]
	Sex	Total	Sex	Total	Sex	Total
	Male	Female	Male	Female	Male	Female
Number of newborns	73 [7.3 ± 1.3]	67 [6.7 ± 0.9]	140 [14.0 ± 1.6]	67 [6.8 ± 2.5]	67 [6.7 ± 1.9]	134 [13.5 ± 1.1]
Number of stillborns <sup>b)</sup>	1	1	2 (1.4)	1	1	1 (0.7)
Number of live newborns at birth <sup>b)</sup>	72	66	138 (98.6)	66	66	133 (99.3)
Sex ratio of live newborns at birth (male/female)	[7.2 ± 1.4]	[6.6 ± 0.8]	[13.8 ± 1.4]	[6.8 ± 2.5]	[6.6 ± 1.8]	[13.3 ± 1.2]
			109.1 (72/66)			101.5 (67/66)
<b>Period II (From birth to day 4)</b>						
Number of deads <sup>c)</sup>	7 (9.7)	8 (12.1)	15 (10.9)	0 (0)	0 (0)	1 (0.7)
Number of live newborns on day 4 <sup>c)</sup>	65 (90.3)	58 (87.8)	123 (89.1)	67 (100)	66 (100)	133 (99.3)
<b>Period III (From day 4 to day 21)</b>						
Number of live newborns just after culling	45 [5.0 ± 0.0]	45 [5.0 ± 0.0]	90 [9.0 ± 3.2]	50 [5.0 ± 0.9]	50 [5.0 ± 0.9]	100 [10 ± 0]
Number of deads <sup>d)</sup>	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Number of weanlings <sup>d)</sup>	45 (100)	45 (100)	90 (100)	50 (100)	50 (100)	100 (100)
	[5.0 ± 0.0]	[5.0 ± 0.0]	[5.0 ± 0.0]	[5.0 ± 0.9]	[5.0 ± 0.9]	[5.0 ± 0.9]
<b>Period IV (After weaning)</b>						
Number of deads <sup>e)</sup>	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Number of live animals <sup>e)</sup>	45 (100)	45 (100)	90 (100)	50 (100)	50 (100)	100 (100)

EE, Ethinyl estradiol.

Value in brackets represents mean ± S.D.

a), Value in parenthesis represents the percentage to the number of animals mated.

b), Value in parenthesis represents the percentage to the number of implantation sites.

c), Value in parenthesis represents the percentage to the number of live newborns at birth.

d), Value in parenthesis represents the percentage to the number of live newborns just after culling.

e), Value in parenthesis represents the percentage to the number of weanlings.

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

I-Table 3 General appearance of offspring at birth - Summary

Exp.group (mg/kg/day)	Male					Female				
	Face/Mouth Eye/Ear	Palate	Abdomen	Tail Anogenital region	Head/Back	Face/Mouth Eye/Ear	Palate	Abdomen	Tail Anogenital region	Head/Back
VehicleControl	NAD(67)	NAD(67)	NAD(67)	NAD(67)	NAD(67)	NAD(63)	NAD(63)	NAD(63)	NAD(63)	NAD(63)
BPA 0.005	NAD(54)	NAD(54)	NAD(54)	NAD(54)	NAD(54)	NAD(56)	NAD(56)	NAD(56)	NAD(56)	NAD(56)
BPA 0.05	NAD(73)	NAD(73)	NAD(73)	NAD(73)	NAD(73)	NAD(63)	NAD(63)	NAD(63)	NAD(63)	NAD(63)
BPA 40	NAD(72)	NAD(72)	NAD(72)	NAD(72)	NAD(72)	NAD(66)	NAD(66)	NAD(66)	NAD(66)	NAD(66)
BPA 400	NAD(72)	NAD(72)	NAD(72)	NAD(72)	NAD(72)	NAD(66)	NAD(66)	NAD(66)	NAD(66)	NAD(66)
EE 0.05	NAD(67)	NAD(67)	NAD(67)	NAD(67)	NAD(67)	NAD(66)	NAD(66)	NAD(66)	NAD(66)	NAD(66)

NAD, No abnormalities detected

Value in parentheses of the number of offspring

**I-Table 4-1 Physical development test; Anogenital distance (AGD) and body weights of male offspring on PND4 - group mean values**

Exp.group (mg/kg/day)	AGD		RelativeAGD		Body weight
	mm	Unit; AGD/ $\sqrt{b.w.}$	g	g	
vehicle control	Mean	4.75	2.20	10.29	
	S.D.	0.36	0.18	1.06	
	n	9 (59)	9 (59)	9 (59)	
BPA 0.005	Mean	4.93	2.15	12.15 *	
	S.D.	0.64	0.22	2.43	
	n	10 (54)	10 (54)	10 (54)	
BPA 0.05	Mean	4.66	2.13	10.46	
	S.D.	0.53	0.24	1.28	
	n	10 (73)	10 (73)	10 (73)	
BPA 40	Mean	4.58	2.12	10.29	
	S.D.	0.40	0.05	1.21	
	n	10 (70)	10 (70)	10 (70)	
BPA 400	Mean	4.68	2.24	9.19	
	S.D.	0.57	0.29	1.05	
	n	10 (65)	10 (65)	10 (65)	
EE 0.05	Mean	5.09	2.41	9.51	
	S.D.	0.39	0.15	1.33	
	n	10 (67)	10 (67)	10 (67)	

\*p<0.05

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

I-Table 4-2 Physical Development test; Anogenital distance (AGD) and body weights of female offspring on PND4 - group mean values

Exp.group (mg/kg/day)	AGD mm		RelativeAGD AGD/3√ b.w.		Body weight g	
	Mean	S.D. n	Mean	S.D. n	Mean	S.D. n
vehicle control	2.28	0.23 9 (55)	1.06	0.11 9 (55)	9.92	0.99 9 (55)
BPA 0.005	2.31	0.26 10 (56)	1.05	0.12 10 (56)	10.71 *	1.86 10 (56)
BPA 0.05	2.20	0.30 10 (60)	1.03	0.14 10 (60)	9.87	1.19 10 (60)
BPA 40	2.29	0.27 10 (63)	1.07	0.12 10 (63)	9.74	1.04 10 (63)
BPA 400	2.21	0.29 10 (58)	1.07	0.14 10 (58)	8.93	1.06 10 (58)
EE 0.05	2.41	0.22 10 (66)	1.15	0.11 10 (66)	9.37	1.20 10 (66)

\*p<0.05

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