ブチルアルデヒドの rasH2 マウスを用いた
吸入による中期発がん性試験報告書

試験番号：0919

TABLES

TABLES

TABLES (CONTINUED)

TABLES (CONTINUED)

TABLE A

CONCENTRATIONS OF BUTYRALDEHYDE IN THE INHALATION CHAMBER OF rasH2 MICE IN THE 26-WEEK CARCINOGENICITY STUDY

TABLE A CONCENTRATIONS OF BUTYRALDEHYDE IN THE INHALATION CHAMBER OF rasH2 MICE IN THE 26-WEEK CARCINOGENICITY

Group Name	Concentration(ppm) Mean ± S.D.
Control	0.0 ± 0.0
300 ppm	299.8 ± 1.1
1000 ppm	1000.5 ± 3.9
3000 ppm	3000.9 ±10.7

TABLE B1

SURVIVAL ANIMAL NUMBERS : MALE

STUDY NO. : 0919 SURVIVAL ANIMAL NUMBERS
ANIMAL : CByB6F1-Tg(HRAS)2Jic (tg/wt)
REPORT TYPE : A1 26
SEX : MALE

Group Name	Animals At start	Administration (Weeks) 0	1	2	3	4	5	6	7	8	9	10	11	12	13
Control	25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
300 ppm	25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1000 ppm	25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
3000 ppm	25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Number of survival/ Number of effective animals
Survival rate(%)

STUDY NO. : 0919 SURVIVAL ANIMAL NUMBERS
ANIMAL : CByB6F1-Tg(HRAS)2Jic (tg/wt)
REPORT TYPE : A1 26
SEX : MALE

Group Name	Animals At start	Administration (Weeks) 14	15	16	17	18	19	20	21	22	23	24	25	26
Control	25	25/25	25/25	24/25	23/25	23/25	23/25	23/25	23/25	23/25	23/25	23/25	23/25	23/25
		100.0	100.0	96.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0
300 ppm	25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1000 ppm	25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
3000 ppm	25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Number of survival/ Number of effective animals
Survival rate(%)

TABLE B2

SURVIVAL ANIMAL NUMBERS : FEMALE

STUDY NO. : 0919 SURVIVAL ANIMAL NUMBERS
ANIMAL : CByB6F1-Tg(HRAS)2Jic (tg/wt)
REPORT TYPE : A1 26
SEX : FEMALE

Group Name	Animals At start	Administration (Weeks) 0	1	2	3	4	5	6	7	8	9	10	11	12	13
Control	25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
300 ppm	25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	24/25	24/25	24/25	24/25	24/25	24/25
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.0	96.0	96.0	96.0	96.0	96.0
1000 ppm	25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	24/25	24/25	24/25	24/25
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.0	96.0	96.0	96.0
3000 ppm	25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Number of survival/ Number of effective animals
Survival rate(%)

STUDY NO. : 0919 SURVIVAL ANIMAL NUMBERS
ANIMAL : CByB6F1-Tg(HRAS)2Jic (tg/wt)
REPORT TYPE : A1 26
SEX : FEMALE

Group Name	Animals At start	Administration (Weeks) 14	15	16	17	18	19	20	21	22	23	24	25	26
Control	25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	24/25	24/25	24/25
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.0	96.0	96.0
300 ppm	25	24/25	24/25	24/25	24/25	24/25	24/25	24/25	23/25	23/25	23/25	23/25	23/25	23/25
		96.0	96.0	96.0	96.0	96.0	96.0	96.0	92.0	92.0	92.0	92.0	92.0	92.0
1000 ppm	25	24/25	24/25	24/25	24/25	24/25	24/25	24/25	24/25	24/25	24/25	24/25	24/25	24/25
		96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
3000 ppm	25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25	25/25
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Number of survival/ Number of effective animals
Survival rate(%)

TABLE C1

CLINICAL OBSERVATION : MALE

STUDY NO. : 0919
ANIMAL : CByB6F1-Tg(HRAS)2Jic (tg/wt)
REPORT TYPE : A1 26

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

Clinical sign	Group Name	Administration Week-day 1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	300 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	300 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	300 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	300 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	25	25	25	25	25	25	25	25	25	25	25	25	25	25
	300 ppm	25	25	25	25	25	25	25	25	25	25	25	25	25	25
	1000 ppm	25	25	25	25	25	25	25	25	25	25	25	25	25	25
	3000 ppm	25	25	25	25	25	25	25	25	25	25	25	25	25	25

Clinical sign	Group Name	Administration Week-day 15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7
DEATH	Control	0	1	2	2	2	2	2	2	2	2	2	2
	300 ppm	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0
	300 ppm	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	1	1
M.ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0
	300 ppm	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	1	1
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	1
	300 ppm	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	25	24	23	23	23	23	23	23	23	23	23	22
	300 ppm	25	25	25	25	25	25	25	25	25	25	25	25
	1000 ppm	25	25	25	25	25	25	25	25	25	25	25	25
	3000 ppm	25	25	25	25	25	25	25	25	25	25	24	24

TABLE C2

CLINICAL OBSERVATION : FEMALE

Clinical sign	Group Name	Administration Week-day 1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	300 ppm	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	1000 ppm	0	0	0	0	0	0	0	0	0	1	1	1	1	1
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	300 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	300 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	300 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	25	25	25	25	25	25	25	25	25	25	25	25	25	25
	300 ppm	25	25	25	25	25	25	25	24	24	24	24	24	24	24
	1000 ppm	25	25	25	25	25	25	25	25	24	24	24	24	24	24
	3000 ppm	25	25	25	25	25	25	25	25	25	25	25	25	25	25

Clinical sign	Group Name	Administration Week-day 15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7
DEATH	Control	0	0	0	0	0	0	0	0	0	1	1	1
	300 ppm	1	1	1	1	1	1	2	2	2	2	2	2
	1000 ppm	1	1	1	1	1	1	1	1	1	1	1	1
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0
	300 ppm	0	0	0	0	0	1	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0
	300 ppm	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	1
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0
	300 ppm	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	25	25	25	25	25	25	25	25	25	24	24	24
	300 ppm	24	24	24	24	24	23	23	23	23	23	23	23
	1000 ppm	24	24	24	24	24	24	24	24	24	24	24	23
	3000 ppm	25	25	25	25	25	25	25	25	25	25	25	25

TABLE D1

BODY WEIGHT CHANGES AND

SURVIVAL ANIMAL NUMBERS : MALE

STUDY NO. : 0919 MEAN BODY WEIGHTS AND SURVIVAL
ANIMAL : CByB6F1-Tg(HRAS)2Jic (tg/wt)
UNIT : g
REPORT TYPE : A1 26
SEX : MALE

Week on Study	Control Av.Wt.	Control No.of Surviv. <25>	300 ppm Av.Wt.	300 ppm % of cont. <25>	300 ppm No.of Surviv.	1000 ppm Av.Wt.	1000 ppm % of cont. <25>	1000 ppm No.of Surviv.	3000 ppm Av.Wt.	3000 ppm % of cont. <25>	3000 ppm No.of Surviv.
0	25.0 (25)	25/25	25.0 (25)	100	25/25	25.0 (25)	100	25/25	25.0 (25)	100	25/25
1	25.3 (25)	25/25	25.4 (25)	100	25/25	25.5 (25)	101	25/25	24.8 (25)	98	25/25
2	26.1 (25)	25/25	25.9 (25)	99	25/25	26.4 (25)	101	25/25	25.1 (25)	96	25/25
3	26.9 (25)	25/25	26.3 (25)	98	25/25	26.6 (25)	99	25/25	25.5 (25)	95	25/25
4	27.6 (25)	25/25	26.7 (25)	97	25/25	27.1 (25)	98	25/25	25.9 (25)	94	25/25
5	28.3 (25)	25/25	27.6 (25)	98	25/25	27.7 (25)	98	25/25	26.2 (25)	93	25/25
6	28.9 (25)	25/25	28.2 (25)	98	25/25	28.3 (25)	98	25/25	26.4 (25)	91	25/25
7	29.1 (25)	25/25	28.4 (25)	98	25/25	28.7 (25)	99	25/25	26.4 (25)	91	25/25
8	29.9 (25)	25/25	28.9 (25)	97	25/25	29.4 (25)	98	25/25	26.8 (25)	90	25/25
9	30.2 (25)	25/25	29.1 (25)	96	25/25	29.6 (25)	98	25/25	26.8 (25)	89	25/25
10	30.5 (25)	25/25	29.5 (25)	97	25/25	29.9 (25)	98	25/25	26.8 (25)	88	25/25
11	30.7 (25)	25/25	29.6 (25)	96	25/25	30.2 (25)	98	25/25	27.1 (25)	88	25/25
12	31.4 (25)	25/25	30.4 (25)	97	25/25	30.7 (25)	98	25/25	27.6 (25)	88	25/25
13	31.4 (25)	25/25	30.3 (25)	96	25/25	31.5 (25)	100	25/25	27.9 (25)	89	25/25
14	31.6 (25)	25/25	30.7 (25)	97	25/25	31.7 (25)	100	25/25	28.0 (25)	89	25/25
15	31.8 (25)	25/25	30.9 (25)	97	25/25	31.5 (25)	99	25/25	27.8 (25)	87	25/25
16	31.8 (24)	24/25	30.8 (25)	97	25/25	31.5 (25)	99	25/25	27.9 (25)	88	25/25
17	32.1 (23)	23/25	30.8 (25)	96	25/25	31.6 (25)	98	25/25	27.7 (25)	86	25/25
18	32.5 (23)	23/25	30.9 (25)	95	25/25	32.1 (25)	99	25/25	27.8 (25)	86	25/25
19	32.4 (23)	23/25	30.8 (25)	95	25/25	32.0 (25)	99	25/25	27.5 (25)	85	25/25
20	32.4 (23)	23/25	31.5 (25)	97	25/25	32.1 (25)	99	25/25	27.7 (25)	85	25/25
21	32.7 (23)	23/25	31.7 (25)	97	25/25	32.4 (25)	99	25/25	27.9 (25)	85	25/25
22	32.9 (23)	23/25	31.9 (25)	97	25/25	32.6 (25)	99	25/25	28.1 (25)	85	25/25
23	33.0 (23)	23/25	31.8 (25)	96	25/25	32.9 (25)	100	25/25	27.9 (25)	85	25/25
24	33.4 (23)	23/25	32.3 (25)	97	25/25	33.5 (25)	100	25/25	28.4 (25)	85	25/25
25	33.4 (23)	23/25	32.5 (25)	97	25/25	33.5 (25)	100	25/25	28.2 (25)	84	25/25
26	33.3 (23)	23/25	32.5 (25)	98	25/25	33.8 (25)	102	25/25	28.8 (25)	86	25/25

< >:No.of effective animals,( ):No.of measured animals Av.Wt.:g

TABLE D2

BODY WEIGHT CHANGES AND

SURVIVAL ANIMAL NUMBERS : FEMALE

STUDY NO. : 0919 MEAN BODY WEIGHTS AND SURVIVAL
ANIMAL : CByB6F1-Tg(HRAS)2Jic (tg/wt)
UNIT : g
REPORT TYPE : A1 26
SEX : FEMALE

Week on Study	Control Av.Wt.	Control No.of Surviv. <25>	300 ppm Av.Wt.	300 ppm % of cont. <25>	300 ppm No.of Surviv.	1000 ppm Av.Wt.	1000 ppm % of cont. <25>	1000 ppm No.of Surviv.	3000 ppm Av.Wt.	3000 ppm % of cont. <25>	3000 ppm No.of Surviv.
0	20.2 (25)	25/25	20.2 (25)	100	25/25	20.2 (25)	100	25/25	20.2 (25)	100	25/25
1	21.0 (25)	25/25	20.8 (25)	99	25/25	20.6 (25)	98	25/25	20.3 (25)	97	25/25
2	21.2 (25)	25/25	20.8 (25)	98	25/25	20.9 (25)	99	25/25	20.5 (25)	97	25/25
3	21.1 (25)	25/25	20.8 (25)	99	25/25	20.3 (25)	96	25/25	20.3 (25)	96	25/25
4	21.7 (25)	25/25	20.9 (25)	96	25/25	20.7 (25)	95	25/25	20.6 (25)	95	25/25
5	21.8 (25)	25/25	21.8 (25)	100	25/25	21.4 (25)	98	25/25	20.7 (25)	95	25/25
6	22.3 (25)	25/25	22.1 (25)	99	25/25	21.4 (25)	96	25/25	21.2 (25)	95	25/25
7	22.5 (25)	25/25	22.3 (25)	99	25/25	22.0 (25)	98	25/25	20.8 (25)	92	25/25
8	23.0 (25)	25/25	22.7 (24)	99	24/25	22.9 (25)	100	25/25	21.4 (25)	93	25/25
9	23.2 (25)	25/25	22.8 (24)	98	24/25	22.3 (25)	96	25/25	21.4 (25)	92	25/25
10	23.0 (25)	25/25	23.0 (24)	100	24/25	22.6 (24)	98	24/25	21.8 (25)	95	25/25
11	23.1 (25)	25/25	23.0 (24)	100	24/25	22.3 (24)	97	24/25	21.9 (25)	95	25/25
12	23.5 (25)	25/25	23.6 (24)	100	24/25	23.0 (24)	98	24/25	21.9 (25)	93	25/25
13	23.5 (25)	25/25	23.8 (24)	101	24/25	23.2 (24)	99	24/25	22.2 (25)	94	25/25
14	23.7 (25)	25/25	23.1 (24)	97	24/25	23.3 (24)	98	24/25	22.4 (25)	95	25/25
15	23.9 (25)	25/25	23.8 (24)	100	24/25	23.7 (24)	99	24/25	22.2 (25)	93	25/25
16	24.0 (25)	25/25	23.6 (24)	98	24/25	23.5 (24)	98	24/25	22.3 (25)	93	25/25
17	24.1 (25)	25/25	23.8 (24)	99	24/25	23.7 (24)	98	24/25	22.2 (25)	92	25/25
18	24.5 (25)	25/25	24.1 (24)	98	24/25	23.8 (24)	97	24/25	22.1 (25)	90	25/25
19	24.5 (25)	25/25	23.9 (24)	98	24/25	23.4 (24)	96	24/25	22.5 (25)	92	25/25
20	24.2 (25)	25/25	23.7 (24)	98	24/25	23.3 (24)	96	24/25	22.4 (25)	93	25/25
21	24.5 (25)	25/25	23.7 (23)	97	23/25	24.2 (24)	99	24/25	22.4 (25)	91	25/25
22	24.3 (25)	25/25	24.0 (23)	99	23/25	23.8 (24)	98	24/25	22.6 (25)	93	25/25
23	24.4 (25)	25/25	24.2 (23)	99	23/25	24.0 (24)	98	24/25	22.8 (25)	93	25/25
24	24.7 (24)	24/25	24.6 (23)	100	23/25	24.3 (24)	98	24/25	23.0 (25)	93	25/25
25	25.1 (24)	24/25	24.8 (23)	99	23/25	24.4 (24)	97	24/25	22.9 (25)	91	25/25
26	25.0 (24)	24/25	24.9 (23)	100	23/25	24.4 (24)	98	24/25	23.5 (25)	94	25/25

< >:No.of effective animals,( ):No.of measured animals Av.Wt.:g

TABLE D3

BODY WEIGHT CHANGES : MALE

STUDY NO. : 0919
ANIMAL : CByB6F1-Tg(HRAS)2Jic (tg/wt)
UNIT : g
REPORT TYPE : A1 26
SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day 0-0	1-7	2-7	3-7	4-7	5-7	6-7
Control	25.0± 1.2	25.3± 1.3	26.1± 1.3	26.9± 1.3	27.6± 1.4	28.3± 1.3	28.9± 1.6
300 ppm	25.0± 1.2	25.4± 1.2	25.9± 1.4	26.3± 1.4	26.7± 1.5	27.6± 1.5	28.2± 1.5
1000 ppm	25.0± 1.2	25.5± 1.1	26.4± 1.1	26.6± 1.2	27.1± 1.3	27.7± 1.4	28.3± 1.4
3000 ppm	25.0± 1.2	24.8± 1.4	25.1± 2.3	25.5± 1.3**	25.9± 1.4**	26.2± 1.3**	26.4± 1.4**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0919
ANIMAL : CByB6F1-Tg(HRAS)2Jic (tg/wt)
UNIT : g
REPORT TYPE : A1 26
SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day 7-7	8-7	9-7	10-7	11-7	12-7	13-7
Control	29.1± 1.7	29.9± 1.8	30.2± 1.7	30.5± 2.1	30.7± 2.1	31.4± 2.1	31.4± 2.3
300 ppm	28.4± 1.7	28.9± 1.7	29.1± 1.7*	29.5± 1.8	29.6± 1.8	30.4± 1.8	30.3± 2.1
1000 ppm	28.7± 1.5	29.4± 1.5	29.6± 1.5	29.9± 1.5	30.2± 1.7	30.7± 1.7	31.5± 2.0
3000 ppm	26.4± 1.3**	26.8± 1.4**	26.8± 1.2**	26.8± 1.3**	27.1± 1.4**	27.6± 1.3**	27.9± 1.1**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0919
ANIMAL : CByB6F1-Tg(HRAS)2Jic (tg/wt)
UNIT : g
REPORT TYPE : A1 26
SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day 14-7	15-7	16-7	17-7	18-7	19-7	20-7
Control	31.6± 2.5	31.8± 2.2	31.8± 2.4	32.1± 2.6	32.5± 2.7	32.4± 2.6	32.4± 2.7
300 ppm	30.7± 2.1	30.9± 2.1	30.8± 2.2	30.8± 2.3	30.9± 2.1	30.8± 2.1*	31.5± 2.2
1000 ppm	31.7± 2.1	31.5± 2.3	31.5± 2.3	31.6± 2.2	32.1± 2.2	32.0± 2.7	32.1± 2.6
3000 ppm	28.0± 1.2**	27.8± 1.1**	27.9± 1.2**	27.7± 1.3**	27.8± 1.4**	27.5± 1.1**	27.7± 1.2**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0919
ANIMAL : CByB6F1-Tg(HRAS)2Jic (tg/wt)
UNIT : g
REPORT TYPE : A1 26
SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day 21-7	22-7	23-7	24-7	25-7	26-7
Control	32.7± 2.8	32.9± 2.9	33.0± 2.9	33.4± 2.9	33.4± 2.9	33.3± 3.3
300 ppm	31.7± 2.3	31.9± 2.3	31.8± 2.3	32.3± 2.1	32.5± 2.3	32.5± 2.4
1000 ppm	32.4± 2.7	32.6± 2.8	32.9± 2.5	33.5± 2.8	33.5± 2.7	33.8± 2.9
3000 ppm	27.9± 1.1**	28.1± 1.2**	27.9± 1.2**	28.4± 1.3**	28.2± 1.3**	28.8± 1.5**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

TABLE D4

BODY WEIGHT CHANGES : FEMALE

STUDY NO. : 0919
ANIMAL : CByB6F1-Tg(HRAS)2Jic (tg/wt)
UNIT : g
REPORT TYPE : A1 26
SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day 0-0	1-7	2-7	3-7	4-7	5-7	6-7
Control	20.2± 1.1	21.0± 1.4	21.2± 1.2	21.1± 1.1	21.7± 1.2	21.8± 0.9	22.3± 1.0
300 ppm	20.2± 1.1	20.8± 1.3	20.8± 1.2	20.8± 1.2	20.9± 0.9*	21.8± 1.1	22.1± 1.3
1000 ppm	20.2± 1.0	20.6± 1.2	20.9± 1.2	20.3± 1.0*	20.7± 1.0**	21.4± 1.1	21.4± 0.9**
3000 ppm	20.2± 1.1	20.3± 0.9	20.5± 1.0	20.3± 0.8*	20.6± 0.8**	20.7± 0.8**	21.2± 1.0**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0919
ANIMAL : CByB6F1-Tg(HRAS)2Jic (tg/wt)
UNIT : g
REPORT TYPE : A1 26
SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day 7-7	8-7	9-7	10-7	11-7	12-7	13-7
Control	22.5± 1.0	23.0± 1.0	23.2± 1.2	23.0± 1.4	23.1± 1.4	23.5± 1.2	23.5± 1.1
300 ppm	22.3± 1.0	22.7± 1.2	22.8± 1.4	23.0± 1.2	23.0± 1.1	23.6± 1.1	23.8± 1.7
1000 ppm	22.0± 0.8	22.9± 1.2	22.3± 1.5*	22.6± 1.1	22.3± 0.8*	23.0± 1.2	23.2± 0.9
3000 ppm	20.8± 0.9**	21.4± 0.9**	21.4± 1.0**	21.8± 1.0**	21.9± 0.9**	21.9± 1.0**	22.2± 1.2**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0919
ANIMAL : CByB6F1-Tg(HRAS)2Jic (tg/wt)
UNIT : g
REPORT TYPE : A1 26
SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day 14-7	15-7	16-7	17-7	18-7	19-7	20-7
Control	23.7± 1.3	23.9± 1.7	24.0± 1.4	24.1± 1.3	24.5± 1.4	24.5± 1.6	24.2± 1.8
300 ppm	23.1± 0.9	23.8± 1.3	23.6± 1.2	23.8± 0.7	24.1± 1.5	23.9± 1.5	23.7± 1.4
1000 ppm	23.3± 1.0	23.7± 1.2	23.5± 1.4	23.7± 0.9	23.8± 1.2	23.4± 0.9*	23.3± 0.9
3000 ppm	22.4± 0.9**	22.2± 1.3**	22.3± 1.2**	22.2± 0.9**	22.1± 0.9**	22.5± 1.4**	22.4± 1.0**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0919
ANIMAL : CByB6F1-Tg(HRAS)2Jic (tg/wt)
UNIT : g
REPORT TYPE : A1 26
SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day 21-7	22-7	23-7	24-7	25-7	26-7
Control	24.5± 1.4	24.3± 1.3	24.4± 1.3	24.7± 1.5	25.1± 1.7	25.0± 1.8
300 ppm	23.7± 1.0	24.0± 1.2	24.2± 1.7	24.6± 1.4	24.8± 1.7	24.9± 1.5
1000 ppm	24.2± 1.3	23.8± 1.5	24.0± 1.1	24.3± 1.1	24.4± 1.5	24.4± 1.8
3000 ppm	22.4± 1.0**	22.6± 0.9**	22.8± 0.6**	23.0± 1.0**	22.9± 0.9**	23.5± 0.8**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

TABLE E1

FOOD CONSUMPTION CHANGES AND

SURVIVAL ANIMAL NUMBERS : MALE

STUDY NO. : 0919
ANIMAL : CByB6F1-Tg(HRAS)2Jic (tg/wt)
UNIT : g
REPORT TYPE : A1 26
SEX : MALE

MEAN FOOD CONSUMPTION(FC) AND SURVIVAL

Week on Study	Control Av.FC.	Control No.of Surviv. <25>	300 ppm Av.FC.	300 ppm % of cont. <25>	300 ppm No.of Surviv.	1000 ppm Av.FC.	1000 ppm % of cont. <25>	1000 ppm No.of Surviv.	3000 ppm Av.FC.	3000 ppm % of cont. <25>	3000 ppm No.of Surviv.
1	3.8 (25)	25/25	4.0 (25)	105	25/25	4.0 (25)	105	25/25	3.8 (25)	100	25/25
2	3.7 (25)	25/25	3.7 (25)	100	25/25	3.8 (25)	103	25/25	3.5 (25)	95	25/25
3	4.0 (25)	25/25	3.9 (25)	98	25/25	3.8 (25)	95	25/25	3.5 (25)	88	25/25
4	4.1 (25)	25/25	4.1 (25)	100	25/25	4.0 (25)	98	25/25	3.6 (25)	88	25/25
5	4.2 (25)	25/25	4.2 (25)	100	25/25	4.0 (25)	95	25/25	3.5 (25)	83	25/25
6	4.2 (25)	25/25	4.2 (25)	100	25/25	4.2 (25)	100	25/25	3.7 (25)	88	25/25
7	4.2 (25)	25/25	4.3 (25)	102	25/25	4.2 (25)	100	25/25	3.6 (25)	86	25/25
8	4.4 (25)	25/25	4.3 (25)	98	25/25	4.3 (25)	98	25/25	3.6 (25)	82	25/25
9	4.4 (25)	25/25	4.5 (25)	102	25/25	4.4 (25)	100	25/25	3.7 (25)	84	25/25
10	4.5 (25)	25/25	4.5 (25)	100	25/25	4.4 (25)	98	25/25	3.8 (25)	84	25/25
11	4.4 (25)	25/25	4.5 (25)	102	25/25	4.4 (25)	100	25/25	3.8 (25)	86	25/25
12	4.5 (25)	25/25	4.5 (25)	100	25/25	4.4 (25)	98	25/25	3.8 (25)	84	25/25
13	4.3 (25)	25/25	4.4 (25)	102	25/25	4.4 (25)	102	25/25	3.7 (25)	86	25/25
14	4.4 (25)	25/25	4.4 (25)	100	25/25	4.4 (25)	100	25/25	3.7 (25)	84	25/25
15	4.4 (25)	25/25	4.5 (25)	102	25/25	4.4 (25)	100	25/25	3.7 (25)	84	25/25
16	4.3 (24)	24/25	4.4 (25)	102	25/25	4.4 (25)	102	25/25	3.7 (25)	86	25/25
17	4.4 (23)	23/25	4.4 (25)	100	25/25	4.4 (25)	100	25/25	3.6 (25)	82	25/25
18	4.4 (23)	23/25	4.4 (25)	100	25/25	4.4 (25)	100	25/25	3.8 (25)	86	25/25
19	4.4 (23)	23/25	4.4 (25)	100	25/25	4.4 (25)	100	25/25	3.6 (25)	82	25/25
20	4.5 (23)	23/25	4.7 (25)	104	25/25	4.6 (25)	102	25/25	3.7 (25)	82	25/25
21	4.6 (23)	23/25	4.6 (25)	100	25/25	4.6 (25)	100	25/25	3.8 (25)	83	25/25
22	4.7 (23)	23/25	4.7 (25)	100	25/25	4.7 (25)	100	25/25	3.9 (25)	83	25/25
23	4.6 (23)	23/25	4.7 (25)	102	25/25	4.7 (25)	102	25/25	3.8 (25)	83	25/25
24	4.7 (23)	23/25	4.7 (25)	100	25/25	4.8 (25)	102	25/25	4.0 (25)	85	25/25
25	4.6 (23)	23/25	4.8 (25)	104	25/25	4.8 (25)	104	25/25	3.8 (25)	83	25/25
26	4.7 (23)	23/25	4.9 (25)	104	25/25	4.9 (25)	104	25/25	4.2 (25)	89	25/25

< >:No.of effective animals,( ):No.of measured animals Av.FC.:g

TABLE E2

FOOD CONSUMPTION CHANGES AND

SURVIVAL ANIMAL NUMBERS : FEMALE

STUDY NO. : 0919
ANIMAL : CByB6F1-Tg(HRAS)2Jic (tg/wt)
UNIT : g
REPORT TYPE : A1 26
SEX : FEMALE

MEAN FOOD CONSUMPTION(FC) AND SURVIVAL

Week on Study	Control Av.FC.	Control No.of Surviv. <25>	300 ppm Av.FC.	300 ppm % of cont. <25>	300 ppm No.of Surviv.	1000 ppm Av.FC.	1000 ppm % of cont. <25>	1000 ppm No.of Surviv.	3000 ppm Av.FC.	3000 ppm % of cont. <25>	3000 ppm No.of Surviv.
1	3.5 (25)	25/25	3.5 (25)	100	25/25	3.5 (25)	100	25/25	3.4 (25)	97	25/25
2	3.1 (25)	25/25	3.1 (25)	100	25/25	3.0 (25)	97	25/25	3.0 (25)	97	25/25
3	3.1 (25)	25/25	3.2 (25)	103	25/25	3.0 (25)	97	25/25	3.0 (25)	97	25/25
4	3.4 (25)	25/25	3.5 (25)	103	25/25	3.4 (25)	100	25/25	3.2 (25)	94	25/25
5	3.4 (25)	25/25	3.7 (25)	109	25/25	3.4 (25)	100	25/25	3.2 (25)	94	25/25
6	3.6 (25)	25/25	3.7 (25)	103	25/25	3.5 (25)	97	25/25	3.4 (25)	94	25/25
7	3.8 (25)	25/25	3.8 (25)	100	25/25	3.7 (25)	97	25/25	3.3 (25)	87	25/25
8	3.8 (25)	25/25	3.9 (24)	103	24/25	3.9 (25)	103	25/25	3.5 (25)	92	25/25
9	4.0 (25)	25/25	4.0 (24)	100	24/25	3.8 (25)	95	25/25	3.6 (25)	90	25/25
10	3.9 (25)	25/25	4.0 (24)	103	24/25	3.9 (24)	100	24/25	3.6 (25)	92	25/25
11	3.9 (25)	25/25	4.0 (24)	103	24/25	3.8 (24)	97	24/25	3.5 (25)	90	25/25
12	3.9 (25)	25/25	3.9 (24)	100	24/25	3.9 (24)	100	24/25	3.5 (25)	90	25/25
13	3.9 (25)	25/25	4.0 (24)	103	24/25	3.9 (24)	100	24/25	3.5 (25)	90	25/25
14	3.9 (25)	25/25	3.8 (24)	97	24/25	3.8 (24)	97	24/25	3.5 (25)	90	25/25
15	3.9 (25)	25/25	4.1 (24)	105	24/25	4.0 (24)	103	24/25	3.5 (25)	90	25/25
16	3.9 (25)	25/25	4.1 (24)	105	24/25	3.9 (24)	100	24/25	3.5 (25)	90	25/25
17	4.0 (25)	25/25	4.0 (24)	100	24/25	3.9 (24)	98	24/25	3.5 (25)	88	25/25
18	3.9 (25)	25/25	4.0 (24)	103	24/25	3.9 (24)	100	24/25	3.5 (25)	90	25/25
19	4.0 (25)	25/25	4.0 (24)	100	24/25	3.9 (24)	98	24/25	3.5 (25)	88	25/25
20	4.2 (25)	25/25	4.3 (24)	102	24/25	4.3 (24)	102	24/25	3.7 (25)	88	25/25
21	4.3 (25)	25/25	4.2 (23)	98	23/25	4.5 (24)	105	24/25	3.6 (25)	84	25/25
22	4.2 (25)	25/25	4.3 (23)	102	23/25	4.3 (24)	102	24/25	3.8 (25)	90	25/25
23	4.3 (25)	25/25	4.4 (23)	102	23/25	4.3 (24)	100	24/25	3.9 (25)	91	25/25
24	4.2 (24)	24/25	4.5 (23)	107	23/25	4.4 (24)	105	24/25	4.0 (25)	95	25/25
25	4.4 (24)	24/25	4.5 (23)	102	23/25	4.4 (24)	100	24/25	3.9 (25)	89	25/25
26	4.4 (24)	24/25	4.5 (23)	102	23/25	4.5 (24)	102	24/25	4.1 (25)	93	25/25

< >:No.of effective animals,( ):No.of measured animals Av.FC.: g

TABLE E3

FOOD CONSUMPTION CHANGES : MALE

STUDY NO. : 0919
ANIMAL : CByB6F1-Tg(HRAS)2Jic (tg/wt)
UNIT : g
REPORT TYPE : A1 26
SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day(effective) 1-7(7)	2-7(7)	3-7(7)	4-7(7)	5-7(7)	6-7(7)	7-7(7)
Control	3.8± 0.3	3.7± 0.3	4.0± 0.3	4.1± 0.3	4.2± 0.3	4.2± 0.3	4.2± 0.4
300 ppm	4.0± 0.3*	3.7± 0.3	3.9± 0.3	4.1± 0.3	4.2± 0.4	4.2± 0.3	4.3± 0.4
1000 ppm	4.0± 0.3*	3.8± 0.2	3.8± 0.2	4.0± 0.2	4.0± 0.3	4.2± 0.3	4.2± 0.4
3000 ppm	3.8± 0.3	3.5± 0.6	3.5± 0.4**	3.6± 0.2**	3.5± 0.2**	3.7± 0.3**	3.6± 0.3**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0919
ANIMAL : CByB6F1-Tg(HRAS)2Jic (tg/wt)
UNIT : g
REPORT TYPE : A1 26
SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day(effective) 8-7(7)	9-7(7)	10-7(7)	11-7(7)	12-7(7)	13-7(7)	14-7(7)
Control	4.4± 0.3	4.4± 0.4	4.5± 0.4	4.4± 0.4	4.5± 0.4	4.3± 0.5	4.4± 0.5
300 ppm	4.3± 0.4	4.5± 0.4	4.5± 0.4	4.5± 0.4	4.5± 0.4	4.4± 0.4	4.4± 0.4
1000 ppm	4.3± 0.3	4.4± 0.4	4.4± 0.4	4.4± 0.3	4.4± 0.4	4.4± 0.4	4.4± 0.4
3000 ppm	3.6± 0.3**	3.7± 0.2**	3.8± 0.2**	3.8± 0.3**	3.8± 0.2**	3.7± 0.2**	3.7± 0.3**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0919
ANIMAL : CByB6F1-Tg(HRAS)2Jic (tg/wt)
UNIT : g
REPORT TYPE : A1 26
SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day(effective) 15-7(7)	16-7(7)	17-7(7)	18-7(7)	19-7(7)	20-7(7)	21-7(7)
Control	4.4± 0.4	4.3± 0.4	4.4± 0.4	4.4± 0.4	4.4± 0.4	4.5± 0.5	4.6± 0.5
300 ppm	4.5± 0.4	4.4± 0.5	4.4± 0.4	4.4± 0.4	4.4± 0.4	4.7± 0.5	4.6± 0.4
1000 ppm	4.4± 0.4	4.4± 0.4	4.4± 0.4	4.4± 0.5	4.4± 0.5	4.6± 0.5	4.6± 0.5
3000 ppm	3.7± 0.2**	3.7± 0.2**	3.6± 0.2**	3.8± 0.2**	3.6± 0.2**	3.7± 0.3**	3.8± 0.3**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0919
ANIMAL : CByB6F1-Tg(HRAS)2Jic (tg/wt)
UNIT : g
REPORT TYPE : A1 26
SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day(effective) 22-7(7)	23-7(7)	24-7(7)	25-7(7)	26-7(7)
Control	4.7± 0.5	4.6± 0.5	4.7± 0.4	4.6± 0.5	4.7± 0.7
300 ppm	4.7± 0.5	4.7± 0.5	4.7± 0.4	4.8± 0.4	4.9± 0.5
1000 ppm	4.7± 0.5	4.7± 0.5	4.8± 0.6	4.8± 0.5	4.9± 0.5
3000 ppm	3.9± 0.3**	3.8± 0.3**	4.0± 0.3**	3.8± 0.3**	4.2± 0.4**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

TABLE E4

FOOD CONSUMPTION CHANGES : FEMALE

STUDY NO. : 0919
ANIMAL : CByB6F1-Tg(HRAS)2Jic (tg/wt)
UNIT : g
REPORT TYPE : A1 26
SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day(effective) 1-7(7)	2-7(7)	3-7(7)	4-7(7)	5-7(7)	6-7(7)	7-7(7)
Control	3.5± 0.4	3.1± 0.2	3.1± 0.3	3.4± 0.3	3.4± 0.4	3.6± 0.3	3.8± 0.3
300 ppm	3.5± 0.4	3.1± 0.2	3.2± 0.2	3.5± 0.2	3.7± 0.3*	3.7± 0.3	3.8± 0.2
1000 ppm	3.5± 0.4	3.0± 0.2	3.0± 0.2	3.4± 0.2	3.4± 0.2	3.5± 0.3	3.7± 0.3
3000 ppm	3.4± 0.2	3.0± 0.3	3.0± 0.3	3.2± 0.3	3.2± 0.3*	3.4± 0.3*	3.3± 0.4**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0919
ANIMAL : CByB6F1-Tg(HRAS)2Jic (tg/wt)
UNIT : g
REPORT TYPE : A1 26
SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day(effective) 8-7(7)	9-7(7)	10-7(7)	11-7(7)	12-7(7)	13-7(7)	14-7(7)
Control	3.8± 0.3	4.0± 0.3	3.9± 0.3	3.9± 0.3	3.9± 0.3	3.9± 0.3	3.9± 0.3
300 ppm	3.9± 0.3	4.0± 0.2	4.0± 0.2	4.0± 0.3	3.9± 0.3	4.0± 0.4	3.8± 0.2
1000 ppm	3.9± 0.3	3.8± 0.5	3.9± 0.3	3.8± 0.3	3.9± 0.3	3.9± 0.3	3.8± 0.3
3000 ppm	3.5± 0.3**	3.6± 0.3**	3.6± 0.3**	3.5± 0.2**	3.5± 0.3**	3.5± 0.2**	3.5± 0.2**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0919
ANIMAL : CByB6F1-Tg(HRAS)2Jic (tg/wt)
UNIT : g
REPORT TYPE : A1 26
SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day(effective) 15-7(7)	16-7(7)	17-7(7)	18-7(7)	19-7(7)	20-7(7)	21-7(7)
Control	3.9± 0.4	3.9± 0.4	4.0± 0.3	3.9± 0.4	4.0± 0.4	4.2± 0.4	4.3± 0.4
300 ppm	4.1± 0.2*	4.1± 0.3	4.0± 0.3	4.0± 0.3	4.0± 0.3	4.3± 0.4	4.2± 0.2
1000 ppm	4.0± 0.3	3.9± 0.5	3.9± 0.3	3.9± 0.3	3.9± 0.3	4.3± 0.5	4.5± 0.5
3000 ppm	3.5± 0.3**	3.5± 0.3**	3.5± 0.2**	3.5± 0.2**	3.5± 0.3**	3.7± 0.3**	3.6± 0.3**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0919
ANIMAL : CByB6F1-Tg(HRAS)2Jic (tg/wt)
UNIT : g
REPORT TYPE : A1 26
SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day(effective) 22-7(7)	23-7(7)	24-7(7)	25-7(7)	26-7(7)
Control	4.2± 0.5	4.3± 0.4	4.2± 0.4	4.4± 0.5	4.4± 0.5
300 ppm	4.3± 0.3	4.4± 0.5	4.5± 0.4	4.5± 0.5	4.5± 0.4
1000 ppm	4.3± 0.6	4.3± 0.4	4.4± 0.5	4.4± 0.9	4.5± 0.7
3000 ppm	3.8± 0.2**	3.9± 0.3**	4.0± 0.3*	3.9± 0.3**	4.1± 0.3

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

TABLE F1

URINALYSIS : MALE

STUDY NO. : 0919 URINALYSIS
ANIMAL : CByB6F1-Tg(HRAS)2Jic (tg/wt)
MEASURE. TIME : 1
SEX : MALE REPORT TYPE : A1

Group Name	NO. of Animals	pH 5.0	6.0	6.5	7.0	7.5	8.0	8.5	CHI	Protein −	±	+	2+	3+	4+	CHI	Glucose −	±	+	2+	3+	4+	CHI	Ketone body −	±	+	2+	3+	4+	CHI	Occult blood −	±	+	2+	3+	CHI
Control	19	0	1	1	2	0	3	12		0	1	8	9	1	0		19	0	0	0	0	0		2	3	9	5	0	0		19	0	0	0	0	
300 ppm	14	0	0	1	2	0	1	10		0	2	9	3	0	0		14	0	0	0	0	0		5	4	4	1	0	0		14	0	0	0	0	
1000 ppm	17	0	2	0	1	0	2	12		0	2	5	10	0	0		17	0	0	0	0	0		1	4	8	4	0	0		17	0	0	0	0	
3000 ppm	17	0	3	3	0	2	4	5		0	0	7	9	1	0		17	0	0	0	0	0		0	1	6	10	0	0		17	0	0	0	0	

Significant difference ; ＊ : P ≦ 0.05 ＊＊ : P ≦ 0.01 Test of CHI SQUARE

STUDY NO. : 0919 URINALYSIS
ANIMAL : CByB6F1-Tg(HRAS)2Jic (tg/wt)
MEASURE. TIME : 1
SEX : MALE REPORT TYPE : A1

Group Name	NO. of Animals	Urobilinogen ±	+	2+	3+	4+	CHI
Control	19	19	0	0	0	0	
300 ppm	14	14	0	0	0	0	
1000 ppm	17	17	0	0	0	0	
3000 ppm	17	17	0	0	0	0	

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of CHI SQUARE

TABLE F2

URINALYSIS : MALE

STUDY NO. : 0919 URINALYSIS
ANIMAL : CByB6F1-Tg(HRAS)2Jic (tg/wt)
MEASURE. TIME : 1
SEX : FEMALE REPORT TYPE : A1

Group Name	NO. of Animals	pH 5.0	6.0	6.5	7.0	7.5	8.0	8.5	CHI	Protein −	±	+	2+	3+	4+	CHI	Glucose −	±	+	2+	3+	4+	CHI	Ketone body −	±	+	2+	3+	4+	CHI	Occult blood −	±	+	2+	3+	CHI
Control	20	0	0	2	3	8	5	2		0	7	12	1	0	0		20	0	0	0	0	0		1	11	8	0	0	0		20	0	0	0	0	
300 ppm	20	0	0	0	7	5	3	5		1	13	4	2	0	0		20	0	0	0	0	0		2	13	3	2	0	0		20	0	0	0	0	
1000 ppm	21	0	0	3	2	7	9	0		1	10	9	1	0	0		21	0	0	0	0	0		2	12	6	1	0	0		21	0	0	0	0	
3000 ppm	23	0	2	4	3	2	6	6		0	2	11	10	0	0	**	23	0	0	0	0	0		0	4	12	7	0	0	**	23	0	0	0	0	

Significant difference ; ＊ : P ≦ 0.05 ＊＊ : P ≦ 0.01 Test of CHI SQUARE

Group Name	NO. of Animals	Urobilinogen ±	＋	2+	3+	4+	CHI
Control	20	20	0	0	0	0	
300 ppm	20	20	0	0	0	0	
1000 ppm	21	21	0	0	0	0	
3000 ppm	23	23	0	0	0	0	

Significant difference ; ＊ : P ≦ 0.05 ＊＊ : P ≦ 0.01 Test of CHI SQUARE

TABLE G1

HEMATOLOGY : MALE

STUDY NO. : 0919
ANIMAL : CByB6F1-Tg(HRAS)2Jic (tg/wt)
MEASURE. TIME : 1
SEX : MALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
ALL ANIMALS (27W)

Group Name	NO. of Animals	RED BLOOD CELL 10^6／μℓ	HEMOGLOBIN g／dℓ	HEMATOCRIT %	MCV f ℓ	MCH p g	MCHC g／dℓ	PLATELET 10^3／μℓ
Control	23	11.11± 0.49	16.5± 0.5	47.5± 1.8	42.8± 0.6	14.9± 0.4	34.8± 0.6	1382± 246
300 ppm	25	11.15± 0.37	16.5± 0.4	47.6± 1.3	42.7± 0.5	14.8± 0.3	34.7± 0.5	1438± 78
1000 ppm	25	10.95± 0.43	16.4± 0.5	47.0± 1.6	42.9± 0.6	15.0± 0.4	34.9± 0.5	1392± 119
3000 ppm	25	11.11± 0.37	16.5± 0.4	47.6± 1.4	42.8± 0.5	14.8± 0.3	34.6± 0.5	1318± 78**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

Group Name	NO. of Animals	RETICULOCYTE %
Control	23	3.2± 0.2
300 ppm	25	3.2± 0.2
1000 ppm	25	3.1± 0.3
3000 ppm	25	3.2± 0.3

Significant difference : ＊ : P ≦ 0.05 ＊＊ : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0919
ANIMAL : CByB6F1-Tg(HRAS)2Jic (tg/wt)
MEASURE. TIME : 1
SEX : MALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
ALL ANIMALS (27W)

Group Name	NO. of Animals	WBC $10^3/\mu\ell$		Differential WBC (%) NEUTRO		LYMPHO		MONO		EOSINO		BASO	
Control	23	2.70±	4.09	29.6±	8.7	65.4±	7.6	3.1±	3.5	1.8±	1.5	0.1±	0.4
300 ppm	25	1.88±	1.32	31.1±	8.5	64.8±	7.8	2.5±	0.9	1.6±	1.6	0.0±	0.1
1000 ppm	25	1.99±	1.16	29.9±	8.9	65.5±	8.3	2.6±	0.9	2.0±	1.8	0.0±	0.0
3000 ppm	25	1.84±	1.00	35.3±	9.6	61.1±	8.8	2.1±	0.7	1.6±	1.4	0.0±	0.1

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

TABLE G2

HEMATOLOGY : FEMALE

Group Name	NO. of Animals	RED BLOOD CELL 10^6／μℓ	HEMOGLOBIN g／dℓ	HEMATOCRIT %	MCV fℓ	MCH pg	MCHC g／dℓ	PLATELET 10^3／μℓ
Control	23	10.86± 0.50	16.5± 0.6	46.6± 1.9	42.9± 0.6	15.2± 0.3	35.5± 0.6	1323± 116
300 ppm	23	11.00± 0.37	16.7± 0.4	47.2± 1.3	42.9± 0.5	15.2± 0.3	35.4± 0.5	1271± 95
1000 ppm	23	11.02± 0.51	16.7± 0.6	47.4± 2.0	43.0± 0.5	15.2± 0.3	35.3± 0.5	1271± 177
3000 ppm	25	10.77± 0.34	16.2± 0.5	46.1± 1.4	42.8± 0.6	15.0± 0.3	35.1± 0.6	1184± 78**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

Group Name	NO. of Animals	RETICULOCYTE %
Control	23	3.2± 0.7
300 ppm	23	3.2± 0.8
1000 ppm	23	3.0± 0.6
3000 ppm	25	3.0± 0.8

Significant difference : ＊ : P ≦ 0.05 ＊＊ : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0919
ANIMAL : CByB6F1-Tg(HRAS)2Jic (tg/wt)
MEASURE. TIME : 1
SEX : FEMALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
ALL ANIMALS (27W)

Group Name	NO. of Animals	WBC $10^3/\mu\ell$		Differential WBC (%) NEUTRO		LYMPHO		MONO		EOSINO		BASO	
Control	23	2.40±	1.95	28.7±	9.0	67.1±	8.2	2.9±	1.2	1.3±	1.2	0.0±	0.0
300 ppm	23	2.33±	1.63	29.1±	10.6	66.6±	10.0	2.9±	1.0	1.4±	1.1	0.0±	0.0
1000 ppm	23	2.26±	1.69	32.8±	6.5	63.6±	6.5	2.4±	1.2	1.3±	1.0	0.0±	0.1
3000 ppm	25	2.47±	1.96	37.0±	12.9*	59.1±	12.1*	2.5±	1.0	1.3±	1.3	0.0±	0.1

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

TABLE H1

BIOCHEMISTRY : MALE

STUDY NO. : 0919
ANIMAL : CByB6F1-Tg(HRAS)2Jic (tg/wt)
MEASURE. TIME : 1
SEX : MALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
ALL ANIMALS (27W)

Group Name	NO. of Animals	TOTAL PROTEIN g／dℓ		ALBUMIN g／dℓ		A/G RATIO		T-BILIRUBIN mg／dℓ		GLUCOSE mg／dℓ		T-CHOLESTEROL mg／dℓ		TRIGLYCERIDE mg／dℓ	
Control	23	5.1±	0.2	2.9±	0.1	1.4±	0.1	0.11±	0.02	194±	33	77±	8	56±	19
300 ppm	25	5.2±	0.1*	3.0±	0.1	1.4±	0.1	0.10±	0.01	217±	32*	79±	8	52±	15
1000 ppm	25	5.1±	0.2	2.9±	0.1	1.4±	0.1	0.10±	0.02	213±	28	78±	10	59±	19
3000 ppm	25	5.1±	0.1	3.0±	0.1**	1.5±	0.1**	0.11±	0.02	194±	29	69±	8**	42±	12*

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0919
ANIMAL : CByB6F1-Tg(HRAS)2Jic (tg/wt)
MEASURE. TIME : 1
SEX : MALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
ALL ANIMALS (27W)

Group Name	NO. of Animals	PHOSPHOLIPID mg／dℓ	AST U／L	ALT U／L	LDH U／L	ALP U／L	G-GTP U／L	CK U／L
Control	23	159± 22	86± 141	31± 46	589± 1783	208± 34	0.2± 0.3	104± 171
300 ppm	25	165± 19	65± 20	26± 12	233± 45	211± 17	0.1± 0.2	64± 16
1000 ppm	25	164± 19	70± 24	24± 7	243± 49	208± 25	0.2± 0.2	85± 64
3000 ppm	25	148± 18	70± 21	24± 7	215± 42	238± 17**	0.1± 0.1	99± 147

Significant difference ; ＊ : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0919
ANIMAL : CByB6F1-Tg(HRAS)2Jic (tg/wt)
MEASURE. TIME : 1
SEX : MALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
ALL ANIMALS (27W)

Group Name	NO. of Animals	UREANITROGEN mg／dℓ		SODIUM mEq／ℓ		POTASSIUM mEq／ℓ		CHLORIDE mEq／ℓ		CALCIUM mg／dℓ		INORGANIC PHOSPHRUS mg／dℓ	
Control	23	25.6±	7.3	150±	1	3.8±	0.6	117±	1	8.4±	0.2	5.8±	1.2
300 ppm	25	22.6±	4.5	150±	1	3.6±	0.3	117±	2	8.4±	0.2	5.8±	0.9
1000 ppm	25	21.5±	4.0	150±	1	3.6±	0.2	117±	2	8.5±	0.2	5.8±	0.9
3000 ppm	25	23.4±	4.9	151±	2*	3.7±	0.4	118±	2*	8.4±	0.2	5.7±	1.0

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

TABLE H2

BIOCHEMISTRY : FEMALE

Group Name	NO. of Animals	TOTAL PROTEIN g／dℓ		ALBUMIN g／dℓ		A/G RATIO		T-BILIRUBIN mg／dℓ		GLUCOSE mg／dℓ		T-CHOLESTEROL mg／dℓ		TRIGLYCERIDE mg／dℓ	
Control	24	5.1±	0.2	3.1±	0.1	1.5±	0.1	0.10±	0.02	176±	27	62±	9	39±	14
300 ppm	23	5.2±	0.2	3.1±	0.1	1.5±	0.1	0.10±	0.01	180±	31	60±	6	34±	10
1000 ppm	24	5.2±	0.2	3.1±	0.2	1.5±	0.2	0.10±	0.01	186±	48	61±	10	35±	17
3000 ppm	25	5.1±	0.2	3.2±	0.1	1.6±	0.1	0.10±	0.01	204±	29**	54±	6**	29±	10

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0919
ANIMAL : CByB6F1-Tg(HRAS)2Jic (tg/wt)
MEASURE. TIME : 1
SEX : FEMALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
ALL ANIMALS (27W)

Group Name	NO. of Animals	PHOSPHOLIPID mg／dℓ	AST U／L	ALT U／L	LDH U／L	ALP U／L	G-GTP U／L	CK U／L
Control	24	129± 19	72± 20	22± 5	194± 35	334± 41	0.2± 0.3	72± 22
300 ppm	23	125± 10	77± 25	24± 7	215± 49	337± 38	0.2± 0.2	88± 72
1000 ppm	24	124± 24	81± 30	25± 9	218± 88	340± 52	0.2± 0.5	98± 102
3000 ppm	25	114± 12**	86± 26	27± 10	192± 37	334± 45	0.1± 0.1	72± 34

Significant difference : * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0919
ANIMAL : CByB6F1-Tg(HRAS)2Jic (tg/wt)
MEASURE. TIME : 1
SEX : FEMALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
ALL ANIMALS (27W)

Group Name	NO. of Animals	UREANITROGEN mg／dℓ		SODIUM mEq／ℓ		POTASSIUM mEq／ℓ		CHLORIDE mEq／ℓ		CALCIUM mg／dℓ		INORGANIC PHOSPHRUS mg／dℓ	
Control	24	18.3±	3.0	150±	2	3.3±	0.2	118±	2	8.7±	0.3	5.9±	0.8
300 ppm	23	18.2±	3.5	151±	1	3.1±	0.2	118±	2	8.7±	0.2	5.8±	1.0
1000 ppm	24	20.3±	7.3	151±	1	3.2±	0.5	118±	1	8.7±	0.2	5.7±	0.9
3000 ppm	25	19.4±	3.1	151±	1*	3.2±	0.4	119±	1*	8.6±	0.2	5.9±	1.0

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

TABLE I1

GROSS FINDINGS : MALE

Organ	Findings	Group Name / NO. of Animals	Control 25	(%)	300 ppm 25	(%)	1000 ppm 25	(%)	3000 ppm 25	(%)
skin/app	nodule		0	(0)	0	(0)	0	(0)	1	(4)
subcutis	mass		0	(0)	0	(0)	0	(0)	1	(4)
lung	white zone		1	(4)	0	(0)	0	(0)	1	(4)
	red zone		0	(0)	1	(4)	0	(0)	0	(0)
	nodule		0	(0)	2	(8)	2	(8)	1	(4)
thymus	enlarged		1	(4)	0	(0)	0	(0)	0	(0)
spleen	enlarged		1	(4)	0	(0)	0	(0)	0	(0)
	black zone		4	(16)	7	(28)	7	(28)	5	(20)
	nodule		0	(0)	1	(4)	2	(8)	1	(4)
stomach	forestomach:nodule		0	(0)	0	(0)	2	(8)	0	(0)
liver	white zone		1	(4)	1	(4)	1	(4)	0	(0)
	red zone		0	(0)	0	(0)	1	(4)	2	(8)
	nodule		1	(4)	0	(0)	1	(4)	0	(0)
kidney	white zone		1	(4)	0	(0)	0	(0)	1	(4)
	cyst		0	(0)	1	(4)	0	(0)	0	(0)
testis	small		0	(0)	1	(4)	0	(0)	0	(0)
thoracic ca	pleural fluid		2	(8)	0	(0)	0	(0)	0	(0)

TABLE I2

GROSS FINDINGS : FEMALE

Organ	Findings	Group Name / NO. of Animals	Control 25	(%)	300 ppm 25	(%)	1000 ppm 25	(%)	3000 ppm 25	(%)
lung	red		0	(0)	1	(4)	0	(0)	0	(0)
	nodule		1	(4)	0	(0)	2	(8)	0	(0)
thymus	enlarged		1	(4)	0	(0)	0	(0)	0	(0)
spleen	black zone		0	(0)	6	(24)	5	(20)	4	(16)
	nodule		1	(4)	2	(8)	0	(0)	0	(0)
stomach	forestomach:nodule		0	(0)	0	(0)	2	(8)	0	(0)
liver	red zone		1	(4)	0	(0)	0	(0)	0	(0)
kidney	hydronephrosis		0	(0)	0	(0)	0	(0)	1	(4)
ovary	black zone		0	(0)	1	(4)	0	(0)	0	(0)
peritoneum	red zone		0	(0)	1	(4)	0	(0)	0	(0)
abdominal c	hemorrhage		1	(4)	1	(4)	0	(0)	0	(0)
	ascites		0	(0)	1	(4)	0	(0)	0	(0)
thoracic ca	pleural fluid		0	(0)	1	(4)	2	(8)	0	(0)

TABLE J1

ORGAN WEIGHT, ABSOLUTE : MALE

STUDY NO. : 0919
ANIMAL : CByB6F1-Tg(HRAS)2Jic (tg/wt)
REPORT TYPE : A1
SEX : MALE
UNIT: g

ORGAN WEIGHT:ABSOLUTE (SUMMARY)
SURVIVAL ANIMALS (27W)

Group Name	NO. of Animals	Body Weight	ADRENALS	TESTES	HEART	LUNGS	KIDNEYS
Control	23	29.3± 3.1	0.013± 0.002	0.263± 0.026	0.196± 0.018	0.176± 0.020	0.606± 0.069
300 ppm	25	28.6± 2.2	0.013± 0.002	0.244± 0.036	0.194± 0.020	0.173± 0.018	0.593± 0.046
1000 ppm	25	30.1± 2.6	0.012± 0.002	0.269± 0.027	0.199± 0.020	0.176± 0.013	0.612± 0.055
3000 ppm	25	25.2± 1.1**	0.013± 0.002	0.260± 0.038	0.170± 0.015**	0.172± 0.012	0.544± 0.033**

Significant difference : * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0919
ANIMAL : CByB6F1-Tg(HRAS)2Jic (tg/wt)
REPORT TYPE : A1
SEX : MALE
UNIT: g

ORGAN WEIGHT:ABSOLUTE (SUMMARY)
SURVIVAL ANIMALS (27W)

Group Name	NO. of Animals	SPLEEN	LIVER	BRAIN
Control	23	0.084± 0.068	1.313± 0.106	0.479± 0.015
300 ppm	25	0.068± 0.011	1.282± 0.083	0.478± 0.012
1000 ppm	25	0.077± 0.023	1.321± 0.127	0.479± 0.014
3000 ppm	25	0.060± 0.011**	1.117± 0.054**	0.461± 0.012**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

TABLE J2

ORGAN WEIGHT, ABSOLUTE : FEMALE

STUDY NO. : 0919
ANIMAL : CByB6F1-Tg(HRAS)2Jic (tg/wt)
REPORT TYPE : A1
SEX : FEMALE
UNIT: %

ORGAN WEIGHT:RELATIVE (SUMMARY)
SURVIVAL ANIMALS (27W)

Group Name	NO. of Animals	Body Weight (g)	ADRENALS	OVARIES	HEART	LUNGS	KIDNEYS
Control	24	21.6± 1.4	0.071± 0.010	0.169± 0.029	0.674± 0.045	0.770± 0.059	1.925± 0.136
300 ppm	23	21.4± 1.3	0.067± 0.011	0.159± 0.020	0.686± 0.045	0.762± 0.034	1.959± 0.076
1000 ppm	24	21.1± 1.3	0.069± 0.010	0.161± 0.029	0.682± 0.032	0.962± 0.721	1.959± 0.120
3000 ppm	25	20.1± 0.9**	0.064± 0.008	0.143± 0.021**	0.671± 0.037	0.818± 0.051**	2.025± 0.115**

Significant difference : * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0919
ANIMAL : CByB6F1-Tg(HRAS)2Jic (tg/wt)
REPORT TYPE : A1
SEX : FEMALE
UNIT: %

ORGAN WEIGHT:RELATIVE (SUMMARY)
SURVIVAL ANIMALS (27W)

Group Name	NO. of Animals	SPLEEN	LIVER	BRAIN
Control	24	0.379± 0.056	4.764± 0.233	2.336± 0.125
300 ppm	23	0.397± 0.112	4.823± 0.236	2.313± 0.092
1000 ppm	24	0.368± 0.062	4.795± 0.288	2.360± 0.146
3000 ppm	25	0.344± 0.064*	4.704± 0.172	2.322± 0.107

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

TABLE K1

ORGAN WEIGHT, RELATIVE : MALE

STUDY NO. : 0919
ANIMAL : CByB6F1-Tg(HRAS)2Jic (tg/wt)
REPORT TYPE : A1
SEX : MALE
UNIT: %

ORGAN WEIGHT:RELATIVE (SUMMARY)
SURVIVAL ANIMALS (27W)

Group Name	NO. of Animals	Body Weight (g)	ADRENALS	TESTES	HEART	LUNGS	KIDNEYS
Control	23	29.3± 3.1	0.044± 0.007	0.907± 0.137	0.673± 0.069	0.607± 0.106	2.068± 0.158
300 ppm	25	28.6± 2.2	0.045± 0.008	0.858± 0.151	0.679± 0.058	0.607± 0.057	2.073± 0.112
1000 ppm	25	30.1± 2.6	0.041± 0.007	0.900± 0.114	0.663± 0.046	0.586± 0.047	2.040± 0.155
3000 ppm	25	25.2± 1.1**	0.050± 0.009*	1.035± 0.174**	0.674± 0.056	0.684± 0.048**	2.158± 0.144

Significant difference : * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0919
ANIMAL : CByB6F1-Tg(HRAS)2Jic (tg/wt)
REPORT TYPE : A1
SEX : MALE
UNIT: %

ORGAN WEIGHT:RELATIVE (SUMMARY)
SURVIVAL ANIMALS (27W)

Group Name	NO. of Animals	SPLEEN	LIVER	BRAIN
Control	23	0.300± 0.303	4.495± 0.288	1.647± 0.164
300 ppm	25	0.240± 0.046	4.487± 0.231	1.678± 0.125
1000 ppm	25	0.257± 0.077	4.402± 0.315	1.604± 0.118
3000 ppm	25	0.238± 0.041	4.427± 0.180	1.828± 0.085**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

TABLE K2

ORGAN WEIGHT, RELATIVE : FEMALE

STUDY NO. : 0919
ANIMAL : CByB6F1-Tg(HRAS)2Jic (tg/wt)
REPORT TYPE : A1
SEX : FEMALE
UNIT: g

ORGAN WEIGHT:ABSOLUTE (SUMMARY)
SURVIVAL ANIMALS (27W)

Group Name	NO. of Animals	Body Weight	ADRENALS	OVARIES	HEART	LUNGS	KIDNEYS
Control	24	21.6± 1.4	0.015± 0.002	0.037± 0.008	0.145± 0.009	0.166± 0.014	0.414± 0.030
300 ppm	23	21.4± 1.3	0.014± 0.002	0.034± 0.005	0.147± 0.009	0.163± 0.009	0.420± 0.031
1000 ppm	24	21.1± 1.3	0.015± 0.002	0.034± 0.006	0.143± 0.008	0.197± 0.119	0.412± 0.026
3000 ppm	25	20.1± 0.9**	0.013± 0.002**	0.029± 0.005**	0.135± 0.008**	0.164± 0.011	0.407± 0.025

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0919
ANIMAL : CByB6F1-Tg(HRAS)2Jic (tg/wt)
REPORT TYPE : A1
SEX : FEMALE
UNIT: g

ORGAN WEIGHT:ABSOLUTE (SUMMARY)
SURVIVAL ANIMALS (27W)

Group Name	NO. of Animals	SPLEEN		LIVER		BRAIN	
Control	24	0.082±	0.014	1.027±	0.083	0.502±	0.019
300 ppm	23	0.085±	0.025	1.033±	0.071	0.495±	0.019
1000 ppm	24	0.077±	0.012	1.011±	0.094	0.495±	0.018
3000 ppm	25	0.069±	0.014**	0.946±	0.059**	0.466±	0.014**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

TABLE L1

HISTOPATHOLOGICAL FINDINGS :

NEOPLASTIC LESIONS : MALE

Organ	Findings	Group Name / No. of animals on Study	Control 25	300 ppm 25	1000 ppm 25	3000 ppm 25
{Integumentary system/appandage}						
skin/app			<25>	<25>	<25>	<25>
	squamous cell papilloma		0 (0%)	0 (0%)	0 (0%)	1 (4%)
subcutis			<25>	<25>	<25>	<25>
	hemangioma		0 (0%)	0 (0%)	0 (0%)	1 (4%)
{Respiratory system}						
lung			<25>	<25>	<25>	<25>
	bronchiolar-alveolar adenoma		0 (0%)	2 (8%)	2 (8%)	2 (8%)
	bronchiolar-alveolar carcinoma		0 (0%)	2 (8%)	1 (4%)	2 (8%)
{Hematopoietic system}						
thymus			<25>	<25>	<25>	<25>
	malignant lymphoma		2 (8%)	0 (0%)	0 (0%)	0 (0%)
spleen			<25>	<25>	<25>	<25>
	fibroma		0 (0%)	0 (0%)	0 (0%)	1 (4%)
	hemangioma		0 (0%)	1 (4%)	2 (8%)	0 (0%)
{Digestive system}						
stomach			<25>	<25>	<25>	<25>
	squamous cell papilloma		0 (0%)	0 (0%)	1 (4%)	0 (0%)
liver			<25>	<25>	<25>	<25>
	hemangioma		0 (0%)	0 (0%)	0 (0%)	1 (4%)
	hepatocellular adenoma		1 (4%)	1 (4%)	2 (8%)	0 (0%)

< a > a : Number of animals examined at the site
b (c) b : Number of animals with neoplasm c : b / a * 100

TABLE L2

HISTOPATHOLOGICAL FINDINGS :

NEOPLASTIC LESIONS : FEMALE

Organ	Findings	Group Name	Control	300 ppm	1000 ppm	3000 ppm
		No. of animals on Study	25	25	25	25
{Respiratory system}						
lung			<25>	<25>	<25>	<25>
	bronchiolar-alveolar carcinoma		1 (4%)	0 (0%)	2 (8%)	0 (0%)
{Hematopoietic system}						
thymus			<25>	<25>	<25>	<25>
	malignant lymphoma		0 (0%)	0 (0%)	1 (4%)	0 (0%)
spleen			<25>	<25>	<25>	<25>
	hemangioma		2 (8%)	0 (0%)	0 (0%)	0 (0%)
	hemangiosarcoma		1 (4%)	2 (8%)	0 (0%)	0 (0%)
{Digestive system}						
stomach			<25>	<25>	<25>	<25>
	squamous cell papilloma		0 (0%)	0 (0%)	1 (4%)	0 (0%)
{Body cavities}						
peritoneum			<25>	<25>	<25>	<25>
	hemangioma		0 (0%)	1 (4%)	0 (0%)	0 (0%)

< a > a : Number of animals examined at the site
b (c) b : Number of animals with neoplasm c : b / a * 100

TABLE M1

NEOPLASTIC LESIONS-INCIDENCE AND

STATISTICAL ANALYSIS : MALE

Group Name	Control	300 ppm	1000 ppm	3000 ppm
SITE : skin/appendage				
TUMOR : squamous cell papilloma				
Tumor rate				
Overall rates(a)	0/25(0.0)	0/25(0.0)	0/25(0.0)	1/25(4.0)
Adjusted rates(b)	0.00	0.00	0.00	4.00
Terminal rates(c)	0/23(0.0)	0/25(0.0)	0/25(0.0)	1/25(4.0)
Statistical analysis				
Peto test				
Standard method(d)	P = ------			
Prevalence method(d)	P = 0.1390			
Combined analysis(d)	P = ------			
Cochran-Armitage test(e)	P = 0.0980			
Fisher Exact test(e)		P = N.C.	P = N.C.	P = 0.5000
SITE : subcutis				
TUMOR : hemangioma				
Tumor rate				
Overall rates(a)	0/25(0.0)	0/25(0.0)	0/25(0.0)	1/25(4.0)
Adjusted rates(b)	0.00	0.00	0.00	4.00
Terminal rates(c)	0/23(0.0)	0/25(0.0)	0/25(0.0)	1/25(4.0)
Statistical analysis				
Peto test				
Standard method(d)	P = ------			
Prevalence method(d)	P = 0.1390			
Combined analysis(d)	P = ------			
Cochran-Armitage test(e)	P = 0.0980			
Fisher Exact test(e)		P = N.C.	P = N.C.	P = 0.5000
SITE : lung				
TUMOR : bronchiolar-alveolar adenoma				
Tumor rate				
Overall rates(a)	0/25(0.0)	2/25(8.0)	2/25(8.0)	2/25(8.0)
Adjusted rates(b)	0.00	8.00	8.00	8.00
Terminal rates(c)	0/23(0.0)	2/25(8.0)	2/25(8.0)	2/25(8.0)
Statistical analysis				
Peto test				
Standard method(d)	P = ------			
Prevalence method(d)	P = 0.2338			
Combined analysis(d)	P = ------			
Cochran-Armitage test(e)	P = 0.4387			
Fisher Exact test(e)		P = 0.2449	P = 0.2449	P = 0.2449

Group Name	Control	300 ppm	1000 ppm	3000 ppm
SITE : lung				
TUMOR : bronchiolar-alveolar carcinoma				
Tumor rate				
Overall rates(a)	0/25(0.0)	2/25(8.0)	1/25(4.0)	2/25(8.0)
Adjusted rates(b)	0.00	8.00	4.00	8.00
Terminal rates(c)	0/23(0.0)	2/25(8.0)	1/25(4.0)	2/25(8.0)
Statistical analysis				
Peto test				
Standard method(d)	P = ------			
Prevalence method(d)	P = 0.2074			
Combined analysis(d)	P = ------			
Cochran-Armitage test(e)	P = 0.3825			
Fisher Exact test(e)		P = 0.2449	P = 0.5000	P = 0.2449
SITE : lung				
TUMOR : bronchiolar-alveolar adenoma,bronchiolar-alveolar carcinoma				
Tumor rate				
Overall rates(a)	0/25(0.0)	4/25(16.0)	3/25(12.0)	4/25(16.0)
Adjusted rates(b)	0.00	16.00	12.00	16.00
Terminal rates(c)	0/23(0.0)	4/25(16.0)	3/25(12.0)	4/25(16.0)
Statistical analysis				
Peto test				
Standard method(d)	P = ------			
Prevalence method(d)	P = 0.1351			
Combined analysis(d)	P = ------			
Cochran-Armitage test(e)	P = 0.2317			
Fisher Exact test(e)		P = 0.0549	P = 0.1173	P = 0.0549
SITE : thymus				
TUMOR : malignant lymphoma				
Tumor rate				
Overall rates(a)	2/25(8.0)	0/25(0.0)	0/25(0.0)	0/25(0.0)
Adjusted rates(b)	4.35	0.00	0.00	0.00
Terminal rates(c)	1/23(4.3)	0/25(0.0)	0/25(0.0)	0/25(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 1.0000 ?			
Prevalence method(d)	P = 1.0000 ?			
Combined analysis(d)	P = 0.9467			
Cochran-Armitage test(e)	P = 0.1890			
Fisher Exact test(e)		P = 0.2449	P = 0.2449	P = 0.2449

Group Name	Control	300 ppm	1000 ppm	3000 ppm
SITE : spleen				
TUMOR : fibroma				
Tumor rate				
Overall rates(a)	0/25(0.0)	0/25(0.0)	0/25(0.0)	1/25(4.0)
Adjusted rates(b)	0.00	0.00	0.00	4.00
Terminal rates(c)	0/23(0.0)	0/25(0.0)	0/25(0.0)	1/25(4.0)
Statistical analysis				
Peto test				
Standard method(d)	P = ------			
Prevalence method(d)	P = 0.1390			
Combined analysis(d)	P = ------			
Cochran-Armitage test(e)	P = 0.0980			
Fisher Exact test(e)		P = N.C.	P = N.C.	P = 0.5000
SITE : spleen				
TUMOR : hemangioma				
Tumor rate				
Overall rates(a)	0/25(0.0)	1/25(4.0)	2/25(8.0)	0/25(0.0)
Adjusted rates(b)	0.00	4.00	8.00	0.00
Terminal rates(c)	0/23(0.0)	1/25(4.0)	2/25(8.0)	0/25(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = ------			
Prevalence method(d)	P = 0.6451			
Combined analysis(d)	P = ------			
Cochran-Armitage test(e)	P = 0.6428			
Fisher Exact test(e)		P = 0.5000	P = 0.2449	P = N.C.
SITE : stomach				
TUMOR : squamous cell papilloma				
Tumor rate				
Overall rates(a)	0/25(0.0)	0/25(0.0)	1/25(4.0)	0/25(0.0)
Adjusted rates(b)	0.00	0.00	4.00	0.00
Terminal rates(c)	0/23(0.0)	0/25(0.0)	1/25(4.0)	0/25(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = ------			
Prevalence method(d)	P = 0.3755			
Combined analysis(d)	P = ------			
Cochran-Armitage test(e)	P = 0.9486			
Fisher Exact test(e)		P = N.C.	P = 0.5000	P = N.C.

Group Name	Control	300 ppm	1000 ppm	3000 ppm
SITE : liver				
TUMOR : hemangioma				
Tumor rate				
Overall rates(a)	0/25(0.0)	0/25(0.0)	0/25(0.0)	1/25(4.0)
Adjusted rates(b)	0.00	0.00	0.00	4.00
Terminal rates(c)	0/23(0.0)	0/25(0.0)	0/25(0.0)	1/25(4.0)
Statistical analysis				
Peto test				
Standard method(d)	P = ------			
Prevalence method(d)	P = 0.1390			
Combined analysis(d)	P = ------			
Cochran-Armitage test(e)	P = 0.0980			
Fisher Exact test(e)		P = N.C.	P = N.C.	P = 0.5000

Group Name	Control	300 ppm	1000 ppm	3000 ppm
SITE : liver				
TUMOR : hepatocellular adenoma				
Tumor rate				
Overall rates(a)	1/25(4.0)	1/25(4.0)	2/25(8.0)	0/25(0.0)
Adjusted rates(b)	4.35	4.00	8.00	0.00
Terminal rates(c)	1/23(4.3)	1/25(4.0)	2/25(8.0)	0/25(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = ------			
Prevalence method(d)	P = 0.8029			
Combined analysis(d)	P = ------			
Cochran-Armitage test(e)	P = 0.3827			
Fisher Exact test(e)		P = 0.7551	P = 0.5000	P = 0.5000

(a): Number of tumor-beaning animals/number of animals examined at the site.
(b): Kaplan-Meier estimated tumor incidence at the end of the study after adjusting for intercurrent mortality.
(c): Observed tumor incidence at terminal kill.
(d): Beneath the control incidence are the P-values associated with the trend test.
Standard method : Death analysis
Prevalence method : Incidental tumor test
Combined analysis : Death analysis + Incidental tumor test
(e): The Cochran-Armitage and Fisher exact test compare directly the overall incidence retes.
? : The conditional probabilities of the largest and smallest possible out comes can not estimated or this P-value is beyond the estimated P-value.
------ : There is no data which should be statistical analysis.
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01
N.C.:Statistical value cannot be calculated and was not significant.

Group Name	Control	300 ppm	1000 ppm	3000 ppm
SITE : ALL SITE				
TUMOR : hemangioma				
Tumor rate				
Overall rates(a)	0/25(0.0)	1/25(4.0)	2/25(8.0)	2/25(8.0)
Adjusted rates(b)	0.00	4.00	8.00	8.00
Terminal rates(c)	0/23(0.0)	1/25(4.0)	2/25(8.0)	2/25(8.0)
Statistical analysis				
Peto test				
Standard method(d)	P = ------			
Prevalence method(d)	P = 0.1455			
Combined analysis(d)	P = ------			
Cochran-Armitage test(e)	P = 0.2510			
Fisher Exact test(e)		P = 0.5000	P = 0.2449	P = 0.2449

(a): Number of tumor-bearing animals/number of animals examined at the site.
(b): Kaplan-Meier estimated tumor incidence at the end of the study after adjusting for intercurrent mortality.
(c): Observed tumor incidence at terminal kill.
(d): Beneath the control incidence are the P-values associated with the trend test.
Standard method : Death analysis
Prevalence method : Incidental tumor test
Combined analysis : Death analysis + Incidental tumor test
(e): The Cochran-Armitage and Fisher exact test compare directly the overall incidence rates.
? : The conditional probabilities of the largest and smallest possible out comes can not estimated or this P-value is beyond the estimated P-value.
------ : There is no data which should be statistical analysis.
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01
N.C.:Statistical value cannot be calculated and was not significant.

TABLE M2

NEOPLASTIC LESIONS-INCIDENCE AND

STATISTICAL ANALYSIS : FEMALE

Group Name	Control	300 ppm	1000 ppm	3000 ppm
SITE : lung				
TUMOR : bronchiolar-alveolar carcinoma				
Tumor rate				
Overall rates(a)	1/25(4.0)	0/25(0.0)	2/25(8.0)	0/25(0.0)
Adjusted rates(b)	4.17	0.00	8.33	0.00
Terminal rates(c)	1/24(4.2)	0/23(0.0)	2/24(8.3)	0/25(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = ------			
Prevalence method(d)	P = 0.7036			
Combined analysis(d)	P = ------			
Cochran-Armitage test(e)	P = 0.5391			
Fisher Exact test(e)		P = 0.5000	P = 0.5000	P = 0.5000
SITE : thymus				
TUMOR : malignant lymphoma				
Tumor rate				
Overall rates(a)	0/25(0.0)	0/25(0.0)	1/25(4.0)	0/25(0.0)
Adjusted rates(b)	0.00	0.00	4.17	0.00
Terminal rates(c)	0/24(0.0)	0/23(0.0)	1/24(4.2)	0/25(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = ------			
Prevalence method(d)	P = 0.3789			
Combined analysis(d)	P = ------			
Cochran-Armitage test(e)	P = 0.9486			
Fisher Exact test(e)		P = N.C.	P = 0.5000	P = N.C.
SITE : spleen				
TUMOR : hemangioma				
Tumor rate				
Overall rates(a)	2/25(8.0)	0/25(0.0)	0/25(0.0)	0/25(0.0)
Adjusted rates(b)	8.00	0.00	0.00	0.00
Terminal rates(c)	1/24(4.2)	0/23(0.0)	0/24(0.0)	0/25(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = ------			
Prevalence method(d)	P = 0.9423			
Combined analysis(d)	P = ------			
Cochran-Armitage test(e)	P = 0.1890			
Fisher Exact test(e)		P = 0.2449	P = 0.2449	P = 0.2449

Group Name	Control	300 ppm	1000 ppm	3000 ppm
SITE : spleen				
TUMOR : hemangiosarcoma				
Tumor rate				
Overall rates(a)	1/25(4.0)	2/25(8.0)	0/25(0.0)	0/25(0.0)
Adjusted rates(b)	0.00	4.35	0.00	0.00
Terminal rates(c)	0/24(0.0)	1/23(4.3)	0/24(0.0)	0/25(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.8756			
Prevalence method(d)	P = 0.5414			
Combined analysis(d)	P = 0.9206			
Cochran-Armitage test(e)	P = 0.1881			
Fisher Exact test(e)		P = 0.5000	P = 0.5000	P = 0.5000
SITE : spleen				
TUMOR : hemangioma,hemangiosarcoma				
Tumor rate				
Overall rates(a)	2/25(8.0)	2/25(8.0)	0/25(0.0)	0/25(0.0)
Adjusted rates(b)	4.17	4.35	0.00	0.00
Terminal rates(c)	1/24(4.2)	1/23(4.3)	0/24(0.0)	0/25(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.8756			
Prevalence method(d)	P = 0.8811			
Combined analysis(d)	P = 0.9669			
Cochran-Armitage test(e)	P = 0.1063			
Fisher Exact test(e)		P = 0.6954	P = 0.2449	P = 0.2449
SITE : stomach				
TUMOR : squamous cell papilloma				
Tumor rate				
Overall rates(a)	0/25(0.0)	0/25(0.0)	1/25(4.0)	0/25(0.0)
Adjusted rates(b)	0.00	0.00	4.17	0.00
Terminal rates(c)	0/24(0.0)	0/23(0.0)	1/24(4.2)	0/25(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = ------			
Prevalence method(d)	P = 0.3789			
Combined analysis(d)	P = ------			
Cochran-Armitage test(e)	P = 0.9486			
Fisher Exact test(e)		P = N.C.	P = 0.5000	P = N.C.

Group Name	Control	300 ppm	1000 ppm	3000 ppm
SITE : peritoneum				
TUMOR : hemangioma				
Tumor rate				
Overall rates(a)	0/25(0.0)	1/25(4.0)	0/25(0.0)	0/25(0.0)
Adjusted rates(b)	0.00	0.00	0.00	0.00
Terminal rates(c)	0/24(0.0)	0/23(0.0)	0/24(0.0)	0/25(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.5320			
Prevalence method(d)	P = ------			
Combined analysis(d)	P = 0.5320			
Cochran-Armitage test(e)	P = 0.5053			
Fisher Exact test(e)		P = 0.5000	P = N.C.	P = N.C.

(a): Number of tumor-beaning animals/number of animals examined at the site.
(b): Kaplan-Meier estimated tumor incidence at the end of the study after adjusting for intercurrent mortality.
(c): Observed tumor incidence at terminal kill.
(d): Beneath the control incidence are the P-values associated with the trend test.
Standard method : Death analysis
Prevalence method : Incidental tumor test
Combined analysis : Death analysis + Incidental tumor test
(e): The Cochran-Armitage and Fisher exact test compare directly the overall incidence retes.
? : The conditional probabilities of the largest and smallest possible out comes can not estimated or this P-value is beyond the estimated P-value.
------ : There is no data which should be statistical analysis.
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01
N.C.:Statistical value cannot be calculated and was not significant.

Group Name	Control	300 ppm	1000 ppm	3000 ppm
SITE : ALL SITE				
TUMOR : hemangioma				
Tumor rate				
Overall rates(a)	2/25(8.0)	1/25(4.0)	0/25(0.0)	0/25(0.0)
Adjusted rates(b)	8.00	0.00	0.00	0.00
Terminal rates(c)	1/24(4.2)	0/23(0.0)	0/24(0.0)	0/25(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.5320			
Prevalence method(d)	P = 0.9423			
Combined analysis(d)	P = 0.9525			
Cochran-Armitage test(e)	P = 0.1425			
Fisher Exact test(e)		P = 0.5000	P = 0.2449	P = 0.2449

(a): Number of tumor-bearing animals/number of animals examined at the site.
(b): Kaplan-Meier estimated tumor incidence at the end of the study after adjusting for intercurrent mortality.
(c): Observed tumor incidence at terminal kill.
(d): Beneath the control incidence are the P-values associated with the trend test.
Standard method : Death analysis
Prevalence method : Incidental tumor test
Combined analysis : Death analysis + Incidental tumor test
(e): The Cochran-Armitage and Fisher exact test compare directly the overall incidence rates.
? : The conditional probabilities of the largest and smallest possible out comes can not estimated or this P-value is beyond the estimated P-value.
------ : There is no data which should be statistical analysis.
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01
N.C.:Statistical value cannot be calculated and was not significant.

TABLE N1

NUMBER OF ANIMALS WITH TUMORS AND

NUMBER OF TUMORS-TIME RELATED : MALE

STUDY NO. : O919
ANIMAL : CByB6F1-Tg(HRAS)2Jic (tg/wt)
REPORT TYPE : A1
SEX : MALE

NUMBER OF ANIMALS WITH TUMORS AND NUMBER OF TUMORS - TIME RELATED

Time-related Weeks	Items	Group Name	Control	300 ppm	1000 ppm	3000 ppm
1 - 26	NO. OF EXAMINED ANIMALS		2	0	0	0
	NO. OF ANIMALS WITH TUMORS		1	0	0	0
	NO. OF ANIMALS WITH SINGLE TUMORS		1	0	0	0
	NO. OF ANIMALS WITH MULTIPLE TUMORS		0	0	0	0
	NO. OF BENIGN TUMORS		0	0	0	0
	NO. OF MALIGNANT TUMORS		1	0	0	0
	NO. OF TOTAL TUMORS		1	0	0	0
27 - 27	NO. OF EXAMINED ANIMALS		23	25	25	25
	NO. OF ANIMALS WITH TUMORS		2	6	8	7
	NO. OF ANIMALS WITH SINGLE TUMORS		2	6	8	6
	NO. OF ANIMALS WITH MULTIPLE TUMORS		0	0	0	1
	NO. OF BENIGN TUMORS		1	4	7	6
	NO. OF MALIGNANT TUMORS		1	2	1	2
	NO. OF TOTAL TUMORS		2	6	8	8
1 - 27	NO. OF EXAMINED ANIMALS		25	25	25	25
	NO. OF ANIMALS WITH TUMORS		3	6	8	7
	NO. OF ANIMALS WITH SINGLE TUMORS		3	6	8	6
	NO. OF ANIMALS WITH MULTIPLE TUMORS		0	0	0	1
	NO. OF BENIGN TUMORS		1	4	7	6
	NO. OF MALIGNANT TUMORS		2	2	1	2
	NO. OF TOTAL TUMORS		3	6	8	8

TABLE N2

NUMBER OF ANIMALS WITH TUMORS AND

NUMBER OF TUMORS-TIME RELATED : FEMALE

NUMBER OF ANIMALS WITH TUMORS AND NUMBER OF TUMORS - TIME RELATED

Time-related Weeks	Items	Group Name	Control	300 ppm	1000 ppm	3000 ppm
1 - 26	NO. OF EXAMINED ANIMALS		1	2	1	0
	NO. OF ANIMALS WITH TUMORS		1	2	0	0
	NO. OF ANIMALS WITH SINGLE TUMORS		0	2	0	0
	NO. OF ANIMALS WITH MULTIPLE TUMORS		1	0	0	0
	NO. OF BENIGN TUMORS		1	1	0	0
	NO. OF MALIGNANT TUMORS		1	1	0	0
	NO. OF TOTAL TUMORS		2	2	0	0
27 - 27	NO. OF EXAMINED ANIMALS		24	23	24	25
	NO. OF ANIMALS WITH TUMORS		2	1	4	0
	NO. OF ANIMALS WITH SINGLE TUMORS		2	1	4	0
	NO. OF ANIMALS WITH MULTIPLE TUMORS		0	0	0	0
	NO. OF BENIGN TUMORS		1	0	1	0
	NO. OF MALIGNANT TUMORS		1	1	3	0
	NO. OF TOTAL TUMORS		2	1	4	0
1 - 27	NO. OF EXAMINED ANIMALS		25	25	25	25
	NO. OF ANIMALS WITH TUMORS		3	3	4	0
	NO. OF ANIMALS WITH SINGLE TUMORS		2	3	4	0
	NO. OF ANIMALS WITH MULTIPLE TUMORS		1	0	0	0
	NO. OF BENIGN TUMORS		2	1	1	0
	NO. OF MALIGNANT TUMORS		2	2	3	0
	NO. OF TOTAL TUMORS		4	3	4	0

TABLE O1

HISTOPATHOLOGICAL FINDINGS :

METASTASIS OF TUMOR : MALE

Organ	Findings	Group Name	Control	300 ppm	1000 ppm	3000 ppm
		No. of Animals on Study	25	25	25	25
{Respiratory system}						
lung			<25>	<25>	<25>	<25>
	leukemic cell infiltration		1	0	0	0
{Hematopoietic system}						
bone marrow			<25>	<25>	<25>	<25>
	leukemic cell infiltration		2	0	0	0
lymph node			<25>	<25>	<25>	<25>
	leukemic cell infiltration		1	0	0	0
spleen			<25>	<25>	<25>	<25>
	leukemic cell infiltration		1	0	0	0
{Circulatory system}						
heart			<25>	<25>	<25>	<25>
	leukemic cell infiltration		1	0	0	0
{Digestive system}						
liver			<25>	<25>	<25>	<25>
	leukemic cell infiltration		1	0	0	0
{Urinary system}						
kidney			<25>	<25>	<25>	<25>
	leukemic cell infiltration		1	0	0	0
{Endocrine system}						
pituitary			<25>	<25>	<25>	<25>
	leukemic cell infiltration		1	0	0	0

< a > a : Number of animals examined at the site
b b : Number of animals with lesion

Organ	Findings	Group Name	Control	300 ppm	1000 ppm	3000 ppm
		No. of Animals on Study	25	25	25	25
{Reproductive system}						
prostate			<25>	<25>	<25>	<25>
	leukemic cell infiltration		1	0	0	0
{Special sense organs/appendage}						
Harder gl			<25>	<25>	<25>	<25>
	leukemic cell infiltration		1	0	0	0
{Musculoskeletal system}						
bone			<25>	<25>	<25>	<25>
	leukemic cell infiltration		1	0	0	0
{Body cavities}						
pleura			<25>	<25>	<25>	<25>
	leukemic cell infiltration		2	0	0	0
peritoneum			<25>	<25>	<25>	<25>
	leukemic cell infiltration		1	0	0	0

< a > a : Number of animals examined at the site
b b : Number of animals with lesion

TABLE O2

HISTOPATHOLOGICAL FINDINGS :

METASTASIS OF TUMOR : FEMALE

Organ	Findings	Group Name / No. of Animals on Study	Control	300 ppm	1000 ppm	3000 ppm
			25	25	25	25
{Respiratory system}						
lung			<25>	<25>	<25>	<25>
	leukemic cell infiltration		0	0	1	0
{Digestive system}						
liver			<25>	<25>	<25>	<25>
	metastasis:spleen tumor		1	0	0	0
{Body cavities}						
pleura			<25>	<25>	<25>	<25>
	metastasis:lung tumor		0	0	1	0
peritoneum			<25>	<25>	<25>	<25>
	metastasis:spleen tumor		0	1	0	0

< a > a : Number of animals examined at the site
b b : Number of animals with lesion

TABLE P1

HISTOPATHOLOGICAL FINDINGS :

NON-NEOPLASTIC LESIONS : MALE

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 25 1+ (%)	Control 25 2+ (%)	Control 25 3+ (%)	Control 25 4+ (%)	300 ppm 25 1+ (%)	300 ppm 25 2+ (%)	300 ppm 25 3+ (%)	300 ppm 25 4+ (%)	1000 ppm 25 1+ (%)	1000 ppm 25 2+ (%)	1000 ppm 25 3+ (%)	1000 ppm 25 4+ (%)	3000 ppm 25 1+ (%)	3000 ppm 25 2+ (%)	3000 ppm 25 3+ (%)	3000 ppm 25 4+ (%)
{Integumentary system/appandage}																		
subcutis		<25>																
	inflammatory infiltration		0 (0)	0 (0)	0 (0)	0 (0)	1 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
{Respiratory system}																		
nasal cavit		<25>																
	eosinophilic change:olfactory epithelium		3 (12)	0 (0)	0 (0)	0 (0)	11 (44)	0 (0)	0 (0)	0 * (0)	1 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	eosinophilic change:respiratory epithelium		2 (8)	0 (0)	0 (0)	0 (0)	6 (24)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	12 (48)	6 (24)	0 (0)	0 ** (0)
	inflammation:respiratory epithelium		0 (0)	0 (0)	0 (0)	0 (0)	1 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	18 (72)	7 (28)	0 (0)	0 ** (0)
	respiratory metaplasia:olfactory epithelium		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	22 (88)	0 (0)	0 (0)	0 ** (0)
	respiratory metaplasia:gland		5 (20)	0 (0)	0 (0)	0 (0)	6 (24)	0 (0)	0 (0)	0 (0)	3 (12)	0 (0)	0 (0)	0 (0)	3 (12)	0 (0)	0 (0)	0 (0)
	squamous cell metaplasia:respiratory epithelium		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	21 (84)	0 (0)	0 (0)	0 ** (0)

Grade 1+ : Slight 2+ : Moderate 3+ : Marked 4+ : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name / Grade	Control 1+ (%)	Control 2+ (%)	Control 3+ (%)	Control 4+ (%)	300 ppm 1+ (%)	300 ppm 2+ (%)	300 ppm 3+ (%)	300 ppm 4+ (%)	1000 ppm 1+ (%)	1000 ppm 2+ (%)	1000 ppm 3+ (%)	1000 ppm 4+ (%)	3000 ppm 1+ (%)	3000 ppm 2+ (%)	3000 ppm 3+ (%)	3000 ppm 4+ (%)
{Respiratory system}																		
nasal cavit		No. of Animals on Study	25				25				25				25			
	transitional cell hyperplasia		0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0 *
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(28)	(0)	(0)	(0)
	atrophy:olfactory epithelium		0	0	0	0	0	0	0	0	19	0	0	0 **	0	13	12	0 **
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(76)	(0)	(0)	(0)	(0)	(52)	(48)	(0)
	exudate:olfactory region		0	0	0	0	0	0	0	0	0	0	0	0	12	7	0	0 **
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(48)	(28)	(0)	(0)
nasopharynx		No. of Animals on Study	25				25				25				25			
	eosinophilic change		6	0	0	0	10	0	0	0	4	0	0	0	0	0	0	0 *
			(24)	(0)	(0)	(0)	(40)	(0)	(0)	(0)	(16)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
trachea		No. of Animals on Study	25				25				25				25			
	vacuolic change:tracheaal epithelium		0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(16)	(0)	(0)	(0)
lung		No. of Animals on Study	25				25				25				25			
	hemorrhage		0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	bronchiolar-alveolar cell hyperplasia		0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1+ : Slight 2+ : Moderate 3+ : Marked 4+ : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name / Grade	Control				300 ppm				1000 ppm				3000 ppm			
		No. of Animals on Study	25				25				25				25			
		1+ (%)	2+ (%)	3+ (%)	4+ (%)	1+ (%)	2+ (%)	3+ (%)	4+ (%)	1+ (%)	2+ (%)	3+ (%)	4+ (%)	1+ (%)	2+ (%)	3+ (%)	4+ (%)
{Respiratory system}																	
lung		<25>				<25>				<25>				<25>			
	vacuolic change:bronchial epithelium	0 (0)	0 (0)	0 (0)	0 (0)	9 (36)	2 (8)	0 (0)	0 ** (0)	6 (24)	6 (24)	0 (0)	0 ** (0)	3 (12)	10 (40)	0 (0)	0 ** (0)
{Hematopoietic system}																	
thymus		<25>				<25>				<25>				<25>			
	hemorrhage	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	necrosis:focal	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (4)	0 (0)	0 (0)	0 (0)
spleen		<25>				<25>				<25>				<25>			
	deposit of melanin	4 (16)	0 (0)	0 (0)	0 (0)	7 (28)	0 (0)	0 (0)	0 (0)	7 (28)	0 (0)	0 (0)	0 (0)	5 (20)	0 (0)	0 (0)	0 (0)
{Circulatory system}																	
heart		<25>				<25>				<25>				<25>			
	myocardial fibrosis	0 (0)	0 (0)	0 (0)	0 (0)	1 (4)	0 (0)	0 (0)	0 (0)	1 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

Grade 1+ : Slight 2+ : Moderate 3+ : Marked 4+ : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name	Control				300 ppm				1000 ppm				3000 ppm			
		No. of Animals on Study	25				25				25				25			
		Grade	1+	2+	3+	4+	1+	2+	3+	4+	1+	2+	3+	4+	1+	2+	3+	4+
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
salivary gl			<25>				<25>				<25>				<25>			
	lymphocytic infiltration		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
stomach			<25>				<25>				<25>				<25>			
	hyperplasia:forestomach		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	erosion:glandular stomach		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	ulcer:glandular stomach		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
liver			<25>				<25>				<25>				<25>			
	angiectasis		0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(4)	(0)	(0)	(0)
	necrosis:focal		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	fatty change		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1+ : Slight 2+ : Moderate 3+ : Marked 4+ : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Grade	Control 1+ (%)	Control 2+ (%)	Control 3+ (%)	Control 4+ (%)	300 ppm 1+ (%)	300 ppm 2+ (%)	300 ppm 3+ (%)	300 ppm 4+ (%)	1000 ppm 1+ (%)	1000 ppm 2+ (%)	1000 ppm 3+ (%)	1000 ppm 4+ (%)	3000 ppm 1+ (%)	3000 ppm 2+ (%)	3000 ppm 3+ (%)	3000 ppm 4+ (%)
{Digestive system}																		
liver		No. of Animals on Study	25				25				25				25			
	mineralization	<a>	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		(c)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	basophilic cell focus	<a>	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
		(c)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
pancreas		No. of Animals on Study	25				25				25				25			
	cyst	<a>	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(c)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Urinary system}																		
kidney		No. of Animals on Study	25				25				25				25			
	cystic change	<a>	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0
		(c)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)
{Endocrine system}																		
pituitary		No. of Animals on Study	25				25				25				25			
	hemorrhage	<a>	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		(c)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)

Grade 1+ : Slight 2+ : Moderate 3+ : Marked 4+ : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 25 1+ (%)	Control 25 2+ (%)	Control 25 3+ (%)	Control 25 4+ (%)	300 ppm 25 1+ (%)	300 ppm 25 2+ (%)	300 ppm 25 3+ (%)	300 ppm 25 4+ (%)	1000 ppm 25 1+ (%)	1000 ppm 25 2+ (%)	1000 ppm 25 3+ (%)	1000 ppm 25 4+ (%)	3000 ppm 25 1+ (%)	3000 ppm 25 2+ (%)	3000 ppm 25 3+ (%)	3000 ppm 25 4+ (%)
{Endocrine system}																		
pituitary		<25>																
	Rathke pouch		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (8)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	cystic degeneration:anterior lobe		1 (4)	0 (0)	0 (0)	0 (0)	3 (12)	0 (0)	0 (0)	0 (0)	2 (8)	0 (0)	0 (0)	0 (0)	2 (8)	0 (0)	0 (0)	0 (0)
thyroid		<25>																
	follicular hyperplasia		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
parathyroid		<25>																
	lymphocytic infiltration		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (4)	0 (0)	0 (0)	0 (0)
	ultimobranchial body remanet		2 (8)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (4)	0 (0)	0 (0)	0 (0)	2 (8)	0 (0)	0 (0)	0 (0)
{Reproductive system}																		
testis		<25>																
	spermatogenic granuloma		0 (0)	0 (0)	0 (0)	0 (0)	1 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (4)	0 (0)	0 (0)	0 (0)

Grade 1+ : Slight 2+ : Moderate 3+ : Marked 4+ : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name / Grade	Control	300 ppm	1000 ppm	3000 ppm
		No. of Animals on Study	25	25	25	25
{Reproductive system}						
testis			<25>	<25>	<25>	<25>
	tubular atrophy:diffuse	1+	0 (0)	1 (4)	0 (0)	0 (0)
		2+	0 (0)	0 (0)	0 (0)	0 (0)
		3+	0 (0)	0 (0)	0 (0)	0 (0)
		4+	0 (0)	0 (0)	0 (0)	0 (0)
epididymis			<25>	<25>	<25>	<25>
	spermatogenic granuloma	1+	0 (0)	1 (4)	0 (0)	0 (0)
		2+	0 (0)	0 (0)	0 (0)	0 (0)
		3+	0 (0)	0 (0)	0 (0)	0 (0)
		4+	0 (0)	0 (0)	0 (0)	0 (0)
	decreased:sperma	1+	0 (0)	1 (4)	0 (0)	0 (0)
		2+	0 (0)	0 (0)	0 (0)	0 (0)
		3+	0 (0)	0 (0)	0 (0)	0 (0)
		4+	0 (0)	0 (0)	0 (0)	0 (0)
{Special sense organs/appendage}						
nasolacr d			<25>	<25>	<25>	<25>
	eosinophilic change:respiratory epithelium	1+	1 (4)	0 (0)	0 (0)	0 (0)
		2+	0 (0)	0 (0)	0 (0)	0 (0)
		3+	0 (0)	0 (0)	0 (0)	0 (0)
		4+	0 (0)	0 (0)	0 (0)	0 (0)
{Musculoskeletal system}						
muscle			<25>	<25>	<25>	<25>
	inflammatory infiltration	1+	0 (0)	0 (0)	1 (4)	1 (4)
		2+	0 (0)	0 (0)	0 (0)	0 (0)
		3+	0 (0)	0 (0)	0 (0)	0 (0)
		4+	0 (0)	0 (0)	0 (0)	0 (0)

Grade 1+ : Slight 2+ : Moderate 3+ : Marked 4+ : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name	Control				300 ppm				1000 ppm				3000 ppm			
		No. of Animals on Study	25				25				25				25			
		Grade	1+	2+	3+	4+	1+	2+	3+	4+	1+	2+	3+	4+	1+	2+	3+	4+
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Body cavities}																		
pleura			<25>				<25>				<25>				<25>			
	mesothelial hyperplasia		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1+ : Slight 2+ : Moderate 3+ : Marked 4+ : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference : * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

TABLE P2

HISTOPATHOLOGICAL FINDINGS :

NON-NEOPLASTIC LESIONS : FEMALE

Organ	Findings	Grade	Control 25 1+ (%)	Control 25 2+ (%)	Control 25 3+ (%)	Control 25 4+ (%)	300 ppm 25 1+ (%)	300 ppm 25 2+ (%)	300 ppm 25 3+ (%)	300 ppm 25 4+ (%)	1000 ppm 25 1+ (%)	1000 ppm 25 2+ (%)	1000 ppm 25 3+ (%)	1000 ppm 25 4+ (%)	3000 ppm 25 1+ (%)	3000 ppm 25 2+ (%)	3000 ppm 25 3+ (%)	3000 ppm 25 4+ (%)
{Respiratory system}																		
nasal cavit			<25>				<25>				<25>				<25>			
	eosinophilic change:olfactory epithelium		7 (28)	0 (0)	0 (0)	0 (0)	10 (40)	1 (4)	0 (0)	0 (0)	4 (16)	1 (4)	0 (0)	0 (0)	3 (12)	0 (0)	0 (0)	0 (0)
	eosinophilic change:respiratory epithelium		5 (20)	0 (0)	0 (0)	0 (0)	7 (28)	1 (4)	0 (0)	0 (0)	3 (12)	0 (0)	0 (0)	0 (0)	14 (56)	0 (0)	0 (0)	0 * (0)
	inflammation:respiratory epithelium		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (4)	0 (0)	0 (0)	0 (0)	13 (52)	12 (48)	0 (0)	0 ** (0)
	respiratory metaplasia:olfactory epithelium		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	21 (84)	0 (0)	0 (0)	0 ** (0)
	respiratory metaplasia:gland		8 (32)	0 (0)	0 (0)	0 (0)	10 (40)	0 (0)	0 (0)	0 (0)	3 (12)	0 (0)	0 (0)	0 (0)	5 (20)	0 (0)	0 (0)	0 (0)
	squamous cell metaplasia:respiratory epithelium		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	20 (80)	0 (0)	0 (0)	0 ** (0)
	atrophy:turbinate		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	16 (64)	0 (0)	0 (0)	0 ** (0)
	transitional cell hyperplasia		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (4)	0 (0)	0 (0)	0 (0)	11 (44)	0 (0)	0 (0)	0 ** (0)

Grade 1+ : Slight 2+ : Moderate 3+ : Marked 4+ : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 25 1+ (%)	Control 25 2+ (%)	Control 25 3+ (%)	Control 25 4+ (%)	300 ppm 25 1+ (%)	300 ppm 25 2+ (%)	300 ppm 25 3+ (%)	300 ppm 25 4+ (%)	1000 ppm 25 1+ (%)	1000 ppm 25 2+ (%)	1000 ppm 25 3+ (%)	1000 ppm 25 4+ (%)	3000 ppm 25 1+ (%)	3000 ppm 25 2+ (%)	3000 ppm 25 3+ (%)	3000 ppm 25 4+ (%)
{Respiratory system}																		
nasal cavit		<25>																
	atrophy:olfactory epithelium		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	4 (16)	0 (0)	0 (0)	0 (0)	0 (0)	19 (76)	6 (24)	0 (0) **
	exudate:respiratory region		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	3 (12)	0 (0)	0 (0)	0 (0)
	exudate:olfactory region		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (4)	0 (0)	0 (0)	0 (0)	5 (20)	20 (80)	0 (0)	0 (0) **
nasopharynx		<25>																
	eosinophilic change		9 (36)	0 (0)	0 (0)	0 (0)	8 (32)	0 (0)	0 (0)	0 (0)	4 (16)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0) **
trachea		<25>																
	vacuolic change:tracheaal epithelium		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	5 (20)	0 (0)	0 (0)	0 (0)
lung		<25>																
	bronchiolar-alveolar cell hyperplasia		0 (0)	0 (0)	0 (0)	0 (0)	1 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (8)	0 (0)	0 (0)
	accumulation of histiocyte		0 (0)	0 (0)	0 (0)	0 (0)	1 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (4)	0 (0)	0 (0)	0 (0)

Grade 1+ : Slight 2+ : Moderate 3+ : Marked 4+ : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name	Control				300 ppm				1000 ppm				3000 ppm			
		No. of Animals on Study	25				25				25				25			
		Grade	1+	2+	3+	4+	1+	2+	3+	4+	1+	2+	3+	4+	1+	2+	3+	4+
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
lung			<25>				<25>				<25>				<25>			
	vacuolic change:bronchial epithelium		0	0	0	0	3	3	0	0 *	8	3	0	0 **	5	5	0	0 **
			(0)	(0)	(0)	(0)	(12)	(12)	(0)	(0)	(32)	(12)	(0)	(0)	(20)	(20)	(0)	(0)
{Hematopoietic system}																		
bone marrow			<25>				<25>				<25>				<25>			
	increased hematopoiesis		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
thymus			<25>				<25>				<25>				<25>			
	hemorrhage		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	necrosis:single cell		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	cyst		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	lymphoid hyperplasia		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1+ : Slight 2+ : Moderate 3+ : Marked 4+ : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name	Control				300 ppm				1000 ppm				3000 ppm			
		No. of Animals on Study	25				25				25				25			
		Grade	1+	2+	3+	4+	1+	2+	3+	4+	1+	2+	3+	4+	1+	2+	3+	4+
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Hematopoietic system}																		
spleen			<25>				<25>				<25>				<25>			
	deposit of melanin		1	0	0	0	6	0	0	0	5	0	0	0	5	0	0	0
			(4)	(0)	(0)	(0)	(24)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(20)	(0)	(0)	(0)
	extramedullary hematopoiesis		2	0	0	0	4	0	0	0	1	0	0	0	2	0	0	0
			(8)	(0)	(0)	(0)	(16)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(8)	(0)	(0)	(0)
{Circulatory system}																		
heart			<25>				<25>				<25>				<25>			
	myocardial fibrosis		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)
{Digestive system}																		
stomach			<25>				<25>				<25>				<25>			
	hyperplasia:forestomach		0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(4)	(0)	(4)	(0)	(0)	(0)
	erosion:glandular stomach		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1+ : Slight 2+ : Moderate 3+ : Marked 4+ : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name	Control				300 ppm				1000 ppm				3000 ppm			
		No. of Animals on Study	25				25				25				25			
		Grade	1+	2+	3+	4+	1+	2+	3+	4+	1+	2+	3+	4+	1+	2+	3+	4+
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
liver			<25>				<25>				<25>				<25>			
	necrosis:focal		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	lymphocytic infiltration		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)
	inflammatory cell nest		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	basophilic cell focus		2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Urinary system}																		
kidney			<25>				<25>				<25>				<25>			
	hemorrhage		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)
	cystic change		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyaline cast		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1+ : Slight 2+ : Moderate 3+ : Marked 4+ : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name	Control				300 ppm				1000 ppm				3000 ppm			
		No. of Animals on Study	25				25				25				25			
		Grade	1+	2+	3+	4+	1+	2+	3+	4+	1+	2+	3+	4+	1+	2+	3+	4+
{Urinary system}																		
kidney			<25>				<25>				<25>				<25>			
	lymphocytic infiltration		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	endothelial cell hyperplasia		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)
	hydronephrosis		0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)
	glomerulosclerosis		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Endocrine system}																		
pituitary			<25>				<25>				<25>				<25>			
	cystic degeneration:anterior lobe		1	0	0	0	2	0	0	0	0	0	0	0	2	0	0	0
			(4)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)
thyroid			<25>				<25>				<25>				<25>			
	C-cell hyperplasia		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1+ : Slight 2+ : Moderate 3+ : Marked 4+ : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name	Control				300 ppm				1000 ppm				3000 ppm			
		No. of Animals on Study	25				25				25				25			
		Grade	1+	2+	3+	4+	1+	2+	3+	4+	1+	2+	3+	4+	1+	2+	3+	4+
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																		
parathyroid			<25>				<25>				<25>				<25>			
	ultimobranchial body remanet		2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
adrenal			<25>				<25>				<25>				<25>			
	hyperplasia:cortical cell		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia:medulla		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Reproductive system}																		
ovary			<25>				<25>				<25>				<25>			
	angiectasis		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	cyst		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
uterus			<25>				<25>				<25>				<25>			
	endometrial hyperplasia		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)

Grade 1+ : Slight 2+ : Moderate 3+ : Marked 4+ : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name	Control				300 ppm				1000 ppm				3000 ppm			
		No. of Animals on Study	25				25				25				25			
		Grade	1+	2+	3+	4+	1+	2+	3+	4+	1+	2+	3+	4+	1+	2+	3+	4+
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Reproductive system}																		
uterus			<25>				<25>				<25>				<25>			
	cystic endometrial hyperplasia		14	0	0	0	10	0	0	0	13	0	0	0	10	0	0	0
			(56)	(0)	(0)	(0)	(40)	(0)	(0)	(0)	(52)	(0)	(0)	(0)	(40)	(0)	(0)	(0)
	vascular anomality		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)
	deposit of brown pigment		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)
{Special sense organs/appendage}																		
Harder gl			<25>				<25>				<25>				<25>			
	hyperplasia		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)
nasolacr d			<25>				<25>				<25>				<25>			
	eosinophilic change:respiratory epithelium		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1+ : Slight 2+ : Moderate 3+ : Marked 4+ : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference : * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

TABLE Q1

CAUSE OF DEATH : MALE

STUDY NO. : 0919 COUSE OF DEATH (SUMMARY)
ANIMAL : CByB6F1-Tg(HRAS)2Jic (tg/wt) (0- 27W)
SEX : MALE

Group Name	Control	300 ppm	1000 ppm	3000 ppm
Number of Dead and Moribund Animal	2	0	0	0
no microscop confirm	1	0	0	0
tumor d:leukemia	1	0	0	0

TABLE Q2

CAUSE OF DEATH : FEMALE

Group Name	Control	300 ppm	1000 ppm	3000 ppm
Number of Dead and Moribund Animal	1	2	1	0
renal lesion	0	0	1	0
tumor d:spleen	1	1	0	0
tumor d:peritoneum	0	1	0	0