テトラクロロエチレンのラット及びマウスを用いた
吸 入 に よ る が ん 原 性 試 験 報 告 書

試験番号

2 週 間　：ラット/0079；マウス/0080
1 3 週 間 ：ラット/0085；マウス/0086
が ん 原 性 ：ラット/0104；マウス/0105

TABLES

TABLES

T A B L E S (CONTINUED)

T A B L E S (CONTINUED)

T A B L E S (CONTINUED)

TABLE 1 EXPERIMENTAL DESIGN AND MATERIALS AND METHODS IN THE INHALATION STUDIES OF TETRACHLOROETHYRENE

Two-Week Studies	Thirteen-Week Studies	Two-Year Studies
<Number of Groups>		
Male 6, Female 6	Male 6, Female 6	Male 4, Female 4
<Size of Study Groups>		
10 males and 10 females of each groups	10 males and 10 females of each groups	50 males and 50 females of each groups
<Animals>		
Strain and Species		
F344/DuCrj(Fischer)rat	F344/DuCrj(Fischer)rat	F344/DuCrj(Fischer)rat
Crj:BDF_1mouse	Crj:BDF_1mouse	Crj:BDF_1mouse
Animal Source		
Charles River Japan, Inc.	Charles River Japan, Inc.	Charles River Japan, Inc.
During of Time Held Before Study		
2 wk	2 wk	2 wk
Age When Placed on Study		
6 wk	6 wk	6 wk
Age When Killed		
8 wk	19 wk	110 wk～111 wk
<Chamber Concentration>		
Rat--0, 200, 400, 800, 1600, or 3200ppm tetrachloroehylene by inhalation; mouse--0, 200, 400, 800, 1600 or 3200ppm	Rat--0, 50, 115, 265, 609, or 1400ppm tetrachloroehylene by inhalation; mouse--0, 50, 115, 265, 609, or 1400ppm	Rat--0, 50, 200, or 600ppm tetrachloroehylene by inhalation; mouse--0, 10 50, or 250ppm
<Date of First Exposure>		
Rat:2/18/87; mouse:3/4/87	Rat:5/7/87; mouse:5/15/87	Rat:7/21/88; mouse:8/12/88
<Date of Last Exposusure>		
Rat:3/3/87; mouse:3/17/87	Rat:8/5/87; mouse:8/13/87	Rat:7/18/90; mouse:8/9/90
<Duration of Exposure>		
6h/d, 5d/wk for 2wk	6h/d, 5d/wk for 13wk	6h/d, 5d/wk for 104wk
<Animal Maintenance>		
Feed		
CRF-1 (Oriental Yeast Co., Ltd.) Sterilized by γ-ray Available ad libitum	Same as two-week studies	Same as two-week studies
Water		
Sterilized by ultraviolet rays Automatic watering system Available ad libitum	Same as two-week studies	Same as two-week studies
Animals per Cage		
Single (stainless steel wire)	Single (stainless steel wire)	Single (stainless steel wire)
Animal Room Environment		
Barrier system Temperature:24±2℃ Humidity :55±10% Fluorescent light 12h/d 15-17 room air changes /h	Same as two-week studies	Barrier system Temperature:22～26℃ Humidity :45～55% Fluorescent light 12h/d 7.5～10 room air changes /h
Chamber Environment		
Temperature:23～26℃ Humidity :45～70% Fluorescent light 12h/d 15 chamber air changes /h	Same as two-week studies	Temperature:24±1℃ Humidity :55±10% Flouresent light 12h/d 12～15 chamber air changes /h
<Type and Frequency of Observation>		
Clinical Sign		
Observed 1×d	Observed 1×d	Observed 1×d
Body Weight		
Weighed 0-0, 1-1, 1-2, 1-3, 1-7, 2-3, and 2-7(wk-d)	Weighed 1×wk for 13wk	Weighed 1×wk for 14wk Weighed 1×2wk thereafter
<Food Consumption>		
Weighed 1×wk for 2wk	Weighed 1×wk for 13wk	Weighed 1×wk for 14wk Weighed 1×4wk thereafter

TABLE 1 EXPERIMENTAL DESIGN AND MATERIALS AND METHODS IN THE INHALATION STUDIES OF TETRACHLOROETHYLENE (Continued)

Two-Week Studies	Thirteen-Week Studies	Two-Year Studies
<Hematology> Red blood cell(RBC), Hemoglobin, Hematocrit, Mean corpuscular volume(MCV), Mean corupscular hemoglobin(MCH), Mean corupscular hemoglobin concentration(MCHC) Platelete, White blood cell(WBC), Differntial WBC	Same as two-week studies	Same as two-week studies
<Blood Biochemistry> Total protein, Albumin, T-bilirubin, Glucose, T-chlesterol, Glutamic oxaloacetic transaminase(GOT), Glutamic pyruvic transaminase(GPT), Lactate dehydrogenase(LDH), Creatine phosphokinase(CPK), Urea nitrgen, Creatinine<rat only>, Sodium, Potassium, Chloride, Calcium, Inorganic phosphrus.	Total protein, Albumin, A/G ratio, T-bilirubin, Glucose, T-cholesterol, Triglyceride Phospholipid<rat only>, Glutamic oxaloacetic transaminase(GOT), Glutamic pyruvic transaminase(GPT), Lactate dehydrogenase(LDH), Alkaline phosphatase(ALP), Leucine aminopeptidase(LAP)<rat only>, γ-Glutamyl transpeptitase(G-GTP) <rat only>, Creatine phosphokinase(CPK), Urea nitrogen, Creatinine<rat only>, Sodium, Potassium, Chloride, Calcium Inorganic phosphorus.	Total protein, Albumin, A/G ratio, T-bilirubin, Glucose, T-cholesterol, Triglyceride, Phospholipid<rat only>, Glutamic oxaloacetic transaminase(GOT), Glutamic pyruvic transaminase(GPT), Lactate dehydrogenase(LDH), Alkaline phosphatase(ALP) <rat only>, γ-Glutamyl transpeptidase (G-GTP) <rat only>, Creatine phosphokinase(CPK), Urea nitrogen, Creatinine <rat only>, Sodium, Potassium, Chloride, Calcium, Inorganic phosphorus.
<Urinalysis> None	pH, Protein, Glucose, Ketone body, Bilirubin <rat only>, Occult blood, Urobilinogen.	Same as thirteen-week studies
<Necropsy> Necropsy performed on all animals.	Same as two-week studies	Same as two-week studies
<Organ Weight> None	Organ weight measurement performed on schedule sacrificed animals. The following organs were weighed :brain, lung, liver, spleen, heart, kidney, adrenal, testis, ovary, thymus.	Same as thirteen-week studies The following organs were weighed :brain, lung, liver, spleen, heart, kidney, adrenal, testis, ovary.
<Histopathologic Examination> Histopathologic examination performed on at least two animals per sex per group. The following organs were examined:nasal cavit, nasopharynx, larynx, trachea, lung, bone marrow, lymph node, thymus, spleen, heart, stomach, small intes, large intes, liver, pancreas, kidney, pituitary, adrenal, testis, ovary, brain.	Histopathologic examination perfermed on all animals. The following organs were examined :skin, nasal cavit, nasopharynx, larynx, trachea, lung, bone marrow, lymph node, thymus, spleen, heart, tongue, salivary gl, esophagus, stomach, small intes, large intes, liver, pancreas, kidney, urin bladd, pituitary, thyroid, adrenal, testis, epidiymis, semin ves, prostate, ovary, uterus, vagina, mammary gl, brain, spinal cord, periph nerv, eye, Harder gl, muscle, bone.	Same as thirteen-week studies Same as thirteen-week studies

TABLE 2 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN MALE RAT (TWO-WEEK STUDIES)

Week-Day on Study	Control Av.Wt.	Control No.of Surviv. <10>	200 ppm Av.Wt.	200 ppm % of cont. <10>	200 ppm No.of Surviv.	400 ppm Av.Wt.	400 ppm % of cont. <10>	400 ppm No.of Surviv.	800 ppm Av.Wt.	800 ppm % of cont. <10>	800 ppm No.of Surviv.	1600 ppm Av.Wt.	1600 ppm % of cont. <10>	1600 ppm No.of Surviv.	3200 ppm Av.Wt.	3200 ppm % of cont. <10>	3200 ppm No.of Surviv.
0-0	125 (10)	10/10	125 (10)	100	10/10	125 (10)	100	10/10	125 (10)	100	10/10	125 (10)	100	10/10	125 (10)	100	10/10
1-1	128 (10)	10/10	128 (10)	100	10/10	129 (10)	101	10/10	128 (10)	100	10/10	125 (10)	98	10/10	119 (10)	93	10/10
1-2	131 (10)	10/10	132 (10)	101	10/10	133 (10)	102	10/10	130 (10)	99	10/10	124 (10)	95	10/10	115 (10)	88	10/10
1-3	135 (10)	10/10	135 (10)	100	10/10	136 (10)	101	10/10	135 (10)	100	10/10	125 (10)	93	10/10	112 (10)	83	10/10
1-7	150 (10)	10/10	151 (10)	101	10/10	152 (10)	101	10/10	150 (10)	100	10/10	138 (10)	92	10/10	117 (10)	78	10/10
2-3	163 (10)	10/10	165 (10)	101	10/10	165 (10)	101	10/10	163 (10)	100	10/10	149 (10)	91	10/10	116 (8)	71	7/10
2-7	181 (10)	10/10	182 (10)	101	10/10	180 (10)	99	10/10	180 (10)	99	10/10	166 (10)	92	10/10	125 (6)	69	5/10

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

TABLE 3 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN FEMALE RAT (TWO-WEEK STUDIES)

Week-Day on Study	Control Av.Wt.	Control No.of Surviv. <10>	200 ppm Av.Wt.	200 ppm % of cont. <10>	200 ppm No.of Surviv.	400 ppm Av.Wt.	400 ppm % of cont. <10>	400 ppm No.of Surviv.	800 ppm Av.Wt.	800 ppm % of cont. <10>	800 ppm No.of Surviv.	1600 ppm Av.Wt.	1600 ppm % of cont. <10>	1600 ppm No.of Surviv.	3200 ppm Av.Wt.	3200 ppm % of cont. <10>	3200 ppm No.of Surviv.
0-0	102 (10)	10/10	102 (10)	100	10/10	102 (10)	100	10/10	102 (10)	100	10/10	102 (10)	100	10/10	102 (10)	100	10/10
1-1	105 (10)	10/10	105 (10)	100	10/10	105 (10)	100	10/10	104 (10)	99	10/10	103 (10)	98	10/10	98 (10)	93	10/10
1-2	105 (10)	10/10	106 (10)	101	10/10	106 (10)	101	10/10	105 (10)	100	10/10	102 (10)	97	10/10	96 (10)	91	10/10
1-3	107 (10)	10/10	108 (10)	101	10/10	107 (10)	100	10/10	107 (10)	100	10/10	103 (10)	96	10/10	93 (10)	87	10/10
1-7	114 (10)	10/10	114 (10)	100	10/10	115 (10)	101	10/10	115 (10)	101	10/10	111 (10)	97	10/10	94 (9)	82	8/10
2-3	120 (10)	10/10	121 (10)	101	10/10	122 (10)	102	10/10	122 (10)	102	10/10	118 (10)	98	10/10	93 (7)	78	7/10
2-7	128 (10)	10/10	130 (10)	102	10/10	129 (10)	101	10/10	129 (10)	101	10/10	127 (10)	99	10/10	102 (3)	80	3/10

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

(Study No. 0104, 0105)

TABLE 4 FOOD CONSUMPTION IN MALE RAT (TWO-WEEK STUDIES)

Week-Day on Study	Control Av.FC.	Control No.of Surviv. <10>	200 ppm Av.FC.	200 ppm % of cont. <10>	200 ppm No.of Surviv.	400 ppm Av.FC.	400 ppm % of cont. <10>	400 ppm No.of Surviv.	800 ppm Av.FC.	800 ppm % of cont. <10>	800 ppm No.of Surviv.	1600 ppm Av.FC.	1600 ppm % of cont. <10>	1600 ppm No.of Surviv.	3200 ppm Av.FC.	3200 ppm % of cont. <10>	3200 ppm No.of Surviv.
1-7	14.4 (10)	10/10	14.0 (10)	97	10/10	14.5 (10)	101	10/10	13.8 (10)	96	10/10	11.5 (10)	80	10/10	8.6 (10)	60	10/10
2-7	15.5 (10)	10/10	15.0 (10)	97	10/10	15.9 (10)	103	10/10	15.5 (10)	100	10/10	14.1 (10)	91	10/10	10.5 (6)	68	5/10

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

TABLE 5 FOOD CONSUMPTION IN FEMALE RAT (TWO-WEEK STUDIES)

Week-Day on Study	Control Av.FC.	Control No.of Surviv. <10>	200 ppm Av.FC.	200 ppm % of cont. <10>	200 ppm No.of Surviv.	400 ppm Av.FC.	400 ppm % of cont. <10>	400 ppm No.of Surviv.	800 ppm Av.FC.	800 ppm % of cont. <10>	800 ppm No.of Surviv.	1600 ppm Av.FC.	1600 ppm % of cont. <10>	1600 ppm No.of Surviv.	3200 ppm Av.FC.	3200 ppm % of cont. <10>	3200 ppm No.of Surviv.
1-7	11.3 (10)	10/10	11.0 (10)	97	10/10	11.3 (10)	100	10/10	10.7 (10)	95	10/10	10.1 (10)	89	10/10	6.8 (9)	60	8/10
2-7	10.9 (10)	10/10	11.1 (10)	102	10/10	11.1 (10)	102	10/10	11.1 (10)	102	10/10	11.5 (10)	106	10/10	8.9 (3)	82	3/10

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

(Study No. 0104, 0105)

TABLE 6 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN MALE RAT (THIRTEEN-WEEK STUDIES)

Week on Study	Control Av.Wt.	Control No.of Surviv. <10>	50 ppm Av.Wt.	50 ppm % of cont. <10>	50 ppm No.of Surviv.	115 ppm Av.Wt.	115 ppm % of cont. <10>	115 ppm No.of Surviv.	265 ppm Av.Wt.	265 ppm % of cont. <10>	265 ppm No.of Surviv.	609 ppm Av.Wt.	609 ppm % of cont. <10>	609 ppm No.of Surviv.	1400 ppm Av.Wt.	1400 ppm % of cont. <10>	1400 ppm No.of Surviv.
0	131 (10)	10/10	131 (10)	100	10/10	131 (10)	100	10/10	131 (10)	100	10/10	131 (10)	100	10/10	131 (10)	100	10/10
1	164 (10)	10/10	159 (10)	97	10/10	162 (10)	99	10/10	162 (10)	99	10/10	160 (10)	98	10/10	150 (10)	91	10/10
2	200 (10)	10/10	192 (10)	96	10/10	194 (10)	97	10/10	195 (10)	98	10/10	195 (10)	98	10/10	181 (10)	91	10/10
3	227 (10)	10/10	219 (10)	96	10/10	221 (10)	97	10/10	222 (10)	98	10/10	221 (10)	97	10/10	207 (10)	91	10/10
4	252 (10)	10/10	243 (10)	96	10/10	244 (10)	97	10/10	246 (10)	98	10/10	246 (10)	98	10/10	231 (10)	92	10/10
5	272 (10)	10/10	262 (10)	96	10/10	263 (10)	97	10/10	267 (10)	98	10/10	265 (10)	97	10/10	250 (10)	92	10/10
6	288 (10)	10/10	278 (10)	97	10/10	278 (10)	97	10/10	283 (10)	98	10/10	281 (10)	98	10/10	265 (10)	92	10/10
7	305 (10)	10/10	295 (10)	97	10/10	294 (10)	96	10/10	298 (10)	98	10/10	298 (10)	98	10/10	280 (10)	92	10/10
8	320 (10)	10/10	308 (10)	96	10/10	309 (10)	97	10/10	314 (10)	98	10/10	314 (10)	98	10/10	294 (10)	92	10/10
9	335 (10)	10/10	321 (10)	96	10/10	321 (10)	96	10/10	330 (10)	99	10/10	328 (10)	98	10/10	307 (10)	92	10/10
10	345 (10)	10/10	331 (10)	96	10/10	330 (10)	96	10/10	339 (10)	98	10/10	337 (10)	98	10/10	316 (10)	92	10/10
11	355 (10)	10/10	340 (10)	96	10/10	339 (10)	95	10/10	349 (10)	98	10/10	346 (10)	97	10/10	327 (10)	92	10/10
12	361 (10)	10/10	348 (10)	96	10/10	349 (10)	97	10/10	357 (10)	99	10/10	357 (10)	99	10/10	337 (10)	93	10/10
13	368 (10)	10/10	355 (10)	96	10/10	357 (10)	97	10/10	367 (10)	100	10/10	366 (10)	99	10/10	345 (10)	94	10/10

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

TABLE 7 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN FEMALE RAT (THIRTEEN-WEEK STUDIES)

Week on Study	Control Av.FC.	Control No.of Surviv. <10>	50 ppm Av.FC.	50 ppm % of cont. <10>	50 ppm No.of Surviv.	115 ppm Av.FC.	115 ppm % of cont. <10>	115 ppm No.of Surviv.	265 ppm Av.FC.	265 ppm % of cont. <10>	265 ppm No.of Surviv.	609 ppm Av.FC.	609 ppm % of cont. <10>	609 ppm No.of Surviv.	1400 ppm Av.FC.	1400 ppm % of cont. <10>	1400 ppm No.of Surviv.
1	11.9 (10)	10/10	11.6 (10)	97	10/10	11.6 (10)	97	10/10	11.1 (10)	93	10/10	11.2 (10)	94	10/10	10.6 (10)	89	10/10
2	12.0 (10)	10/10	11.7 (10)	98	10/10	12.0 (10)	100	10/10	11.5 (10)	96	10/10	11.7 (10)	98	10/10	11.6 (10)	97	10/10
3	12.2 (10)	10/10	11.9 (10)	98	10/10	11.7 (10)	96	10/10	11.6 (10)	95	10/10	11.7 (10)	96	10/10	12.1 (10)	99	10/10
4	12.1 (10)	10/10	11.7 (10)	97	10/10	11.7 (10)	97	10/10	11.4 (10)	94	10/10	11.5 (10)	95	10/10	12.3 (10)	102	10/10
5	11.8 (10)	10/10	11.6 (10)	98	10/10	11.2 (10)	95	10/10	10.9 (10)	92	10/10	11.5 (10)	97	10/10	11.8 (10)	100	10/10
6	11.5 (10)	10/10	11.5 (10)	100	10/10	11.1 (10)	97	10/10	10.7 (10)	93	10/10	11.3 (10)	98	10/10	12.1 (10)	105	10/10
7	11.5 (10)	10/10	11.2 (10)	97	10/10	11.3 (10)	98	10/10	11.2 (10)	97	10/10	11.4 (10)	99	10/10	12.0 (10)	104	10/10
8	12.0 (10)	10/10	10.9 (10)	91	10/10	10.9 (10)	91	10/10	11.0 (10)	92	10/10	11.4 (10)	95	10/10	11.8 (10)	98	10/10
9	12.2 (10)	10/10	11.8 (10)	97	10/10	11.1 (10)	91	10/10	11.2 (10)	92	10/10	11.7 (10)	96	10/10	12.2 (10)	100	10/10
10	11.6 (10)	10/10	11.3 (10)	97	10/10	11.3 (10)	97	10/10	10.7 (10)	92	10/10	11.5 (10)	99	10/10	11.8 (10)	102	10/10
11	11.5 (10)	10/10	11.3 (10)	98	10/10	11.0 (10)	96	10/10	11.0 (10)	96	10/10	11.7 (10)	102	10/10	12.1 (10)	105	10/10
12	11.5 (10)	10/10	11.1 (10)	97	10/10	11.2 (10)	97	10/10	10.7 (10)	93	10/10	12.1 (10)	105	10/10	12.3 (10)	107	10/10
13	11.1 (10)	10/10	11.1 (10)	100	10/10	10.4 (10)	94	10/10	10.2 (10)	92	10/10	11.5 (10)	104	10/10	11.7 (10)	105	10/10

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

(Study No.0104, 0105)

TABLE 8 FOOD CONSUMPTION IN MALE RAT (THIRTEEN-WEEK STUDIES)

Week on Study	Control Av.FC.	Control No.of Surviv. <10>	50 ppm Av.FC.	50 ppm % of cont. <10>	50 ppm No.of Surviv.	115 ppm Av.FC.	115 ppm % of cont. <10>	115 ppm No.of Surviv.	265 ppm Av.FC.	265 ppm % of cont. <10>	265 ppm No.of Surviv.	609 ppm Av.FC.	609 ppm % of cont. <10>	609 ppm No.of Surviv.	1400 ppm Av.FC.	1400 ppm % of cont. <10>	1400 ppm No.of Surviv.
1	15.5 (10)	10/10	15.1 (10)	97	10/10	14.9 (10)	96	10/10	15.2 (10)	98	10/10	14.5 (10)	94	10/10	12.6 (10)	81	10/10
2	17.0 (10)	10/10	16.9 (10)	99	10/10	16.6 (10)	98	10/10	16.6 (10)	98	10/10	16.3 (10)	96	10/10	15.6 (10)	92	10/10
3	17.6 (10)	10/10	17.9 (10)	102	10/10	18.1 (10)	103	10/10	17.7 (10)	101	10/10	16.9 (10)	96	10/10	16.3 (10)	93	10/10
4	18.1 (10)	10/10	18.2 (10)	101	10/10	18.2 (10)	101	10/10	18.0 (10)	99	10/10	17.6 (10)	97	10/10	17.3 (10)	96	10/10
5	17.9 (10)	10/10	17.9 (10)	100	10/10	17.8 (10)	99	10/10	18.4 (10)	103	10/10	17.3 (10)	97	10/10	17.3 (10)	97	10/10
6	17.8 (10)	10/10	17.3 (10)	97	10/10	17.0 (10)	96	10/10	18.0 (10)	101	10/10	17.4 (10)	98	10/10	16.9 (10)	95	10/10
7	18.2 (10)	10/10	17.3 (10)	95	10/10	16.9 (10)	93	10/10	18.3 (10)	101	10/10	17.8 (10)	98	10/10	17.2 (10)	95	10/10
8	18.1 (10)	10/10	17.4 (10)	96	10/10	17.0 (10)	94	10/10	18.0 (10)	99	10/10	17.4 (10)	96	10/10	17.3 (10)	96	10/10
9	18.6 (10)	10/10	17.4 (10)	94	10/10	17.4 (10)	94	10/10	18.4 (10)	99	10/10	17.9 (10)	96	10/10	17.4 (10)	94	10/10
10	17.6 (10)	10/10	16.4 (10)	93	10/10	16.4 (10)	93	10/10	17.2 (10)	98	10/10	17.2 (10)	98	10/10	16.8 (10)	95	10/10
11	17.2 (10)	10/10	16.6 (10)	97	10/10	16.7 (10)	97	10/10	17.7 (10)	103	10/10	17.3 (10)	101	10/10	17.2 (10)	100	10/10
12	16.9 (10)	10/10	16.3 (10)	96	10/10	16.7 (10)	99	10/10	16.8 (10)	99	10/10	17.2 (10)	102	10/10	17.6 (10)	104	10/10
13	17.0 (10)	10/10	16.3 (10)	96	10/10	16.6 (10)	98	10/10	17.0 (10)	100	10/10	17.0 (10)	100	10/10	17.2 (10)	101	10/10

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

TABLE 9 FOOD CONSUMPTION IN FEMALE RAT (THIRTEEN-WEEK STUDIES)

Week on Study	Control Av.Wt.	Control No.of Surviv. <10>	50 ppm Av.Wt.	50 ppm % of cont. <10>	50 ppm No.of Surviv.	115 ppm Av.Wt.	115 ppm % of cont. <10>	115 ppm No.of Surviv.	265 ppm Av.Wt.	265 ppm % of cont. <10>	265 ppm No.of Surviv.	609 ppm Av.Wt.	609 ppm % of cont. <10>	609 ppm No.of Surviv.	1400 ppm Av.Wt.	1400 ppm % of cont. <10>	1400 ppm No.of Surviv.
0	104 (10)	10/10	104 (10)	100	10/10	104 (10)	100	10/10	104 (10)	100	10/10	104 (10)	100	10/10	104 (10)	100	10/10
1	120 (10)	10/10	119 (10)	99	10/10	118 (10)	98	10/10	118 (10)	98	10/10	118 (10)	98	10/10	114 (10)	95	10/10
2	136 (10)	10/10	134 (10)	99	10/10	132 (10)	97	10/10	132 (10)	97	10/10	132 (10)	97	10/10	131 (10)	96	10/10
3	147 (10)	10/10	146 (10)	99	10/10	143 (10)	97	10/10	144 (10)	98	10/10	144 (10)	98	10/10	144 (10)	98	10/10
4	157 (10)	10/10	155 (10)	99	10/10	153 (10)	97	10/10	152 (10)	97	10/10	152 (10)	97	10/10	155 (10)	99	10/10
5	167 (10)	10/10	164 (10)	98	10/10	160 (10)	96	10/10	160 (10)	96	10/10	161 (10)	96	10/10	164 (10)	98	10/10
6	171 (10)	10/10	171 (10)	100	10/10	166 (10)	97	10/10	166 (10)	97	10/10	168 (10)	98	10/10	171 (10)	100	10/10
7	179 (10)	10/10	177 (10)	99	10/10	172 (10)	96	10/10	173 (10)	97	10/10	173 (10)	97	10/10	178 (10)	99	10/10
8	186 (10)	10/10	181 (10)	97	10/10	178 (10)	96	10/10	181 (10)	97	10/10	181 (10)	97	10/10	184 (10)	99	10/10
9	192 (10)	10/10	189 (10)	98	10/10	183 (10)	95	10/10	186 (10)	97	10/10	186 (10)	97	10/10	190 (10)	99	10/10
10	199 (10)	10/10	194 (10)	97	10/10	189 (10)	95	10/10	189 (10)	95	10/10	193 (10)	97	10/10	196 (10)	98	10/10
11	203 (10)	10/10	198 (10)	98	10/10	193 (10)	95	10/10	194 (10)	96	10/10	199 (10)	98	10/10	200 (10)	99	10/10
12	208 (10)	10/10	202 (10)	97	10/10	198 (10)	95	10/10	197 (10)	95	10/10	204 (10)	98	10/10	206 (10)	99	10/10
13	210 (10)	10/10	204 (10)	97	10/10	199 (10)	95	10/10	199 (10)	95	10/10	208 (10)	99	10/10	207 (10)	99	10/10

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

(Study No.0104, 0105)

(Study No. 0104, 0105)

TABLE 10 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN MALE RAT

(TWO-YEAR STUDIES)

Week on Study	Control Av.Wt.	Control No.of Surviv. <50>	50 ppm Av.Wt.	50 ppm % of cont. <50>	50 ppm No.of Surviv.	200 ppm Av.Wt.	200 ppm % of cont. <50>	200 ppm No.of Surviv.	600 ppm Av.Wt.	600 ppm % of cont. <50>	600 ppm No.of Surviv.
0	127 (50)	50/50	127 (50)	100	50/50	127 (50)	100	50/50	127 (50)	100	50/50
1	160 (50)	50/50	160 (50)	100	50/50	159 (50)	99	50/50	158 (50)	99	50/50
2	196 (50)	50/50	193 (50)	98	50/50	193 (50)	98	50/50	193 (50)	98	50/50
3	223 (50)	50/50	221 (50)	99	50/50	219 (50)	98	50/50	220 (50)	99	50/50
4	247 (50)	50/50	244 (50)	99	50/50	242 (50)	98	50/50	243 (50)	98	50/50
5	266 (50)	50/50	263 (50)	99	50/50	261 (50)	98	50/50	262 (50)	98	50/50
6	282 (50)	50/50	279 (50)	99	50/50	276 (50)	98	50/50	277 (50)	98	50/50
7	299 (50)	50/50	296 (50)	99	50/50	293 (50)	98	50/50	292 (50)	98	50/50
8	314 (50)	50/50	311 (50)	99	50/50	307 (50)	98	50/50	305 (50)	97	50/50
9	328 (50)	50/50	325 (50)	99	50/50	318 (50)	97	50/50	318 (50)	97	50/50
10	338 (50)	50/50	335 (50)	99	50/50	329 (50)	97	50/50	328 (50)	97	50/50
11	346 (50)	50/50	344 (50)	99	50/50	337 (50)	97	50/50	338 (50)	98	50/50
12	355 (50)	50/50	353 (50)	99	50/50	348 (50)	98	50/50	347 (50)	98	50/50
13	364 (50)	50/50	362 (50)	99	50/50	357 (50)	98	50/50	355 (50)	98	50/50
14	371 (50)	50/50	368 (50)	99	50/50	364 (50)	98	50/50	361 (50)	97	50/50
16	382 (50)	50/50	381 (50)	100	50/50	379 (50)	99	50/50	375 (50)	98	50/50
18	393 (50)	50/50	393 (50)	100	50/50	390 (50)	99	50/50	386 (50)	98	50/50
20	405 (50)	50/50	404 (50)	100	50/50	400 (50)	99	50/50	392 (50)	97	50/50
22	417 (50)	50/50	414 (50)	99	50/50	411 (50)	99	50/50	403 (50)	97	50/50
24	425 (50)	50/50	422 (50)	99	50/50	419 (50)	99	50/50	413 (50)	97	50/50
26	432 (50)	50/50	431 (50)	100	50/50	426 (50)	99	50/50	418 (50)	97	50/50
28	437 (50)	50/50	437 (50)	100	50/50	431 (50)	99	50/50	420 (50)	96	50/50
30	447 (50)	50/50	445 (50)	100	50/50	438 (50)	98	50/50	427 (50)	96	50/50
32	455 (50)	50/50	455 (50)	100	50/50	447 (50)	98	50/50	437 (50)	96	50/50
34	460 (50)	50/50	461 (50)	100	50/50	452 (50)	98	50/50	442 (50)	96	50/50
36	465 (50)	50/50	466 (50)	100	50/50	458 (50)	98	50/50	449 (50)	97	50/50
38	471 (50)	50/50	472 (50)	100	50/50	461 (50)	98	50/50	454 (50)	96	50/50
40	475 (50)	50/50	477 (50)	100	50/50	465 (50)	98	50/50	457 (50)	96	50/50
42	480 (50)	50/50	480 (50)	100	50/50	469 (50)	98	50/50	462 (50)	96	50/50
44	488 (50)	50/50	485 (50)	99	50/50	475 (50)	97	50/50	467 (50)	96	50/50
46	487 (50)	50/50	486 (50)	100	50/50	476 (50)	98	50/50	467 (50)	96	50/50
48	484 (50)	50/50	484 (50)	100	50/50	477 (50)	99	50/50	468 (50)	97	50/50
50	490 (50)	50/50	489 (50)	100	50/50	480 (50)	98	50/50	471 (50)	96	50/50
52	490 (50)	50/50	487 (50)	99	50/50	479 (50)	98	50/50	471 (50)	96	50/50
54	491 (50)	50/50	487 (50)	99	50/50	481 (50)	98	50/50	475 (50)	97	50/50
56	496 (50)	50/50	492 (50)	99	50/50	485 (50)	98	50/50	476 (50)	96	50/50
58	500 (50)	50/50	495 (50)	99	50/50	488 (50)	98	50/50	478 (50)	96	50/50
60	503 (50)	50/50	499 (50)	99	50/50	490 (50)	97	50/50	479 (50)	95	50/50
62	505 (50)	50/50	503 (50)	100	50/50	493 (50)	98	50/50	480 (50)	95	50/50
64	507 (50)	50/50	502 (50)	99	50/50	494 (50)	97	50/50	481 (49)	95	49/50
66	509 (50)	50/50	505 (49)	99	49/50	496 (50)	97	50/50	482 (49)	95	49/50
68	509 (50)	50/50	507 (48)	100	48/50	497 (50)	98	50/50	482 (49)	95	49/50
70	510 (50)	50/50	507 (48)	99	48/50	499 (49)	98	49/50	484 (49)	95	49/50
72	509 (50)	50/50	507 (48)	100	48/50	498 (49)	98	49/50	484 (49)	95	49/50
74	508 (50)	50/50	506 (48)	100	48/50	501 (48)	99	48/50	483 (49)	95	49/50
76	507 (50)	50/50	507 (48)	100	48/50	506 (48)	100	48/50	486 (49)	96	49/50
78	499 (50)	50/50	501 (48)	100	48/50	488 (47)	98	47/50	476 (49)	95	49/50
80	495 (50)	50/50	497 (48)	100	48/50	487 (46)	98	46/50	469 (49)	95	49/50
82	491 (50)	50/50	491 (47)	100	47/50	484 (46)	99	46/50	467 (46)	95	46/50
84	494 (48)	48/50	488 (47)	99	47/50	481 (46)	97	46/50	467 (45)	95	45/50
86	493 (47)	47/50	485 (47)	98	47/50	479 (45)	97	45/50	461 (45)	94	44/50
88	489 (46)	46/50	483 (47)	99	47/50	479 (45)	98	45/50	462 (44)	94	44/50
90	487 (45)	45/50	482 (46)	99	46/50	472 (45)	97	45/50	461 (43)	95	43/50
92	479 (44)	43/50	480 (44)	100	44/50	467 (44)	97	44/50	459 (42)	96	42/50
94	481 (41)	41/50	477 (44)	99	44/50	457 (44)	95	44/50	446 (42)	93	42/50
96	477 (41)	41/50	474 (44)	99	44/50	453 (42)	95	41/50	443 (39)	93	39/50
98	478 (40)	40/50	468 (43)	98	43/50	453 (40)	95	40/50	438 (37)	92	36/50
100	474 (40)	40/50	461 (42)	97	41/50	445 (38)	94	37/50	434 (34)	92	33/50
102	467 (40)	40/50	454 (37)	97	37/50	456 (33)	98	33/50	433 (32)	93	32/50
104	459 (38)	37/50	445 (35)	97	34/50	454 (32)	99	30/50	436 (28)	95	28/50

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

(Study No. 0104, 0105)

TABLE 11 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN FEMALE RAT

(TWO-YEAR STUDIES)

Week on Study	Control Av.Wt.	Control No.of Surviv. <50>	50 ppm Av.Wt.	50 ppm % of cont. <50>	50 ppm No.of Surviv.	200 ppm Av.Wt.	200 ppm % of cont. <50>	200 ppm No.of Surviv.	600 ppm Av.Wt.	600 ppm % of cont. <50>	600 ppm No.of Surviv.
0	101 (50)	50/50	101 (50)	100	50/50	101 (50)	100	50/50	101 (50)	100	50/50
1	116 (50)	50/50	116 (50)	100	50/50	115 (50)	99	50/50	114 (50)	98	50/50
2	131 (50)	50/50	130 (50)	99	50/50	130 (50)	99	50/50	129 (50)	98	50/50
3	143 (50)	50/50	142 (50)	99	50/50	140 (50)	98	50/50	140 (50)	98	50/50
4	153 (50)	50/50	150 (50)	98	50/50	148 (50)	97	50/50	149 (50)	97	50/50
5	161 (50)	50/50	158 (50)	98	50/50	157 (50)	98	50/50	158 (50)	98	50/50
6	168 (50)	50/50	165 (50)	98	50/50	163 (50)	97	50/50	164 (50)	98	50/50
7	174 (50)	50/50	172 (50)	99	50/50	169 (50)	97	50/50	171 (50)	98	50/50
8	179 (50)	50/50	177 (50)	99	50/50	174 (50)	97	50/50	176 (50)	98	50/50
9	184 (50)	50/50	184 (50)	100	50/50	179 (50)	97	50/50	181 (50)	98	50/50
10	189 (50)	50/50	188 (50)	99	50/50	184 (50)	97	50/50	185 (50)	98	50/50
11	192 (50)	50/50	191 (50)	99	50/50	186 (50)	97	50/50	189 (50)	98	50/50
12	196 (50)	50/50	196 (50)	100	50/50	192 (50)	98	50/50	193 (50)	98	50/50
13	199 (50)	50/50	200 (50)	101	50/50	195 (50)	98	50/50	196 (50)	98	50/50
14	202 (50)	50/50	202 (50)	100	50/50	198 (50)	98	50/50	198 (50)	98	50/50
16	207 (50)	50/50	207 (50)	100	50/50	203 (50)	98	50/50	204 (50)	99	50/50
18	211 (50)	50/50	212 (50)	100	50/50	207 (50)	98	50/50	210 (50)	100	50/50
20	216 (50)	50/50	218 (50)	101	50/50	212 (50)	98	50/50	212 (50)	98	50/50
22	222 (50)	50/50	224 (50)	101	50/50	218 (50)	98	50/50	218 (50)	98	50/50
24	226 (50)	50/50	228 (50)	101	50/50	222 (50)	98	50/50	225 (50)	100	50/50
26	230 (50)	50/50	233 (50)	101	50/50	225 (50)	98	50/50	226 (50)	98	50/50
28	232 (50)	50/50	233 (50)	100	50/50	226 (50)	97	50/50	227 (50)	98	50/50
30	236 (50)	50/50	237 (50)	100	50/50	230 (50)	97	50/50	231 (50)	98	50/50
32	241 (50)	50/50	241 (50)	100	50/50	233 (50)	97	50/50	235 (50)	98	50/50
34	245 (50)	50/50	246 (50)	100	50/50	237 (50)	97	50/50	237 (50)	97	50/50
36	249 (50)	50/50	250 (50)	100	50/50	240 (50)	96	50/50	241 (50)	97	50/50
38	252 (50)	50/50	254 (50)	101	50/50	243 (50)	96	50/50	244 (50)	97	50/50
40	255 (50)	50/50	256 (50)	100	50/50	245 (50)	96	50/50	246 (50)	96	50/50
42	257 (50)	50/50	259 (50)	101	50/50	246 (50)	96	50/50	248 (50)	96	50/50
44	261 (50)	50/50	262 (50)	100	50/50	249 (50)	95	50/50	252 (50)	97	50/50
46	263 (50)	50/50	265 (50)	101	50/50	252 (50)	96	50/50	253 (50)	96	50/50
48	261 (50)	50/50	263 (50)	101	50/50	252 (50)	97	50/50	254 (50)	97	50/50
50	267 (50)	50/50	268 (50)	100	50/50	255 (50)	96	50/50	255 (50)	96	50/50
52	271 (50)	50/50	272 (50)	100	50/50	259 (50)	96	50/50	259 (50)	96	50/50
54	274 (50)	50/50	273 (50)	100	50/50	263 (50)	96	50/50	262 (50)	96	50/50
56	279 (50)	50/50	278 (50)	100	50/50	266 (50)	95	50/50	264 (50)	95	50/50
58	282 (50)	50/50	283 (50)	100	50/50	270 (50)	96	50/50	267 (50)	95	50/50
60	286 (50)	50/50	285 (50)	100	50/50	271 (50)	95	50/50	269 (50)	94	50/50
62	289 (50)	50/50	289 (50)	100	50/50	274 (50)	95	50/50	271 (50)	94	50/50
64	291 (50)	50/50	289 (50)	99	50/50	275 (50)	95	50/50	273 (50)	94	50/50
66	295 (50)	50/50	295 (49)	100	49/50	279 (50)	95	50/50	277 (50)	94	50/50
68	298 (50)	50/50	298 (49)	100	49/50	281 (50)	94	50/50	278 (50)	93	50/50
70	303 (50)	50/50	302 (48)	100	48/50	285 (48)	94	48/50	283 (49)	93	49/50
72	304 (50)	50/50	304 (48)	100	48/50	285 (48)	94	48/50	285 (49)	94	49/50
74	307 (50)	50/50	306 (47)	100	47/50	289 (47)	94	47/50	284 (49)	93	49/50
76	308 (50)	50/50	307 (47)	100	47/50	286 (47)	93	47/50	287 (49)	93	49/50
78	303 (50)	50/50	302 (47)	100	47/50	281 (47)	93	47/50	277 (49)	91	49/50
80	301 (50)	50/50	304 (46)	101	46/50	276 (46)	92	46/50	274 (48)	91	48/50
82	299 (49)	49/50	300 (46)	100	46/50	276 (46)	92	46/50	272 (47)	91	47/50
84	299 (49)	49/50	300 (46)	100	46/50	275 (45)	92	45/50	273 (46)	91	46/50
86	301 (49)	49/50	298 (46)	99	46/50	277 (45)	92	45/50	272 (46)	90	45/50
88	311 (49)	49/50	303 (45)	97	45/50	283 (45)	91	45/50	288 (45)	93	45/50
90	317 (49)	49/50	314 (42)	99	42/50	292 (42)	92	42/50	295 (45)	93	45/50
92	319 (49)	49/50	318 (42)	100	42/50	294 (41)	92	40/50	298 (44)	93	44/50
94	322 (48)	48/50	319 (41)	99	41/50	296 (40)	92	40/50	291 (42)	90	42/50
96	323 (48)	48/50	317 (41)	98	40/50	298 (39)	92	38/50	290 (42)	90	42/50
98	322 (48)	48/50	319 (37)	99	37/50	301 (38)	93	38/50	288 (41)	89	41/50
100	328 (46)	46/50	317 (37)	97	37/50	302 (37)	92	38/50	294 (38)	90	38/50
102	328 (45)	45/50	314 (37)	96	37/50	305 (36)	93	36/50	296 (36)	90	36/50
104	326 (43)	42/50	321 (34)	98	34/50	303 (35)	93	34/50	299 (34)	92	34/50

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

TABLE 12 INCIDENCE AND TIME OF MASS OCCURRENCE(CLINICAL OBSERVATION) :RAT :MALE

Time of mass occurrence		Dosing week 0～13	14～26	27～39	40～52	53～65	66～78	79～91	92～104	0～104
The kind of mass		No. of animals with mass (No. of dead and moribund animals with mass)								
Internal mass										
	Control	0	0	0	0	0	0	0	3	3 (1)
	50 ppm	0	0	0	0	0	0	3	2	5 (4)
	200 ppm	0	0	0	0	1	0	1	6	7 (6)
	600 ppm	0	0	0	0	0	1	4	10	13(11)
External mass	Control	0	0	0	0	10	13	11	13	27 (8)
	50 ppm	0	0	0	0	7	10	12	17	30(15)
	200 ppm	0	0	0	0	14	23	18	20	36(13)
	600 ppm	0	0	0	0	4	9	19	23	29(11)

TABLE 13 INCIDENCE AND TIME OF MASS OCCURRENCE(CLINICAL OBSERVATION) :RAT :FEMALE

Time of mass occurrence		Dosing week 0～13	14～26	27～39	40～52	53～65	66～78	79～91	92～104	0～104
The kind of mass		No. of animals with mass (No. of dead and moribund animals with mass)								
Internal mass										
	Control	0	0	0	0	0	0	1	3	4(3)
	50 ppm	0	0	0	0	1	0	5	4	10(8)
	200 ppm	0	0	0	0	0	1	4	5	8(6)
	600 ppm	0	0	0	0	0	1	2	6	8(7)
External mass	Control	0	0	0	0	0	0	3	5	5(1)
	50 ppm	0	0	0	0	1	4	8	12	14(5)
	200 ppm	0	0	0	0	2	1	5	6	8(2)
	600 ppm	0	0	0	0	2	5	4	2	8(5)

(Study No. 0104, 0105)

TABLE 14 FOOD CONSUMPTION IN MALE RAT (TWO-YEAR STUDIES)

Week on Study	Control Av.FC.	Control No.of Surviv. <50>	50 ppm Av.FC.	50 ppm % of cont. <50>	50 ppm No.of Surviv.	200 ppm Av.FC.	200 ppm % of cont. <50>	200 ppm No.of Surviv.	600 ppm Av.FC.	600 ppm % of cont. <50>	600 ppm No.of Surviv.
1	15.1 (50)	50/50	14.8 (50)	98	50/50	14.5 (50)	96	50/50	14.3 (50)	95	50/50
2	17.3 (50)	50/50	16.9 (50)	98	50/50	16.6 (50)	96	50/50	16.9 (49)	98	50/50
3	18.1 (50)	50/50	17.8 (50)	98	50/50	17.1 (50)	94	50/50	17.4 (50)	96	50/50
4	18.5 (50)	50/50	18.4 (50)	99	50/50	17.7 (50)	96	50/50	18.3 (50)	99	50/50
5	18.9 (50)	50/50	18.6 (50)	98	50/50	18.1 (50)	96	50/50	18.6 (50)	98	50/50
6	18.5 (50)	50/50	18.3 (50)	99	50/50	18.0 (50)	97	50/50	18.4 (50)	99	50/50
7	18.9 (50)	50/50	18.6 (50)	98	50/50	18.0 (50)	95	50/50	18.3 (50)	97	50/50
8	18.9 (50)	50/50	18.4 (50)	97	50/50	18.1 (50)	96	50/50	18.5 (50)	98	50/50
9	19.0 (50)	50/50	18.5 (50)	97	50/50	18.0 (50)	95	50/50	18.2 (50)	96	50/50
10	18.8 (50)	50/50	18.5 (50)	98	50/50	17.9 (50)	95	50/50	18.5 (50)	98	50/50
11	18.4 (50)	50/50	17.9 (50)	97	50/50	17.9 (50)	97	50/50	18.5 (50)	101	50/50
12	18.4 (50)	50/50	18.3 (50)	99	50/50	18.2 (50)	99	50/50	18.7 (50)	102	50/50
13	18.8 (50)	50/50	18.2 (50)	97	50/50	18.1 (50)	96	50/50	18.2 (50)	97	50/50
14	17.9 (50)	50/50	17.6 (50)	98	50/50	17.7 (50)	99	50/50	17.9 (50)	100	50/50
18	18.6 (50)	50/50	18.2 (50)	98	50/50	18.0 (50)	97	50/50	18.5 (50)	99	50/50
22	19.1 (50)	50/50	18.6 (50)	97	50/50	18.2 (50)	95	50/50	18.3 (50)	96	50/50
26	19.0 (50)	50/50	18.8 (50)	99	50/50	18.6 (50)	98	50/50	18.6 (50)	98	50/50
30	19.4 (50)	50/50	19.1 (50)	98	50/50	19.0 (50)	98	50/50	18.7 (50)	96	50/50
34	19.1 (50)	50/50	18.8 (50)	98	50/50	19.0 (50)	99	50/50	19.0 (50)	99	50/50
38	18.7 (50)	50/50	18.6 (50)	99	50/50	18.0 (50)	96	50/50	18.5 (50)	99	50/50
42	19.3 (50)	50/50	18.8 (50)	97	50/50	18.8 (50)	97	50/50	19.0 (50)	98	50/50
46	18.1 (50)	50/50	18.0 (50)	99	50/50	18.1 (50)	100	50/50	18.1 (50)	100	50/50
50	18.4 (50)	50/50	18.5 (50)	101	50/50	18.3 (50)	99	50/50	18.0 (50)	98	50/50
52	17.9 (50)	50/50	17.5 (50)	98	50/50	17.9 (50)	100	50/50	18.0 (50)	101	50/50
54	17.8 (50)	50/50	17.6 (50)	99	50/50	18.0 (50)	101	50/50	18.1 (50)	102	50/50
58	18.5 (50)	50/50	18.5 (50)	100	50/50	18.5 (50)	100	50/50	18.0 (50)	97	50/50
62	19.0 (50)	50/50	18.8 (50)	99	50/50	18.7 (50)	98	50/50	18.2 (50)	96	50/50
66	19.0 (50)	50/50	18.8 (49)	99	49/50	18.7 (50)	98	50/50	18.3 (49)	96	49/50
70	18.7 (50)	50/50	18.7 (48)	100	48/50	18.4 (49)	98	49/50	18.5 (49)	99	49/50
74	18.7 (50)	50/50	18.5 (48)	99	48/50	18.6 (48)	99	48/50	18.8 (49)	101	49/50
78	17.8 (50)	50/50	17.6 (48)	99	48/50	17.7 (46)	99	47/50	17.6 (49)	99	49/50
82	17.5 (50)	50/50	17.7 (47)	101	47/50	17.9 (46)	102	46/50	16.9 (48)	97	46/50
86	17.4 (48)	47/50	17.5 (47)	101	47/50	17.7 (46)	102	45/50	17.4 (45)	100	44/50
90	18.6 (46)	45/50	18.3 (46)	98	46/50	17.8 (45)	96	45/50	18.2 (43)	98	43/50
94	16.9 (42)	41/50	18.0 (44)	107	44/50	17.0 (44)	101	44/50	17.2 (42)	102	42/50
98	17.8 (40)	40/50	16.8 (43)	94	43/50	17.3 (40)	97	40/50	17.1 (37)	96	36/50
102	17.2 (40)	40/50	16.7 (39)	97	37/50	17.5 (33)	102	33/50	17.4 (32)	101	32/50
104	16.4 (39)	37/50	17.5 (35)	107	34/50	17.7 (32)	108	30/50	17.4 (29)	106	28/50

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

(Study No. 0104, 0105)

TABLE 15 FOOD CONSUMPTION IN FEMALE RAT (TWO-YEAR STUDIES)

Week on Study	Control Av.FC.	Control No.of Suruiu. <50>	50 ppm Av.FC.	50 ppm % of cont. <50>	50 ppm No.of Suruiu.	200 ppm Av.FC.	200 ppm % of cont. <50>	200 ppm No.of Suruiu.	600 ppm Av.FC.	600 ppm % of cont. <50>	600 ppm No.of Suruiu.
1	11.3 (50)	50/50	11.0 (50)	97	50/50	10.9 (50)	96	50/50	10.7 (50)	95	50/50
2	11.7 (50)	50/50	11.5 (50)	98	50/50	11.3 (50)	97	50/50	11.5 (50)	98	50/50
3	11.7 (50)	50/50	11.5 (50)	98	50/50	11.2 (50)	96	50/50	11.3 (50)	97	50/50
4	11.9 (50)	50/50	11.6 (50)	97	50/50	11.4 (50)	96	50/50	11.9 (50)	100	50/50
5	11.8 (49)	50/50	11.7 (50)	99	50/50	11.5 (49)	97	50/50	11.7 (50)	99	50/50
6	12.0 (50)	50/50	11.5 (50)	96	50/50	11.6 (50)	97	50/50	11.6 (50)	97	50/50
7	12.0 (50)	50/50	11.8 (50)	98	50/50	11.4 (50)	95	50/50	11.6 (49)	97	50/50
8	11.8 (50)	50/50	11.6 (50)	98	50/50	11.4 (50)	97	50/50	11.7 (50)	99	50/50
9	11.8 (50)	50/50	12.2 (50)	103	50/50	11.6 (50)	98	50/50	11.8 (50)	100	50/50
10	11.9 (50)	50/50	11.9 (50)	100	50/50	11.4 (49)	96	50/50	11.7 (50)	98	50/50
11	11.2 (50)	50/50	11.3 (50)	101	50/50	11.0 (50)	98	50/50	11.3 (50)	101	50/50
12	12.0 (50)	50/50	12.3 (50)	103	50/50	11.8 (50)	98	50/50	12.2 (50)	102	50/50
13	12.0 (50)	50/50	12.3 (50)	103	50/50	12.1 (50)	101	50/50	11.9 (50)	99	50/50
14	12.0 (50)	50/50	11.6 (50)	97	50/50	11.7 (50)	98	50/50	11.6 (50)	97	50/50
18	12.0 (50)	50/50	12.3 (50)	103	50/50	12.0 (50)	100	50/50	12.3 (50)	103	50/50
22	12.5 (50)	50/50	12.6 (50)	101	50/50	12.1 (50)	97	50/50	12.4 (50)	99	50/50
26	12.8 (50)	50/50	13.2 (50)	103	50/50	12.2 (50)	95	50/50	12.5 (50)	98	50/50
30	12.5 (50)	50/50	12.6 (50)	101	50/50	12.5 (50)	100	50/50	12.4 (50)	99	50/50
34	12.8 (50)	50/50	13.0 (50)	102	50/50	12.9 (50)	101	50/50	12.4 (50)	97	50/50
38	12.7 (50)	50/50	13.0 (50)	102	50/50	12.2 (49)	96	50/50	12.3 (50)	97	50/50
42	12.5 (50)	50/50	12.5 (50)	100	50/50	12.0 (50)	96	50/50	12.6 (50)	101	50/50
46	12.5 (50)	50/50	12.7 (49)	102	50/50	12.3 (50)	98	50/50	12.2 (50)	98	50/50
50	13.0 (50)	50/50	13.5 (50)	104	50/50	12.8 (50)	98	50/50	12.3 (50)	95	50/50
52	12.6 (50)	50/50	12.6 (50)	100	50/50	12.4 (50)	98	50/50	12.5 (50)	99	50/50
54	12.1 (50)	50/50	12.2 (50)	101	50/50	12.4 (50)	102	50/50	12.4 (49)	102	50/50
58	12.6 (50)	50/50	12.9 (50)	102	50/50	12.9 (50)	102	50/50	12.7 (50)	101	50/50
62	13.0 (50)	50/50	13.3 (50)	102	50/50	13.0 (50)	100	50/50	13.0 (50)	100	50/50
66	13.2 (50)	50/50	13.2 (50)	100	49/50	13.2 (50)	100	50/50	13.4 (50)	102	50/50
70	13.7 (50)	50/50	13.6 (49)	99	48/50	12.9 (49)	94	48/50	13.6 (50)	99	49/50
74	13.3 (49)	50/50	13.5 (47)	102	47/50	13.5 (47)	102	47/50	13.4 (49)	101	49/50
78	11.9 (50)	50/50	11.9 (46)	100	47/50	11.7 (47)	98	47/50	11.5 (49)	97	49/50
82	12.4 (49)	49/50	12.8 (46)	103	46/50	12.4 (46)	100	46/50	12.5 (43)	101	47/50
86	12.9 (49)	49/50	12.5 (46)	97	46/50	12.7 (44)	98	45/50	12.7 (46)	98	45/50
90	14.8 (49)	49/50	14.5 (43)	98	42/50	14.0 (43)	95	42/50	14.8 (45)	100	45/50
94	14.3 (48)	48/50	14.5 (40)	101	41/50	14.0 (40)	98	40/50	14.4 (42)	101	42/50
98	13.6 (48)	48/50	14.5 (36)	107	37/50	14.2 (38)	104	38/50	13.7 (41)	101	41/50
102	13.3 (46)	45/50	13.7 (36)	103	37/50	13.9 (36)	105	36/50	13.5 (37)	102	36/50
104	12.9 (44)	42/50	14.6 (35)	113	34/50	14.3 (35)	111	34/50	14.2 (33)	110	34/50

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

(Study No.0104, 0105)

TABLE 16 NEOPLASTIC LESIONS (SPLEEN) INCIDENCE AND STATISTICAL ANALYSIS : RAT : MALE

Group Name	Control	50 ppm	200 ppm	600 ppm
SITE : spleen				
TUMOUR : mononuclear cell leukemia				
Overall Rates(a)	11/50 (22.0)	14/50 (28.0)	22/50 (44.0)	27/50 (54.0)
Adjusted Rates(b)	24.32	17.65	40.00	42.86
Terminal Rates(c)	9/37 (24.3)	6/34 (17.6)	12/30 (40.0)	12/28 (42.9)
Standard Rates(d)	P=0.0022**			
Prevalence Rates(d)	P=0.0104*			
Combind analysis(d)	P=0.0001**			
Cochran-Armitage Test(e)	P=0.0005**			
Fisher Exact Test(e)		P=0.3777	P=0.0707	P=0.0201*

TABLE 17 NEOPLASTIC LESIONS (SPLEEN) INCIDENCE AND STATISTICAL ANALYSIS : RAT : FEMALE

Group Name	Control	10 ppm	50 ppm	250 ppm
SITE : spleen				
TUMOUR : hemangioendothelioma				
Overall Rates(a)	10/50 (20.0)	17/50 (34.0)	16/50 (32.0)	19/50 (38.0)
Adjusted Rates(b)	14.29	20.59	22.50	20.59
Terminal Rates(c)	6/42 (14.3)	7/34 (20.6)	7/34 (20.6)	7/34 (20.6)
Standard Rates(d)	P=0.0486*			
Prevalence Rates(d)	P=0.3153			
Combind analysis(d)	P=0.0571			
Cochran-Armitage Test(e)	P=0.1397			
Fisher Exact Test(e)		P=0.1636	P=0.2039	P=0.1027

(a):Number of tumor-bearing animals/number of animals examined at the site.
(b):Kaplan-Meire estimate tumor incidence at the end of study after adjusting for intercurrent mortality.
(c):Observed tumor incidence at terminal kill.
(d):Beneth the control incidence are the P-values associated with the trend test.
Standard method : Death analysis
Prevalence method : Incidental tumor test
Combind analysis : Death analysis + Incidental tumor test
(e):The Cochran-Armitage and Fisher's 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 beyond the estimated P-value.
------:There is no data which should be statistic analysis.

TABLE 18 NUMBER OF RAT WITH SELECTED LIVER LESIONS

	Male				Female			
Group	Control	50ppm	200ppm	600ppm	Control	50ppm	200ppm	600ppm
Number of examined	50	50	50	50	50	50	50	50
Spongiosis hepatis	5	4	10	16	0	0	0	0
Hyperplasia	4	2	5	13	2	1	5	1
Clear cell focus	3	1	0	1	1	0	0	1
Acidphilic cell focus	1	0	1	0	0	0	0	0
Basophilic cell focus	4	3	0	4	1	1	2	0
Vacuolic cell focus	0	2	1	1	0	0	0	2
Mixed cell focus	4	3	1	1	0	0	0	2
Hepatocellular adenoma	3	0	0	2	0	0	1	0
Cholangiocellular adenoma	1	0	0	0	1	0	0	0
Cholangiocellular carcinoma	1	0	1	0	0	0	0	0

TABLE 19 NUMBER OF RAT WITH SELECTED KIDNEY LESIONS

	Male				Female			
Group	Control	50ppm	200ppm	600ppm	Control	50ppm	200ppm	600ppm
Number of examined	50	50	50	50	50	50	50	50
Nuclear enlargement:								
proximal tubule	0	0	23	48	0	0	1	18
Atypical tubular dilation:								
proximal tubule	0	0	0	24	0	0	0	6
Liposarcoma	0	0	0	1	0	0	0	0
Renal cell adenoma	1	2	1	2	1	0	0	0
Renal cell carcinima	0	0	0	0	0	0	0	1

TABLE 20 CAUSE OF DEATH :RAT

Group	Male				Female			
	Control	50ppm	200ppm	600ppm	Control	50ppm	200ppm	600ppm
Number of dead/moriboud animal	13	16	20	22	8	16	16	16
Renal lesion	1	0	2	0	0	0	1	0
Chronic nephropathy	0	0	0	1	0	0	0	0
Tumor death : leukemia	3	8	9	14	4	10	7	12
: subcutis	0	1	2	1	0	0	0	1
: spleen	0	0	0	0	1	0	0	0
: small intestine	0	0	0	1	0	0	1	0
: kidney	0	0	0	2	0	0	0	0
: pituitary gland	4	2	4	1	3	1	2	3
: thyroid	0	0	0	0	0	1	0	0
: adrenal	1	1	0	1	0	1	0	0
: uterus	0	0	0	0	0	1	3	0
: mammary gland	1	0	0	0	0	1	0	0
: prep./cli. gland	0	0	1	0	0	1	1	0
: brain	1	0	0	0	0	0	1	0
: Zymbal gland	0	1	1	0	8	8	8	9
: muscle	1	0	0	0	0	0	1	0
: bone	0	1	1	1	5	2	2	2
: pleura	1	0	0	0	1	0	0	0
: mediastinum	0	1	0	0	1	2	2	1
: peritoneum	0	1	0	0	0	0	0	0

TABLE 21 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN MALE MOUSE (TWO-WEEK STUDIES)

Week-Day on Study	Control Av.Wt.	Control No.of Surviv. <10>	200 ppm Av.Wt.	200 ppm % of cont. <10>	200 ppm No.of Surviv.	400 ppm Av.Wt.	400 ppm % of cont. <10>	400 ppm No.of Surviv.	800 ppm Av.Wt.	800 ppm % of cont. <10>	800 ppm No.of Surviv.	1600 ppm Av.Wt.	1600 ppm % of cont. <10>	1600 ppm No.of Surviv.	3200 ppm Av.Wt.	3200 ppm % of cont. <10>	3200 ppm No.of Surviv.
0-0	23.1 (10)	10/10	23.1 (10)	100	10/10	23.1 (10)	100	10/10	23.1 (10)	100	10/10	23.1 (10)	100	10/10	23.1 (10)	100	10/10
1-1	22.4 (10)	10/10	22.6 (10)	101	10/10	22.7 (10)	101	10/10	22.5 (10)	100	10/10	22.2 (10)	99	10/10	21.8 (10)	97	9/10
1-2	22.7 (10)	10/10	23.4 (10)	103	10/10	23.2 (10)	102	10/10	22.8 (10)	100	10/10	21.9 (10)	96	10/10	21.1 (9)	93	5/10
1-3	23.1 (10)	10/10	23.5 (10)	102	10/10	23.6 (10)	102	10/10	23.4 (10)	101	10/10	22.1 (10)	96	10/10	21.2 (5)	92	5/10
1-7	23.7 (10)	10/10	24.3 (10)	103	10/10	24.4 (10)	103	10/10	24.4 (10)	103	10/10	23.1 (10)	97	10/10	22.1 (1)	93	1/10
2-3	23.9 (10)	10/10	24.9 (10)	104	10/10	24.9 (10)	104	10/10	25.0 (10)	105	10/10	23.5 (10)	98	10/10	22.3 (1)	93	1/10
2-7	24.5 (10)	10/10	25.2 (10)	103	10/10	25.3 (10)	103	10/10	25.3 (10)	103	10/10	24.0 (10)	98	10/10	23.3 (1)	95	1/10

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

TABLE 22 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN FEMALE MOUSE (TWO-WEEK STUDIES)

Week-Day on Study	Control Av.Wt.	Control No.of Surviv. <10>	200 ppm Av.Wt.	200 ppm % of cont. <10>	200 ppm No.of Surviv.	400 ppm Av.Wt.	400 ppm % of cont. <10>	400 ppm No.of Surviv.	800 ppm Av.Wt.	800 ppm % of cont. <10>	800 ppm No.of Surviv.	1600 ppm Av.Wt.	1600 ppm % of cont. <10>	1600 ppm No.of Surviv.	3200 ppm Av.Wt.	3200 ppm % of cont. <10>	3200 ppm No.of Surviv.
0-0	19.2 (10)	10/10	19.2 (10)	100	10/10	19.2 (10)	100	10/10	19.2 (10)	100	10/10	19.2 (10)	100	10/10	19.2 (10)	100	10/10
1-1	18.4 (10)	10/10	18.2 (10)	99	10/10	18.4 (10)	100	10/10	18.4 (10)	100	10/10	18.3 (10)	99	10/10	18.0 (10)	98	7/10
1-2	18.3 (10)	10/10	18.5 (10)	101	10/10	18.7 (10)	102	10/10	18.4 (10)	101	10/10	18.1 (10)	99	10/10	17.2 (7)	94	5/10
1-3	18.6 (10)	10/10	18.7 (10)	101	10/10	19.0 (10)	102	10/10	19.1 (10)	103	10/10	18.5 (10)	99	10/10	16.7 (5)	90	5/10
1-7	18.8 (10)	10/10	19.2 (10)	102	10/10	19.9 (10)	106	10/10	20.0 (10)	106	10/10	19.4 (10)	103	10/10	17.5 (5)	93	5/10
2-3	19.7 (10)	10/10	20.5 (10)	104	10/10	20.5 (10)	104	10/10	20.8 (10)	106	10/10	20.8 (10)	106	10/10	18.8 (3)	95	3/10
2-7	20.1 (10)	10/10	21.1 (10)	105	10/10	20.9 (10)	104	10/10	21.1 (10)	105	10/10	21.0 (10)	104	10/10	19.1 (3)	95	3/10

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

(Study No.0104,0105)

TABLE 23 FOOD CONSUMPTION IN MALE MOUSE (TWO-WEEK STUDIES)

Week-Day on Study	Control Av.FC.	Control No.of Surviv. <10>	200 ppm Av.FC.	200 ppm % of cont. <10>	200 ppm No.of Surviv.	400 ppm Av.FC.	400 ppm % of cont. <10>	400 ppm No.of Surviv.	800 ppm Av.FC.	800 ppm % of cont. <10>	800 ppm No.of Surviv.	1600 ppm Av.FC.	1600 ppm % of cont. <10>	1600 ppm No.of Surviv.	3200 ppm Av.FC.	3200 ppm % of cont. <10>	3200 ppm No.of Surviv.
1-7	3.7 (10)	10/10	3.7 (10)	100	10/10	3.8 (10)	103	10/10	3.8 (10)	103	10/10	3.4 (10)	92	10/10	2.7 (1)	73	1/10
2-7	3.6 (9)	10/10	3.8 (10)	106	10/10	3.9 (10)	108	10/10	4.4 (10)	122	10/10	4.6 (10)	128	10/10	3.9 (1)	108	1/10

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

TABLE 24 FOOD CONSUMPTION IN FEMALE MOUSE (TWO-WEEK STUDIES)

Week-Day on Study	Control Av.FC.	Control No.of Surviv. <10>	200 ppm Av.FC.	200 ppm % of cont. <10>	200 ppm No.of Surviv.	400 ppm Av.FC.	400 ppm % of cont. <10>	400 ppm No.of Surviv.	800 ppm Av.FC.	800 ppm % of cont. <10>	800 ppm No.of Surviv.	1600 ppm Av.FC.	1600 ppm % of cont. <10>	1600 ppm No.of Surviv.	3200 ppm Av.FC.	3200 ppm % of cont. <10>	3200 ppm No.of Surviv.
1-7	2.9 (10)	10/10	3.0 (10)	103	10/10	3.3 (10)	114	10/10	3.4 (10)	117	10/10	3.3 (10)	114	10/10	2.3 (5)	79	5/10
2-7	3.0 (10)	10/10	3.4 (10)	113	10/10	3.4 (10)	113	10/10	3.5 (10)	117	10/10	3.9 (10)	130	10/10	3.8 (3)	127	3/10

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

(Study No.0104, 0105)

TABLE 25 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN MALE MOUSE (THIRTEEN-WEEK STUDIES)

Week on Study	Control		50 ppm			115 ppm			265 ppm			609 ppm			1400 ppm		
	Av.Wt.	No.of Surviv. <10>	Av.Wt.	% of cont. <10>	No.of Surviv.	Av.Wt.	% of cont. <10>	No.of Surviv.	Av.Wt.	% of cont. <10>	No.of Surviv.	Av.Wt.	% of cont. <10>	No.of Surviv.	Av.Wt.	% of cont. <10>	No.of Surviv.
0	22.7 (10)	10/10	22.7 (10)	100	10/10	22.7 (10)	100	10/10	22.7 (10)	100	10/10	22.7 (10)	100	10/10	22.7 (10)	100	10/10
1	24.3 (10)	10/10	24.4 (10)	100	10/10	24.3 (10)	100	10/10	23.9 (10)	98	10/10	24.6 (10)	101	10/10	22.8 (10)	94	10/10
2	25.5 (10)	10/10	26.0 (10)	102	10/10	25.8 (10)	101	10/10	25.4 (10)	100	10/10	26.0 (10)	102	10/10	22.2 (10)	87	10/10
3	26.7 (10)	10/10	27.1 (10)	101	10/10	26.9 (10)	101	10/10	26.6 (10)	100	10/10	26.8 (10)	100	10/10	23.7 (10)	89	10/10
4	27.5 (10)	10/10	28.1 (10)	102	10/10	27.9 (10)	101	10/10	27.4 (10)	100	10/10	26.8 (10)	97	10/10	24.5 (10)	89	10/10
5	28.9 (10)	10/10	29.1 (10)	101	10/10	29.1 (10)	101	10/10	28.4 (10)	98	10/10	27.3 (10)	94	10/10	24.5 (10)	85	10/10
6	29.8 (10)	10/10	29.9 (10)	100	10/10	29.6 (10)	99	10/10	29.2 (10)	98	10/10	27.1 (10)	91	10/10	24.9 (10)	84	10/10
7	30.7 (10)	10/10	31.1 (10)	101	10/10	30.9 (10)	101	10/10	29.7 (10)	97	10/10	27.6 (10)	90	10/10	25.7 (10)	84	10/10
8	31.4 (10)	10/10	32.1 (10)	102	10/10	31.9 (10)	102	10/10	30.6 (10)	97	10/10	27.8 (10)	89	10/10	26.2 (10)	83	10/10
9	32.8 (10)	10/10	32.9 (10)	100	10/10	32.8 (10)	100	10/10	31.3 (10)	95	10/10	28.3 (10)	86	10/10	26.5 (10)	81	10/10
10	33.5 (10)	10/10	33.7 (10)	101	10/10	33.6 (10)	100	10/10	32.0 (10)	96	10/10	29.2 (10)	87	10/10	28.0 (10)	84	10/10
11	34.3 (10)	10/10	34.7 (10)	101	10/10	34.4 (10)	100	10/10	32.5 (10)	95	10/10	28.9 (10)	84	10/10	26.5 (10)	77	10/10
12	35.0 (10)	10/10	35.3 (10)	101	10/10	35.2 (10)	101	10/10	33.0 (10)	94	10/10	28.9 (10)	83	10/10	27.6 (10)	79	10/10
13	35.9 (10)	10/10	36.1 (10)	101	10/10	35.9 (10)	100	10/10	33.1 (10)	92	10/10	29.1 (10)	81	10/10	27.7 (10)	77	10/10

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

TABLE 26 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN FEMALE MOUSE (THIRTEEN-WEEK STUDIES)

Week on Study	Control		50 ppm			115 ppm			265 ppm			609 ppm			1400 ppm		
	Av.Wt.	No.of Surviv. <10>	Av.Wt.	% of cont. <10>	No.of Surviv.	Av.Wt.	% of cont. <10>	No.of Surviv.	Av.Wt.	% of cont. <10>	No.of Surviv.	Av.Wt.	% of cont. <10>	No.of Surviv.	Av.Wt.	% of cont. <10>	No.of Surviv.
0	19.0 (10)	10/10	19.0 (10)	100	10/10	19.0 (10)	100	10/10	19.0 (10)	100	10/10	19.0 (10)	100	10/10	19.0 (10)	100	10/10
1	20.1 (10)	10/10	19.9 (10)	99	10/10	19.8 (10)	99	10/10	20.2 (10)	100	10/10	20.1 (10)	100	10/10	19.3 (10)	96	10/10
2	20.7 (10)	10/10	20.6 (10)	100	10/10	20.5 (10)	99	10/10	21.2 (10)	102	10/10	20.8 (10)	100	10/10	20.3 (10)	98	10/10
3	21.5 (10)	10/10	21.5 (10)	100	10/10	21.4 (10)	100	10/10	21.9 (10)	102	10/10	21.6 (10)	100	10/10	21.2 (10)	99	10/10
4	22.1 (10)	10/10	22.2 (10)	100	10/10	22.5 (10)	102	10/10	22.3 (10)	101	10/10	22.3 (10)	101	10/10	22.1 (10)	100	10/10
5	22.8 (10)	10/10	23.1 (10)	101	10/10	23.1 (10)	101	10/10	22.9 (10)	100	10/10	22.9 (10)	100	10/10	22.4 (10)	98	10/10
6	23.8 (10)	10/10	23.9 (10)	100	10/10	23.6 (10)	99	10/10	23.4 (10)	98	10/10	23.6 (10)	99	10/10	22.9 (10)	96	10/10
7	24.5 (10)	10/10	24.8 (10)	101	10/10	24.7 (10)	101	10/10	24.2 (10)	99	10/10	24.1 (10)	98	10/10	23.4 (10)	96	10/10
8	25.3 (10)	10/10	25.5 (10)	101	10/10	25.2 (10)	100	10/10	25.3 (10)	100	10/10	24.5 (10)	97	10/10	23.5 (10)	93	10/10
9	25.9 (10)	10/10	26.2 (10)	101	10/10	25.2 (10)	97	10/10	25.4 (10)	98	10/10	25.0 (10)	97	10/10	24.4 (10)	94	10/10
10	26.7 (10)	10/10	26.5 (10)	99	10/10	26.4 (10)	99	10/10	25.7 (10)	96	10/10	25.6 (10)	96	10/10	25.2 (10)	94	10/10
11	27.4 (10)	10/10	26.6 (10)	97	10/10	26.4 (10)	96	10/10	26.2 (10)	96	10/10	25.2 (10)	92	10/10	24.3 (10)	89	10/10
12	27.3 (10)	10/10	27.5 (10)	101	10/10	27.0 (10)	99	10/10	26.8 (10)	98	10/10	25.6 (10)	94	10/10	25.1 (10)	92	10/10
13	28.0 (10)	10/10	28.0 (10)	100	10/10	27.3 (10)	98	10/10	27.6 (10)	99	10/10	26.0 (10)	93	10/10	25.3 (10)	90	10/10

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

(Study No.0104, 0105)

TABLE 27 FOOD CONSUMPTION IN MALE MOUSE (THIRTEEN-WEEK STUDIES)

Week on Study	Control Av.FC.	Control No.of Surviv. <10>	50 ppm Av.FC.	50 ppm % of cont. <10>	50 ppm No.of Surviv.	115 ppm Av.FC.	115 ppm % of cont. <10>	115 ppm No.of Surviv.	265 ppm Av.FC.	265 ppm % of cont. <10>	265 ppm No.of Surviv.	609 ppm Av.FC.	609 ppm % of cont. <10>	609 ppm No.of Surviv.	1400 ppm Av.FC.	1400 ppm % of cont. <10>	1400 ppm No.of Surviv.
1	3.7 (10)	10/10	3.8 (10)	103	10/10	3.9 (10)	105	10/10	3.8 (10)	103	10/10	4.0 (10)	108	10/10	3.9 (10)	105	10/10
2	3.7 (10)	10/10	3.8 (10)	103	10/10	3.8 (10)	103	10/10	3.8 (10)	103	10/10	4.1 (10)	111	10/10	4.0 (10)	108	10/10
3	3.7 (10)	10/10	3.7 (10)	100	10/10	3.8 (10)	103	10/10	3.8 (10)	103	10/10	4.2 (10)	114	10/10	4.1 (10)	111	10/10
4	3.8 (10)	10/10	3.8 (10)	100	10/10	3.9 (10)	103	10/10	3.8 (10)	100	10/10	4.4 (10)	116	10/10	4.4 (10)	116	10/10
5	4.0 (10)	10/10	3.9 (10)	98	10/10	4.1 (10)	103	10/10	4.0 (10)	100	10/10	4.5 (10)	113	10/10	4.3 (10)	108	10/10
6	4.1 (10)	10/10	4.0 (10)	98	10/10	4.1 (10)	100	10/10	4.1 (10)	100	10/10	4.4 (10)	107	10/10	4.1 (10)	100	10/10
7	4.0 (10)	10/10	4.1 (10)	103	10/10	4.0 (10)	100	10/10	4.0 (10)	100	10/10	4.3 (10)	108	10/10	4.2 (10)	105	10/10
8	4.0 (10)	10/10	4.1 (10)	103	10/10	4.1 (10)	103	10/10	4.0 (10)	100	10/10	4.0 (10)	100	10/10	4.0 (10)	100	10/10
9	4.0 (10)	10/10	4.1 (10)	103	10/10	4.1 (10)	103	10/10	4.0 (10)	100	10/10	3.9 (10)	98	10/10	3.8 (10)	95	10/10
10	4.0 (10)	10/10	4.0 (10)	100	10/10	4.1 (10)	103	10/10	4.0 (10)	100	10/10	4.0 (10)	100	10/10	3.9 (10)	98	10/10
11	4.0 (10)	10/10	4.0 (10)	100	10/10	4.1 (10)	103	10/10	3.9 (10)	98	10/10	3.5 (10)	88	10/10	3.4 (10)	85	10/10
12	4.0 (10)	10/10	4.0 (10)	100	10/10	4.2 (10)	105	10/10	3.9 (10)	98	10/10	3.8 (10)	95	10/10	3.9 (10)	98	10/10
13	4.0 (10)	10/10	4.0 (10)	100	10/10	4.1 (10)	103	10/10	4.0 (10)	100	10/10	3.7 (10)	93	10/10	3.8 (10)	95	10/10

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

TABLE 28 FOOD CONSUMPTION IN FEMALE MOUSE (THIRTEEN-WEEK STUDIES)

Week on Study	Control Av.FC.	Control No.of Surviv. <10>	50 ppm Av.FC.	50 ppm % of cont. <10>	50 ppm No.of Surviv.	115 ppm Av.FC.	115 ppm % of cont. <10>	115 ppm No.of Surviv.	265 ppm Av.FC.	265 ppm % of cont. <10>	265 ppm No.of Surviv.	609 ppm Av.FC.	609 ppm % of cont. <10>	609 ppm No.of Surviv.	1400 ppm Av.FC.	1400 ppm % of cont. <10>	1400 ppm No.of Surviv.
1	3.3 (10)	10/10	3.2 (10)	97	10/10	3.2 (10)	97	10/10	3.4 (10)	103	10/10	3.3 (10)	100	10/10	3.1 (10)	94	10/10
2	3.2 (10)	10/10	3.2 (10)	100	10/10	3.3 (10)	103	10/10	3.4 (10)	106	10/10	3.3 (10)	103	10/10	3.7 (10)	116	10/10
3	3.2 (10)	10/10	3.4 (10)	106	10/10	3.5 (10)	109	10/10	3.3 (10)	103	10/10	3.3 (10)	103	10/10	4.0 (10)	125	10/10
4	3.3 (10)	10/10	3.5 (10)	106	10/10	3.6 (10)	109	10/10	3.4 (10)	103	10/10	3.5 (10)	106	10/10	4.0 (10)	121	10/10
5	3.7 (10)	10/10	3.9 (10)	105	10/10	3.8 (10)	103	10/10	3.8 (10)	103	10/10	3.7 (10)	100	10/10	3.9 (10)	105	10/10
6	3.9 (9)	10/10	3.9 (10)	100	10/10	4.0 (10)	103	10/10	3.9 (10)	100	10/10	3.9 (10)	100	10/10	4.0 (10)	103	10/10
7	3.9 (10)	10/10	4.1 (10)	105	10/10	4.0 (10)	103	10/10	3.8 (10)	97	10/10	3.9 (10)	100	10/10	3.9 (10)	100	10/10
8	4.0 (10)	10/10	4.0 (10)	100	10/10	4.1 (10)	103	10/10	4.0 (10)	100	10/10	3.9 (10)	98	10/10	3.8 (10)	95	10/10
9	3.9 (10)	10/10	4.1 (10)	105	10/10	4.0 (10)	103	10/10	3.9 (10)	100	10/10	3.8 (10)	97	10/10	3.8 (10)	97	10/10
10	3.9 (10)	10/10	3.9 (10)	100	10/10	4.2 (10)	108	10/10	3.7 (10)	95	10/10	3.8 (10)	97	10/10	3.9 (10)	100	10/10
11	3.8 (10)	10/10	3.7 (10)	97	10/10	3.9 (10)	103	10/10	3.7 (10)	97	10/10	3.6 (10)	95	10/10	3.6 (10)	95	10/10
12	3.7 (10)	10/10	3.8 (10)	103	10/10	4.0 (10)	108	10/10	3.7 (10)	100	10/10	3.7 (10)	100	10/10	3.9 (10)	105	10/10
13	3.8 (10)	10/10	3.9 (10)	103	10/10	4.0 (10)	105	10/10	3.9 (10)	103	10/10	3.7 (10)	97	10/10	3.8 (10)	100	10/10

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

(Study No.0104, 0105)

(Study No.0104, 0105)

TABLE 29 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN MALE MOUSE

(TWO-YEAR STUDIES)

Week on Study	Control Av.Wt.	Control No.of Surviv. <50>	10 ppm Av.Wt.	10 ppm % of cont. <50>	10 ppm No.of Surviv.	50 ppm Av.Wt.	50 ppm % of cont. <50>	50 ppm No.of Surviv.	250 ppm Av.Wt.	250 ppm % of cont. <50>	250 ppm No.of Surviv.
0	22.7 (50)	50/50	22.7 (50)	100	50/50	22.7 (50)	100	50/50	22.7 (50)	100	50/50
1	24.6 (50)	50/50	24.4 (50)	99	50/50	24.4 (50)	99	50/50	24.4 (50)	99	50/50
2	25.3 (50)	50/50	24.8 (50)	98	50/50	25.3 (50)	100	50/50	25.3 (50)	100	50/50
3	26.3 (50)	50/50	25.8 (50)	98	50/50	26.0 (50)	99	50/50	25.9 (49)	98	50/50
4	27.0 (50)	50/50	26.4 (50)	98	50/50	26.6 (50)	99	50/50	26.4 (50)	98	50/50
5	27.8 (50)	50/50	27.4 (50)	99	50/50	27.7 (50)	100	50/50	27.2 (50)	98	50/50
6	28.5 (50)	50/50	27.8 (50)	98	50/50	28.3 (50)	99	50/50	27.6 (50)	97	50/50
7	29.0 (50)	50/50	28.0 (50)	97	50/50	28.8 (50)	99	50/50	28.2 (50)	97	50/50
8	29.8 (50)	50/50	28.6 (50)	96	50/50	29.6 (50)	99	50/50	28.5 (50)	96	50/50
9	30.2 (50)	50/50	29.0 (50)	96	50/50	30.2 (50)	100	50/50	29.0 (50)	96	50/50
10	30.7 (50)	50/50	29.6 (50)	96	50/50	30.9 (50)	101	50/50	29.4 (50)	96	50/50
11	31.5 (50)	50/50	30.5 (50)	97	50/50	31.4 (50)	100	50/50	30.0 (50)	95	50/50
12	32.2 (50)	50/50	30.9 (50)	96	50/50	31.8 (50)	99	50/50	30.3 (50)	94	50/50
13	32.9 (50)	50/50	31.8 (50)	97	50/50	32.5 (50)	99	50/50	30.6 (50)	93	50/50
14	33.4 (50)	50/50	32.4 (50)	97	50/50	33.2 (50)	99	50/50	31.2 (50)	93	50/50
16	34.9 (50)	50/50	33.9 (50)	97	50/50	34.5 (50)	99	50/50	32.7 (50)	94	50/50
18	36.3 (50)	50/50	35.5 (50)	98	50/50	36.1 (50)	99	50/50	33.9 (50)	93	50/50
20	37.2 (50)	50/50	36.6 (50)	98	50/50	37.1 (50)	100	50/50	35.5 (50)	95	50/50
22	37.5 (50)	50/50	37.2 (50)	99	50/50	38.0 (50)	101	50/50	35.7 (50)	95	50/50
24	38.2 (50)	50/50	38.2 (50)	100	50/50	38.8 (50)	102	50/50	36.1 (50)	95	50/50
26	39.3 (50)	50/50	39.3 (50)	100	50/50	39.8 (50)	101	50/50	36.7 (50)	93	50/50
28	39.9 (50)	49/50	40.7 (50)	102	50/50	40.9 (50)	103	50/50	38.0 (50)	95	50/50
30	41.5 (49)	49/50	41.1 (50)	99	50/50	41.7 (50)	100	50/50	38.0 (50)	92	50/50
32	41.9 (49)	49/50	42.1 (50)	100	50/50	42.4 (50)	101	50/50	39.0 (49)	93	49/50
34	43.0 (49)	49/50	42.7 (50)	99	50/50	43.3 (50)	101	50/50	39.4 (49)	92	49/50
36	43.3 (49)	49/50	43.2 (50)	100	50/50	43.9 (50)	101	50/50	39.8 (49)	92	49/50
38	44.3 (49)	49/50	44.0 (50)	99	50/50	44.5 (50)	100	50/50	41.5 (49)	94	49/50
40	44.9 (49)	49/50	45.1 (49)	100	49/50	44.9 (50)	100	50/50	41.6 (49)	93	49/50
42	45.9 (48)	48/50	46.0 (49)	100	49/50	46.4 (49)	101	49/50	42.2 (49)	92	49/50
44	46.4 (48)	48/50	46.9 (49)	101	49/50	46.8 (49)	101	49/50	42.9 (49)	92	49/50
46	46.6 (48)	48/50	47.3 (49)	102	49/50	47.2 (49)	101	49/50	43.1 (49)	92	49/50
48	47.6 (47)	47/50	47.9 (49)	101	49/50	47.6 (49)	100	49/50	43.5 (49)	91	49/50
50	48.0 (46)	46/50	48.4 (49)	101	49/50	48.0 (49)	100	49/50	43.6 (49)	91	49/50
52	48.6 (46)	46/50	49.0 (49)	101	49/50	48.4 (48)	100	48/50	44.4 (49)	91	49/50
54	48.4 (46)	46/50	48.9 (49)	101	49/50	48.3 (48)	100	48/50	44.4 (49)	92	49/50
56	48.4 (46)	46/50	49.0 (48)	101	48/50	48.5 (48)	100	48/50	44.5 (49)	92	49/50
58	48.6 (46)	46/50	49.2 (48)	101	48/50	48.7 (48)	100	48/50	44.3 (49)	91	49/50
60	48.6 (46)	46/50	48.6 (48)	100	48/50	48.3 (48)	99	48/50	43.9 (49)	90	49/50
62	48.5 (46)	46/50	48.4 (48)	100	48/50	48.2 (48)	99	48/50	44.0 (49)	91	49/50
64	48.9 (46)	46/50	48.9 (47)	100	47/50	48.6 (47)	99	47/50	44.0 (49)	90	49/50
66	49.1 (46)	46/50	48.9 (47)	100	47/50	48.4 (47)	99	47/50	43.7 (48)	89	48/50
68	49.7 (46)	46/50	49.2 (47)	99	47/50	48.8 (47)	98	46/50	43.5 (48)	88	48/50
70	50.2 (46)	46/50	49.7 (47)	99	47/50	48.7 (46)	97	46/50	43.4 (47)	86	47/50
72	50.3 (46)	46/50	50.7 (47)	101	47/50	48.3 (46)	96	46/50	43.9 (47)	87	47/50
74	49.6 (46)	46/50	50.5 (47)	102	47/50	48.6 (45)	98	44/50	43.3 (47)	87	47/50
76	50.3 (45)	45/50	50.7 (47)	101	47/50	49.2 (43)	98	43/50	43.7 (46)	87	46/50
78	51.1 (44)	44/50	51.5 (47)	101	47/50	49.4 (43)	97	43/50	43.3 (46)	85	46/50
80	51.2 (44)	44/50	51.1 (47)	100	47/50	49.7 (42)	97	42/50	43.3 (45)	85	45/50
82	51.1 (44)	44/50	51.4 (47)	101	47/50	50.3 (41)	98	41/50	42.7 (44)	84	44/50
84	51.9 (42)	42/50	50.6 (47)	97	47/50	50.4 (41)	97	41/50	42.2 (44)	81	44/50
86	51.9 (42)	42/50	50.7 (46)	98	46/50	50.0 (41)	96	41/50	42.6 (40)	82	40/50
88	52.1 (42)	42/50	50.6 (46)	97	46/50	50.1 (39)	96	39/50	41.7 (39)	80	39/50
90	51.8 (42)	42/50	50.7 (46)	98	46/50	49.4 (38)	95	38/50	40.9 (39)	79	39/50
92	51.7 (41)	41/50	50.4 (45)	97	45/50	49.1 (37)	95	36/50	40.1 (37)	78	37/50
94	51.4 (41)	41/50	50.1 (44)	97	44/50	48.5 (35)	94	34/50	39.5 (35)	77	35/50
96	51.4 (38)	38/50	49.4 (44)	96	43/50	47.8 (32)	93	32/50	38.5 (34)	75	34/50
98	51.4 (36)	36/50	49.3 (41)	96	40/50	47.1 (31)	92	31/50	38.3 (31)	75	31/50
100	50.2 (36)	36/50	49.3 (39)	98	38/50	46.5 (30)	93	30/50	37.8 (27)	75	27/50
102	50.0 (35)	34/50	49.3 (37)	99	37/50	45.8 (30)	92	30/50	36.8 (25)	74	25/50
104	50.3 (31)	31/50	49.2 (35)	98	35/50	45.3 (28)	90	28/50	36.4 (23)	72	22/50

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

(Study No.0104,0105)

TABLE 30 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN FEMALE MOUSE

(TWO-YEAR STUDIES)

Week on Study	Control Av.Wt.	Control No.of Surviv. <50>	10 ppm Av.Wt.	10 ppm % of cont. <47>	10 ppm No.of Surviv.	50 ppm Av.Wt.	50 ppm % of cont. <49>	50 ppm No.of Surviv.	250 ppm Av.Wt.	250 ppm % of cont. <50>	250 ppm No.of Surviv.
0	18.6 (50)	50/50	18.5 (47)	99	50/50.	18.5 (49)	99	50/50	18.6 (50)	100	50/50
1	20.0 (50)	50/50	19.9 (47)	100	50/50	19.5 (49)	98	50/50	19.7 (50)	99	50/50
2	20.5 (50)	50/50	20.5 (47)	100	50/50	20.2 (49)	99	50/50	20.4 (50)	100	50/50
3	21.2 (50)	50/50	21.0 (47)	99	50/50	20.9 (49)	99	50/50	21.3 (50)	100	50/50
4	22.0 (50)	50/50	21.7 (47)	99	50/50	21.6 (49)	98	50/50	22.1 (50)	100	50/50
5	22.4 (50)	50/50	22.4 (47)	100	50/50	22.2 (49)	99	50/50	23.1 (50)	103	50/50
6	23.0 (50)	50/50	22.8 (47)	99	50/50	22.8 (49)	99	50/50	23.1 (50)	100	50/50
7	23.4 (50)	50/50	23.1 (47)	99	49/49	23.1 (49)	99	50/50	23.7 (50)	101	50/50
8	24.1 (50)	50/50	23.5 (47)	98	49/49	23.9 (49)	99	50/50	24.1 (50)	100	50/50
9	23.9 (50)	50/50	23.6 (47)	99	49/49	23.9 (49)	100	50/50	24.4 (50)	102	50/50
10	24.4 (50)	50/50	23.8 (47)	98	49/49	24.0 (49)	98	50/50	24.6 (50)	101	50/50
11	24.9 (50)	50/50	24.2 (47)	97	49/49	24.2 (49)	97	50/50	24.6 (50)	99	50/50
12	24.9 (50)	50/50	24.5 (47)	98	49/49	24.6 (49)	99	50/50	24.8 (50)	100	50/50
13	24.9 (50)	50/50	24.9 (47)	100	49/49	24.7 (49)	99	50/50	25.2 (50)	101	50/50
14	25.2 (50)	50/50	25.1 (47)	100	49/49	25.1 (49)	100	50/50	25.1 (50)	100	50/50
16	26.1 (50)	50/50	25.6 (47)	98	49/49	25.6 (49)	98	50/50	26.0 (50)	100	50/50
18	27.0 (50)	50/50	26.6 (47)	99	49/49	26.2 (49)	97	50/50	26.8 (50)	99	50/50
20	27.5 (50)	50/50	27.1 (47)	99	49/49	27.1 (49)	99	50/50	27.3 (50)	99	50/50
22	27.4 (50)	50/50	27.2 (47)	99	49/49	27.1 (49)	99	50/50	27.7 (50)	101	50/50
24	27.2 (50)	50/50	27.5 (47)	101	49/49	27.1 (49)	100	49/49	27.5 (50)	101	50/50
26	28.3 (50)	50/50	27.9 (47)	99	49/49	27.5 (49)	97	49/49	28.8 (50)	102	50/50
28	28.3 (50)	50/50	29.0 (47)	102	49/49	27.9 (49)	99	49/49	28.7 (50)	101	50/50
30	29.7 (50)	50/50	29.2 (47)	98	49/49	28.8 (49)	97	49/49	29.2 (50)	98	50/50
32	29.4 (50)	50/50	29.6 (47)	101	49/49	28.5 (49)	97	49/49	29.0 (50)	99	50/50
34	30.3 (50)	50/50	29.9 (47)	99	49/49	29.1 (49)	96	49/49	29.9 (50)	99	50/50
36	29.7 (50)	50/50	30.3 (47)	102	49/49	29.9 (49)	101	49/49	30.0 (50)	101	50/50
38	30.3 (50)	50/50	31.2 (47)	103	49/49	30.2 (49)	100	49/49	31.1 (50)	103	50/50
40	31.0 (50)	50/50	31.8 (47)	103	49/49	31.1 (48)	100	48/49	31.0 (50)	100	50/50
42	32.4 (50)	50/50	32.3 (47)	100	49/49	32.1 (48)	99	48/49	31.8 (50)	98	50/50
44	32.7 (50)	50/50	33.5 (47)	102	49/49	32.1 (48)	98	48/49	32.7 (50)	100	50/50
46	33.1 (50)	50/50	33.6 (47)	102	49/49	32.3 (48)	98	48/49	32.9 (50)	99	50/50
48	33.9 (50)	50/50	34.1 (47)	101	49/49	33.3 (48)	98	48/49	33.6 (50)	99	50/50
50	33.9 (50)	50/50	34.6 (47)	102	49/49	33.6 (48)	99	48/49	33.5 (50)	99	50/50
52	34.9 (50)	50/50	35.3 (47)	101	49/49	34.6 (48)	99	48/49	34.3 (50)	98	50/50
54	34.6 (50)	50/50	34.8 (47)	101	48/48	34.4 (48)	99	47/49	34.9 (50)	101	50/50
56	35.4 (50)	50/50	35.8 (47)	101	48/48	34.5 (47)	97	47/49	34.2 (50)	97	50/50
58	35.7 (50)	50/50	35.8 (47)	100	48/48	34.7 (47)	97	47/49	34.7 (50)	97	50/50
60	35.0 (50)	50/50	35.5 (47)	101	48/48	34.0 (47)	97	47/49	33.7 (50)	96	50/50
62	35.2 (50)	50/50	35.2 (47)	100	48/48	34.0 (47)	97	47/49	33.9 (50)	96	50/50
64	35.6 (50)	50/50	35.2 (45)	99	46/48	34.7 (47)	97	47/49	34.3 (50)	96	50/50
66	35.6 (50)	50/50	35.2 (45)	99	46/48	34.2 (47)	96	47/49	34.1 (50)	96	50/50
68	36.0 (49)	49/50	35.5 (44)	99	45/48	35.5 (47)	99	47/49	34.6 (50)	96	50/50
70	36.6 (49)	49/50	36.5 (44)	100	45/48	35.5 (47)	97	47/49	34.8 (50)	95	50/50
72	36.9 (48)	48/50	36.4 (44)	99	45/48	35.7 (46)	97	46/49	35.2 (50)	95	50/50
74	37.0 (46)	46/50	36.4 (44)	98	45/48	36.2 (46)	98	46/49	34.7 (50)	94	50/50
76	37.1 (46)	46/50	37.1 (42)	100	43/48	36.0 (45)	97	44/49	35.6 (49)	96	49/50
78	38.3 (46)	46/50	38.0 (42)	99	43/48	37.8 (44)	99	44/49	35.7 (49)	93	49/50
80	39.0 (46)	46/50	37.8 (42)	97	43/48	37.2 (42)	95	42/49	36.1 (49)	93	49/50
82	38.9 (44)	44/50	39.0 (41)	100	42/48	37.6 (41)	97	40/49	35.9 (47)	92	47/50
84	38.9 (43)	43/50	37.8 (41)	97	42/48	37.9 (40)	97	39/49	35.7 (43)	92	43/50
86	39.3 (43)	43/50	38.4 (40)	98	41/48	38.0 (37)	97	37/49	36.4 (41)	93	41/50
88	39.2 (43)	43/50	38.0 (39)	97	41/48	38.0 (37)	97	37/49	35.3 (41)	90	41/50
90	39.6 (43)	43/50	38.5 (39)	97	40/48	38.2 (34)	96	34/49	34.9 (40)	88	40/50
92	39.3 (41)	41/50	37.8 (39)	96	40/48	37.7 (34)	96	34/49	34.9 (35)	89	35/50
94	39.5 (41)	41/50	37.5 (38)	95	38/47	37.5 (33)	95	33/49	34.0 (33)	86	33/50
96	38.8 (41)	41/50	37.2 (35)	96	34/47	37.2 (32)	96	32/49	33.8 (31)	87	31/50
98	38.6 (39)	39/50	37.8 (32)	98	32/47	36.8 (32)	95	32/49	33.7 (29)	87	29/50
100	38.1 (38)	38/50	37.6 (30)	99	30/47	36.5 (27)	96	27/49	31.6 (27)	83	27/50
102	38.5 (37)	37/50	37.9 (29)	98	28/47	35.6 (25)	92	25/49	31.6 (24)	82	24/50
104	37.3 (34)	32/50	37.3 (27)	100	27/47	35.5 (23)	95	22/49	31.1 (17)	83	17/50

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

TABLE 31 INCIDENCE AND TIME OF MASS OCCURRENCE(CLINICAL OBSERVATION) :MOUSE :MALE

Time of mass occurrence		Dosing week 0～13	14～26	27～39	40～52	53～65	66～78	79～91	92～104	0～104
The kind of mass		No. of animals with mass (No. of dead and moribund animals with mass)								
Internal mass										
	Control	0	0	0	1	3	8	10	11	18(12)
	10 ppm	0	0	0	0	3	14	9	16	26(9)
	50 ppm	0	0	0	1	3	17	18	20	31(14)
	250 ppm	0	0	0	1	4	11	12	20	30(18)
External mass	Control	0	0	0	0	0	0	4	3	5(3)
	10 ppm	0	0	0	0	0	2	2	4	5(3)
	50 ppm	0	0	0	0	2	1	5	5	6(3)
	250 ppm	0	0	0	0	1	2	7	10	12(7)

TABLE 32 INCIDENCE AND TIME OF MASS OCCURRENCE(CLINICAL OBSERVATION) :MOUSE :FEMALE

Time of mass occurrence		Dosing week 0～13	14～26	27～39	40～52	53～65	66～78	79～91	92～104	0～104
The kind of mass		No. of animals with mass (No. of dead and moribund animals with mass)								
Internal mass										
	Control	0	0	0	1	3	7	7	8	18(14)
	10 ppm	0	0	0	1	2	7	7	8	16(14)
	50 ppm	0	0	0	2	9	9	8	7	21(13)
	250 ppm	0	0	0	1	1	7	9	13	22(18)
External mass	Control	0	0	0	0	0	2	4	4	8(4)
	10 ppm	0	0	0	0	0	1	1	4	4(2)
	50 ppm	0	0	0	0	2	1	5	6	8(7)
	250 ppm	0	0	0	0	1	2	3	3	5(3)

(Study No. 0104, 0105)

TABLE 33 FOOD CONSUMPTION IN MALE MOUSE (TWO-YEAR STUDIES)

Week on Study	Control Av.FC.	Control No.of Surviv. <50>	10 ppm Av.FC.	10 ppm % of cont. <50>	10 ppm No.of Surviv.	50 ppm Av.FC.	50 ppm % of cont. <50>	50 ppm No.of Surviv.	250 ppm Av.FC.	250 ppm % of cont. <50>	250 ppm No.of Surviv.
1	3.8 (50)	50/50	3.8 (50)	100	50/50	3.8 (50)	100	50/50	3.8 (50)	100	50/50
2	3.8 (50)	50/50	3.6 (50)	95	50/50	3.7 (50)	97	50/50	3.8 (50)	100	50/50
3	3.9 (50)	50/50	3.7 (50)	95	50/50	3.7 (50)	95	50/50	3.8 (50)	97	50/50
4	4.0 (50)	50/50	3.9 (50)	98	50/50	3.9 (50)	98	50/50	3.9 (50)	98	50/50
5	4.0 (50)	50/50	3.9 (50)	98	50/50	4.0 (50)	100	50/50	3.9 (50)	98	50/50
6	4.1 (50)	50/50	3.9 (50)	95	50/50	3.9 (50)	95	50/50	3.9 (50)	95	50/50
7	4.1 (50)	50/50	3.8 (50)	93	50/50	4.0 (50)	98	50/50	3.9 (50)	95	50/50
8	4.1 (50)	50/50	4.0 (50)	98	50/50	4.1 (50)	100	50/50	4.0 (50)	98	50/50
9	4.2 (50)	50/50	4.1 (50)	98	50/50	4.1 (50)	98	50/50	4.1 (50)	98	50/50
10	4.1 (50)	50/50	4.1 (50)	100	50/50	4.1 (50)	100	50/50	4.0 (50)	98	50/50
11	4.2 (50)	50/50	4.1 (50)	98	50/50	4.1 (50)	98	50/50	4.1 (50)	98	50/50
12	4.3 (50)	50/50	4.1 (50)	95	50/50	4.2 (50)	98	50/50	4.2 (50)	98	50/50
13	4.2 (50)	50/50	4.1 (50)	98	50/50	4.1 (50)	98	50/50	4.0 (50)	95	50/50
14	4.2 (50)	50/50	4.2 (50)	100	50/50	4.2 (50)	100	50/50	4.2 (50)	100	50/50
18	4.4 (50)	50/50	4.2 (50)	95	50/50	4.4 (50)	100	50/50	4.3 (50)	98	50/50
22	4.4 (50)	50/50	4.4 (50)	100	50/50	4.4 (50)	100	50/50	4.1 (50)	93	50/50
26	4.6 (50)	50/50	4.5 (50)	98	50/50	4.6 (50)	100	50/50	4.4 (50)	96	50/50
30	4.6 (49)	49/50	4.5 (50)	98	50/50	4.6 (50)	100	50/50	4.4 (50)	96	50/50
34	4.6 (49)	49/50	4.5 (50)	98	50/50	4.6 (50)	100	50/50	4.5 (49)	98	49/50
38	4.8 (49)	49/50	4.6 (50)	96	50/50	4.7 (50)	98	50/50	4.7 (49)	98	49/50
42	4.7 (48)	48/50	4.6 (49)	98	49/50	4.6 (49)	98	49/50	4.5 (49)	96	49/50
46	4.6 (48)	48/50	4.7 (49)	102	49/50	4.6 (49)	100	49/50	4.5 (49)	98	49/50
50	4.7 (46)	46/50	4.6 (49)	98	49/50	4.7 (49)	100	49/50	4.6 (49)	98	49/50
52	4.7 (46)	46/50	4.6 (49)	98	49/50	4.8 (48)	102	48/50	4.5 (49)	96	49/50
54	4.7 (46)	46/50	4.5 (49)	96	49/50	4.8 (48)	102	48/50	4.6 (49)	98	49/50
58	5.0 (46)	46/50	4.8 (48)	96	48/50	5.1 (48)	102	48/50	4.8 (49)	96	49/50
62	4.7 (46)	46/50	4.7 (48)	100	48/50	4.9 (48)	104	48/50	4.6 (49)	98	49/50
66	4.8 (46)	46/50	4.7 (47)	98	47/50	4.9 (47)	102	47/50	4.7 (49)	98	48/50
70	4.8 (46)	46/50	4.7 (47)	98	47/50	4.8 (46)	100	46/50	4.7 (48)	98	47/50
74	4.8 (46)	46/50	4.9 (47)	102	47/50	4.7 (46)	98	44/50	4.4 (47)	92	47/50
78	5.1 (44)	44/50	5.0 (47)	98	47/50	5.1 (43)	100	43/50	5.0 (46)	98	46/50
82	5.2 (44)	44/50	5.0 (47)	96	47/50	5.2 (42)	100	41/50	4.9 (44)	94	44/50
86	5.2 (42)	42/50	5.0 (46)	96	46/50	5.1 (41)	98	41/50	4.6 (41)	88	40/50
90	5.2 (42)	42/50	5.0 (46)	96	46/50	5.1 (39)	98	38/50	4.8 (39)	92	39/50
94	5.0 (41)	41/50	4.9 (44)	98	44/50	4.9 (36)	98	34/50	4.6 (36)	92	35/50
98	5.0 (36)	36/50	5.0 (41)	100	40/50	5.1 (31)	102	31/50	4.6 (33)	92	31/50
102	4.9 (36)	34/50	4.8 (37)	98	37/50	4.9 (30)	100	30/50	4.4 (25)	90	25/50
104	5.1 (32)	31/50	4.8 (35)	94	35/50	4.7 (28)	92	28/50	4.5 (24)	88	22/50

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

TABLE 34 FOOD CONSUMPTION IN FEMALE MOUSE (TWO-YEAR STUDIES)

Week on Study	Control Av.FC.	Control No.of Surviv. <50>	10 ppm Av.FC.	10 ppm % of cont. <47>	10 ppm No.of Surviv.	50 ppm Av.FC.	50 ppm % of cont. <49>	50 ppm No.of Surviv.	250 ppm Av.FC.	250 ppm % of cont. <50>	250 ppm No.of Surviv.
1	3.2 (50)	50/50	3.3 (47)	103	50/50	3.1 (49)	97	50/50	3.2 (50)	100	50/50
2	3.1 (50)	50/50	3.1 (47)	100	50/50	3.2 (49)	103	50/50	3.2 (50)	103	50/50
3	3.4 (50)	50/50	3.2 (47)	94	50/50	3.4 (49)	100	50/50	3.5 (50)	103	50/50
4	3.6 (50)	50/50	3.5 (47)	97	50/50	3.6 (49)	100	50/50	3.7 (50)	103	50/50
5	3.7 (50)	50/50	3.6 (47)	97	50/50	3.7 (49)	100	50/50	3.8 (50)	103	50/50
6	3.9 (50)	50/50	3.7 (47)	95	50/50	3.8 (49)	97	50/50	3.7 (50)	95	50/50
7	3.9 (50)	50/50	3.8 (47)	97	49/49	3.9 (49)	100	50/50	3.8 (50)	97	50/50
8	4.0 (50)	50/50	3.9 (47)	98	49/49	4.0 (49)	100	50/50	3.9 (50)	98	50/50
9	4.0 (50)	50/50	3.9 (47)	98	49/49	3.9 (49)	98	50/50	4.0 (50)	100	50/50
10	4.0 (50)	50/50	3.9 (47)	98	49/49	3.8 (49)	95	50/50	3.9 (50)	98	50/50
11	4.0 (50)	50/50	3.9 (47)	98	49/49	3.9 (49)	98	50/50	3.9 (50)	98	50/50
12	3.9 (50)	50/50	3.9 (47)	100	49/49	4.0 (49)	103	50/50	4.0 (50)	103	50/50
13	3.9 (50)	50/50	3.8 (47)	97	49/49	3.9 (49)	100	50/50	3.9 (50)	100	50/50
14	3.9 (50)	50/50	3.9 (47)	100	49/49	4.0 (49)	103	50/50	4.0 (50)	103	50/50
18	4.2 (50)	50/50	4.1 (47)	98	49/49	4.1 (49)	98	50/50	4.3 (50)	102	50/50
22	4.3 (50)	50/50	4.1 (47)	95	49/49	4.1 (49)	95	50/50	4.1 (50)	95	50/50
26	4.5 (50)	50/50	4.4 (47)	98	49/49	4.4 (49)	98	49/49	4.5 (50)	100	50/50
30	4.5 (50)	50/50	4.4 (47)	98	49/49	4.5 (49)	100	49/49	4.4 (50)	98	50/50
34	4.7 (50)	50/50	4.5 (47)	96	49/49	4.5 (49)	96	49/49	4.5 (50)	96	50/50
38	4.6 (50)	50/50	4.6 (47)	100	49/49	4.6 (49)	100	49/49	4.7 (50)	102	50/50
42	4.6 (50)	50/50	4.4 (47)	96	49/49	4.6 (48)	100	48/49	4.5 (50)	98	50/50
46	4.4 (50)	50/50	4.4 (47)	100	49/49	4.3 (48)	98	48/49	4.5 (50)	102	50/50
50	4.4 (50)	50/50	4.4 (47)	100	49/49	4.4 (48)	100	48/49	4.5 (50)	102	50/50
52	4.7 (50)	50/50	4.5 (47)	96	49/49	4.6 (48)	98	48/49	4.5 (50)	96	50/50
54	4.5 (50)	50/50	4.3 (47)	96	48/48	4.4 (48)	98	47/49	4.7 (50)	104	50/50
58	4.9 (50)	50/50	4.7 (44)	96	48/48	4.7 (47)	96	47/49	4.7 (50)	96	50/50
62	4.5 (50)	50/50	4.4 (47)	98	48/48	4.4 (47)	98	47/49	4.4 (50)	98	50/50
66	4.5 (49)	50/50	4.5 (45)	100	46/48	4.4 (47)	98	47/49	4.4 (50)	98	50/50
70	4.6 (49)	49/50	4.6 (44)	100	45/48	4.4 (47)	96	47/49	4.6 (50)	100	50/50
74	4.4 (48)	46/50	4.7 (44)	107	45/48	4.4 (46)	100	46/49	4.3 (50)	98	50/50
78	4.8 (46)	46/50	4.7 (42)	98	43/48	5.0 (44)	104	44/49	4.9 (49)	102	49/50
82	4.9 (45)	44/50	4.9 (42)	100	42/48	4.9 (41)	100	40/49	4.7 (48)	96	47/50
86	5.0 (43)	43/50	4.9 (40)	98	41/48	4.8 (38)	96	37/49	4.8 (41)	96	41/50
90	4.8 (43)	43/50	5.0 (39)	104	40/48	4.8 (35)	100	34/49	4.7 (41)	98	40/50
94	4.9 (41)	41/50	4.7 (38)	96	38/47	4.6 (34)	94	33/49	4.6 (35)	94	33/50
98	4.8 (40)	39/50	4.5 (34)	94	32/47	4.6 (31)	96	32/49	4.8 (30)	100	29/50
102	4.6 (38)	37/50	4.6 (29)	100	28/47	4.3 (27)	93	25/49	4.3 (24)	93	24/50
104	4.1 (37)	32/50	4.4 (28)	107	27/47	4.7 (24)	115	22/49	4.0 (18)	98	17/50

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

(Study No. 0104, 0105)

TABLE 35 NEOPLASTIC LESIONS (SPLEEN) INCIDENCE AND STATISTICAL ANALYSIS : MOUSE:MALE

Group Name	Control	10 ppm	50 ppm	250 ppm
SITE : spleen				
TUMOUR : hemangioendothelioma				
Overall Rates(a)	1/50 (2.0)	1/50 (2.0)	3/50 (6.0)	5/50 (10.0)
Adjusted Rates(b)	3.23	0.0	6.38	12.00
Terminal Rates(c)	1/31 (3.2)	0/35 (0.0)	0/28 (0.0)	2/22 (9.1)
Standard Rates(d)	P=0.5167			
Prevalence Rates(d)	P=0.0177*			
Combind analysis(d)	P=0.0340*			
Cochran-Armitage Test(e)	P=0.0420*			
Fisher Exact Test(e)		P=0.2475	P=0.3235	P=0.1210
SITE : spleen				
TUMOUR : hemangioendothelioma:benign, hemangioendothelioma				
Overall Rates(a)	2/50 (4.0)	2/50 (4.0)	3/50 (6.0)	6/50 (12.0)
Adjusted Rates(b)	6.45	2.86	6.38	12.90
Terminal Rates(c)	2/31 (6.5)	1/35 (2.9)	0/28 (0.0)	2/22 (9.1)
Standard Rates(d)	P=0.5167			
Prevalence Rates(d)	P=0.0276*			
Combind analysis(d)	P=0.0458*			
Cochran-Armitage Test(e)	P=0.0608			
Fisher Exact Test(e)		P=0.3088	P=0.4909	P=0.1606

(a):Number of tumor-bearing animals/number of animals examined at the site.
(b):Kaplan-Meire estimate tumor incidence at the end of study after adjusting for intercurrent mortality.
(c):Observed tumor incidence at terminal kill.
(d):Beneth the control incidence are the P-values associated with the trend test.
Standard method : Death analysis
Prevalence method : Incidental tumor test
Combind analysis : Death analysis + Incidental tumor test
(e):The Cochran-Armitage and Fisher's 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 beyond the estimated P-value.
------:There is no data which should be statistic analysis.

TABLE 36 NEOPLASTIC LESIONS (LIVER) INCIDENCE AND STATISTICAL ANALYSIS : MOUSE:MALE

Group Name	Control	10 ppm	50 ppm	250 ppm
SITE : liver TUMOUR : hepatocellular adenoma				
Overall Rates(a)	7/50 (14.0)	13/50 (26.0)	8/50 (16.0)	26/50 (52.0)
Adjusted Rates(b)	15.22	34.29	20.59	77.27
Terminal Rates(c)	4/31 (12.9)	12/35 (34.3)	5/28 (17.9)	17/22 (77.3)
Standard Rates(d)	P=1.0000 ?			
Prevalence Rates(d)	P<0.0001**			
Combind analysis(d)	P<0.0001**			
Cochran-Armitage Test(e)	P<0.0001**			
Fisher Exact Test(e)		P=0.1634	P=0.4854	P=0.0029**
SITE : liver TUMOUR : hemangioendothelioma				
Overall Rates(a)	1/50 (2.0)	1/50 (2.0)	5/50 (10.0)	5/50 (10.0)
Adjusted Rates(b)	0.0	2.17	3.57	13.64
Terminal Rates(c)	0/31 (0.0)	0/35 (0.0)	1/28 (3.6)	3/22 (13.6)
Standard Rates(d)	P=0.2158			
Prevalence Rates(d)	P=0.0270*			
Combind analysis(d)	P=0.0332*			
Cochran-Armitage Test(e)	P=0.0883			
Fisher Exact Test(e)		P=0.2475	P=0.1210	P=0.1210
SITE : liver TUMOUR : hepatocellular carcinoma				
Overall Rates(a)	7/50 (14.0)	8/50 (16.0)	12/50 (24.0)	25/50 (50.0)
Adjusted Rates(b)	16.13	16.67	25.00	45.45
Terminal Rates(c)	5/31 (16.1)	5/35 (14.3)	7/28 (25.0)	10/22 (45.5)
Standard Rates(d)	P=0.0010**			
Prevalence Rates(d)	P=0.0002**			
Combind analysis(d)	P<0.0001**			
Cochran-Armitage Test(e)	P<0.0001**			
Fisher Exact Test(e)		P=0.4854	P=0.2119	P=0.0041**
SITE : liver TUMOUR : hepatocellular adenoma, hepatocellular carcinoma				
Overall Rates(a)	13/50 (26.0)	21/50 (42.0)	19/50 (38.0)	40/50 (80.0)
Adjusted Rates(b)	26.47	50.00	39.39	90.91
Terminal Rates(c)	8/31 (25.8)	17/35 (48.6)	11/28 (39.3)	20/22 (90.9)
Standard Rates(d)	P=0.0020**			
Prevalence Rates(d)	P<0.0001**			
Combind analysis(d)	P<0.0001**			
Cochran-Armitage Test(e)	P<0.0001**			
Fisher Exact Test(e)		P=0.1615	P=0.2359	P=0.0018**

(a):Number of tumor-bearing animals/number of animals examined at the site.
(b):Kaplan-Meire estimate tumor incidence at the end of study after adjusting for intercurrent mortality.
(c):Observed tumor incidence at terminal kill.
(d):Beneth the control incidence are the P-values associated with the trend test.
Standard method : Death analysis
Prevalence method : Incidental tumor test
Combind analysis : Death analysis + Incidental tumor test
(e):The Cochran-Armitage and Fisher's 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 beyond the estimated P-value.
------:There is no data which should be statistic analysis.

TABLE 37 NEOPLASTIC LESIONS (LIVER) INCIDENCE AND STATISTICAL ANALYSIS : MOUSE:FEMALE

Group Name	Control	10 ppm	50 ppm	250 ppm
SITE : liver				
TUMOUR : hepatocellular adenoma				
Overall Rates(a)	3/50 (6.0)	3/47 (6.4)	7/49 (14.3)	26/49 (53.1)
Adjusted Rates(b)	9.38	11.11	30.43	64.00
Terminal Rates(c)	3/32 (9.4)	3/27 (11.1)	6/22 (27.3)	9/17 (52.9)
Standard Rates(d)	P=-------			
Prevalence Rates(d)	P<0.0001**?			
Combind analysis(d)	P=-------			
Cochran-Armitage Test(e)	P<0.0001**			
Fisher Exact Test(e)		P=0.3673	P=0.1836	P=0.0001**
SITE : liver				
TUMOUR : hepatocellular carcinoma				
Overall Rates(a)	0/50 (0.0)	0/47 (0.0)	0/49 (0.0)	14/49 (28.6)
Adjusted Rates(b)	0.0	0.0	0.0	23.33
Terminal Rates(c)	0/32 (0.0)	0/27 (0.0)	0/22 (0.0)	3/17 (17.6)
Standard Rates(d)	P<0.0001**?			
Prevalence Rates(d)	P<0.0001**?			
Combind analysis(d)	P<0.0001**?			
Cochran-Armitage Test(e)	P<0.0001**?			
Fisher Exact Test(e)		P=0.5000	P=0.5000	P=0.0001**
SITE : liver				
TUMOUR : hepatocellular adenoma,hepatocellular carcinoma				
Overall Rates(a)	3/50 (6.0)	3/47 (6.4)	7/49 (14.3)	33/49 (67.3)
Adjusted Rates(b)	9.38	11.11	30.43	69.70
Terminal Rates(c)	3/32 (9.4)	3/27 (11.1)	6/22 (27.3)	10/17 (58.8)
Standard Rates(d)	P<0.0001**?			
Prevalence Rates(d)	P<0.0001**?			
Combind analysis(d)	P<0.0001**?			
Cochran-Armitage Test(e)	P<0.0001**?			
Fisher Exact Test(e)		P=0.3673	P=0.1836	P<0.0001**

(a):Number of tumor-bearing animals/number of animals examined at the site.
(b):Kaplan-Meire estimate tumor incidence at the end of study after adjusting for intercurrent mortality.
(c):Observed tumor incidence at terminal kill.
(d):Beneth the control incidence are the P-values associated with the trend test.
Standard method : Death analysis
Prevalence method : Incidental tumor test
Combind analysis : Death analysis + Incidental tumor test
(e):The Cochran-Armitage and Fisher's 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 beyond the estimated P-value.
------:There is no data which should be statistic analysis.

TABLE 38 NUMBER OF MOUSE WITH SELECTED LIVER LESIONS

	Male				Female			
Group	Control	10ppm	50ppm	250ppm	Control	10ppm	50ppm	250ppm
Number of examined	50	50	50	50	50	47	49	50
Anigectasis	1	3	12	30	6	9	8	26
Degeneration:central	1	1	4	37	0	1	2	30
Necrosis:central	0	0	2	3	1	1	1	0
Necrosis:focal	3	4	8	13	1	1	1	0
Hyperplasia	1	0	3	3	0	1	0	0
Clear cell focus	2	2	3	5	1	1	0	4
Acidophilic cell focus	1	1	0	0	0	0	0	1
Basophilic cell focus	2	3	4	5	0	0	0	1
Vacuolic cell focus	0	0	0	0	1	0	0	1
Mixed cell focus	0	0	0	0	2	1	1	0
Hepatocellular adenoma	7	13	8	26	3	3	7	26
Cholangiocellular adenoma	0	0	0	0	0	1	0	0
Histiocytic sarcoma	2	0	1	1	1	1	1	0
Hemangioendothelioma	1	1	5	5	0	0	0	1
Hepatocellular carcinoma	7	8	12	25	0	0	0	14

TABLE 39 NUMBER OF MOUSE WITH SELECTED KIDNEY LESIONS

	Male				Female			
Group	Control	10ppm	50ppm	250ppm	Control	10ppm	50ppm	250ppm
Number of examined	50	50	50	50	50	47	49	50
Nuclear enlargement: proximal tubule	0	0	6	38	0	0	1	49
Atypical tubular dilation: proximal tubule	0	0	0	1	0	0	0	6
Renal cell adenoma	0	1	0	0	0	0	0	0
Renal cell carcinoma	0	0	1	0	0	0	0	0

TABLE 40 NEOPLASTIC LESIONS (HARDERIAN GLAND) INCIDENCE AND STATISTICAL ANALYSIS : MOUSE:MALE

Group Name	Control	10 ppm	50 ppm	250 ppm
SITE : mammary gland				
TUMOUR : adenocarcinoma				
Overall Rates(a)	2/50 (2.0)	2/50 (4.0)	2/50 (4.0)	8/50 (16.0)
Adjusted Rates(b)	6.45	5.26	6.45	23.08
Terminal Rates(c)	2/31 (6.5)	1/35 (2.9)	0/28 (0.0)	4/22 (18.2)
Standard Rates(d)	P=-------			
Prevalence Rates(d)	P=0.0024**			
Combind analysis(d)	P=-------			
Cochran-Armitage Test(e)	P=0.0046**			
Fisher Exact Test(e)		P=0.3088	P=0.3088	P=0.0671

TABLE 41 NEOPLASTIC LESIONS (PITUITARY GLAND) INCIDENCE AND STATISTICAL ANALYSIS : MOUSE:FEMALE

Group Name	Control	10 ppm	50 ppm	250 ppm
SITE : pituitary gland				
TUMOUR : adenoma				
Overall Rates(a)	9/49 (18.4)	11/47 (23.4)	4/48 (8.3)	9/50 (18.0)
Adjusted Rates(b)	23.08	31.03	13.64	27.78
Terminal Rates(c)	7/32 (21.9)	8/27 (29.6)	3/22 (13.6)	4/17 (23.5)
Standard Rates(d)	P=0.0154*			
Prevalence Rates(d)	P=0.6810			
Combind analysis(d)	P=0.2327			
Cochran-Armitage Test(e)	P=0.9190			
Fisher Exact Test(e)		P=0.4032	P=0.1655	P=0.3839

(a):Number of tumor-bearing animals/number of animals examined at the site.
(b):Kaplan-Meire estimate tumor incidence at the end of study after adjusting for intercurrent mortality.
(c):Observed tumor incidence at terminal kill.
(d):Beneth the control incidence are the P-values associated with the trend test.
Standard method : Death analysis
Prevalence method : Incidental tumor test
Combind analysis : Death analysis + Incidental tumor test
(e):The Cochran-Armitage and Fisher's 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 beyond the estimated P-value.
------:There is no data which should be statistic analysis.

TABLE 42 CAUSE OF DEATH :MOUSE

Group	Male				Female			
	Control	10ppm	50ppm	250ppm	Control	10ppm	50ppm	250ppm
Number of dead/moriboud animal	19	15	22	28	18	20	27	33
No microscopical confirmation	2	2	1	0	0	1	2	0
Cardiovascular lesion	0	0	0	0	0	1	2	0
Respiratory sy. lesion	1	0	0	1	0	0	0	0
Hepatic lesion	0	1	1	4	0	0	0	1
Urinary sy. lesion	0	0	0	1	0	0	0	0
Renal lesion	3	1	4	1	1	2	0	1
Urinary retention	1	3	2	0	0	0	0	0
Amyloidosis	0	1	0	0	0	0	0	0
Arteritis	2	0	1	0	0	0	0	0
Tumor death : leukemia	4	3	3	4	6	4	13	10
: subcutis	0	0	0	1	0	2	0	1
: stomach	0	0	0	0	1	0	0	0
: lung	1	0	1	0	0	0	0	0
: lymph node	0	0	0	1	0	0	0	0
: spleen	0	1	0	0	0	0	0	0
: liver	4	3	8	13	0	1	1	7
: pituitary gland	0	0	0	0	1	2	2	4
: ovary	0	0	0	0	0	0	0	1
: uterus	0	0	0	0	8	8	8	9
: mammary gland	0	0	0	0	0	0	1	0
: epididymis	0	0	0	1	5	2	2	2
: seminal vesicle	1	0	0	1	1	0	0	0
: bone	0	0	1	0	1	2	2	1