

1,2-ジクロロエタ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

急性 : ラット/0041 ; マウス/0042

2週間 : ラット/0047 ; マウス/0048

13週間 : ラット/0055 ; マウス/0056

がん原性 : ラット/0067 ; マウス/0068

TABLES

TABLE 1

EXPERIMENTAL DESIGN AND MATERIALS AND METHODS IN THE INHALATION STUDIES OF 1,2-DICHLOROETHANE

Single-Exposure Studies (Acute Studies)	Two-Week Studies	Thirteen-Week Studies	Two-Year Studies
<Number of Groups> Male 6, Female 6	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	10 males and 10 females of each groups	50 males and 50 females of each groups
<Animals> Strain and Species F344/DuCrj (Fischer) rat Crj:BDF ₁ mouse	F344/DuCrj (Fischer) rat Crj:BDF ₁ mouse	F344/DuCrj (Fischer) rat Crj:BDF ₁ mouse	F344/DuCrj (Fischer) rat Crj:BDF ₁ mouse
Animal Source Charles River Japan, Inc.	Charles River Japan, Inc.	Charles River Japan, Inc.	Charles River Japan, Inc.
During of Time Held Before Study 1 wk	2 wk	2 wk	2 wk
Age When Placed on Study 6 wk	6 wk	6 wk	6 wk
Age When Killed 8 wk	8 wk	19 wk	110 wk~111 wk
<Chamber Concentration> 500, 1000, 2000, 4000, 8000, or 16000ppm 1,2-dichloro- ethane by inhalation	Rat—0, 200, 400, 800, 1600, or 3200ppm 1,2-dichloroethane by inhalation; mouse—0, 50, 100, 200, 400, or 800ppm	Rat—0, 20, 40, 80, 160, or 320ppm 1,2-dichloroethane by inhalation; mouse—0, 10, 20, 40, 80, or 160ppm	Rat—0, 10, 40, or 160ppm 1,2-dichloroethane by inhalation; mouse—0, 10 30, or 90ppm
<Date of First Exposure> Rat:3/13/84; mouse:3/14/84	Rat:5/22/84; mouse:5/23/84	Rat:9/13/84; mouse:9/21/84	Rat:4/11/85; mouse:5/10/85
<Date of Last Exposure> N/A	Rat:6/4/84; mouse:6/5/84	Rat:12/12/84; mouse:12/20/84	Rat:4/8/87; mouse:5/7/87
<Duration of Exposure> Single(4h)	6h/d, 5d/wk for 2wk	6h/d, 5d/wk for 13wk	6h/d, 5d/wk for 104wk (except 32d) for 488 exposures
<Animal Maintenance> Feed CRF-1 (Oriental Yeast Co., Ltd.) Sterilized by γ -ray Available ad libitum	Same as single-exposure studies	Same as single-exposure studies	Same as single-exposure studies
Water Sterilized by ultraviolet rays Automatic watering system Available ad libitum	Same as single-exposure studies	Same as single-exposure studies	Same as single-exposure studies
Animals per Cage Single (stainless steel wire)	Single (stainless steel wire)	Single (stainless steel wire)	Single (stainless steel wire)
Animal Room Environment Barrier system Temperature:24 $\pm$ 2°C Humidity :55 $\pm$ 10% Fluorescent light 12h/d 15~17 room air changes /h	Same as single-exposure studies	Same as single-exposure studies	Barrier system Temperature:22~26°C Humidity :45~55% Fluorescent light 12h/d 7.5~10 room air changes /h
Chamber Environment Temperature:23~26°C Humidity :45~70% Fluorescent light 12h/d 15 chamber air changes /h	Same as single-exposure studies	Same as single-exposure studies	Temperature:24 $\pm$ 1°C Humidity :55 $\pm$ 10% Flourescent light 12h/d 12~15 chamber air changes /h
<Type and Frequency of Observation> Clinical Sign Observed 2h after administration/ observed 1 $\times$ d thereafter	Observed 1 $\times$ d	Observed 1 $\times$ d	Observed 1 $\times$ d
Body Weight Weighed 0-0, 1-1, 1-2, 1-3, 1-7, 2-3, and 2-7(wk-d)	Weighed 0-0, 1-1, 1-2, 1-3, 1-7, 2-3, and 2-7(wk-d)	Weighed 1 $\times$ wk for 13wk	Weighed 1 $\times$ wk for 14wk Weighed 1 $\times$ 2wk thereafter
<Food Consumption> None	Weighed 1 $\times$ wk for 2wk	Weighed 1 $\times$ wk for 13wk	Weighed 1 $\times$ wk for 14wk Weighed 1 $\times$ 4wk thereafter

TABLE 1 EXPERIMENTAL DESIGN AND MATERIALS AND METHODS IN THE INHALATION STUDIES OF 1,2-DICHLOROETHANE
(Continued)

Single-Exposure Studies (Acute Studies)	Two-Week Studies	Thirteen-Week Studies	Two-Year Studies
<Hematology> None	None	Red blood cell (RBC), Hemoglobin, Hematocrit, Mean corpuscular volume (MCV), Platelet, White blood cell (WBC), Differential WBC.	Same as thirteen-week studies
<Blood Biochemistry> None	None	Total protein, Albumin, A/G ratio, T-bilirubin, Glucose, T-cholesterol, Triglyceride <rat only>, Glutamic oxaloacetic transaminase (GOT), Glutamic pyruvic transaminase (GPT), Lactate dehydrogenase (LDH), Alkaline phosphatase (ALP), Leucine aminopeptidase (LAP), Creatine phosphokinase (CPK) <rat only>, Urea nitrogen, Creatinine <rat only>, Sodium, Potassium, Chloride, Calcium <rat only>, Inorganic phosphorus <rat only>.	Total protein, Albumin, A/G ratio, T-bilirubin, Glucose, T-cholesterol, Triglyceride, Phospholipid, Glutamic oxaloacetic transaminase (GOT), Glutamic pyruvic transaminase (GPT), Lactate dehydrogenase (LDH), Alkaline phosphatase (ALP), Leucine aminopeptidase (LAP), γ -Glutamyl transpeptidase (G-GTP) <rat only>, Creatine phosphokinase (CPK), Urea nitrogen, Creatinine <rat only>, Sodium, Potassium, Chloride, Calcium, Inorganic phosphorus.
<Urinalysis> None	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 single-exposure studies	Same as single-exposure studies	Same as single-exposure studies
<Organ Weight> None	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.	Same as single-exposure studies	Histopathologic examination performed on all animals.	Same as thirteen-week studies
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.	Same as single-exposure studies	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, epidymis, semin ves, prostate, ovary, uterus, vagina, mammary gl, brain, spinal cord, periph nerv, eye, Harder gl, muscle, bone.	Same as thirteen-week studies

TABLE 2 DEAD ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN MALE RAT (ACUT STUDIES)

Week-Day on study	500ppm		1000ppm		2000ppm		4000ppm		8000ppm		16000ppm	
	Av. wt.	No. of Dead	Av. wt.	No. of Dead	Av. wt.	No. of Dead	Av. wt.	No. of Dead	Av. wt.	No. of Dead	Av. wt.	No. of Dead
	<10>		<10>		<10>		<10>		<10>		<10>	
0-0	130 (10)	0/10	130 (10)	0/10	130 (10)	0/10	130 (10)	0/10	130 (10)	0/10	130 (10)	10/10
1-1	131 (10)	0/10	129 (10)	0/10	122 (10)	0/10	121 (10)	3/10	124 (10)	10/10		
1-2	135 (10)	0/10	133 (10)	0/10	128 (10)	0/10	119 (7)	10/10				
1-3	140 (10)	0/10	139 (10)	0/10	133 (10)	0/10						
1-7	161 (10)	0/10	161 (10)	0/10	157 (10)	0/10						
2-3	178 (10)	0/10	178 (10)	0/10	176 (10)	0/10						
2-7	200 (10)	0/10	197 (10)	0/10	197 (10)	0/10						

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

TABLE 3 DEAD ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN FEMALE RAT (ACUT STUDIES)

Week-Day on study	500ppm		1000ppm		2000ppm		4000ppm		8000ppm		16000ppm	
	Av. wt.	No. of Dead	Av. wt.	No. of Dead	Av. wt.	No. of Dead	Av. wt.	No. of Dead	Av. wt.	No. of Dead	Av. wt.	No. of Dead
	<10>		<10>		<10>		<10>		<10>		<10>	
0-0	103 (10)	0/10	103 (10)	0/10	103 (10)	0/10	103 (10)	0/10	103 (10)	0/10	103 (10)	10/10
1-1	101 (10)	0/10	99 (10)	0/10	94 (10)	0/10	95 (10)	5/10	97 (10)	10/10		
1-2	104 (10)	0/10	103 (10)	0/10	96 (10)	0/10	93 (5)	10/10				
1-3	107 (10)	0/10	106 (10)	0/10	100 (10)	0/10						
1-7	117 (10)	0/10	118 (10)	0/10	113 (10)	0/10						
2-3	127 (10)	0/10	128 (10)	0/10	125 (10)	0/10						
2-7	136 (10)	0/10	137 (10)	0/10	136 (10)	0/10						

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

TABLE 4 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN MALE RAT (TWO-WEEK STUDIES)

Week-Day on Study	Control		200 ppm			400 ppm			800 ppm			1600 ppm			3200 ppm		
	Au.Wt.	No.of Surviv. <10>	Au.Wt.	% of cont. <10>	No.of Surviv.	Au.Wt.	% of cont. <10>	No.of Surviv.	Au.Wt.	% of cont. <10>	No.of Surviv.	Au.Wt.	% of cont. <10>	No.of Surviv.	Au.Wt.	% of cont. <10>	No.of Surviv.
0-0	128 (10)	10/10	128 (10)	100	10/10	128 (10)	100	10/10	128 (10)	100	10/10	128 (10)	100	10/10	128 (10)	100	10/10
1-1	132 (10)	10/10	131 (10)	99	10/10	127 (10)	96	9/10	126 (10)	95	10/10	114 (10)	86	9/10	117 (10)	89	0/10
1-2	135 (10)	10/10	134 (10)	99	10/10	114 (9)	84	7/10	116 (10)	86	9/10	107 (9)	79	8/10	- (-)	-	0/10
1-3	138 (10)	10/10	137 (10)	99	10/10	107 (7)	78	2/10	114 (9)	83	9/10	98 (8)	71	8/10	- (-)	-	0/10
1-7	150 (10)	10/10	153 (10)	102	10/10	- (-)	-	0/10	120 (5)	80	4/10	94 (3)	63	3/10	- (-)	-	0/10
2-3	168 (10)	10/10	167 (10)	99	10/10	- (-)	-	0/10	129 (4)	77	3/10	87 (3)	52	3/10	- (-)	-	0/10
2-7	185 (10)	10/10	184 (10)	99	10/10	- (-)	-	0/10	163 (3)	88	3/10	80 (3)	43	3/10	- (-)	-	0/10

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

Au.Wt.: g

TABLE 5 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN FEMALE RAT (TWO-WEEK STUDIES)

Week-Day on Study	Control		200 ppm			400 ppm			800 ppm			1600 ppm			3200 ppm		
	Au.Wt.	No.of Surviv. <10>	Au.Wt.	% of cont. <10>	No.of Surviv.	Au.Wt.	% of cont. <10>	No.of Surviv.	Au.Wt.	% of cont. <10>	No.of Surviv.	Au.Wt.	% of cont. <10>	No.of Surviv.	Au.Wt.	% of cont. <10>	No.of Surviv.
0-0	105 (10)	10/10	105 (10)	100	10/10	105 (10)	100	8/10	105 (10)	100	8/10	105 (10)	100	10/10	105 (10)	100	10/10
1-1	107 (10)	10/10	106 (10)	99	10/10	95 (8)	89	4/10	97 (8)	91	4/10	94 (10)	88	2/10	97 (10)	91	0/10
1-2	109 (10)	10/10	108 (10)	99	10/10	94 (4)	86	4/10	101 (4)	93	4/10	90 (2)	83	2/10	- (-)	-	0/10
1-3	111 (10)	10/10	110 (10)	99	10/10	94 (4)	85	4/10	101 (4)	91	4/10	85 (2)	77	1/10	- (-)	-	0/10
1-7	119 (10)	10/10	120 (10)	101	10/10	83 (4)	70	3/10	108 (3)	91	3/10	89 (1)	75	1/10	- (-)	-	0/10
2-3	126 (10)	10/10	127 (10)	101	10/10	82 (3)	65	2/10	112 (3)	89	3/10	83 (1)	66	1/10	- (-)	-	0/10
2-7	134 (10)	10/10	135 (10)	101	10/10	96 (2)	72	1/10	123 (3)	92	3/10	79 (1)	59	1/10	- (-)	-	0/10

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

Au.Wt.: g

TABLE 6 FOOD CONSUMPTION IN MALE RAT (TWO-WEEK STUDIES)

Week-Day on Study	Control		200 ppm			400 ppm			800 ppm			1600 ppm			3200 ppm		
	Au.FC.	No.of Surviv. <10>	Au.FC.	% of cont. <10>	No.of Surviv.	Au.FC.	% of cont. <10>	No.of Surviv.	Au.FC.	% of cont. <10>	No.of Surviv.	Au.FC.	% of cont. <10>	No.of Surviv.	Au.FC.	% of cont. <10>	No.of Surviv.
1-7	15.0 (10)	10/10	16.3 (10)	109	10/10	- (-)	-	0/10	8.9 (5)	59	4/10	4.3 (3)	29	3/10	- (-)	-	0/10
2-7	16.6 (10)	10/10	17.6 (10)	106	10/10	- (-)	-	0/10	14.2 (3)	86	3/10	6.4 (3)	39	3/10	- (-)	-	0/10

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

TABLE 7 FOOD CONSUMPTION IN FEMALE RAT (TWO-WEEK STUDIES)

Week-Day on Study	Control		200 ppm			400 ppm			800 ppm			1600 ppm			3200 ppm		
	Au.FC.	No.of Surviv. <10>	Au.FC.	% of cont. <10>	No.of Surviv.	Au.FC.	% of cont. <10>	No.of Surviv.	Au.FC.	% of cont. <10>	No.of Surviv.	Au.FC.	% of cont. <10>	No.of Surviv.	Au.FC.	% of cont. <10>	No.of Surviv.
1-7	11.5 (10)	10/10	12.1 (10)	105	10/10	5.0 (4)	43	3/10	7.3 (3)	63	3/10	4.7 (1)	41	1/10	- (-)	-	0/10
2-7	12.0 (10)	10/10	12.3 (10)	103	10/10	6.1 (2)	51	1/10	9.2 (3)	77	3/10	4.4 (1)	37	1/10	- (-)	-	0/10

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

TABLE 8 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN MALE RAT (THIRTEEN-WEEK STUDIES)

Week-Day on Study	Control			20 ppm			40 ppm			80 ppm			160 ppm			320 ppm		
	Au.Wt.	No.of Surviv. <10>		Au.Wt.	% of cont. <10>	No.of Surviv.	Au.Wt.	% of cont. <10>	No.of Surviv.	Au.Wt.	% of cont. <10>	No.of Surviv.	Au.Wt.	% of cont. <10>	No.of Surviv.	Au.Wt.	% of cont. <10>	No.of Surviv.
0-0	118 (10)	10/10		118 (10)	100	10/10	118 (10)	100	10/10	118 (10)	100	10/10	118 (10)	100	10/10	118 (10)	100	10/10
1-7	147 (10)	10/10		147 (10)	100	10/10	145 (10)	99	10/10	146 (10)	99	10/10	144 (10)	98	10/10	117 (1)	80	1/10
2-7	178 (10)	10/10		179 (10)	101	10/10	177 (10)	99	10/10	181 (10)	102	10/10	176 (10)	99	10/10	- (-)	-	0/10
3-7	204 (10)	10/10		206 (10)	101	10/10	205 (10)	100	10/10	210 (10)	103	10/10	204 (10)	100	10/10	- (-)	-	0/10
4-7	227 (10)	10/10		229 (10)	101	10/10	230 (10)	101	10/10	235 (10)	104	10/10	229 (10)	101	10/10	- (-)	-	0/10
5-7	247 (10)	10/10		249 (10)	101	10/10	251 (10)	102	10/10	258 (10)	104	10/10	251 (10)	102	10/10	- (-)	-	0/10
6-7	262 (10)	10/10		266 (10)	102	10/10	270 (10)	103	10/10	277 (10)	106	10/10	269 (10)	103	10/10	- (-)	-	0/10
7-7	280 (10)	10/10		282 (10)	101	10/10	286 (10)	102	10/10	293 (10)	105	10/10	286 (10)	102	10/10	- (-)	-	0/10
8-7	294 (10)	10/10		299 (10)	102	10/10	301 (10)	102	10/10	308 (10)	105	10/10	302 (10)	103	10/10	- (-)	-	0/10
9-7	305 (10)	10/10		313 (10)	103	10/10	316 (10)	104	10/10	322 (10)	106	10/10	317 (10)	104	10/10	- (-)	-	0/10
10-7	313 (10)	10/10		323 (10)	103	10/10	327 (10)	104	10/10	332 (10)	106	10/10	328 (10)	105	10/10	- (-)	-	0/10
11-7	325 (10)	10/10		331 (10)	102	10/10	334 (10)	103	10/10	341 (10)	105	10/10	337 (10)	104	10/10	- (-)	-	0/10
12-7	334 (10)	10/10		341 (10)	102	10/10	343 (10)	103	10/10	349 (10)	104	10/10	347 (10)	104	10/10	- (-)	-	0/10
13-7	343 (10)	10/10		351 (10)	102	10/10	351 (10)	102	10/10	355 (10)	103	10/10	357 (10)	104	10/10	- (-)	-	0/10

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

TABLE 9 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN FEMALE RAT (THIRTEEN-WEEK STUDIES)

Week-Day on Study	Control			20 ppm			40 ppm			80 ppm			160 ppm			320 ppm		
	Au.Wt.	No.of Surviv. <10>		Au.Wt.	% of cont. <10>	No.of Surviv.	Au.Wt.	% of cont. <10>	No.of Surviv.	Au.Wt.	% of cont. <10>	No.of Surviv.	Au.Wt.	% of cont. <10>	No.of Surviv.	Au.Wt.	% of cont. <10>	No.of Surviv.
0-0	101 (10)	10/10		101 (10)	100	10/10	101 (10)	100	10/10	101 (10)	100	10/10	101 (10)	100	10/10	101 (10)	100	10/10
1-7	116 (10)	10/10		116 (10)	100	10/10	115 (10)	99	10/10	117 (10)	101	10/10	117 (10)	101	10/10	- (-)	-	0/10
2-7	130 (10)	10/10		131 (10)	101	10/10	129 (10)	99	10/10	134 (10)	103	10/10	129 (10)	99	10/10	- (-)	-	0/10
3-7	142 (10)	10/10		141 (10)	99	10/10	140 (10)	99	10/10	145 (10)	102	10/10	142 (10)	100	10/10	- (-)	-	0/10
4-7	152 (10)	10/10		153 (10)	101	10/10	149 (10)	98	10/10	154 (10)	101	10/10	150 (10)	99	10/10	- (-)	-	0/10
5-7	162 (10)	10/10		161 (10)	99	10/10	157 (10)	97	10/10	165 (10)	102	10/10	158 (10)	98	10/10	- (-)	-	0/10
6-7	170 (10)	10/10		170 (10)	100	10/10	165 (10)	97	10/10	174 (10)	102	10/10	167 (10)	98	10/10	- (-)	-	0/10
7-7	178 (10)	10/10		175 (10)	98	10/10	171 (10)	96	10/10	182 (10)	102	10/10	174 (10)	98	10/10	- (-)	-	0/10
8-7	182 (10)	10/10		182 (10)	100	10/10	177 (10)	97	10/10	189 (10)	104	10/10	180 (10)	99	10/10	- (-)	-	0/10
9-7	187 (10)	10/10		187 (10)	100	10/10	180 (10)	96	10/10	182 (10)	103	10/10	186 (10)	99	10/10	- (-)	-	0/10
10-7	191 (10)	10/10		191 (10)	100	10/10	187 (10)	98	10/10	200 (10)	105	10/10	190 (10)	99	10/10	- (-)	-	0/10
11-7	196 (10)	10/10		197 (10)	101	10/10	188 (10)	96	10/10	201 (10)	103	10/10	196 (10)	100	10/10	- (-)	-	0/10
12-7	199 (10)	10/10		202 (10)	102	10/10	193 (10)	97	10/10	208 (10)	105	10/10	200 (10)	101	10/10	- (-)	-	0/10
13-7	205 (10)	10/10		205 (10)	100	10/10	195 (10)	95	10/10	211 (10)	103	10/10	206 (10)	100	10/10	- (-)	-	0/10

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

TABLE 10 FOOD CONSUMPTION IN MALE RAT (THIRTEEN-WEEK STUDIES)

Week-Day on Study	Control			20 ppm			40 ppm			80 ppm			160 ppm			320 ppm		
	Au.FC.	No.of Surviv. <10>		Au.FC.	% of cont. <10>	No.of Surviv.	Au.FC.	% of cont. <10>	No.of Surviv.	Au.FC.	% of cont. <10>	No.of Surviv.	Au.FC.	% of cont. <10>	No.of Surviv.	Au.FC.	% of cont. <10>	No.of Surviv.
1-7	14.1 (10)	10/10		14.7 (10)	104	10/10	14.8 (10)	105	10/10	15.2 (10)	108	10/10	15.0 (10)	106	10/10	10.6 (1)	75	1/10
2-7	16.3 (10)	10/10		16.4 (10)	101	10/10	16.7 (10)	102	10/10	16.8 (10)	103	10/10	17.5 (10)	107	10/10	- (-)	-	0/10
3-7	17.0 (10)	10/10		17.1 (10)	101	10/10	17.2 (10)	101	10/10	18.2 (10)	107	10/10	18.4 (10)	108	10/10	- (-)	-	0/10
4-7	17.4 (10)	10/10		17.4 (10)	100	10/10	17.9 (10)	103	10/10	18.6 (10)	107	10/10	18.4 (10)	106	10/10	- (-)	-	0/10
5-7	17.3 (10)	10/10		17.0 (10)	98	10/10	17.8 (10)	103	10/10	18.7 (10)	108	10/10	19.1 (10)	110	10/10	- (-)	-	0/10
6-7	17.1 (10)	10/10		17.3 (10)	101	10/10	18.1 (10)	106	10/10	18.8 (10)	110	10/10	19.4 (10)	113	10/10	- (-)	-	0/10
7-7	17.3 (10)	10/10		17.4 (10)	101	10/10	18.0 (10)	104	10/10	18.1 (10)	105	10/10	18.6 (10)	108	10/10	- (-)	-	0/10
8-7	17.3 (10)	10/10		17.6 (10)	102	10/10	18.2 (10)	105	10/10	18.0 (10)	104	10/10	18.5 (10)	107	10/10	- (-)	-	0/10
9-7	16.9 (10)	10/10		17.2 (10)	102	10/10	18.0 (10)	107	10/10	17.9 (10)	106	10/10	18.5 (10)	109	10/10	- (-)	-	0/10
10-7	17.8 (10)	10/10		17.6 (10)	99	10/10	18.1 (10)	102	10/10	17.9 (10)	101	10/10	18.9 (10)	106	10/10	- (-)	-	0/10
11-7	16.8 (10)	10/10		17.2 (10)	102	10/10	17.2 (10)	102	10/10	17.0 (10)	101	10/10	18.1 (10)	108	10/10	- (-)	-	0/10
12-7	16.6 (10)	10/10		17.1 (10)	103	10/10	17.1 (10)	103	10/10	17.3 (10)	104	10/10	17.8 (10)	107	10/10	- (-)	-	0/10
13-7	17.2 (10)	10/10		17.3 (10)	101	10/10	17.1 (10)	99	10/10	16.8 (10)	98	10/10	17.9 (10)	104	10/10	- (-)	-	0/10

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

TABLE 11 FOOD CONSUMPTION IN FEMALE RAT (THIRTEEN-WEEK STUDIES)

Week-Day on Study	Control			20 ppm			40 ppm			80 ppm			160 ppm			320 ppm		
	Au.FC.	No.of Surviv. <10>		Au.FC.	% of cont. <10>	No.of Surviv.	Au.FC.	% of cont. <10>	No.of Surviv.	Au.FC.	% of cont. <10>	No.of Surviv.	Au.FC.	% of cont. <10>	No.of Surviv.	Au.FC.	% of cont. <10>	No.of Surviv.
1-7	12.3 (10)	10/10		12.0 (10)	98	10/10	12.2 (10)	99	10/10	12.2 (10)	99	10/10	12.1 (10)	98	10/10	- (-)	-	0/10
2-7	12.3 (10)	10/10		12.2 (10)	99	10/10	12.4 (10)	101	10/10	12.4 (10)	101	10/10	11.9 (10)	97	10/10	- (-)	-	0/10
3-7	12.2 (10)	10/10		12.2 (10)	100	10/10	12.2 (10)	100	10/10	12.6 (10)	103	10/10	12.2 (10)	100	10/10	- (-)	-	0/10
4-7	11.9 (10)	10/10		11.8 (10)	99	10/10	11.9 (10)	100	10/10	12.3 (10)	103	10/10	11.6 (10)	97	10/10	- (-)	-	0/10
5-7	11.7 (10)	10/10		11.5 (10)	98	10/10	11.4 (10)	97	10/10	12.3 (10)	105	10/10	11.5 (10)	98	10/10	- (-)	-	0/10
6-7	11.6 (10)	10/10		11.8 (10)	102	10/10	11.6 (10)	100	10/10	12.5 (10)	108	10/10	11.5 (10)	99	10/10	- (-)	-	0/10
7-7	12.0 (10)	10/10		11.3 (10)	94	10/10	11.4 (10)	95	10/10	12.5 (10)	104	10/10	12.1 (10)	101	10/10	- (-)	-	0/10
8-7	11.3 (10)	10/10		11.1 (10)	98	10/10	11.3 (10)	100	10/10	12.6 (10)	112	10/10	11.5 (10)	102	10/10	- (-)	-	0/10
9-7	11.5 (10)	10/10		11.5 (10)	100	10/10	11.0 (10)	96	10/10	12.0 (10)	104	10/10	12.0 (10)	104	10/10	- (-)	-	0/10
10-7	11.0 (10)	10/10		11.4 (10)	104	10/10	11.6 (10)	105	10/10	12.3 (10)	112	10/10	11.6 (10)	105	10/10	- (-)	-	0/10
11-7	11.6 (10)	10/10		11.4 (10)	98	10/10	10.8 (10)	93	10/10	11.7 (10)	101	10/10	12.2 (10)	105	10/10	- (-)	-	0/10
12-7	11.4 (10)	10/10		11.9 (10)	104	10/10	11.0 (10)	96	10/10	12.1 (10)	106	10/10	11.6 (10)	102	10/10	- (-)	-	0/10
13-7	11.9 (10)	10/10		11.5 (10)	97	10/10	11.1 (10)	93	10/10	12.4 (10)	104	10/10	12.4 (10)	104	10/10	- (-)	-	0/10

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

TABLE 12 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN MALE RAT
(TWO-YEAR STUDIES)

Week-Day on Study	Control			10 ppm			40 ppm			160 ppm		
	Au.Wt.	No. of Surviv. (50)		Au.Wt.	% of cont. (50)	No. of Surviv.	Au.Wt.	% of cont. (50)	No. of Surviv.	Au.Wt.	% of cont. (50)	No. of Surviv.
0-0	120 (50)	50/50		120 (50)	100	50/50	120 (50)	100	50/50	120 (50)	100	50/50
1-7	153 (50)	50/50		151 (50)	99	50/50	150 (50)	98	50/50	147 (50)	96	50/50
2-7	187 (50)	50/50		185 (50)	99	50/50	184 (50)	98	50/50	180 (50)	96	50/50
3-7	213 (50)	50/50		212 (50)	100	50/50	209 (50)	98	50/50	206 (50)	97	50/50
4-7	233 (50)	50/50		235 (50)	101	50/50	232 (50)	100	50/50	230 (50)	99	50/50
5-7	254 (50)	50/50		256 (50)	101	50/50	252 (50)	99	50/50	250 (50)	98	50/50
6-7	272 (50)	50/50		275 (50)	101	50/50	270 (50)	99	50/50	268 (50)	98	50/50
7-7	288 (50)	50/50		292 (50)	101	50/50	287 (50)	100	50/50	283 (50)	98	50/50
8-7	305 (50)	50/50		306 (50)	100	50/50	302 (50)	99	50/50	297 (50)	97	50/50
9-7	319 (50)	50/50		320 (50)	100	50/50	317 (50)	99	50/50	311 (50)	97	50/50
10-7	330 (50)	50/50		330 (50)	100	50/50	327 (50)	99	50/50	322 (50)	98	50/50
11-7	341 (50)	50/50		341 (50)	100	50/50	339 (50)	99	50/50	332 (50)	97	50/50
12-7	349 (50)	50/50		350 (50)	100	50/50	347 (50)	99	50/50	341 (50)	98	50/50
13-7	360 (50)	50/50		360 (50)	100	50/50	358 (50)	99	50/50	350 (50)	97	50/50
14-7	367 (50)	50/50		368 (50)	100	50/50	365 (50)	99	50/50	358 (50)	98	50/50
16-7	382 (50)	50/50		380 (50)	99	50/50	380 (50)	99	50/50	371 (50)	97	50/50
18-7	393 (50)	50/50		392 (50)	100	50/50	393 (50)	100	50/50	383 (50)	97	50/50
20-7	404 (50)	50/50		403 (50)	100	50/50	404 (50)	100	50/50	394 (50)	98	50/50
22-7	414 (50)	50/50		413 (50)	100	50/50	413 (50)	100	50/50	402 (50)	97	50/50
24-7	424 (50)	50/50		423 (50)	100	50/50	423 (50)	100	50/50	412 (50)	97	50/50
26-7	431 (50)	50/50		431 (50)	100	50/50	430 (50)	100	50/50	421 (50)	98	50/50
28-7	436 (50)	50/50		435 (50)	100	50/50	432 (50)	99	50/50	423 (50)	97	50/50
30-7	440 (50)	50/50		440 (50)	100	50/50	437 (50)	99	50/50	429 (50)	98	50/50
32-7	446 (50)	50/50		445 (50)	100	50/50	442 (50)	99	50/50	433 (50)	97	50/50
34-7	451 (50)	50/50		450 (50)	100	50/50	448 (50)	99	49/50	438 (50)	97	50/50
36-7	457 (50)	50/50		457 (50)	100	50/50	455 (49)	100	49/50	443 (50)	97	50/50
38-7	463 (50)	50/50		464 (50)	100	50/50	462 (49)	100	49/50	452 (50)	98	50/50
40-7	468 (50)	50/50		468 (50)	100	50/50	467 (49)	100	49/50	457 (50)	98	50/50
42-7	473 (50)	50/50		472 (50)	100	50/50	472 (49)	100	49/50	462 (50)	98	50/50
44-7	476 (50)	50/50		476 (50)	100	50/50	476 (49)	100	49/50	466 (50)	98	50/50
46-7	481 (50)	50/50		481 (50)	100	50/50	481 (49)	100	49/50	472 (50)	98	49/50
48-7	487 (50)	50/50		487 (50)	100	50/50	487 (49)	100	49/50	479 (49)	98	49/50
50-7	488 (50)	50/50		488 (50)	100	50/50	489 (49)	100	49/50	481 (49)	99	49/50
52-7	492 (50)	50/50		492 (50)	100	50/50	492 (49)	100	49/50	486 (49)	99	49/50
54-7	493 (50)	50/50		493 (50)	101	50/50	497 (49)	101	49/50	490 (49)	99	49/50
56-7	495 (50)	50/50		499 (50)	101	50/50	501 (49)	101	49/50	493 (49)	100	49/50
58-7	497 (50)	50/50		501 (50)	101	50/50	503 (49)	101	49/50	496 (49)	100	49/50
60-7	499 (49)	49/50		501 (50)	100	50/50	502 (49)	101	49/50	498 (49)	100	49/50
62-7	503 (49)	49/50		501 (50)	100	50/50	506 (49)	101	49/50	500 (49)	99	49/50
64-7	505 (49)	49/50		502 (50)	99	50/50	506 (48)	100	48/50	500 (49)	99	49/50
66-7	506 (49)	49/50		507 (49)	100	48/50	507 (48)	100	48/50	501 (49)	99	49/50
68-7	505 (49)	49/50		508 (49)	101	49/50	504 (48)	100	48/50	502 (49)	99	49/50
70-7	506 (49)	49/50		508 (49)	100	49/50	509 (46)	101	46/50	502 (49)	99	49/50
72-7	507 (49)	49/50		508 (49)	100	49/50	511 (46)	101	46/50	502 (49)	99	49/50
74-7	505 (49)	49/50		507 (49)	100	49/50	509 (46)	101	46/50	504 (48)	100	48/50
76-7	501 (49)	49/50		504 (49)	101	49/50	508 (46)	101	46/50	503 (48)	100	48/50
78-7	506 (48)	48/50		507 (48)	100	48/50	507 (46)	100	46/50	502 (47)	99	47/50
80-7	503 (48)	48/50		505 (48)	100	48/50	508 (45)	101	45/50	500 (47)	99	47/50
82-7	503 (48)	48/50		504 (48)	100	48/50	507 (44)	101	44/50	500 (47)	99	47/50
84-7	497 (48)	48/50		500 (48)	101	48/50	504 (43)	101	43/50	497 (47)	100	47/50
86-7	491 (48)	48/50		496 (48)	101	48/50	499 (42)	102	42/50	493 (45)	100	45/50
88-7	485 (48)	48/50		495 (44)	102	44/50	498 (41)	103	40/50	490 (44)	101	44/50
90-7	472 (48)	46/50		487 (44)	103	44/50	491 (40)	104	39/50	487 (43)	103	43/50
92-7	469 (44)	44/50		479 (43)	102	43/50	492 (38)	105	38/50	482 (43)	103	43/50
94-7	466 (42)	42/50		487 (41)	105	41/50	490 (37)	105	37/50	476 (43)	102	43/50
96-7	462 (41)	41/50		485 (41)	105	41/50	491 (36)	106	36/50	477 (43)	103	43/50
98-7	460 (40)	40/50		468 (40)	102	40/50	473 (35)	103	35/50	477 (42)	104	42/50
100-7	449 (39)	38/50		469 (37)	104	37/50	463 (35)	103	35/50	468 (42)	104	42/50
102-7	447 (37)	37/50		463 (36)	104	36/50	456 (34)	102	34/50	463 (41)	104	41/50
104-7	434 (37)	37/50		450 (35)	106	35/50	448 (32)	103	32/50	467 (37)	108	37/50

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

Au.Wt.: g

TABLE 13 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN FEMALE RAT
(TWO-YEAR STUDIES)

Week-Day on Study	Control		10 ppm			40 ppm			160 ppm		
	Au.Wt.	No. of Surviv. (50)	Au.Wt.	% of cont. (50)	No. of Surviv.	Au.Wt.	% of cont. (50)	No. of Surviv.	Au.Wt.	% of cont. (50)	No. of Surviv.
0-0	100 (50)	50/50	100 (50)	100	50/50	100 (50)	100	50/50	100 (50)	100	50/50
1-7	117 (50)	50/50	116 (50)	99	50/50	116 (50)	99	50/50	114 (50)	97	50/50
2-7	134 (50)	50/50	133 (50)	99	50/50	133 (50)	99	50/50	130 (50)	97	50/50
3-7	144 (50)	50/50	143 (50)	99	50/50	143 (50)	99	50/50	141 (50)	98	50/50
4-7	152 (50)	50/50	153 (50)	101	50/50	153 (50)	101	50/50	150 (50)	99	50/50
5-7	161 (50)	50/50	163 (50)	101	50/50	162 (50)	101	50/50	160 (50)	99	50/50
6-7	169 (50)	50/50	170 (50)	101	50/50	171 (50)	101	50/50	167 (50)	99	50/50
7-7	176 (50)	50/50	177 (50)	101	50/50	179 (50)	102	50/50	175 (50)	99	50/50
8-7	182 (50)	50/50	182 (50)	100	50/50	184 (50)	101	50/50	179 (50)	98	50/50
9-7	180 (50)	50/50	188 (50)	99	50/50	190 (50)	101	50/50	186 (50)	98	50/50
10-7	184 (50)	50/50	184 (50)	100	50/50	185 (50)	101	50/50	191 (50)	98	50/50
11-7	188 (50)	50/50	187 (50)	99	50/50	200 (50)	101	50/50	197 (50)	99	50/50
12-7	200 (50)	50/50	201 (50)	101	50/50	203 (50)	102	50/50	200 (50)	100	50/50
13-7	205 (50)	50/50	205 (50)	100	50/50	207 (50)	101	50/50	206 (50)	100	50/50
14-7	208 (50)	50/50	208 (50)	100	50/50	210 (50)	101	50/50	207 (50)	100	50/50
16-7	214 (50)	50/50	213 (50)	100	50/50	216 (50)	101	50/50	212 (50)	99	50/50
18-7	221 (50)	50/50	220 (50)	100	50/50	221 (50)	100	50/50	219 (50)	99	50/50
20-7	225 (50)	50/50	225 (50)	100	50/50	225 (50)	100	50/50	223 (50)	99	50/50
22-7	231 (40)	50/50	229 (50)	99	50/50	230 (50)	100	50/50	228 (50)	99	50/50
24-7	235 (50)	50/50	234 (50)	100	50/50	236 (50)	100	50/50	234 (50)	100	50/50
26-7	238 (50)	50/50	238 (50)	100	50/50	237 (50)	100	50/50	236 (50)	99	50/50
28-7	240 (50)	50/50	237 (50)	99	50/50	236 (50)	98	50/50	236 (50)	98	50/50
30-7	242 (50)	50/50	240 (50)	99	50/50	238 (50)	98	50/50	239 (50)	99	50/50
32-7	244 (50)	50/50	242 (50)	99	50/50	241 (50)	99	50/50	242 (50)	99	50/50
34-7	248 (50)	50/50	247 (50)	100	50/50	246 (50)	99	50/50	246 (50)	99	50/50
36-7	251 (50)	50/50	251 (50)	100	50/50	250 (50)	100	50/50	251 (50)	100	50/50
38-7	258 (50)	50/50	257 (50)	100	50/50	256 (50)	99	50/50	256 (50)	99	50/50
40-7	262 (50)	50/50	260 (50)	99	50/50	260 (50)	99	50/50	259 (50)	99	50/50
42-7	264 (50)	50/50	262 (50)	99	50/50	262 (50)	99	50/50	261 (50)	99	50/50
44-7	269 (50)	50/50	266 (50)	99	50/50	266 (50)	99	50/50	265 (50)	99	50/50
46-7	273 (50)	50/50	272 (50)	100	50/50	272 (50)	100	50/50	270 (50)	99	50/50
48-7	279 (50)	50/50	277 (50)	99	50/50	277 (50)	99	50/50	274 (50)	98	50/50
50-7	281 (50)	50/50	277 (50)	99	50/50	279 (50)	99	50/50	276 (50)	98	50/50
52-7	286 (50)	50/50	282 (50)	99	50/50	283 (50)	99	50/50	281 (50)	98	50/50
54-7	291 (50)	50/50	286 (50)	98	50/50	288 (50)	99	50/50	285 (50)	98	50/50
56-7	295 (50)	50/50	291 (50)	99	50/50	293 (50)	99	50/50	288 (50)	98	50/50
58-7	298 (50)	50/50	294 (50)	99	50/50	297 (50)	100	50/50	291 (50)	98	50/50
60-7	301 (40)	49/50	296 (50)	99	50/50	299 (50)	99	50/50	294 (49)	98	49/50
62-7	305 (40)	49/50	301 (50)	99	50/50	304 (50)	100	50/50	299 (49)	98	49/50
64-7	310 (40)	49/50	304 (50)	98	50/50	307 (50)	99	50/50	301 (49)	97	49/50
66-7	313 (40)	49/50	306 (50)	98	50/50	310 (50)	99	50/50	304 (48)	97	48/50
68-7	317 (40)	49/50	311 (50)	98	50/50	311 (50)	98	50/50	307 (48)	97	48/50
70-7	321 (40)	49/50	314 (50)	98	50/50	315 (48)	98	49/50	310 (48)	97	48/50
72-7	327 (40)	49/50	317 (50)	97	50/50	319 (48)	98	49/50	314 (48)	96	48/50
74-7	330 (40)	49/50	318 (50)	96	50/50	320 (48)	97	49/50	317 (48)	96	48/50
76-7	332 (40)	49/50	321 (40)	97	49/50	320 (48)	96	48/50	318 (48)	96	48/50
78-7	330 (48)	48/50	325 (48)	98	48/50	323 (48)	98	48/50	321 (48)	97	48/50
80-7	331 (48)	48/50	326 (48)	98	48/50	321 (48)	97	48/50	321 (48)	97	48/50
82-7	334 (48)	48/50	329 (48)	99	48/50	324 (47)	97	47/50	327 (47)	98	47/50
84-7	333 (48)	48/50	331 (48)	99	48/50	323 (47)	97	47/50	330 (47)	99	47/50
86-7	335 (47)	47/50	332 (48)	99	48/50	324 (45)	97	45/50	331 (47)	99	47/50
88-7	338 (46)	46/50	330 (47)	98	47/50	330 (42)	98	42/50	332 (47)	98	47/50
90-7	335 (46)	46/50	329 (46)	98	46/50	331 (42)	99	42/50	334 (47)	100	47/50
92-7	335 (45)	45/50	328 (45)	98	45/50	329 (42)	98	42/50	332 (46)	99	46/50
94-7	333 (44)	44/50	326 (44)	98	44/50	328 (41)	98	41/50	333 (45)	100	45/50
96-7	332 (43)	43/50	332 (42)	100	42/50	330 (40)	99	40/50	331 (45)	100	45/50
98-7	328 (43)	43/50	335 (41)	102	41/50	335 (39)	102	39/50	335 (43)	102	43/50
100-7	322 (42)	42/50	334 (41)	104	41/50	338 (38)	105	38/50	333 (43)	103	43/50
102-7	316 (40)	40/50	330 (41)	104	41/50	336 (37)	106	37/50	336 (40)	106	40/50
104-7	317 (36)	35/50	329 (41)	104	41/50	331 (37)	104	37/50	336 (38)	106	38/50

() : No. of effective animals, () : No. of measured animals

Au.Wt.: g

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

Week-Day on Study	Control		10 ppm			40 ppm			160 ppm		
	Au.FC.	No.of Surviv. <50>	Au.FC.	% of cont. <50>	No.of Surviv.	Au.FC.	% of cont. <50>	No.of Surviv.	Au.FC.	% of cont. <50>	No.of Surviv.
1-7	15.9 (50)	50/50	15.3 (50)	96	50/50	15.3 (50)	96	50/50	15.0 (50)	94	50/50
2-7	19.6 (50)	50/50	18.7 (50)	95	50/50	18.8 (50)	96	50/50	18.5 (50)	94	50/50
3-7	19.5 (50)	50/50	18.8 (50)	96	50/50	18.7 (50)	96	50/50	19.3 (50)	99	50/50
4-7	19.6 (50)	50/50	18.9 (50)	96	50/50	18.5 (50)	94	50/50	19.2 (50)	98	50/50
5-7	20.0 (50)	50/50	19.6 (50)	98	50/50	19.3 (50)	97	50/50	19.9 (50)	100	50/50
6-7	19.8 (50)	50/50	19.2 (50)	97	50/50	18.6 (50)	94	50/50	18.9 (50)	95	50/50
7-7	19.9 (50)	50/50	19.2 (50)	96	50/50	18.8 (50)	94	50/50	18.8 (50)	94	50/50
8-7	19.4 (50)	50/50	18.9 (50)	97	50/50	18.6 (50)	96	50/50	18.3 (50)	94	50/50
9-7	19.6 (50)	50/50	19.2 (50)	98	50/50	19.0 (50)	97	50/50	18.9 (50)	96	50/50
10-7	19.6 (50)	50/50	19.0 (50)	97	50/50	18.8 (50)	96	50/50	18.5 (50)	94	50/50
11-7	18.7 (50)	50/50	18.1 (50)	97	50/50	18.2 (50)	97	50/50	17.4 (50)	93	50/50
12-7	18.4 (50)	50/50	18.2 (50)	99	50/50	18.0 (50)	98	50/50	17.6 (50)	96	50/50
13-7	19.1 (50)	50/50	18.5 (50)	97	50/50	18.5 (50)	97	50/50	18.0 (50)	94	50/50
14-7	18.7 (50)	50/50	18.3 (50)	98	50/50	18.2 (50)	97	50/50	18.0 (50)	96	50/50
18-7	18.8 (50)	50/50	18.2 (50)	97	50/50	18.5 (50)	98	50/50	18.2 (50)	97	50/50
22-7	19.7 (50)	50/50	19.1 (50)	97	50/50	18.9 (50)	96	50/50	18.7 (50)	95	50/50
26-7	19.3 (50)	50/50	19.0 (50)	98	50/50	18.8 (50)	97	50/50	18.8 (50)	97	50/50
30-7	18.6 (50)	50/50	18.0 (50)	97	50/50	17.5 (50)	94	50/50	17.7 (50)	95	50/50
34-7	19.6 (50)	50/50	18.8 (50)	96	50/50	18.6 (50)	95	49/50	18.4 (50)	94	50/50
38-7	19.1 (50)	50/50	18.7 (50)	98	50/50	18.6 (49)	97	49/50	19.0 (50)	99	50/50
42-7	19.2 (50)	50/50	18.6 (50)	97	50/50	18.7 (49)	97	49/50	18.8 (50)	98	50/50
46-7	19.4 (49)	50/50	18.9 (50)	97	50/50	18.9 (49)	97	49/50	18.9 (50)	97	49/50
50-7	19.4 (50)	50/50	18.8 (50)	97	50/50	18.6 (49)	96	49/50	18.7 (49)	96	49/50
52-7	19.1 (50)	50/50	18.5 (50)	97	50/50	18.6 (49)	97	49/50	18.8 (49)	98	49/50
54-7	19.0 (50)	50/50	18.9 (50)	99	50/50	18.8 (49)	99	49/50	18.5 (49)	97	49/50
58-7	19.7 (50)	50/50	19.2 (50)	97	50/50	19.2 (49)	97	49/50	19.0 (49)	96	49/50
62-7	19.9 (48)	49/50	18.7 (50)	94	50/50	19.1 (49)	96	49/50	19.2 (49)	96	49/50
66-7	19.9 (49)	49/50	18.5 (49)	93	49/50	18.8 (48)	94	48/50	18.7 (49)	94	49/50
70-7	19.6 (49)	49/50	18.6 (49)	95	49/50	18.5 (46)	94	46/50	18.7 (49)	95	49/50
74-7	19.8 (49)	49/50	18.7 (49)	94	49/50	18.8 (46)	95	46/50	19.1 (48)	96	48/50
78-7	19.5 (48)	48/50	18.9 (48)	97	48/50	18.9 (46)	97	46/50	18.8 (47)	96	47/50
82-7	19.4 (48)	48/50	18.3 (48)	94	48/50	18.3 (44)	94	44/50	18.7 (47)	96	47/50
86-7	18.6 (48)	48/50	17.9 (48)	96	48/50	17.7 (42)	95	42/50	17.9 (45)	96	45/50
90-7	18.1 (48)	46/50	17.8 (44)	98	44/50	18.1 (39)	100	39/50	18.6 (43)	103	43/50
94-7	18.6 (42)	42/50	18.5 (40)	99	41/50	18.8 (37)	101	37/50	18.2 (43)	98	43/50
98-7	19.4 (40)	40/50	18.3 (40)	94	40/50	19.0 (35)	98	35/50	19.0 (42)	98	42/50
102-7	18.5 (37)	37/50	19.0 (35)	103	36/50	17.7 (34)	96	34/50	17.3 (38)	94	41/50
104-7	18.1 (37)	37/50	18.4 (35)	102	35/50	18.3 (32)	101	32/50	18.7 (36)	103	37/50

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

Au.FC.:g

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

Week-Day on Study	Control		10 ppm			40 ppm			160 ppm		
	Au.FC.	No.of Surviv. <50>	Au.FC.	% of cont. <50>	No.of Surviv.	Au.FC.	% of cont. <50>	No.of Surviv.	Au.FC.	% of cont. <50>	No.of Surviv.
1-7	12.4 (50)	50/50	12.1 (50)	98	50/50	12.1 (50)	98	50/50	11.7 (50)	94	50/50
2-7	13.8 (50)	50/50	13.6 (50)	99	50/50	13.2 (48)	96	50/50	12.8 (50)	93	50/50
3-7	13.2 (50)	50/50	13.2 (50)	100	50/50	13.2 (50)	100	50/50	12.9 (50)	98	50/50
4-7	13.2 (50)	50/50	12.8 (50)	97	50/50	12.8 (50)	97	50/50	12.7 (50)	96	50/50
5-7	13.8 (50)	50/50	13.3 (50)	96	50/50	13.2 (50)	96	50/50	13.1 (50)	95	50/50
6-7	13.6 (50)	50/50	13.0 (50)	96	50/50	13.0 (50)	96	50/50	12.8 (50)	94	50/50
7-7	13.6 (50)	50/50	13.0 (50)	96	50/50	13.3 (50)	98	50/50	12.8 (50)	94	50/50
8-7	13.2 (50)	50/50	12.7 (50)	96	50/50	12.7 (50)	96	50/50	12.4 (50)	94	50/50
9-7	13.4 (50)	50/50	12.6 (50)	94	50/50	12.7 (50)	95	50/50	12.6 (50)	94	50/50
10-7	13.5 (50)	50/50	12.7 (50)	94	50/50	12.6 (50)	93	50/50	12.9 (50)	96	50/50
11-7	12.6 (50)	50/50	12.1 (50)	96	50/50	12.4 (50)	98	50/50	12.2 (50)	97	50/50
12-7	12.5 (50)	50/50	12.1 (49)	97	50/50	12.1 (50)	97	50/50	12.3 (50)	98	50/50
13-7	12.9 (50)	50/50	12.5 (50)	97	50/50	12.4 (50)	96	50/50	12.6 (50)	98	50/50
14-7	12.6 (50)	50/50	12.3 (50)	98	50/50	12.6 (50)	100	50/50	12.4 (50)	98	50/50
18-7	13.0 (50)	50/50	12.9 (50)	99	50/50	12.7 (50)	98	50/50	12.8 (50)	98	50/50
22-7	13.5 (50)	50/50	13.1 (50)	97	50/50	12.9 (50)	96	50/50	13.3 (50)	99	50/50
26-7	12.6 (50)	50/50	12.8 (50)	102	50/50	11.9 (50)	94	50/50	12.4 (50)	98	50/50
30-7	13.2 (50)	50/50	12.5 (50)	95	50/50	12.2 (50)	92	50/50	12.7 (50)	96	50/50
34-7	13.7 (50)	50/50	13.4 (50)	98	50/50	13.1 (50)	96	50/50	13.2 (50)	96	50/50
38-7	14.0 (50)	50/50	13.8 (50)	99	50/50	13.2 (50)	94	50/50	13.7 (50)	98	50/50
42-7	13.2 (50)	50/50	12.7 (50)	96	50/50	12.6 (50)	95	50/50	12.8 (50)	97	50/50
46-7	13.7 (50)	50/50	13.5 (50)	99	50/50	13.4 (50)	98	50/50	13.2 (50)	96	50/50
50-7	13.4 (50)	50/50	12.7 (50)	95	50/50	12.8 (50)	96	50/50	12.6 (50)	94	50/50
52-7	13.8 (50)	50/50	13.5 (50)	98	50/50	13.3 (50)	96	50/50	13.3 (50)	96	50/50
54-7	13.9 (50)	50/50	13.3 (50)	98	50/50	13.4 (50)	96	50/50	13.2 (50)	95	50/50
58-7	14.3 (50)	50/50	13.9 (50)	97	50/50	13.8 (50)	97	50/50	13.4 (50)	94	50/50
62-7	14.6 (49)	49/50	14.0 (50)	96	50/50	14.1 (50)	97	50/50	13.6 (49)	93	49/50
66-7	14.3 (49)	49/50	13.6 (50)	95	50/50	13.6 (50)	95	50/50	13.5 (48)	94	48/50
70-7	14.5 (49)	49/50	13.9 (50)	96	50/50	13.8 (49)	95	49/50	13.7 (48)	94	48/50
74-7	14.8 (49)	49/50	13.7 (50)	93	50/50	13.8 (49)	93	49/50	13.9 (48)	94	48/50
78-7	15.0 (48)	48/50	14.3 (48)	95	48/50	14.0 (48)	93	48/50	13.7 (48)	91	48/50
82-7	14.9 (48)	48/50	14.4 (48)	97	48/50	13.7 (47)	92	47/50	14.5 (47)	87	47/50
86-7	14.7 (47)	47/50	14.3 (48)	97	48/50	13.8 (45)	94	45/50	14.1 (47)	96	47/50
90-7	14.7 (46)	46/50	14.3 (46)	97	46/50	14.5 (42)	99	42/50	14.5 (46)	99	47/50
94-7	15.0 (44)	44/50	14.3 (44)	95	44/50	14.0 (41)	93	41/50	14.5 (45)	97	45/50
98-7	15.3 (43)	43/50	15.5 (41)	101	41/50	15.3 (39)	100	39/50	15.0 (43)	98	43/50
102-7	13.5 (38)	40/50	15.0 (40)	111	41/50	14.9 (36)	110	37/50	14.5 (40)	107	40/50
104-7	14.1 (35)	35/50	14.7 (41)	104	41/50	14.4 (37)	102	37/50	14.0 (38)	99	38/50

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

Au.FC.: g

TABLE 16

CLINICAL OBSERVATION (EXTERNAL MASS) : RAT - TWO-YEAR STUDIES -

Location of external mass	No. of survival animals with external mass (No. of dead and moribund animals with external mass)							
	Male				Female			
	Control	10ppm	40ppm	160ppm	Control	10ppm	40ppm	160ppm
<u>No. of observed animals</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>
No. of survival animals (No. of dead and moribund animals)	37 (13)	35 (15)	32 (18)	37 (13)	35 (15)	41 (9)	37 (13)	38 (12)
M. NOSE	0 (0)	0 (0)	0 (0)	1 (0)	0 (0)	0 (0)	0 (0)	0 (0)
M. EYE	1 (1)	1 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (1)
M. PERI MOUTE	0 (0)	0 (1)	2 (0)	0 (0)	1 (1)	0 (0)	0 (0)	0 (0)
M. MANDIBULAR	0 (0)	0 (0)	0 (0)	1 (0)	0 (0)	0 (0)	0 (0)	0 (0)
M. ORAL CAVITY	0 (0)	0 (1)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
M. EAR	1 (1)	0 (0)	1 (0)	0 (0)	1 (0)	1 (0)	1 (0)	0 (0)
M. PERI EAR	0 (0)	1 (0)	1 (0)	0 (1)	1 (0)	0 (0)	0 (0)	0 (1)
M. HEAD	0 (0)	0 (0)	0 (0)	1 (1)	0 (0)	0 (0)	0 (0)	0 (0)
M. NECK	0 (0)	0 (0)	0 (1)	1 (0)	0 (0)	1 (0)	0 (0)	2 (0)
M. FORLMB	0 (1)	0 (0)	0 (1)	1 (0)	0 (0)	0 (0)	0 (0)	0 (0)
M. BREAST	2 (1)	4 (0)	3 (2)	5 (0)	2 (2)	3 (1)	3 (0)	8 (3)
M. ABDOMEN	11 (1)	5 (1)	4 (4)	7 (2)	1 (0)	4 (0)	5 (1)	8 (3)
M. ANTERIR DORSUM	0 (0)	6 (3)	7 (0)	9 (2)	0 (0)	1 (0)	0 (0)	2 (0)
M. POSTERIR DORSUM	2 (0)	2 (3)	2 (1)	3 (0)	0 (0)	0 (0)	0 (0)	0 (0)
M. HINDLIMB	0 (0)	0 (0)	0 (0)	1 (1)	0 (0)	1 (0)	0 (0)	1 (0)
M. SCROTUM	0 (0)	1 (0)	0 (0)	1 (0)	-	-	-	-
M. GENITALIA	0 (0)	0 (0)	0 (0)	0 (0)	0 (1)	2 (1)	0 (2)	7 (0)
M. ANUS	0 (0)	0 (0)	0 (1)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
M. TAIL	1 (0)	1 (0)	0 (0)	0 (0)	1 (0)	0 (0)	0 (0)	0 (1)
Total								
<u>All animals</u>	<u>20</u>	<u>25</u>	<u>26</u>	<u>25</u>	<u>9</u>	<u>14</u>	<u>12</u>	<u>28</u>
Survival animals (Dead and moribund animals)	16 (4)	19 (6)	17 (9)	19 (6)	6 (3)	12 (2)	9 (3)	21 (7)

TABLE 17

NEOPLASTIC LESIONS (SUBCUTIS) INCIDENCE AND STATISTICAL ANALYSIS : RAT:MALE

Group Name	Control	10 ppm	40 ppm	160 ppm
SITE : subcutis TUMOUR : fibroma				
Overall Rates(a)	6/50 (12.0)	9/50 (18.0)	12/50 (24.0)	15/50 (30.0)
Adjusted Rates(b)	13.51	18.92	27.78	40.54
Terminal Rates(c)	5/37 (13.5)	6/35 (17.1)	8/32 (25.0)	15/37 (40.5)
Standard Rates(d)	P=0.8188			
Prevalence Rates(d)	P=0.0107*			
Combind analysis(d)	P=0.0278*			
Cochran-Armitage Test(e)	P=0.0373*			
Fisher Exact Test(e)		P=0.3291	P=0.1474	P=0.0592

TABLE 18

NEOPLASTIC LESIONS (SUBCUTIS) INCIDENCE AND STATISTICAL ANALYSIS : RAT:FEMALE

Group Name	Control	10 ppm	40 ppm	160 ppm
SITE : subcutis TUMOUR : fibroma				
Overall Rates(a)	0/50 (0.0)	0/50 (0.0)	1/50 (2.0)	5/50 (10.0)
Adjusted Rates(b)	0.0	0.0	2.33	11.36
Terminal Rates(c)	0/35 (0.0)	0/41 (0.0)	0/37 (0.0)	3/38 (7.9)
Standard Rates(d)	P=-----			
Prevalence Rates(d)	P=0.0007**			
Combind analysis(d)	P=-----			
Cochran-Armitage Test(e)	P=0.0006**			
Fisher Exact Test(e)		P=0.5000	P=0.4950	P=0.0360*

TABLE 19

NEOPLASTIC LESIONS (MAMMARY GLAND) INCIDENCE AND STATISTICAL ANALYSIS : RAT:MALE

Group Name	Control	10 ppm	40 ppm	160 ppm
SITE : mammary gland TUMOUR : adenoma				
Overall Rates(a)	1/50 (2.0)	2/50 (4.0)	0/50 (0.0)	2/50 (4.0)
Adjusted Rates(b)	2.70	5.71	0.0	5.41
Terminal Rates(c)	1/37 (2.7)	2/35 (5.7)	0/32 (0.0)	2/37 (5.4)
Standard Rates(d)	P=-----			
Prevalence Rates(d)	P=0.2963			
Combind analysis(d)	P=-----			
Cochran-Armitage Test(e)	P=0.5821			
Fisher Exact Test(e)		P=0.4926	P=0.4950	P=0.4926

SITE : mammary gland
TUMOUR : fibroadenoma

Overall Rates(a)	0/50 (0.0)	0/50 (0.0)	1/50 (2.0)	5/50 (10.0)
Adjusted Rates(b)	0.0	0.0	3.13	13.51
Terminal Rates(c)	0/37 (0.0)	0/35 (0.0)	1/32 (3.1)	5/37 (13.5)
Standard Rates(d)	P=-----			
Prevalence Rates(d)	P=0.0008**			
Combind analysis(d)	P=-----			
Cochran-Armitage Test(e)	P=0.0006**			
Fisher Exact Test(e)		P=0.5000	P=0.4950	P=0.0360*

SITE : mammary gland
TUMOUR : adenoma, fibroadenoma

Overall Rates(a)	1/50 (2.0)	2/50 (4.0)	1/50 (2.0)	7/50 (14.0)
Adjusted Rates(b)	2.70	5.71	3.13	18.92
Terminal Rates(c)	1/37 (2.7)	2/35 (5.7)	1/32 (3.1)	7/37 (18.9)
Standard Rates(d)	P=-----			
Prevalence Rates(d)	P=0.0037**			
Combind analysis(d)	P=-----			
Cochran-Armitage Test(e)	P=0.0034**			
Fisher Exact Test(e)		P=0.4926	P=0.2475	P=0.0430*

TABLE 20

NEOPLASTIC LESIONS (MAMMARY GLAND) INCIDENCE AND STATISTICAL ANALYSIS : RAT:FEMALE

Group Name	Control	10 ppm	40 ppm	160 ppm
SITE : mammary gland TUMOUR : adenoma				
Overall Rates(a)	3/50 (6.0)	5/50 (10.0)	5/50 (10.0)	11/50 (22.0)
Adjusted Rates(b)	8.11	12.20	13.51	25.41
Terminal Rates(c)	2/35 (5.7)	5/41 (12.2)	5/37 (13.5)	9/38 (23.7)
Standard Rates(d)	P=-----			
Prevalence Rates(d)	P=0.0091**			
Combind analysis(d)	P=-----			
Cochran-Armitage Test(e)	P=0.0105*			
Fisher Exact Test(e)		P=0.3790	P=0.3790	P=0.0402*
SITE : mammary gland TUMOUR : fibroadenoma				
Overall Rates(a)	4/50 (8.0)	1/50 (2.0)	6/50 (12.0)	13/50 (26.0)
Adjusted Rates(b)	7.69	2.44	15.00	28.95
Terminal Rates(c)	2/35 (5.7)	1/41 (2.4)	5/37 (13.5)	11/38 (28.9)
Standard Rates(d)	P=0.2669			
Prevalence Rates(d)	P=0.0003**			
Combind analysis(d)	P=0.0003**			
Cochran-Armitage Test(e)	P=0.0003**			
Fisher Exact Test(e)		P=0.1998	P=0.3944	P=0.0371*
SITE : mammary gland TUMOUR : adenocarcinoma				
Overall Rates(a)	1/50 (2.0)	2/50 (4.0)	0/50 (0.0)	5/50 (10.0)
Adjusted Rates(b)	2.78	4.76	0.0	7.89
Terminal Rates(c)	1/35 (2.9)	1/41 (2.4)	0/37 (0.0)	3/38 (7.9)
Standard Rates(d)	P=0.0174* ?			
Prevalence Rates(d)	P=0.1376			
Combind analysis(d)	P=0.0222*			
Cochran-Armitage Test(e)	P=0.0236*			
Fisher Exact Test(e)		P=0.4926	P=0.4950	P=0.1210
SITE : mammary gland TUMOUR : adenoma, fibroadenoma, adenocarcinoma				
Overall Rates(a)	8/50 (16.0)	8/50 (16.0)	11/50 (22.0)	25/50 (50.0)
Adjusted Rates(b)	17.95	19.05	27.50	50.00
Terminal Rates(c)	5/35 (14.3)	7/41 (17.1)	10/37 (27.0)	19/38 (50.0)
Standard Rates(d)	P=0.0302*			
Prevalence Rates(d)	P=0.0001**			
Combind analysis(d)	P<0.0001**			
Cochran-Armitage Test(e)	P<0.0001**			
Fisher Exact Test(e)		P=0.3943	P=0.3526	P=0.0076**

TABLE 21

NEOPLASTIC LESIONS (PERITONEUM) INCIDENCE AND STATISTICAL ANALYSIS : RAT:MALE

Group Name	Control	10 ppm	40 ppm	160 ppm
SITE : peritoneum TUMOUR : mesothelioma				
Overall Rates(a)	1/50 (2.0)	1/50 (2.0)	1/50 (2.0)	5/50 (10.0)
Adjusted Rates(b)	2.70	2.86	3.13	8.11
Terminal Rates(c)	1/37 (2.7)	1/35 (2.9)	1/32 (3.1)	3/37 (8.1)
Standard Rates(d)	P=0.0183*			
Prevalence Rates(d)	P=0.1030			
Combind analysis(d)	P=0.0153*			
Cochran-Armitage Test(e)	P=0.0150*			
Fisher Exact Test(e)		P=0.2475	P=0.2475	P=0.1210

TABLE 22 COUSE OF DEATH :RAT

Group	Male				Female			
	Control	10ppm	40ppm	160ppm	Control	10ppm	40ppm	160ppm
Number of dead/moriboud animal	13	15	18	13	15	9	13	12
Hepatic lesion								1
Renal lesion	1	1					1	
Adrenal lesion			1					
Thrombosis		1			1			1
Nasal lesion		1						
Tumor death : leukemia	3	1	4	3	4	4	5	3
: kidney							1	
: skin/appendage		1	1					
: subcutis	1	1	1					
: spleen	1	2	1					
: small intesine		1						
: pituitary gland	2	3	6	3	5	2	2	2
: adrenal gland					1			
: uterus					1	2	2	1
: mammary gland					1			3
: thyroid		1		1				
: prep/cli gland		1	1		1		1	
: brain	1	1	1					
: Zymbal gland				1				1
: muscle				1				
: bone	1		1	1				
: vertebra	1							
: peritoneum				2				
: retroperitoneum	1						1	
No microscopical confirmation	1		1	1	1	1		

TABLE 23 DEAD ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN MALE MOUSE (ACUT STUDIES)

Week-Day on study	500ppm		1000ppm		2000ppm		4000ppm		8000ppm		16000ppm	
	Av. wt.	No. of Dead	Av. wt.	No. of Dead	Av. wt.	No. of Dead	Av. wt.	No. of Dead	Av. wt.	No. of Dead	Av. wt.	No. of Dead
	<10>		<10>		<10>		<10>		<10>		<10>	
0-0	24.3(10)	0/10	24.3(10)	0/10	24.3(10)	0/10	24.3(10)	0/10	24.3(10)	4/10	24.3(10)	10/10
1-1	23.0(10)	2/10	21.6(10)	7/10	21.8(10)	10/10	21.9(10)	10/10	23.1(6)	10/10		
1-2	24.0(8)	2/10	21.7(3)	7/10								
1-3	24.5(8)	2/10	20.7(2)	8/10								
1-4	-	2/10	-	9/10								
1-7	25.5(8)	2/10	23.4(1)	9/10								
2-3	25.7(8)	2/10	24.0(1)	9/10								
2-7	26.3(8)	2/10	25.7(1)	9/10								

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

TABLE 24 DEAD ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN FEMALE MOUSE (ACUT STUDIES)

Week-Day on study	500ppm		1000ppm		2000ppm		4000ppm		8000ppm		16000ppm	
	Av. wt.	No. of Dead	Av. wt.	No. of Dead	Av. wt.	No. of Dead	Av. wt.	No. of Dead	Av. wt.	No. of Dead	Av. wt.	No. of Dead
	<10>		<10>		<10>		<10>		<10>		<10>	
0-0	19.2(10)	0/10	19.2(10)	0/10	19.2(10)	0/10	19.2(10)	0/10	19.3(10)	6/10	19.2(10)	10/10
1-1	18.5(10)	1/10	18.2(10)	0/10	17.0(10)	6/10	17.7(10)	10/10	19.7(4)	10/10		
1-2	19.3(9)	1/10	18.6(10)	0/10	16.2(4)	9/10						
1-3	19.6(9)	1/10	18.8(10)	0/10	16.1(1)	9/10						
1-4	-	1/10	-	0/10	-	10/10						
1-7	19.8(9)	1/10	19.7(10)	0/10								
2-3	19.8(9)	1/10	19.5(10)	0/10								
2-7	20.2(9)	1/10	20.1(10)	0/10								

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

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

Week-Day on Study	Control		50 ppm			100 ppm			200 ppm			400 ppm			800 ppm		
	Au.Wt.	No.of Surviv. <10>	Au.Wt.	% of cont. <10>	No.of Surviv.	Au.Wt.	% of cont. <10>	No.of Surviv.	Au.Wt.	% of cont. <10>	No.of Surviv.	Au.Wt.	% of cont. <10>	No.of Surviv.	Au.Wt.	% of cont. <10>	No.of Surviv.
0-0	24.3 (10)	10/10	24.3 (10)	100	10/10	24.4 (10)	100	10/10	24.4 (10)	100	10/10	24.4 (10)	100	10/10	24.4 (10)	100	10/10
1-1	24.0 (10)	10/10	24.1 (10)	100	10/10	24.0 (10)	100	10/10	23.3 (10)	97	10/10	21.5 (10)	90	0/10	21.7 (10)	90	0/10
1-2	24.1 (10)	10/10	24.1 (10)	100	10/10	23.9 (10)	99	10/10	23.4 (10)	97	10/10	- (-)	-	0/10	- (-)	-	0/10
1-3	24.3 (10)	10/10	24.4 (10)	100	10/10	24.3 (10)	100	10/10	23.2 (10)	95	10/10	- (-)	-	0/10	- (-)	-	0/10
1-7	25.5 (10)	10/10	25.2 (10)	99	10/10	25.2 (10)	99	10/10	23.9 (10)	94	10/10	- (-)	-	0/10	- (-)	-	0/10
2-3	26.0 (10)	10/10	25.5 (10)	98	10/10	25.6 (10)	98	10/10	22.6 (10)	87	10/10	- (-)	-	0/10	- (-)	-	0/10
2-7	26.4 (10)	10/10	25.8 (10)	98	10/10	26.1 (10)	99	10/10	23.0 (10)	87	10/10	- (-)	-	0/10	- (-)	-	0/10

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

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

Week-Day on Study	Control		50 ppm			100 ppm			200 ppm			400 ppm			800 ppm		
	Au.Wt.	No.of Surviv. <10>	Au.Wt.	% of cont. <10>	No.of Surviv.	Au.Wt.	% of cont. <10>	No.of Surviv.	Au.Wt.	% of cont. <10>	No.of Surviv.	Au.Wt.	% of cont. <10>	No.of Surviv.	Au.Wt.	% of cont. <10>	No.of Surviv.
0-0	19.4 (10)	10/10	19.5 (10)	101	10/10	19.5 (10)	101	10/10	19.5 (10)	101	10/10	19.5 (10)	101	10/10	19.5 (10)	101	10/10
1-1	18.5 (10)	10/10	19.0 (10)	103	10/10	19.1 (10)	103	10/10	17.3 (10)	94	9/10	17.1 (10)	92	0/10	17.0 (10)	92	1/10
1-2	18.7 (10)	10/10	19.4 (10)	104	10/10	19.2 (10)	103	10/10	17.2 (9)	92	9/10	- (-)	-	0/10	17.8 (1)	95	0/10
1-3	19.2 (10)	10/10	19.6 (10)	102	10/10	19.4 (10)	101	10/10	17.3 (9)	90	9/10	- (-)	-	0/10	- (-)	-	0/10
1-7	19.6 (10)	10/10	20.5 (10)	105	10/10	20.3 (10)	104	10/10	18.9 (8)	96	7/10	- (-)	-	0/10	- (-)	-	0/10
2-3	20.2 (10)	10/10	20.3 (10)	100	10/10	20.8 (10)	103	10/10	14.9 (5)	74	5/10	- (-)	-	0/10	- (-)	-	0/10
2-7	21.2 (10)	10/10	21.2 (10)	100	10/10	21.4 (10)	101	10/10	16.5 (5)	78	4/10	- (-)	-	0/10	- (-)	-	0/10

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

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

Week-Day on Study	Control		50 ppm			100 ppm			200 ppm			400 ppm			800 ppm		
	Au.FC.	No.of Surviv. <10>	Au.FC.	% of cont. <10>	No.of Surviv.	Au.FC.	% of cont. <10>	No.of Surviv.	Au.FC.	% of cont. <10>	No.of Surviv.	Au.FC.	% of cont. <10>	No.of Surviv.	Au.FC.	% of cont. <10>	No.of Surviv.
1-7	4.2 (10)	10/10	4.1 (10)	98	10/10	4.3 (10)	102	10/10	3.7 (10)	88	10/10	- (-)	-	0/10	- (-)	-	0/10
2-7	4.1 (10)	10/10	4.1 (10)	100	10/10	4.1 (10)	100	10/10	3.8 (10)	93	10/10	- (-)	-	0/10	- (-)	-	0/10

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

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

Week-Day on Study	Control		50 ppm			100 ppm			200 ppm			400 ppm			800 ppm		
	Au.FC.	No.of Surviv. <10>	Au.FC.	% of cont. <10>	No.of Surviv.	Au.FC.	% of cont. <10>	No.of Surviv.	Au.FC.	% of cont. <10>	No.of Surviv.	Au.FC.	% of cont. <10>	No.of Surviv.	Au.FC.	% of cont. <10>	No.of Surviv.
1-7	3.2 (10)	10/10	3.3 (10)	103	10/10	3.5 (10)	109	10/10	3.0 (8)	94	7/10	- (-)	-	0/10	- (-)	-	0/10
2-7	3.6 (10)	10/10	3.6 (10)	100	10/10	3.8 (10)	106	10/10	3.3 (5)	92	4/10	- (-)	-	0/10	- (-)	-	0/10

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

TABLE 29 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN MALE MOUSE (THIRTEEN-WEEK STUDIES)

Week-Day on Study	Control		10 ppm			20 ppm			40 ppm			80 ppm			160 ppm		
	Au.Wt.	No.of Surviv. <10>	Au.Wt.	% of cont. <10>	No.of Surviv.	Au.Wt.	% of cont. <10>	No.of Surviv.	Au.Wt.	% of cont. <10>	No.of Surviv.	Au.Wt.	% of cont. <10>	No.of Surviv.	Au.Wt.	% of cont. <10>	No.of Surviv.
0-0	23.8 (10)	10/10	23.8 (10)	100	10/10	23.8 (10)	100	10/10	23.8 (10)	100	10/10	23.8 (10)	100	10/10	23.8 (10)	100	10/10
1-7	25.0 (10)	10/10	25.1 (10)	100	10/10	24.9 (10)	100	10/10	24.8 (10)	99	10/10	24.7 (10)	99	10/10	24.1 (10)	96	10/10
2-7	26.2 (10)	10/10	26.0 (10)	98	10/10	25.0 (10)	99	10/10	25.4 (10)	97	10/10	25.4 (10)	97	10/10	25.1 (10)	96	10/10
3-7	27.2 (10)	10/10	26.5 (10)	97	10/10	27.1 (10)	100	10/10	26.0 (10)	96	10/10	26.4 (10)	97	10/10	26.2 (10)	96	10/10
4-7	28.1 (10)	10/10	27.3 (10)	97	10/10	27.8 (10)	99	10/10	26.7 (10)	95	10/10	27.2 (10)	97	10/10	26.9 (10)	96	10/10
5-7	28.7 (10)	10/10	27.9 (10)	97	10/10	28.5 (10)	99	10/10	27.4 (10)	95	10/10	28.0 (10)	98	10/10	27.6 (10)	96	10/10
6-7	29.9 (10)	10/10	29.0 (10)	97	10/10	29.1 (10)	97	10/10	28.3 (10)	95	10/10	28.6 (10)	96	10/10	28.1 (10)	94	10/10
7-7	30.7 (10)	10/10	29.4 (10)	96	10/10	30.1 (10)	98	10/10	28.4 (10)	93	10/10	29.1 (10)	95	10/10	28.5 (10)	93	10/10
8-7	31.6 (10)	10/10	30.3 (10)	96	10/10	31.3 (10)	99	10/10	29.7 (10)	94	10/10	30.5 (10)	97	10/10	29.9 (10)	95	10/10
9-7	32.2 (10)	10/10	30.8 (10)	96	10/10	31.8 (10)	99	10/10	29.8 (10)	93	10/10	30.6 (10)	95	10/10	29.8 (10)	93	10/10
10-7	33.1 (10)	10/10	31.7 (10)	96	10/10	32.9 (10)	99	10/10	30.5 (10)	92	10/10	31.3 (10)	95	10/10	30.7 (10)	93	10/10
11-7	34.0 (10)	10/10	32.6 (10)	96	10/10	33.4 (10)	98	10/10	31.2 (10)	92	10/10	31.8 (10)	94	10/10	31.4 (10)	92	10/10
12-7	35.2 (10)	10/10	34.0 (10)	97	10/10	34.7 (10)	99	10/10	32.2 (10)	91	10/10	32.8 (10)	93	10/10	32.0 (10)	91	10/10
13-7	35.2 (10)	10/10	33.5 (10)	95	10/10	34.7 (10)	99	10/10	31.9 (10)	91	10/10	32.1 (10)	91	10/10	31.6 (10)	90	10/10

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

TABLE 30 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN FEMALE MOUSE (THIRTEEN-WEEK STUDIES)

Week-Day on Study	Control		10 ppm			20 ppm			40 ppm			80 ppm			160 ppm		
	Au.Wt.	No.of Surviv. <10>	Au.Wt.	% of cont. <10>	No.of Surviv.	Au.Wt.	% of cont. <10>	No.of Surviv.	Au.Wt.	% of cont. <10>	No.of Surviv.	Au.Wt.	% of cont. <10>	No.of Surviv.	Au.Wt.	% of cont. <10>	No.of Surviv.
0-0	18.9 (10)	10/10	18.9 (10)	100	10/10	18.9 (10)	100	10/10	18.9 (10)	100	10/10	18.9 (10)	100	10/10	18.9 (10)	100	10/10
1-7	20.0 (10)	10/10	19.8 (10)	99	10/10	20.0 (10)	100	10/10	19.9 (10)	100	10/10	19.6 (10)	98	10/10	19.6 (9)	98	9/10
2-7	20.3 (10)	10/10	20.9 (10)	103	10/10	20.9 (10)	103	10/10	20.6 (10)	101	10/10	20.1 (10)	99	10/10	20.2 (9)	100	8/10
3-7	21.5 (10)	10/10	21.3 (10)	99	10/10	21.1 (10)	98	10/10	21.1 (10)	98	10/10	20.6 (10)	96	10/10	21.9 (8)	102	8/10
4-7	22.0 (10)	10/10	22.5 (10)	102	10/10	22.4 (10)	102	10/10	22.1 (10)	100	10/10	21.6 (10)	98	10/10	22.2 (8)	101	8/10
5-7	22.8 (10)	10/10	22.4 (10)	98	10/10	22.7 (10)	100	10/10	22.3 (10)	98	10/10	22.5 (10)	99	10/10	23.1 (8)	101	8/10
6-7	23.5 (10)	10/10	23.7 (10)	101	10/10	23.4 (10)	100	10/10	23.3 (10)	99	10/10	22.8 (10)	97	10/10	23.0 (8)	98	8/10
7-7	23.8 (10)	10/10	24.2 (10)	102	10/10	23.7 (10)	100	10/10	23.7 (10)	100	10/10	23.5 (10)	99	10/10	23.9 (6)	100	6/10
8-7	24.1 (10)	10/10	24.9 (10)	103	10/10	24.5 (10)	102	10/10	24.4 (10)	101	10/10	24.3 (10)	101	10/10	24.2 (4)	100	4/10
9-7	24.3 (10)	10/10	24.5 (10)	101	10/10	24.0 (10)	99	10/10	24.2 (10)	100	10/10	24.4 (10)	100	10/10	24.6 (4)	101	4/10
10-7	25.0 (10)	10/10	25.4 (10)	102	10/10	24.6 (10)	98	10/10	24.1 (10)	96	10/10	24.6 (10)	98	10/10	24.7 (4)	99	4/10
11-7	25.6 (10)	10/10	26.0 (10)	102	10/10	24.9 (10)	97	10/10	25.6 (10)	100	10/10	25.0 (10)	98	10/10	25.3 (4)	99	4/10
12-7	26.6 (10)	10/10	26.6 (10)	100	10/10	25.7 (10)	97	10/10	25.3 (10)	95	10/10	25.2 (10)	95	10/10	25.9 (4)	97	4/10
13-7	25.9 (10)	10/10	25.7 (10)	99	10/10	25.2 (10)	97	10/10	24.6 (10)	95	10/10	24.1 (10)	93	10/10	24.7 (4)	95	4/10

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

TABLE 31 FOOD CONSUMPTION IN MALE MOUSE (THIRTEEN-WEEK STUDIES)

Week-Day on Study	Control		10 ppm			20 ppm			40 ppm			80 ppm			160 ppm		
	Au.F.C.	No.of Surviv. <10>	Au.F.C.	% of cont. <10>	No.of Surviv.	Au.F.C.	% of cont. <10>	No.of Surviv.	Au.F.C.	% of cont. <10>	No.of Surviv.	Au.F.C.	% of cont. <10>	No.of Surviv.	Au.F.C.	% of cont. <10>	No.of Surviv.
1-7	4.3 (10)	10/10	4.2 (10)	98	10/10	4.2 (10)	98	10/10	4.3 (10)	100	10/10	4.2 (10)	98	10/10	4.0 (10)	93	10/10
2-7	4.2 (10)	10/10	4.1 (10)	98	10/10	4.2 (10)	100	10/10	4.1 (10)	98	10/10	4.1 (10)	98	10/10	4.4 (10)	105	10/10
3-7	4.3 (10)	10/10	4.1 (10)	95	10/10	4.3 (10)	100	10/10	4.4 (10)	102	10/10	4.2 (10)	98	10/10	4.5 (10)	105	10/10
4-7	4.0 (10)	10/10	3.9 (10)	98	10/10	4.0 (10)	100	10/10	4.1 (10)	103	10/10	3.9 (10)	98	10/10	4.1 (10)	103	10/10
5-7	4.0 (10)	10/10	4.0 (10)	100	10/10	4.1 (10)	103	10/10	4.2 (10)	105	10/10	4.1 (10)	103	10/10	4.3 (10)	108	10/10
6-7	4.2 (10)	10/10	4.1 (10)	98	10/10	4.1 (10)	98	10/10	4.3 (10)	102	10/10	4.1 (10)	98	10/10	4.5 (10)	107	10/10
7-7	4.1 (10)	10/10	4.0 (10)	98	10/10	4.2 (10)	102	10/10	4.0 (10)	98	10/10	4.1 (10)	100	10/10	4.4 (10)	107	10/10
8-7	4.1 (10)	10/10	4.0 (10)	98	10/10	4.3 (10)	105	10/10	4.1 (10)	100	10/10	4.1 (10)	100	10/10	4.5 (10)	110	10/10
9-7	4.2 (10)	10/10	4.2 (10)	100	10/10	4.3 (10)	102	10/10	4.2 (10)	100	10/10	4.0 (10)	95	10/10	4.4 (10)	105	10/10
10-7	4.2 (10)	10/10	4.1 (10)	98	10/10	4.3 (10)	102	10/10	4.2 (10)	100	10/10	4.1 (10)	98	10/10	4.5 (10)	107	10/10
11-7	4.3 (10)	10/10	4.2 (10)	98	10/10	4.3 (10)	100	10/10	4.2 (10)	98	10/10	4.1 (10)	95	10/10	4.6 (10)	107	10/10
12-7	4.4 (10)	10/10	4.2 (10)	95	10/10	4.4 (10)	100	10/10	4.2 (10)	95	10/10	4.3 (10)	98	10/10	4.5 (10)	102	10/10
13-7	4.4 (10)	10/10	4.4 (10)	100	10/10	4.5 (10)	102	10/10	4.5 (10)	102	10/10	4.3 (10)	98	10/10	4.6 (10)	105	10/10

< >:No.of effective animals,():No.of measured animals Au.F.C.:g

TABLE 32 FOOD CONSUMPTION IN FEMALE MOUSE (THIRTEEN-WEEK STUDIES)

Week-Day on Study	Control		10 ppm			20 ppm			40 ppm			80 ppm			160 ppm		
	Au.F.C.	No.of Surviv. <10>	Au.F.C.	% of cont. <10>	No.of Surviv.	Au.F.C.	% of cont. <10>	No.of Surviv.	Au.F.C.	% of cont. <10>	No.of Surviv.	Au.F.C.	% of cont. <10>	No.of Surviv.	Au.F.C.	% of cont. <10>	No.of Surviv.
1-7	3.5 (10)	10/10	3.5 (10)	100	10/10	3.6 (10)	103	10/10	3.4 (10)	97	10/10	3.4 (10)	97	10/10	3.4 (9)	97	9/10
2-7	3.7 (10)	10/10	3.7 (10)	100	10/10	3.8 (10)	103	10/10	3.5 (10)	95	10/10	3.5 (10)	95	10/10	3.5 (9)	95	8/10
3-7	3.9 (10)	10/10	3.7 (10)	95	10/10	3.8 (10)	97	10/10	3.8 (10)	97	10/10	3.9 (10)	100	10/10	4.1 (8)	105	8/10
4-7	3.8 (10)	10/10	3.9 (10)	103	10/10	3.9 (10)	103	10/10	3.8 (10)	100	10/10	3.7 (10)	97	10/10	3.9 (8)	103	8/10
5-7	3.9 (10)	10/10	3.9 (10)	100	10/10	3.9 (10)	100	10/10	3.8 (10)	97	10/10	3.9 (10)	100	10/10	4.1 (8)	105	8/10
6-7	4.0 (10)	10/10	4.1 (10)	103	10/10	3.9 (10)	98	10/10	4.0 (10)	100	10/10	3.9 (10)	98	10/10	4.2 (8)	105	8/10
7-7	3.9 (10)	10/10	3.9 (10)	100	10/10	4.1 (10)	105	10/10	4.0 (10)	103	10/10	3.9 (10)	100	10/10	4.3 (6)	110	6/10
8-7	4.0 (10)	10/10	4.2 (10)	105	10/10	4.1 (10)	103	10/10	4.0 (10)	100	10/10	4.0 (10)	100	10/10	4.4 (4)	110	4/10
9-7	4.0 (10)	10/10	4.1 (10)	103	10/10	4.2 (10)	105	10/10	4.1 (10)	103	10/10	4.0 (10)	100	10/10	4.5 (4)	113	4/10
10-7	4.0 (10)	10/10	4.1 (10)	103	10/10	4.2 (10)	105	10/10	4.1 (10)	103	10/10	3.9 (10)	98	10/10	4.6 (4)	115	4/10
11-7	4.2 (10)	10/10	4.2 (10)	100	10/10	4.2 (10)	100	10/10	4.2 (10)	100	10/10	3.9 (10)	93	10/10	4.6 (4)	110	4/10
12-7	4.2 (10)	10/10	4.3 (10)	102	10/10	4.2 (10)	100	10/10	4.1 (10)	98	10/10	4.2 (10)	100	10/10	4.3 (4)	102	4/10
13-7	4.2 (10)	10/10	4.3 (10)	102	10/10	4.4 (10)	105	10/10	4.3 (10)	102	10/10	4.0 (10)	95	10/10	4.5 (4)	107	4/10

< >:No.of effective animals,():No.of measured animals Au.F.C.:g

TABLE 33 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN MALE MOUSE
(TWO-YEAR STUDIES)

Week-Day on Study	Control		10 ppm			30 ppm			90 ppm		
	Au.Wt. (50)	No. of Surviv. (50)	Au.Wt. (40)	% of cont. (40)	No. of Surviv. (40)	Au.Wt. (50)	% of cont. (50)	No. of Surviv. (50)	Au.Wt. (50)	% of cont. (50)	No. of Surviv. (50)
0-0	23.4 (50)	50/50	23.4 (40)	100	50/50	23.4 (50)	100	50/50	23.4 (50)	100	50/50
1-7	25.3 (50)	50/50	25.2 (40)	100	40/40	25.1 (50)	99	50/50	24.9 (50)	98	50/50
2-7	26.4 (50)	50/50	26.1 (40)	99	40/40	26.2 (50)	99	50/50	26.0 (50)	98	50/50
3-7	27.4 (50)	50/50	26.0 (40)	98	40/40	27.4 (50)	100	50/50	27.0 (50)	99	50/50
4-7	28.3 (50)	50/50	27.0 (40)	99	40/40	28.2 (50)	100	50/50	27.7 (50)	98	50/50
5-7	29.5 (50)	50/50	29.1 (40)	99	40/40	29.2 (50)	99	50/50	28.7 (50)	97	50/50
6-7	30.1 (50)	50/50	29.0 (40)	99	40/40	29.8 (50)	99	50/50	29.3 (50)	97	50/50
7-7	30.7 (50)	50/50	30.3 (40)	99	40/40	30.3 (50)	99	50/50	29.8 (50)	97	50/50
8-7	31.4 (50)	50/50	31.2 (40)	99	40/40	31.1 (50)	99	50/50	30.5 (50)	97	50/50
9-7	32.1 (50)	50/50	31.0 (40)	99	40/40	31.9 (50)	99	50/50	31.4 (50)	98	50/50
10-7	33.0 (50)	50/50	32.8 (40)	99	40/40	32.7 (50)	99	50/50	31.7 (50)	96	50/50
11-7	33.8 (50)	50/50	33.6 (40)	99	40/40	33.5 (50)	99	50/50	32.4 (50)	96	50/50
12-7	34.4 (50)	50/50	33.0 (40)	99	40/40	34.0 (50)	99	50/50	32.7 (50)	95	50/50
13-7	35.0 (50)	50/50	34.7 (40)	99	40/40	35.0 (50)	100	50/50	33.6 (50)	96	50/50
14-7	35.0 (50)	50/50	35.7 (40)	99	40/40	35.6 (50)	99	50/50	34.3 (50)	96	50/50
16-7	36.7 (50)	50/50	36.0 (40)	98	40/40	36.4 (40)	99	40/50	34.9 (50)	95	50/50
18-7	38.1 (50)	50/50	37.3 (40)	98	40/40	37.8 (40)	99	40/50	35.8 (50)	94	50/50
20-7	39.0 (50)	50/50	38.1 (40)	98	40/40	38.5 (40)	99	40/50	36.5 (50)	94	50/50
22-7	40.4 (50)	50/50	40.0 (40)	99	40/40	39.7 (40)	98	40/50	37.7 (50)	93	50/50
24-7	41.0 (50)	50/50	40.9 (40)	100	40/40	40.6 (40)	99	40/50	38.8 (50)	95	50/50
26-7	41.7 (50)	50/50	41.6 (40)	100	40/40	41.4 (40)	99	40/50	38.9 (50)	93	50/50
28-7	42.2 (50)	50/50	42.3 (40)	100	40/40	41.9 (40)	99	40/50	40.2 (50)	95	50/50
30-7	43.3 (50)	50/50	43.4 (40)	100	40/40	42.6 (40)	98	40/50	40.5 (50)	94	50/50
32-7	44.1 (50)	50/50	44.0 (40)	100	40/40	43.6 (40)	99	40/50	41.3 (50)	94	50/50
34-7	45.5 (50)	50/50	45.3 (40)	100	40/40	44.9 (40)	99	40/50	42.7 (50)	94	50/50
36-7	46.0 (50)	50/50	45.8 (40)	100	40/40	45.3 (40)	98	40/50	42.9 (50)	93	50/50
38-7	46.7 (50)	50/50	46.7 (40)	100	40/40	45.8 (40)	98	40/50	43.6 (50)	93	50/50
40-7	47.1 (50)	50/50	46.0 (40)	100	40/40	46.2 (40)	98	40/50	44.0 (50)	93	50/50
42-7	47.6 (50)	50/50	47.4 (40)	100	40/40	46.5 (40)	98	40/50	44.7 (50)	94	50/50
44-7	48.8 (50)	50/50	48.6 (40)	100	40/40	47.8 (40)	98	40/50	46.0 (50)	94	50/50
46-7	48.6 (50)	50/50	48.5 (40)	100	40/40	48.0 (40)	99	40/50	46.1 (50)	95	50/50
48-7	49.6 (40)	40/50	49.2 (40)	99	40/40	48.6 (40)	98	40/50	47.0 (50)	95	50/50
50-7	49.9 (40)	40/50	49.4 (40)	99	40/40	49.0 (40)	98	40/50	47.4 (50)	95	50/50
52-7	50.6 (40)	40/50	49.7 (40)	98	40/40	49.2 (47)	97	47/50	48.1 (50)	95	50/50
54-7	50.5 (40)	40/50	49.6 (40)	98	40/40	49.4 (47)	98	47/50	48.4 (50)	96	50/50
56-7	50.8 (40)	40/50	50.8 (47)	100	47/40	50.2 (46)	99	46/50	48.9 (50)	96	50/50
58-7	51.2 (40)	40/50	50.8 (47)	99	46/40	50.4 (46)	98	46/50	49.3 (50)	96	50/50
60-7	51.4 (40)	48/50	51.0 (46)	99	46/40	50.8 (46)	99	46/50	49.6 (50)	96	50/50
62-7	51.7 (40)	48/50	51.5 (46)	100	46/40	51.1 (45)	99	45/50	50.1 (50)	97	50/50
64-7	51.5 (40)	48/50	51.6 (46)	100	46/40	51.4 (45)	100	45/50	50.1 (49)	97	49/50
66-7	52.0 (40)	48/50	51.6 (46)	99	46/40	51.6 (45)	99	45/50	50.2 (49)	97	49/50
68-7	52.2 (40)	48/50	51.7 (46)	99	46/40	52.0 (45)	100	45/50	50.8 (49)	97	49/50
70-7	52.0 (40)	48/50	51.7 (46)	99	46/40	51.6 (45)	99	44/50	50.5 (49)	97	49/50
72-7	52.5 (40)	48/50	51.0 (46)	99	46/40	52.3 (44)	100	44/50	50.9 (49)	97	49/50
74-7	52.5 (47)	47/50	51.7 (46)	98	46/40	52.4 (44)	100	44/50	50.9 (49)	97	49/50
76-7	52.3 (47)	47/50	51.9 (46)	99	46/40	52.3 (44)	100	44/50	51.1 (49)	98	49/50
78-7	52.3 (47)	47/50	51.4 (46)	98	46/40	52.2 (43)	100	43/50	51.2 (48)	98	48/50
80-7	52.1 (47)	47/50	51.7 (45)	99	45/40	52.7 (43)	101	43/50	51.4 (48)	99	48/50
82-7	51.8 (47)	47/50	51.1 (45)	99	45/40	52.5 (43)	101	43/50	51.0 (48)	98	48/50
84-7	52.2 (47)	47/50	51.3 (43)	98	43/40	53.4 (43)	102	43/50	51.2 (47)	98	47/50
86-7	51.8 (47)	47/50	51.3 (43)	99	43/40	53.1 (43)	103	43/50	52.1 (47)	101	47/50
88-7	51.2 (46)	45/50	50.9 (42)	99	42/40	52.5 (43)	103	43/50	51.7 (46)	101	46/50
90-7	52.3 (44)	44/50	51.1 (41)	98	40/40	52.3 (42)	100	42/50	51.6 (45)	99	45/50
92-7	51.0 (44)	44/50	50.8 (30)	98	30/40	51.4 (42)	99	42/50	50.9 (44)	98	43/50
94-7	51.0 (44)	44/50	51.5 (38)	99	38/40	51.2 (42)	99	42/50	52.0 (42)	100	42/50
96-7	51.2 (44)	44/50	51.2 (38)	100	38/40	50.8 (42)	99	42/50	52.5 (40)	103	40/50
98-7	51.0 (42)	42/50	51.3 (37)	99	37/40	49.9 (42)	96	42/50	52.6 (40)	101	40/50
100-7	52.0 (40)	40/50	51.1 (36)	98	36/40	49.8 (39)	96	39/50	52.1 (40)	100	40/50
102-7	51.4 (30)	30/50	51.2 (34)	100	34/40	49.0 (36)	95	36/50	51.5 (30)	100	30/50
104-7	50.8 (30)	30/50	51.7 (32)	102	32/40	48.1 (35)	95	35/50	50.7 (37)	100	37/50

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

Au.Wt.: g

TABLE 34 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN FEMALE MOUSE
(TWO-YEAR STUDIES)

Week-Day on Study	Control			10 ppm			30 ppm			90 ppm		
	Au.Wt.	No. of Surviv. (49)		Au.Wt.	% of cont. (50)	No. of Surviv.	Au.Wt.	% of cont. (50)	No. of Surviv.	Au.Wt.	% of cont. (50)	No. of Surviv.
0-0	19.8 (49)	50/50		19.8 (50)	100	50/50	19.8 (50)	100	50/50	19.8 (50)	100	50/50
1-7	20.9 (49)	50/50		20.8 (50)	100	50/50	21.0 (50)	100	50/50	20.5 (50)	98	50/50
2-7	21.3 (49)	50/50		21.1 (50)	99	50/50	21.4 (50)	100	50/50	21.4 (50)	100	50/50
3-7	21.8 (49)	50/50		21.8 (50)	100	50/50	22.4 (50)	103	50/50	21.8 (50)	100	50/50
4-7	22.5 (49)	50/50		22.5 (50)	100	50/50	23.1 (50)	103	50/50	22.6 (50)	100	50/50
5-7	23.1 (49)	50/50		22.9 (50)	99	50/50	23.5 (50)	102	50/50	22.8 (50)	99	50/50
6-7	23.5 (49)	50/50		23.3 (50)	99	50/50	24.0 (50)	102	50/50	23.3 (50)	99	50/50
7-7	23.7 (49)	50/50		23.7 (50)	100	50/50	24.3 (50)	103	50/50	23.4 (50)	99	50/50
8-7	24.0 (49)	50/50		24.3 (50)	101	50/50	24.8 (50)	103	50/50	24.0 (50)	100	50/50
9-7	24.4 (49)	50/50		24.5 (50)	100	50/50	25.2 (50)	103	50/50	24.7 (50)	101	50/50
10-7	24.7 (49)	50/50		24.4 (50)	99	50/50	25.4 (50)	103	50/50	24.2 (50)	98	50/50
11-7	24.7 (49)	50/50		24.9 (50)	101	50/50	25.4 (50)	103	50/50	24.5 (50)	99	50/50
12-7	25.1 (49)	50/50		24.6 (50)	98	50/50	25.8 (50)	103	50/50	24.4 (50)	97	50/50
13-7	25.3 (49)	50/50		24.8 (50)	98	50/50	26.0 (50)	103	50/50	24.8 (50)	98	50/50
14-7	25.7 (49)	50/50		25.2 (50)	98	49/50	26.2 (50)	102	50/50	25.1 (50)	98	50/50
16-7	25.9 (49)	50/50		25.4 (49)	98	49/50	26.5 (50)	102	50/50	25.2 (50)	97	50/50
18-7	26.8 (49)	50/50		26.0 (49)	97	49/50	27.6 (50)	103	50/50	25.4 (50)	95	50/50
20-7	26.8 (49)	50/50		26.4 (49)	99	49/50	27.2 (50)	101	50/50	26.1 (50)	97	50/50
22-7	28.0 (49)	50/50		27.3 (49)	98	49/50	28.2 (50)	101	50/50	26.3 (50)	94	50/50
24-7	28.5 (49)	50/50		28.1 (49)	99	49/50	28.9 (50)	101	50/50	27.3 (50)	96	50/50
26-7	28.6 (49)	50/50		28.3 (49)	99	49/50	29.1 (50)	102	50/50	27.2 (50)	95	50/50
28-7	28.8 (49)	50/50		28.8 (49)	100	49/50	29.4 (50)	102	50/50	27.7 (49)	96	49/50
30-7	29.7 (49)	50/50		29.2 (49)	98	49/50	29.6 (50)	100	50/50	27.6 (49)	93	49/50
32-7	29.5 (49)	50/50		29.5 (49)	100	49/50	30.5 (50)	103	50/50	28.5 (49)	97	49/50
34-7	30.7 (49)	50/50		30.0 (49)	98	49/50	31.6 (50)	103	50/50	28.8 (49)	94	49/50
36-7	30.9 (49)	49/49		30.6 (49)	99	49/50	31.3 (50)	101	50/50	29.2 (49)	94	49/50
38-7	31.8 (49)	49/49		31.1 (49)	98	49/50	31.7 (50)	100	50/50	29.1 (49)	92	49/50
40-7	31.5 (49)	49/49		31.6 (49)	100	49/50	32.1 (50)	102	50/50	29.5 (48)	94	48/50
42-7	32.1 (49)	49/49		31.7 (49)	99	49/50	31.9 (50)	99	50/50	29.5 (48)	92	48/50
44-7	32.9 (49)	49/49		32.3 (49)	98	49/50	33.3 (50)	101	50/50	30.6 (48)	93	48/50
46-7	33.2 (49)	49/49		32.8 (49)	99	49/50	33.4 (50)	101	50/50	30.4 (48)	92	48/50
48-7	34.3 (49)	49/49		33.4 (49)	97	49/50	34.0 (50)	99	50/50	31.0 (48)	90	48/50
50-7	34.3 (49)	49/49		34.0 (49)	99	49/50	34.3 (50)	100	50/50	31.4 (48)	92	48/50
52-7	34.8 (49)	49/49		34.4 (49)	99	49/50	35.1 (50)	101	50/50	32.0 (48)	92	48/50
54-7	35.1 (49)	49/49		34.8 (49)	99	49/50	35.0 (50)	100	50/50	31.5 (48)	90	48/50
56-7	35.8 (48)	48/48		35.0 (49)	98	49/50	35.5 (50)	99	50/50	32.1 (48)	90	48/50
58-7	35.5 (48)	48/48		35.5 (49)	100	49/50	35.6 (50)	100	50/50	33.2 (48)	94	47/50
60-7	36.0 (48)	48/48		35.6 (47)	99	47/50	35.9 (50)	100	50/50	32.5 (47)	90	47/50
62-7	36.3 (48)	48/48		35.9 (47)	99	47/50	36.1 (50)	99	50/50	33.1 (47)	91	47/50
64-7	37.3 (48)	48/48		36.4 (47)	98	47/50	37.0 (49)	99	49/50	33.2 (46)	89	46/50
66-7	36.9 (48)	48/48		36.7 (46)	99	46/50	36.8 (48)	100	48/50	33.1 (46)	90	46/50
68-7	37.3 (48)	48/48		36.8 (46)	99	46/50	36.8 (48)	99	48/50	33.7 (46)	90	46/50
70-7	37.6 (48)	48/48		36.5 (45)	97	45/50	37.3 (48)	99	47/50	33.4 (46)	89	46/50
72-7	37.6 (48)	48/48		36.4 (45)	97	45/50	37.4 (46)	99	46/50	34.1 (45)	91	45/50
74-7	37.2 (47)	47/47		37.0 (44)	99	44/50	37.5 (46)	101	46/50	34.5 (44)	93	44/50
76-7	36.6 (47)	47/47		36.6 (44)	100	44/50	36.7 (46)	100	46/50	34.3 (43)	94	43/50
78-7	36.5 (46)	46/46		36.9 (44)	101	44/50	37.6 (45)	103	45/50	34.1 (41)	93	41/50
80-7	37.1 (46)	46/46		36.6 (43)	99	43/50	38.3 (43)	103	43/50	34.2 (39)	92	39/50
82-7	36.7 (46)	46/46		35.8 (43)	98	43/50	37.6 (41)	102	40/50	33.5 (39)	91	39/50
84-7	37.5 (45)	45/45		36.7 (43)	98	43/50	37.6 (40)	100	39/50	34.1 (39)	91	39/50
86-7	36.6 (44)	44/44		36.3 (41)	99	41/50	38.3 (39)	105	39/50	34.4 (38)	94	38/50
88-7	36.6 (43)	42/42		36.3 (39)	99	38/50	37.9 (38)	104	38/50	34.1 (36)	93	36/50
90-7	36.7 (42)	42/42		35.9 (38)	98	38/50	37.4 (38)	102	37/50	34.1 (35)	93	35/50
92-7	36.5 (41)	41/41		34.8 (38)	95	38/50	37.3 (36)	102	36/50	33.4 (35)	92	35/50
94-7	37.8 (40)	40/40		35.7 (35)	94	35/50	38.0 (35)	101	35/50	34.5 (34)	91	34/50
96-7	38.0 (40)	40/40		36.3 (34)	96	34/50	38.1 (33)	100	31/50	34.2 (34)	90	34/50
98-7	37.7 (38)	38/40		36.5 (33)	97	33/50	38.2 (26)	101	26/50	34.8 (33)	92	33/50
100-7	36.9 (38)	38/40		36.7 (31)	99	31/50	37.8 (25)	102	25/50	34.0 (31)	92	30/50
102-7	37.5 (35)	35/40		35.9 (30)	96	30/50	37.7 (22)	101	22/50	34.1 (29)	91	29/50
104-7	36.6 (34)	34/49		35.8 (28)	98	28/50	37.4 (20)	102	19/50	34.1 (26)	93	26/50

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

Au.Wt.: g

TABLE 35 FOOD CONSUMPTION IN MALE MOUSE (TWO-YEAR STUDIES)

Week-Day on Study	Control			10 ppm			30 ppm			90 ppm		
	Au.FC.	No. of Surviv. <50>		Au.FC.	% of cont. <49>	No. of Surviv.	Au.FC.	% of cont. <50>	No. of Surviv.	Au.FC.	% of cont. <50>	No. of Surviv.
1-7	4.3 (50)	50/50		4.2 (49)	98	49/49	4.2 (50)	98	50/50	4.3 (50)	100	50/50
2-7	4.2 (50)	50/50		4.2 (49)	100	49/49	4.2 (50)	100	50/50	4.2 (50)	100	50/50
3-7	4.2 (50)	50/50		4.2 (49)	100	49/49	4.2 (50)	100	50/50	4.3 (50)	102	50/50
4-7	4.2 (50)	50/50		4.4 (49)	105	49/49	4.4 (50)	105	50/50	4.4 (50)	105	50/50
5-7	4.2 (50)	50/50		4.3 (48)	102	49/49	4.3 (50)	102	50/50	4.3 (50)	102	50/50
6-7	4.2 (50)	50/50		4.3 (49)	102	49/49	4.3 (50)	102	50/50	4.4 (50)	105	50/50
7-7	3.9 (50)	50/50		4.1 (49)	105	49/49	4.1 (50)	105	50/50	4.1 (50)	105	50/50
8-7	4.1 (50)	50/50		4.3 (49)	105	49/49	4.3 (50)	105	50/50	4.3 (50)	105	50/50
9-7	4.1 (50)	50/50		4.2 (49)	102	49/49	4.2 (50)	102	50/50	4.2 (50)	102	50/50
10-7	4.2 (50)	50/50		4.3 (49)	102	49/49	4.3 (50)	102	50/50	4.2 (50)	100	50/50
11-7	4.2 (50)	50/50		4.3 (49)	102	49/49	4.3 (50)	102	50/50	4.3 (50)	102	50/50
12-7	4.3 (50)	50/50		4.3 (49)	100	49/49	4.3 (50)	100	50/50	4.3 (50)	100	50/50
13-7	4.3 (50)	50/50		4.3 (49)	100	49/49	4.4 (50)	102	50/50	4.4 (50)	102	50/50
14-7	4.3 (49)	50/50		4.4 (49)	102	49/49	4.4 (50)	102	50/50	4.4 (50)	102	50/50
18-7	4.6 (50)	50/50		4.6 (49)	100	49/49	4.5 (49)	98	49/50	4.4 (50)	96	50/50
22-7	4.5 (50)	50/50		4.6 (48)	102	48/49	4.6 (49)	102	49/50	4.5 (50)	100	50/50
26-7	4.4 (49)	50/50		4.4 (48)	100	48/49	4.4 (49)	100	49/50	4.4 (50)	100	50/50
30-7	4.5 (50)	50/50		4.4 (48)	98	48/49	4.5 (49)	100	49/50	4.4 (50)	98	50/50
34-7	4.7 (50)	50/50		4.7 (48)	100	48/49	4.7 (49)	100	49/50	4.7 (50)	100	50/50
38-7	4.7 (50)	50/50		4.8 (48)	102	48/49	4.7 (49)	100	49/50	4.7 (50)	100	50/50
42-7	4.7 (50)	50/50		4.8 (48)	102	48/49	4.7 (49)	100	49/50	4.6 (50)	98	50/50
46-7	4.8 (50)	50/50		4.8 (48)	100	48/49	4.8 (49)	100	49/50	4.7 (50)	98	50/50
50-7	4.8 (49)	49/50		4.8 (48)	100	48/49	4.8 (48)	100	48/50	4.7 (50)	98	50/50
52-7	4.9 (49)	49/50		4.9 (48)	100	48/49	4.9 (47)	100	47/50	4.9 (50)	100	50/50
54-7	4.9 (49)	49/50		4.9 (48)	100	48/49	4.9 (47)	100	47/50	4.9 (50)	100	50/50
58-7	4.9 (49)	49/50		5.0 (47)	102	46/49	5.0 (46)	102	46/50	4.9 (50)	100	50/50
62-7	4.9 (48)	48/50		5.0 (46)	102	46/49	5.0 (45)	102	45/50	4.9 (50)	100	50/50
66-7	5.0 (48)	48/50		5.0 (46)	100	46/49	5.1 (45)	102	45/50	4.9 (49)	98	49/50
70-7	5.0 (48)	48/50		5.1 (46)	102	46/49	5.1 (45)	102	44/50	5.0 (48)	100	49/50
74-7	5.0 (47)	47/50		5.0 (46)	100	46/49	5.1 (44)	102	44/50	5.0 (49)	100	49/50
78-7	5.0 (47)	47/50		4.9 (46)	98	46/49	5.0 (43)	100	43/50	4.9 (48)	98	48/50
82-7	4.9 (47)	47/50		4.9 (45)	100	45/49	4.9 (43)	100	43/50	4.9 (48)	100	48/50
86-7	5.1 (47)	47/50		5.3 (43)	104	43/49	5.2 (43)	102	43/50	5.3 (47)	104	47/50
90-7	5.2 (44)	44/50		5.1 (41)	98	40/49	5.1 (42)	98	42/50	5.2 (45)	100	45/50
94-7	5.2 (44)	44/50		5.2 (38)	100	38/49	5.1 (42)	98	42/50	5.3 (42)	102	42/50
98-7	5.2 (41)	42/50		5.3 (37)	102	37/49	5.1 (41)	98	42/50	5.3 (40)	102	40/50
102-7	4.9 (39)	39/50		5.1 (34)	104	34/49	4.7 (36)	96	36/50	4.9 (39)	100	39/50
104-7	4.8 (39)	39/50		5.1 (32)	106	32/49	4.8 (35)	100	35/50	4.9 (37)	102	37/50

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

Au.FC.: g

TABLE 36 FOOD CONSUMPTION IN FEMALE MOUSE (TWO-YEAR STUDIES)

Week-Day on Study	Control		10 ppm			30 ppm			90 ppm		
	Au.F.C.	No.of Surviv. <49>	Au.F.C.	% of cont. <50>	No.of Surviv.	Au.F.C.	% of cont. <50>	No.of Surviv.	Au.F.C.	% of cont. <50>	No.of Surviv.
1-7	3.7 (49)	50/50	3.6 (50)	97	50/50	3.7 (50)	100	50/50	3.7 (50)	100	50/50
2-7	3.6 (49)	50/50	3.6 (50)	100	50/50	3.8 (50)	106	50/50	3.8 (50)	106	50/50
3-7	3.8 (49)	50/50	3.8 (50)	100	50/50	3.9 (50)	103	50/50	3.8 (50)	100	50/50
4-7	4.0 (49)	50/50	4.0 (50)	100	50/50	4.1 (50)	103	50/50	4.1 (50)	103	50/50
5-7	4.1 (49)	50/50	4.0 (50)	98	50/50	4.1 (50)	100	50/50	4.0 (50)	98	50/50
6-7	4.1 (49)	50/50	4.2 (50)	102	50/50	4.2 (50)	102	50/50	4.2 (50)	102	50/50
7-7	4.1 (49)	50/50	4.0 (50)	98	50/50	4.0 (50)	98	50/50	4.0 (50)	98	50/50
8-7	4.2 (49)	50/50	4.2 (50)	100	50/50	4.3 (50)	102	50/50	4.3 (50)	102	50/50
9-7	4.2 (49)	50/50	4.2 (50)	100	50/50	4.1 (50)	98	50/50	4.2 (50)	100	50/50
10-7	4.2 (49)	50/50	4.2 (50)	100	50/50	4.2 (50)	100	50/50	4.2 (47)	100	50/50
11-7	4.2 (49)	50/50	4.3 (50)	102	50/50	4.1 (50)	98	50/50	4.2 (50)	100	50/50
12-7	4.3 (49)	50/50	4.3 (50)	100	50/50	4.2 (50)	98	50/50	4.3 (50)	100	50/50
13-7	4.3 (49)	50/50	4.3 (50)	100	50/50	4.2 (50)	98	50/50	4.3 (50)	100	50/50
14-7	4.4 (49)	50/50	4.3 (50)	98	49/50	4.3 (50)	98	50/50	4.3 (50)	98	50/50
18-7	4.6 (49)	50/50	4.5 (49)	98	49/50	4.4 (50)	96	50/50	4.2 (50)	91	50/50
22-7	4.4 (49)	50/50	4.4 (49)	100	49/50	4.5 (50)	102	50/50	4.3 (50)	98	50/50
26-7	4.3 (49)	50/50	4.2 (49)	98	49/50	4.2 (50)	98	50/50	4.1 (50)	95	50/50
30-7	4.3 (49)	50/50	4.2 (49)	98	49/50	4.3 (50)	100	50/50	4.2 (49)	98	49/50
34-7	4.6 (49)	50/50	4.4 (49)	96	49/50	4.6 (50)	100	50/50	4.4 (49)	96	49/50
38-7	4.7 (49)	49/49	4.5 (49)	96	49/50	4.5 (50)	96	50/50	4.5 (49)	96	49/50
42-7	4.7 (49)	49/49	4.5 (49)	96	49/50	4.6 (50)	98	50/50	4.4 (48)	94	48/50
46-7	4.7 (49)	49/49	4.5 (49)	96	49/50	4.7 (50)	100	50/50	4.5 (48)	96	48/50
50-7	4.4 (49)	49/49	4.6 (49)	105	49/50	4.6 (50)	105	50/50	4.4 (48)	100	48/50
52-7	4.7 (49)	49/49	4.7 (49)	100	49/50	4.8 (50)	102	50/50	4.6 (48)	98	48/50
54-7	4.7 (48)	49/49	4.8 (49)	102	49/50	4.7 (50)	100	50/50	4.6 (48)	98	48/50
58-7	4.6 (48)	48/49	4.8 (49)	104	49/50	4.7 (50)	102	50/50	4.8 (48)	104	47/50
62-7	4.7 (48)	48/49	5.0 (47)	106	47/50	4.7 (50)	100	50/50	4.6 (47)	98	47/50
66-7	4.7 (48)	48/49	5.0 (46)	106	46/50	4.9 (48)	104	48/50	4.7 (46)	100	46/50
70-7	4.8 (48)	48/49	4.7 (45)	98	45/50	4.9 (48)	102	47/50	4.7 (46)	98	46/50
74-7	4.9 (47)	47/49	4.7 (44)	96	44/50	4.8 (46)	98	46/50	4.8 (44)	98	44/50
78-7	4.6 (46)	46/49	4.7 (44)	102	44/50	4.8 (45)	104	45/50	4.5 (41)	98	41/50
82-7	4.5 (46)	46/49	4.4 (43)	98	43/50	4.5 (41)	100	40/50	4.5 (39)	100	39/50
86-7	4.6 (44)	44/49	4.8 (41)	104	41/50	5.0 (38)	109	39/50	4.8 (38)	104	38/50
90-7	4.8 (42)	42/49	4.7 (38)	98	38/50	4.7 (38)	98	37/50	4.7 (35)	98	35/50
94-7	5.1 (40)	40/49	4.8 (35)	94	35/50	4.9 (35)	96	35/50	4.8 (34)	94	34/50
98-7	5.1 (38)	38/49	5.1 (33)	100	33/50	5.2 (26)	102	26/50	4.8 (33)	94	33/50
102-7	4.9 (35)	35/49	4.7 (30)	96	30/50	4.9 (22)	100	22/50	4.7 (29)	96	29/50
104-7	4.9 (34)	34/49	4.7 (28)	96	28/50	4.8 (20)	98	19/50	4.8 (26)	98	26/50

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

Au.F.C.: g

TABLE 37

CLINICAL OBSERVATION (EXTERNAL MASS) : MOUSE - TWO-YEAR STUDIES -

Location of external mass	No. of survival animals with external mass (No. of dead and moribund animals with external mass)							
	Male				Female			
	Control	10ppm	30ppm	90ppm	Control	10ppm	30ppm	90ppm
No. of observed animals	<u>50</u>	<u>49</u>	<u>50</u>	<u>50</u>	<u>49</u>	<u>50</u>	<u>50</u>	<u>50</u>
No. of survival animals (No. of dead and moribund animals)	39(11)	32(17)	35(15)	37(13)	34(15)	28(22)	19(31)	26(24)
M. EYE	1(0)	0(0)	0(0)	1(0)	0(0)	0(1)	0(0)	1(0)
M. PERI MOUTE	0(0)	0(1)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
M. EAR	0(0)	0(0)	1(0)	0(0)	0(0)	0(0)	0(0)	0(0)
M. NECK	0(0)	0(0)	0(0)	0(0)	0(0)	0(2)	0(1)	0(0)
M. BREAST	0(0)	0(1)	0(0)	0(0)	0(0)	0(0)	0(0)	1(0)
M. ABDOMEN	1(0)	0(0)	0(0)	0(0)	0(2)	0(0)	0(0)	1(1)
M. ANTERIR DORSUM	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(2)	3(0)
M. INTERSCAPULUM	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(1)	0(0)
M. POSTERIR DORSUM	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(1)	2(1)
M. HINDLIMB	0(0)	0(0)	0(0)	0(0)	0(0)	1(0)	0(0)	0(0)
M. GENITALIA	0(0)	0(0)	0(0)	0(1)	0(0)	1(0)	0(1)	0(0)
M. TAIL	1(0)	0(0)	0(0)	1(0)	1(0)	0(0)	0(0)	0(0)
Total								
<u>All animals</u>	<u>3</u>	<u>2</u>	<u>1</u>	<u>3</u>	<u>3</u>	<u>5</u>	<u>4</u>	<u>9</u>
Survival animals (Dead and moribund animals)	3(0)	0(2)	1(0)	2(1)	1(2)	2(3)	0(4)	7(2)

TABLE 38

NEOPLASTIC LESIONS (LUNG/BRONCHUS) INCIDENCE AND STATISTICAL ANALYSIS : MOUSE:FEMALE

Group Name	Control	10 ppm	30 ppm	90 ppm
SITE : lung/bronchus TUMOUR : bronchiolar-alveolar adenoma				
Overall Rates(a)	4/49 (8.2)	1/50 (2.0)	3/50 (6.0)	8/50 (16.0)
Adjusted Rates(b)	11.76	3.57	10.00	18.18
Terminal Rates(c)	4/34 (11.8)	1/28 (3.6)	2/19 (10.5)	4/26 (15.4)
Standard Rates(d)	P=-----			
Prevalence Rates(d)	P=0.0132*			
Combind analysis(d)	P=-----			
Cochran-Armitage Test(e)	P=0.0264*			
Fisher Exact Test(e)		P=0.1936	P=0.5000	P=0.2271
SITE : lung/bronchus TUMOUR : bronchioar-alveolar carcinoma				
Overall Rates(a)	1/49 (2.0)	0/50 (0.0)	1/50 (2.0)	3/50 (6.0)
Adjusted Rates(b)	2.94	0.0	5.00	11.11
Terminal Rates(c)	1/34 (2.9)	0/28 (0.0)	1/19 (5.3)	2/26 (7.7)
Standard Rates(d)	P=-----			
Prevalence Rates(d)	P=0.0369*			
Combind analysis(d)	P=-----			
Cochran-Armitage Test(e)	P=0.0763			
Fisher Exact Test(e)		P=0.5000	P=0.2426	P=0.3312
SITE : lung/bronchus TUMOUR : bronchiolar-alveolar adenoma, bronchioar-alveolar carcinoma				
Overall Rates(a)	5/49 (10.2)	1/50 (2.0)	4/50 (8.0)	11/50 (22.0)
Adjusted Rates(b)	14.71	3.57	15.00	27.27
Terminal Rates(c)	5/34 (14.7)	1/28 (3.6)	3/19 (15.8)	6/26 (23.1)
Standard Rates(d)	P=-----			
Prevalence Rates(d)	P=0.0020**			
Combind analysis(d)	P=-----			
Cochran-Armitage Test(e)	P=0.0041**			
Fisher Exact Test(e)		P=0.1163	P=0.5000	P=0.1383

TABLE 39

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

Group Name	Control	10 ppm	30 ppm	90 ppm
SITE : Liver TUMOUR : hemangiosarcoma				
Overall Rates(a)	0/50 (0.0)	4/49 (8.2)	6/50 (12.0)	5/50 (10.0)
Adjusted Rates(b)	0.0	6.25	17.14	5.41
Terminal Rates(c)	0/39 (10.3)	2/32 (6.3)	6/35 (17.1)	2/37 (5.4)
Standard Rates(d)	P=0.0713			
Prevalence Rates(d)	P=0.3106			
Combind analysis(d)	P=0.1009			
Cochran-Armitage Test(e)	P=0.1649			
Fisher Exact Test(e)		P=0.0662	P=0.0190*	P=0.0360*

TABLE 40

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

Group Name	Control	10 ppm	30 ppm	90 ppm
SITE : liver TUMOUR : hepatocellular adenoma				
Overall Rates(a)	1/49 (2.0)	1/50 (2.0)	1/50 (2.0)	6/50 (12.0)
Adjusted Rates(b)	2.94	3.13	4.00	19.23
Terminal Rates(c)	1/34 (2.9)	0/28 (0.0)	0/19 (0.0)	5/26 (19.2)
Standard Rates(d)	P=-----			
Prevalence Rates(d)	P=0.0036**			
Combind analysis(d)	P=-----			
Cochran-Armitage Test(e)	P=0.0052**			
Fisher Exact Test(e)		P=0.2426	P=0.2426	P=0.0761

SITE : liver TUMOUR : hepatocellular carcinoma				
Overall Rates(a)	1/49 (2.0)	0/50 (0.0)	1/50 (2.0)	0/50 (0.0)
Adjusted Rates(b)	0.0	0.0	4.17	0.0
Terminal Rates(c)	0/34 (0.0)	0/28 (0.0)	0/19 (0.0)	0/26 (0.0)
Standard Rates(d)	P=1.0000 ?			
Prevalence Rates(d)	P=0.3505			
Combind analysis(d)	P=0.6682			
Cochran-Armitage Test(e)	P=0.4722			
Fisher Exact Test(e)		P=0.5000	P=0.2426	P=0.5000

SITE : liver TUMOUR : hepatocellular adenoma, hepatocellular carcinoma				
Overall Rates(a)	2/49 (4.1)	1/50 (2.0)	2/50 (4.0)	6/50 (12.0)
Adjusted Rates(b)	2.94	3.13	8.00	19.23
Terminal Rates(c)	1/34 (2.9)	0/28 (0.0)	0/19 (0.0)	5/26 (19.2)
Standard Rates(d)	P=1.0000 ?			
Prevalence Rates(d)	P=0.0057**			
Combind analysis(d)	P=0.0155*			
Cochran-Armitage Test(e)	P=0.0259*			
Fisher Exact Test(e)		P=0.5000	P=0.3015	P=0.1677

TABLE 41

NEOPLASTIC LESIONS (UTERUS) INCIDENCE AND STATISTICAL ANALYSIS : MOUSE:FEMALE

Group Name	Control	10 ppm	30 ppm	90 ppm
SITE : uterus TUMOUR : endometrial stromal polyp				
Overall Rates(a)	2/49 (4.1)	0/50 (0.0)	1/50 (2.0)	6/50 (12.0)
Adjusted Rates(b)	5.88	0.0	5.00	23.08
Terminal Rates(c)	2/34 (5.9)	0/28 (0.0)	0/19 (0.0)	6/26 (23.1)
Standard Rates(d)	P=-----			
Prevalence Rates(d)	P=0.0028**			
Combind analysis(d)	P=-----			
Cochran-Armitage Test(e)	P=0.0070**			
Fisher Exact Test(e)		P=0.2525	P=0.5000	P=0.1677

TABLE 42

NEOPLASTIC LESIONS (MAMMARY GLAND) INCIDENCE AND STATISTICAL ANALYSIS : MOUSE:FEMALE

Group Name	Control	10 ppm	30 ppm	90 ppm
SITE : mammary gland TUMOUR : adenocarcinoma				
Overall Rates(a)	1/49 (2.0)	2/50 (4.0)	1/50 (2.0)	6/50 (12.0)
Adjusted Rates(b)	2.94	7.14	4.76	18.52
Terminal Rates(c)	1/34 (2.9)	2/28 (7.1)	0/19 (0.0)	4/26 (15.4)
Standard Rates(d)	P=0.1359			
Prevalence Rates(d)	P=0.0168*			
Combind analysis(d)	P=0.0058**			
Cochran-Armitage Test(e)	P=0.0144*			
Fisher Exact Test(e)		P=0.4851	P=0.2426	P=0.0761

TABLE 43 COUSE OF DEATH :MOUSE

Group	Male				Female			
	Control	10ppm	30ppm	90ppm	Control	10ppm	30ppm	90ppm
Number of dead/moriboud animal	11	17	15	13	15	22	31	24
Digestive sy lesion			1					1
Reproductive sy lesion							1	
Urinary sy lesion		1	1					
CNS disorders				1				
Urinary retention	2	5	2					1
arterits		1						
Tumor death : leukemia	2	3	2	2	6	12	19	9
: subcutis							1	
: lung		1	2	2				
: liver	7	6	5	5	2		1	1
: pituitary gland					1	3	1	1
: ovary								1
: uterus					6	5	7	7
: mammary gland								1
No microscopical confirmation			2	3		2	1	2