１，１，１-トリ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:ラット/0189；マウス/0190

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TABLE1 EXPERIMENTAL DESIGN AND MATERIALS AND METHODS IN THE INHALATION STUDIES OF 1,1,1-TRICHLOROETHANE

Two-Year Studies

<Method of Adoministration>
Inhalation

<Number of Group>
Male 4,Female 4

<Size of Groups>
50 males and 50 females of each group

<Animals>
Strain and Species
F344/DuCrj(Fischer)rat
Crj:BDF 1 mouse
Animal Source
Charles River Japan,Inc.
Duration Held Before Study
2 wk
Age When Placed on Study
6 wk
Age When Killed
110 ～ 111 wk

<Exposure Concentration>
Rat----0,200,800 or 3200ppm
Mouse--0,200,800 or 3200ppm

<Duration of Exposure>
6 h/d,5 d/wk,for 104 wk

<Animal Maintenance>
Feed
CRF-1(Oriental Yeast Co.,Ltd.)
Sterilized by γ-ray
Available *ad libitum*
Water
Sterilized by ultraviolet rays
Automatic Watering system.
Available *ad libitum*
Animal per Cage
Single(stainless steel wire)
Animal Chambers Room Environment
Barrier system
Temperature : 23 ± 2℃
Humidity : 55 ± 10%
Fluorescent light 12 h/d
15-17 room air changes/h
Inhalation Chamber Environment
Temperature : 23 ± 2℃
Humidity : 55 ± 10%
Fluorescent light 12 h/d
12 room air changes/h
(6 room air changes/h during exposure)

<Type and Frequency of Observation>
Clinical Sign
Observed 1 per d
Body Weight
Weighed 1 per wk for 14 wk
Weighed 1 per 2 wks thereafter
Food Consumption
Weighed 1 per wk for 14 wk
Weighed 1 per 4 wks thereafter

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

Week on Study	Control Av.Wt.	Control No.of Surviv. <50>	200ppm Av.Wt.	200ppm % of cont. <50>	200ppm No.of Surviv.	800ppm Av.Wt.	800ppm % of cont. <50>	800ppm No.of Surviv.	3200ppm Av.Wt.	3200ppm % of cont. <50>	3200ppm No.of Surviv.
0	133 (50)	50/50	134 (50)	101	50/50	133 (50)	100	50/50	133 (50)	100	50/50
1	168 (50)	50/50	167 (50)	99	50/50	166 (50)	99	50/50	160 (50)	95	50/50
2	201 (50)	50/50	198 (50)	99	50/50	199 (50)	99	50/50	184 (50)	92	50/50
3	227 (50)	50/50	224 (50)	99	50/50	225 (50)	99	50/50	205 (50)	90	50/50
4	248 (50)	50/50	245 (50)	99	50/50	247 (50)	100	50/50	223 (50)	90	50/50
5	265 (50)	50/50	263 (50)	99	50/50	265 (50)	100	50/50	241 (50)	91	50/50
6	278 (50)	50/50	276 (50)	99	50/50	278 (50)	100	50/50	256 (50)	92	50/50
7	294 (50)	50/50	293 (50)	100	50/50	294 (50)	100	50/50	270 (50)	92	50/50
8	308 (50)	50/50	308 (50)	100	50/50	307 (50)	100	50/50	282 (50)	92	50/50
9	320 (50)	50/50	318 (50)	99	50/50	317 (50)	99	50/50	291 (50)	91	50/50
10	329 (50)	50/50	327 (50)	99	50/50	326 (50)	99	50/50	299 (50)	91	50/50
11	338 (50)	50/50	337 (50)	100	50/50	335 (50)	99	50/50	306 (50)	91	50/50
12	347 (50)	50/50	345 (50)	99	50/50	344 (50)	99	50/50	314 (50)	90	50/50
13	353 (50)	50/50	350 (50)	99	50/50	351 (50)	99	50/50	321 (50)	91	50/50
14	356 (50)	50/50	354 (50)	99	50/50	355 (50)	100	50/50	325 (50)	91	50/50
18	369 (50)	50/50	368 (50)	100	50/50	373 (50)	101	50/50	346 (50)	94	50/50
22	391 (50)	50/50	389 (50)	99	50/50	396 (50)	101	50/50	372 (50)	95	50/50
26	413 (50)	50/50	413 (50)	100	50/50	411 (50)	100	50/50	389 (50)	94	50/50
30	430 (50)	50/50	432 (50)	100	50/50	427 (50)	99	50/50	409 (50)	95	50/50
34	444 (50)	50/50	445 (50)	100	50/50	441 (50)	99	50/50	424 (50)	95	50/50
38	454 (50)	50/50	456 (50)	100	50/50	450 (50)	99	50/50	435 (50)	96	50/50
42	464 (50)	50/50	467 (50)	101	50/50	457 (50)	98	50/50	446 (50)	96	50/50
46	469 (50)	50/50	469 (50)	100	50/50	457 (50)	97	50/50	448 (50)	96	50/50
50	481 (50)	50/50	482 (50)	100	50/50	469 (50)	98	50/50	454 (50)	94	50/50
54	484 (50)	50/50	485 (50)	100	50/50	470 (50)	97	50/50	451 (50)	93	50/50
58	480 (50)	50/50	482 (50)	100	50/50	471 (50)	98	50/50	451 (50)	94	50/50
62	480 (49)	49/50	480 (50)	100	50/50	470 (50)	98	50/50	452 (50)	94	50/50
66	484 (49)	49/50	485 (50)	100	50/50	473 (50)	98	50/50	457 (49)	94	49/50
70	490 (49)	49/50	492 (50)	100	50/50	479 (50)	98	50/50	460 (49)	94	49/50
74	490 (49)	49/50	494 (49)	101	49/50	480 (50)	98	50/50	463 (47)	94	47/50
78	489 (49)	49/50	494 (49)	101	49/50	480 (50)	98	50/50	462 (47)	94	47/50
82	488 (47)	47/50	491 (49)	101	49/50	482 (48)	99	48/50	463 (47)	95	47/50
86	483 (45)	45/50	486 (48)	101	48/50	478 (47)	99	47/50	463 (47)	96	47/50
90	477 (44)	44/50	478 (48)	100	48/50	477 (46)	100	46/50	460 (44)	96	44/50
94	462 (42)	42/50	477 (46)	103	46/50	468 (46)	101	46/50	462 (42)	100	42/50
98	453 (37)	37/50	459 (45)	101	45/50	453 (44)	100	44/50	434 (34)	96	34/50
102	441 (35)	34/50	439 (40)	100	40/50	441 (39)	100	37/50	418 (29)	95	29/50
104	429 (34)	34/50	438 (36)	102	36/50	442 (36)	103	36/50	410 (28)	96	28/50

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

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

Week on Study	Control Av.Wt.	Control No.of Surviv. <50>	200ppm Av.Wt.	200ppm % of cont. <50>	200ppm No.of Surviv.	800ppm Av.Wt.	800ppm % of cont. <50>	800ppm No.of Surviv.	3200ppm Av.Wt.	3200ppm % of cont. <50>	3200ppm No.of Surviv.
0	103 (50)	50/50	103 (50)	100	50/50	103 (50)	100	50/50	102 (50)	99	50/50
1	121 (50)	50/50	120 (50)	99	50/50	120 (50)	99	50/50	116 (50)	96	50/50
2	137 (50)	50/50	134 (50)	98	50/50	135 (50)	99	50/50	128 (50)	93	50/50
3	148 (50)	50/50	143 (50)	97	50/50	145 (50)	98	50/50	138 (50)	93	50/50
4	158 (50)	50/50	151 (50)	96	50/50	156 (50)	99	50/50	146 (50)	92	50/50
5	167 (50)	50/50	160 (50)	96	50/50	164 (50)	98	50/50	154 (50)	92	50/50
6	174 (50)	50/50	166 (50)	95	50/50	171 (50)	98	50/50	160 (50)	92	50/50
7	182 (50)	50/50	175 (50)	96	50/50	178 (50)	98	50/50	166 (50)	91	50/50
8	187 (50)	50/50	180 (50)	96	50/50	183 (50)	98	50/50	172 (50)	92	50/50
9	193 (50)	50/50	186 (50)	96	50/50	188 (50)	97	50/50	175 (50)	91	50/50
10	198 (50)	50/50	191 (50)	96	50/50	193 (50)	97	50/50	179 (50)	90	50/50
11	202 (50)	50/50	195 (50)	97	50/50	197 (50)	98	50/50	182 (50)	90	50/50
12	206 (50)	50/50	199 (50)	97	50/50	201 (50)	98	50/50	187 (50)	91	50/50
13	210 (50)	50/50	204 (50)	97	50/50	206 (50)	98	50/50	191 (50)	91	50/50
14	212 (50)	50/50	207 (50)	98	50/50	210 (50)	99	50/50	194 (50)	92	50/50
18	224 (50)	50/50	220 (50)	98	50/50	221 (50)	99	50/50	207 (50)	92	50/50
22	232 (50)	50/50	230 (50)	99	50/50	229 (50)	99	50/50	214 (50)	92	50/50
26	238 (50)	50/50	235 (49)	99	49/50	232 (50)	97	50/50	222 (50)	93	50/50
30	247 (50)	50/50	244 (49)	99	49/50	240 (50)	97	50/50	230 (50)	93	50/50
34	252 (50)	50/50	252 (49)	100	49/50	246 (50)	98	50/50	235 (50)	93	50/50
38	260 (50)	50/50	257 (49)	99	49/50	256 (49)	98	49/50	242 (50)	93	50/50
42	263 (50)	50/50	263 (49)	100	49/50	260 (49)	99	49/50	245 (50)	93	50/50
46	267 (50)	50/50	269 (49)	101	49/50	267 (49)	100	49/50	249 (50)	93	50/50
50	272 (50)	50/50	274 (48)	101	48/50	269 (49)	99	49/50	251 (50)	92	50/50
54	276 (50)	50/50	275 (48)	100	48/50	273 (49)	99	49/50	248 (50)	90	50/50
58	281 (50)	50/50	283 (48)	101	48/50	279 (49)	99	49/50	257 (49)	91	49/50
62	288 (50)	50/50	288 (48)	100	48/50	283 (49)	98	49/50	261 (49)	91	49/50
66	294 (50)	50/50	292 (48)	99	48/50	286 (49)	97	49/50	267 (49)	91	49/50
70	303 (50)	50/50	300 (48)	99	48/50	296 (48)	98	48/50	275 (49)	91	49/50
74	307 (50)	50/50	308 (48)	100	48/50	304 (48)	99	48/50	281 (49)	92	49/50
78	317 (49)	49/50	314 (46)	99	46/50	313 (48)	99	48/50	288 (49)	91	49/50
82	321 (49)	49/50	316 (46)	98	46/50	319 (48)	99	48/50	295 (49)	92	49/50
86	324 (49)	49/50	320 (46)	99	46/50	323 (48)	100	48/50	297 (49)	92	49/50
90	323 (47)	46/50	322 (45)	100	45/50	327 (46)	101	46/50	297 (49)	92	49/50
94	326 (43)	43/50	327 (42)	100	42/50	327 (45)	100	45/50	301 (48)	92	48/50
98	329 (41)	41/50	331 (41)	101	41/50	326 (45)	99	45/50	299 (47)	91	47/50
102	332 (39)	39/50	325 (39)	98	39/50	326 (42)	98	42/50	302 (43)	91	41/50
104	328 (38)	38/50	324 (38)	99	38/50	325 (42)	99	42/50	298 (39)	91	38/50

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

(Study No.0189,0190)

TABLE 4 INCIDENCE OF EXTERNAL AND INTERNAL MASS IN CLINICAL OBSERVATION :RAT :MALE

	week	0～13	14～26	27～39	40～52	53～65	66～78	79～91	92～104	0～104	
External mass	Control	0/50	0/50	0/50	0/50	3/50	6/49	9/49	10/44	14/50	(6/16)
	200 ppm	0/50	0/50	0/50	1/50	2/50	4/50	8/49	11/48	13/50	(6/14)
	800 ppm	0/50	0/50	0/50	1/50	1/50	3/50	7/50	14/46	18/50	(4/14)
	3200 ppm	0/50	0/50	0/50	0/50	0/50	2/49	7/47	10/43	12/50	(6/22)
Internal mass	Control	0/50	0/50	0/50	0/50	0/50	0/49	1/49	4/44	4/50	(3/16)
	200 ppm	0/50	0/50	0/50	0/50	0/50	1/50	1/49	4/48	5/50	(3/14)
	800 ppm	0/50	0/50	0/50	0/50	0/50	0/50	2/50	3/46	5/50	(5/14)
	3200 ppm	0/50	0/50	0/50	0/50	0/50	0/49	0/47	3/43	3/50	(3/22)

No. of animals with mass/No. of survival animals at first week on each period.
(No. of dead and moribund animals with mass/No. of dead and moribund animals.)

TABLE 5 INCIDENCE OF EXTERNAL AND INTERNAL MASS IN CLINICAL OBSERVATION :RAT :FEMALE

	week	0～13	14～26	27～39	40～52	53～65	66～78	79～91	92～104	0～104	
External mass	Control	0/50	0/50	0/50	0/50	0/50	4/50	10/49	8/44	12/50	(6/12)
	200 ppm	0/50	0/50	0/49	0/49	1/48	3/48	6/46	10/44	10/50	(1/12)
	800 ppm	0/50	0/50	1/50	0/49	0/49	5/49	7/48	6/46	10/50	(4/8)
	3200 ppm	0/50	0/50	0/50	0/50	1/50	2/49	5/49	10/48	11/50	(3/12)
Internal mass	Control	0/50	0/50	0/50	0/50	0/50	1/50	2/49	3/44	5/50	(3/12)
	200 ppm	0/50	0/50	0/49	1/49	0/48	1/48	2/46	4/44	6/50	(6/12)
	800 ppm	0/50	0/50	0/50	0/49	0/49	0/49	0/48	3/46	3/50	(1/8)
	3200 ppm	0/50	0/50	0/50	0/50	0/50	0/49	1/49	3/48	4/50	(3/12)

No. of animals with mass/No. of survival animals at first week on each period.
(No. of dead and moribund animals with mass/No. of dead and moribund animals.)

TABLE 6 FOOD CONSUMPTION IN MALE RAT (TWO-YEAR STUDY)

Week on Study	Control Av.FC.	Control No.of Surviv. <50>	200ppm Av.FC.	200ppm % of cont. <50>	200ppm No.of Surviv.	800ppm Av.FC.	800ppm % of cont. <50>	800ppm No.of Surviv.	3200ppm Av.FC.	3200ppm % of cont. <50>	3200ppm No.of Surviv.
1	16.7 (50)	50/50	16.7 (50)	100	50/50	16.1 (50)	96	50/50	15.7 (50)	94	50/50
2	17.6 (50)	50/50	17.3 (50)	98	50/50	17.1 (50)	97	50/50	16.2 (50)	92	50/50
3	18.6 (50)	50/50	18.5 (50)	99	50/50	18.0 (50)	97	50/50	16.6 (50)	89	50/50
4	19.3 (50)	50/50	18.7 (50)	97	50/50	19.0 (50)	98	50/50	17.5 (50)	91	50/50
5	18.9 (50)	50/50	18.6 (50)	98	50/50	18.8 (50)	99	50/50	17.8 (50)	94	50/50
6	19.7 (50)	50/50	19.4 (50)	98	50/50	18.9 (50)	96	50/50	18.2 (50)	92	50/50
7	19.1 (50)	50/50	18.9 (50)	99	50/50	18.7 (50)	98	50/50	18.0 (50)	94	50/50
8	19.2 (50)	50/50	18.8 (50)	98	50/50	18.7 (50)	97	50/50	18.2 (50)	95	50/50
9	19.0 (50)	50/50	19.1 (50)	101	50/50	18.4 (50)	97	50/50	17.7 (50)	93	50/50
10	19.0 (50)	50/50	18.8 (50)	99	50/50	18.4 (50)	97	50/50	17.9 (50)	94	50/50
11	18.8 (50)	50/50	18.7 (50)	99	50/50	18.3 (50)	97	50/50	17.8 (49)	95	50/50
12	18.7 (50)	50/50	18.5 (50)	99	50/50	18.4 (50)	98	50/50	17.6 (50)	94	50/50
13	19.4 (50)	50/50	19.0 (50)	98	50/50	18.4 (50)	95	50/50	17.9 (50)	92	50/50
14	18.3 (50)	50/50	18.6 (50)	102	50/50	18.1 (50)	99	50/50	17.7 (50)	97	50/50
18	18.7 (50)	50/50	18.9 (50)	101	50/50	18.4 (50)	98	50/50	17.8 (50)	95	50/50
22	17.9 (50)	50/50	18.4 (50)	103	50/50	18.1 (50)	101	50/50	18.2 (50)	102	50/50
26	18.3 (50)	50/50	18.3 (50)	100	50/50	17.3 (50)	95	50/50	17.6 (50)	96	50/50
30	18.1 (50)	50/50	18.6 (50)	103	50/50	17.7 (50)	98	50/50	18.2 (50)	101	50/50
34	18.4 (50)	50/50	18.4 (50)	100	50/50	18.0 (50)	98	50/50	18.4 (50)	100	50/50
38	19.2 (50)	50/50	19.4 (50)	101	50/50	18.9 (50)	98	50/50	19.0 (50)	99	50/50
42	19.4 (50)	50/50	19.5 (50)	101	50/50	19.1 (50)	98	50/50	19.1 (50)	98	50/50
46	19.0 (50)	50/50	18.4 (50)	97	50/50	18.2 (50)	96	50/50	18.4 (50)	97	50/50
50	19.3 (50)	50/50	19.5 (50)	101	50/50	19.2 (50)	99	50/50	19.3 (50)	100	50/50
54	19.1 (50)	50/50	19.1 (50)	100	50/50	18.2 (50)	95	50/50	17.6 (50)	92	50/50
57	17.8 (50)	50/50	17.7 (50)	99	50/50	17.9 (50)	101	50/50	17.4 (50)	98	50/50
62	18.3 (49)	49/50	18.1 (50)	99	50/50	17.6 (50)	96	50/50	17.7 (50)	97	50/50
66	19.1 (49)	49/50	18.9 (50)	99	50/50	18.1 (50)	95	50/50	18.3 (49)	96	49/50
70	18.9 (49)	49/50	18.8 (50)	99	50/50	18.3 (50)	97	50/50	18.4 (49)	97	49/50
74	18.4 (49)	49/50	18.6 (49)	101	49/50	18.2 (50)	99	50/50	18.6 (47)	101	47/50
78	18.6 (49)	49/50	18.6 (49)	100	49/50	18.5 (50)	99	50/50	18.8 (47)	101	47/50
82	18.4 (47)	47/50	18.6 (48)	101	49/50	18.2 (48)	99	48/50	18.5 (47)	101	47/50
86	18.3 (46)	45/50	17.8 (48)	97	48/50	18.7 (47)	102	47/50	18.4 (46)	101	47/50
90	19.1 (44)	44/50	18.7 (48)	98	48/50	19.5 (46)	102	46/50	19.0 (45)	99	44/50
94	18.5 (41)	42/50	19.0 (46)	103	46/50	19.2 (45)	104	46/50	19.0 (43)	103	42/50
98	17.9 (38)	37/50	18.4 (45)	103	45/50	18.5 (44)	103	44/50	18.8 (34)	105	34/50
102	18.6 (35)	34/50	18.4 (40)	99	40/50	18.4 (39)	99	37/50	19.0 (29)	102	29/50
104	18.3 (34)	34/50	17.4 (38)	95	36/50	19.0 (36)	104	36/50	19.6 (27)	107	28/50

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

(Study No.0189,0190)

TABLE 7 FOOD CONSUMPTION IN FEMALE RAT (TWO-YEAR STUDY)

Week on Study	Control Av.FC.	Control No.of Surviv. <50>	200ppm Av.FC.	200ppm % of cont. <50>	200ppm No.of Surviv.	800ppm Av.FC.	800ppm % of cont. <50>	800ppm No.of Surviv.	3200ppm Av.FC.	3200ppm % of cont. <50>	3200ppm No.of Surviv.
1	12.9 (50)	50/50	12.5 (50)	97	50/50	12.2 (50)	95	50/50	12.0 (50)	93	50/50
2	13.0 (50)	50/50	12.6 (50)	97	50/50	12.2 (50)	94	50/50	12.1 (50)	93	50/50
3	13.2 (50)	50/50	12.5 (50)	95	50/50	12.4 (50)	94	50/50	12.2 (50)	92	50/50
4	13.9 (50)	50/50	12.8 (50)	92	50/50	13.1 (50)	94	50/50	12.5 (50)	90	50/50
5	13.9 (50)	50/50	13.2 (50)	95	50/50	13.1 (50)	94	50/50	12.6 (50)	91	50/50
6	14.6 (50)	50/50	14.2 (50)	97	50/50	13.7 (50)	94	50/50	13.0 (50)	89	50/50
7	14.0 (50)	50/50	13.6 (50)	97	50/50	13.4 (50)	96	50/50	13.0 (50)	93	50/50
8	14.1 (50)	50/50	13.4 (50)	95	50/50	13.2 (50)	94	50/50	12.8 (50)	91	50/50
9	13.9 (50)	50/50	13.6 (50)	98	50/50	13.2 (50)	95	50/50	12.2 (50)	88	50/50
10	13.8 (50)	50/50	13.8 (50)	100	50/50	13.0 (50)	94	50/50	12.7 (50)	92	50/50
11	13.6 (50)	50/50	13.2 (50)	97	50/50	13.0 (50)	96	50/50	12.5 (50)	92	50/50
12	13.4 (50)	50/50	13.2 (50)	99	50/50	12.9 (50)	96	50/50	12.6 (50)	94	50/50
13	13.9 (50)	50/50	14.4 (50)	104	50/50	13.2 (50)	95	50/50	13.2 (50)	95	50/50
14	14.2 (50)	50/50	14.9 (50)	105	50/50	14.0 (50)	99	50/50	13.4 (50)	94	50/50
18	14.2 (50)	50/50	15.2 (49)	107	50/50	13.4 (49)	94	50/50	13.7 (50)	96	50/50
22	13.3 (50)	50/50	14.0 (50)	105	50/50	12.7 (48)	95	50/50	12.5 (48)	94	50/50
26	12.7 (50)	50/50	12.7 (50)	100	49/50	11.7 (50)	92	50/50	12.4 (50)	98	50/50
30	13.0 (50)	50/50	13.2 (49)	102	49/50	12.4 (50)	95	50/50	12.6 (50)	97	50/50
34	12.7 (50)	50/50	12.9 (49)	102	49/50	12.4 (50)	98	50/50	12.3 (50)	97	50/50
38	13.7 (50)	50/50	13.5 (49)	99	49/50	13.7 (49)	100	49/50	13.1 (50)	96	50/50
42	13.3 (50)	50/50	13.6 (49)	102	49/50	13.3 (49)	100	49/50	12.9 (50)	97	50/50
46	12.9 (50)	50/50	13.2 (49)	102	49/50	13.1 (49)	102	49/50	12.9 (50)	100	50/50
50	13.6 (50)	50/50	13.6 (49)	100	48/50	13.3 (49)	98	49/50	13.7 (50)	101	50/50
54	13.1 (50)	50/50	12.7 (48)	97	48/50	12.8 (49)	98	49/50	11.8 (50)	90	50/50
57	13.1 (50)	50/50	13.5 (48)	103	48/50	13.0 (48)	99	49/50	13.0 (50)	99	49/50
62	13.3 (50)	50/50	13.2 (47)	99	48/50	13.0 (49)	98	49/50	12.8 (48)	96	49/50
66	14.1 (50)	50/50	13.9 (48)	99	48/50	13.1 (49)	93	49/50	13.4 (49)	95	49/50
70	14.4 (50)	50/50	14.0 (48)	97	48/50	13.8 (48)	96	48/50	14.0 (49)	97	49/50
74	13.3 (50)	50/50	13.8 (48)	104	48/50	13.7 (48)	103	48/50	13.6 (49)	102	49/50
78	14.2 (49)	49/50	13.9 (47)	98	46/50	14.0 (48)	99	48/50	13.8 (49)	97	49/50
82	13.8 (49)	49/50	13.7 (46)	99	46/50	13.9 (48)	101	48/50	13.8 (49)	100	49/50
86	13.9 (49)	49/50	14.2 (46)	102	46/50	14.5 (48)	104	48/50	14.3 (49)	103	49/50
90	13.8 (48)	46/50	15.0 (45)	109	45/50	14.5 (46)	105	46/50	14.0 (49)	101	49/50
94	14.6 (43)	43/50	14.8 (42)	101	42/50	14.7 (45)	101	45/50	14.7 (48)	101	48/50
98	15.3 (41)	41/50	14.7 (42)	96	41/50	14.1 (45)	92	45/50	14.3 (47)	93	47/50
102	15.6 (39)	39/50	14.7 (39)	94	39/50	14.8 (42)	95	42/50	14.8 (42)	95	41/50
104	14.9 (38)	38/50	15.1 (38)	101	38/50	15.5 (42)	104	42/50	14.8 (38)	99	38/50

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

TABLE 8 CAUSE OF DEATH:RAT

Group Name	Male				Female			
	Control	200ppm	800ppm	3200ppm	Control	200ppm	800ppm	3200ppm
Number of Dead/Moribund Animal	16	14	14	22	12	12	8	12
No microscopical confirmation	0	0	1	2	1	1	0	1
Respiratory system lesion	0	0	0	1	0	0	0	0
Digestive system lesion	1	0	0	0	0	0	0	0
Urinary system lesion	0	0	1	0	0	0	0	0
Chronic nephropathy	1	3	0	2	0	0	0	1
Tumor death : leukemia	3	6	6	4	1	5	3	3
: subcutis	2	1	0	1	1	0	0	2
: bone marrow	0	0	0	0	1	0	0	0
: spleen	0	0	0	0	1	0	0	0
: kidney	0	0	0	1	0	0	0	0
: urinary bladder	0	1	0	0	0	0	0	0
: pituitary gland	6	1	3	0	4	4	2	2
: thyroid	0	0	1	0	0	0	0	0
: adrenal gland	1	0	1	0	0	1	0	0
: uterus	0	0	0	0	0	1	0	1
: preputial/clitoral gland	0	0	0	0	0	0	1	0
: brain	0	0	0	0	0	0	1	2
: Zymbal gland	0	0	0	0	1	0	0	0
: muscle	0	0	0	0	0	0	1	0
: bone	0	0	1	0	1	0	0	0
: mediastinum	0	1	0	1	0	0	0	0
: peritoneum	1	1	0	10	1	0	0	0
: retroperitoneum	1	0	0	0	0	0	0	0

TABLE 9 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN MALE MOUSE (TWO-YEAR STUDY)

Week on Study	Control Av.Wt.	Control No.of Surviv. <50>	200ppm Av.Wt.	200ppm % of cont. <50>	200ppm No.of Surviv.	800ppm Av.Wt.	800ppm % of cont. <50>	800ppm No.of Surviv.	3200ppm Av.Wt.	3200ppm % of cont. <50>	3200ppm No.of Surviv.
0	23.0 (50)	50/50	23.0 (50)	100	50/50	22.9 (50)	100	50/50	22.8 (50)	99	50/50
1	24.9 (50)	50/50	24.5 (50)	98	50/50	25.0 (50)	100	50/50	24.6 (50)	99	50/50
2	25.5 (50)	50/50	25.0 (50)	98	50/50	25.8 (50)	101	50/50	25.3 (50)	99	50/50
3	26.4 (50)	50/50	26.1 (50)	99	50/50	26.6 (50)	101	50/50	26.3 (50)	100	50/50
4	26.9 (50)	50/50	26.3 (49)	98	49/50	26.8 (50)	100	50/50	26.5 (50)	99	50/50
5	27.4 (50)	50/50	27.0 (49)	99	49/50	27.4 (50)	100	50/50	27.2 (50)	99	50/50
6	28.0 (50)	50/50	27.3 (49)	98	49/50	28.0 (50)	100	50/50	27.7 (50)	99	50/50
7	28.7 (50)	50/50	27.4 (49)	95	49/50	28.6 (50)	100	50/50	28.2 (50)	98	50/50
8	29.6 (50)	50/50	28.2 (49)	95	49/50	29.3 (50)	99	50/50	28.8 (50)	97	50/50
9	30.3 (50)	50/50	28.7 (49)	95	49/50	30.0 (50)	99	50/50	29.3 (50)	97	50/50
10	31.3 (50)	50/50	29.6 (49)	95	49/50	30.8 (50)	98	50/50	29.8 (50)	95	50/50
11	31.7 (50)	50/50	30.1 (49)	95	49/50	31.1 (50)	98	50/50	30.1 (50)	95	50/50
12	32.3 (50)	50/50	30.6 (49)	95	49/50	31.8 (50)	98	50/50	30.7 (50)	95	50/50
13	33.0 (50)	50/50	31.8 (49)	96	49/50	32.7 (50)	99	50/50	31.8 (50)	96	50/50
14	33.9 (50)	50/50	32.5 (49)	96	49/50	33.3 (50)	98	50/50	32.2 (50)	95	50/50
18	36.0 (50)	50/50	34.7 (49)	96	49/50	35.7 (50)	99	50/50	34.6 (50)	96	50/50
22	38.6 (50)	50/50	38.1 (47)	99	47/50	38.3 (50)	99	50/50	37.5 (50)	97	50/50
26	41.1 (50)	50/50	40.1 (47)	98	47/50	40.7 (50)	99	50/50	39.7 (50)	97	50/50
30	43.5 (50)	50/50	42.2 (47)	97	47/50	42.8 (50)	98	50/50	41.7 (50)	96	50/50
34	45.7 (50)	50/50	44.1 (47)	96	47/50	44.5 (50)	97	50/50	43.1 (50)	94	50/50
38	47.3 (50)	50/50	45.5 (47)	96	47/50	46.1 (50)	97	50/50	45.0 (50)	95	50/50
42	48.5 (50)	50/50	46.8 (47)	96	47/50	47.2 (50)	97	50/50	46.1 (50)	95	50/50
46	48.8 (50)	50/50	47.0 (47)	96	47/50	47.7 (50)	98	50/50	46.4 (50)	95	50/50
50	49.7 (50)	50/50	47.5 (46)	96	46/50	48.6 (50)	98	50/50	47.7 (50)	96	50/50
54	50.4 (50)	50/50	48.1 (46)	95	46/50	49.2 (50)	98	50/50	47.7 (50)	95	50/50
58	50.3 (50)	50/50	47.8 (46)	95	46/50	48.5 (50)	96	50/50	48.0 (50)	95	50/50
62	50.4 (50)	50/50	48.6 (46)	96	46/50	49.0 (50)	97	49/50	48.1 (50)	95	50/50
66	50.4 (50)	50/50	48.9 (46)	97	46/50	49.7 (49)	99	49/50	47.9 (49)	95	49/50
70	50.6 (50)	50/50	49.3 (46)	97	46/50	50.3 (49)	99	49/50	48.0 (48)	95	48/50
74	53.1 (49)	49/50	50.8 (46)	96	46/50	51.6 (48)	97	48/50	50.6 (46)	95	46/50
78	53.1 (49)	49/50	51.3 (45)	97	45/50	52.5 (47)	99	47/50	51.0 (46)	96	46/50
82	53.5 (49)	49/50	50.8 (45)	95	45/50	52.7 (46)	99	46/50	50.7 (45)	95	45/50
86	52.2 (49)	49/50	49.8 (44)	95	44/50	51.2 (45)	98	45/50	50.0 (42)	96	42/50
90	52.4 (48)	48/50	50.1 (41)	96	41/50	50.9 (43)	97	43/50	48.5 (41)	93	41/50
94	52.3 (46)	46/50	49.2 (39)	94	39/50	50.0 (40)	96	40/50	47.1 (38)	90	38/50
98	49.1 (43)	43/50	46.5 (38)	95	37/50	46.7 (38)	95	38/50	44.1 (36)	90	36/50
102	47.0 (42)	42/50	45.8 (35)	97	35/50	44.9 (36)	96	36/50	42.9 (31)	91	31/50
104	45.2 (40)	40/50	44.6 (34)	99	34/50	44.3 (34)	98	34/50	41.6 (31)	92	31/50

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

(Study No.0189,0190)

TABLE 10 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES IN FEMALE MOUSE (TWO-YEAR STUDY)

Week on Study	Control Av.Wt.	Control No.of Surviv. <50>	200ppm Av.Wt.	200ppm % of cont. <48>	200ppm No.of Surviv.	800ppm Av.Wt.	800ppm % of cont. <50>	800ppm No.of Surviv.	3200ppm Av.Wt.	3200ppm % of cont. <49>	3200ppm No.of Surviv.
0	18.7 (50)	50/50	18.5 (48)	99	50/50	18.5 (50)	99	50/50	18.4 (49)	98	50/50
1	20.5 (50)	50/50	20.1 (48)	98	49/49	20.4 (50)	100	50/50	20.5 (49)	100	50/50
2	21.0 (50)	50/50	20.9 (48)	100	49/49	20.8 (50)	99	50/50	21.0 (49)	100	50/50
3	22.1 (50)	50/50	21.6 (48)	98	49/49	21.8 (50)	99	50/50	22.0 (49)	100	50/50
4	22.4 (50)	50/50	22.0 (48)	98	49/49	22.0 (50)	98	50/50	22.6 (49)	101	50/50
5	22.9 (50)	50/50	22.5 (48)	98	49/49	22.6 (50)	99	50/50	22.9 (49)	100	50/50
6	23.1 (50)	50/50	22.8 (48)	99	49/49	23.0 (50)	100	50/50	23.6 (49)	102	50/50
7	23.4 (50)	50/50	23.0 (48)	98	48/48	23.4 (50)	100	50/50	24.0 (49)	103	50/50
8	24.2 (50)	50/50	23.7 (48)	98	48/48	24.0 (50)	99	50/50	24.4 (49)	101	50/50
9	24.7 (50)	50/50	23.8 (48)	96	48/48	24.2 (50)	98	50/50	24.6 (49)	100	50/50
10	24.9 (50)	50/50	24.5 (48)	98	48/48	24.8 (50)	100	50/50	25.0 (49)	100	50/50
11	24.6 (50)	50/50	24.4 (48)	99	48/48	24.5 (50)	100	50/50	25.0 (49)	102	50/50
12	24.7 (50)	50/50	24.4 (48)	99	48/48	24.9 (50)	101	50/50	25.0 (49)	101	50/50
13	25.6 (50)	50/50	25.0 (48)	98	48/48	25.4 (50)	99	50/50	25.9 (49)	101	50/50
14	25.7 (50)	50/50	25.2 (48)	98	48/48	25.6 (50)	100	50/50	26.0 (49)	101	50/50
18	26.5 (50)	50/50	26.0 (48)	98	48/48	26.2 (50)	99	50/50	26.7 (49)	101	49/49
22	28.2 (50)	50/50	27.4 (48)	97	48/48	27.6 (50)	98	50/50	28.6 (49)	101	49/49
26	29.3 (50)	50/50	28.1 (48)	96	48/48	28.9 (50)	99	50/50	29.2 (49)	100	49/49
30	30.3 (50)	50/50	29.1 (48)	96	48/48	29.5 (50)	97	50/50	30.0 (49)	99	49/49
34	31.2 (50)	50/50	30.3 (48)	97	48/48	30.0 (50)	96	50/50	30.2 (49)	97	49/49
38	32.0 (50)	50/50	31.3 (48)	98	48/48	31.1 (50)	97	50/50	31.5 (48)	98	48/49
42	32.8 (50)	50/50	32.3 (48)	98	48/48	31.5 (50)	96	50/50	32.1 (48)	98	48/49
46	32.5 (50)	50/50	32.3 (48)	99	48/48	31.5 (50)	97	50/50	31.9 (48)	98	48/49
50	33.3 (50)	50/50	32.7 (47)	98	47/48	32.4 (50)	97	50/50	32.9 (48)	99	48/49
54	33.9 (50)	50/50	33.4 (46)	99	46/48	32.6 (50)	96	50/50	32.6 (48)	96	48/49
58	33.7 (50)	50/50	33.0 (46)	98	46/48	32.1 (49)	95	49/50	32.6 (47)	97	47/49
62	34.2 (50)	50/50	33.5 (46)	98	46/48	32.6 (49)	95	49/50	32.6 (47)	95	47/49
66	34.4 (49)	49/50	33.7 (46)	98	46/48	32.6 (49)	95	49/50	32.9 (47)	96	47/49
70	34.5 (48)	48/50	34.6 (46)	100	46/48	32.9 (49)	95	49/50	33.2 (46)	96	46/49
74	35.8 (48)	48/50	35.8 (45)	100	45/48	34.6 (48)	97	48/50	34.7 (45)	97	45/49
78	36.3 (47)	47/50	36.4 (45)	100	45/48	35.3 (46)	97	45/50	34.9 (45)	96	45/49
82	36.7 (43)	43/50	36.6 (44)	100	44/48	35.8 (44)	98	44/50	34.7 (44)	95	44/49
86	35.9 (43)	43/50	36.0 (39)	100	39/48	35.0 (43)	97	43/50	33.7 (43)	94	43/49
90	35.4 (40)	40/50	35.5 (38)	100	38/48	35.6 (41)	101	41/50	33.6 (41)	95	41/49
94	34.6 (37)	37/50	35.6 (37)	103	37/48	35.0 (36)	101	36/50	33.3 (37)	96	37/49
98	33.2 (35)	35/50	34.7 (32)	105	32/48	33.7 (36)	102	36/50	33.2 (34)	100	34/49
102	33.2 (31)	31/50	34.1 (31)	103	29/48	32.5 (34)	98	33/50	31.8 (31)	96	30/49
104	32.9 (29)	29/50	34.7 (28)	105	28/48	32.0 (29)	97	29/50	31.4 (29)	95	29/49

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

TABLE 11 INCIDENCE OF EXTERNAL AND INTERNAL MASS IN CLINICAL OBSERVATION :MOUSE :MALE

	week	0～13	14～26	27～39	40～52	53～65	66～78	79～91	92～104	0～104
External mass	Control	0/50	0/50	0/50	0/50	3/50	6/50	9/49	10/47	14/50 (0/10)
	200 ppm	0/50	0/49	0/47	1/47	2/46	4/46	8/45	11/40	13/50 (1/16)
	800 ppm	0/50	0/50	0/50	1/50	1/50	3/49	7/47	14/42	18/50 (1/16)
	3200 ppm	0/50	0/50	0/50	0/50	0/50	2/49	7/46	10/40	12/50 (2/19)
Internal mass	Control	0/50	0/50	0/50	0/50	0/50	0/50	1/49	4/47	4/50 (4/10)
	200 ppm	0/50	0/49	0/47	0/47	0/46	1/46	1/45	4/40	5/50 (8/16)
	800 ppm	0/50	0/50	0/50	0/50	0/50	0/49	2/47	3/42	5/50 (5/16)
	3200 ppm	0/50	0/50	0/50	0/50	0/50	0/49	0/46	3/40	3/50 (4/19)

No. of animals with mass/No. of survival animals at first week on each period.
(No. of dead and moribund animals with mass/No. of dead and moribund animals.)

TABLE 12 INCIDENCE OF EXTERNAL AND INTERNAL MASS IN CLINICAL OBSERVATION :MOUSE :FEMALE

	week	0～13	14～26	27～39	40～52	53～65	66～78	79～91	92～104	0～104
External mass	Control	0/50	0/50	0/50	0/50	0/50	4/49	10/45	8/38	12/50 (1/21)
	200 ppm	0/50	0/48	0/48	0/48	1/46	3/46	6/44	10/38	10/50 (1/22)
	800 ppm	0/50	0/50	1/50	0/50	0/50	5/49	7/45	6/38	10/50 (3/21)
	3200 ppm	0/50	0/50	0/49	0/48	1/48	2/47	5/45	10/40	11/50 (5/21)
Internal mass	Control	0/50	0/50	0/50	0/50	0/50	1/49	2/45	3/38	5/50 (10/21)
	200 ppm	0/50	0/48	0/48	1/48	0/46	1/46	2/44	4/38	6/50 (12/22)
	800 ppm	0/50	0/50	0/50	0/50	0/50	0/49	0/45	3/38	3/50 (14/21)
	3200 ppm	0/50	0/50	0/49	0/48	0/48	0/47	1/45	3/40	4/50 (10/21)

No. of animals with mass/No. of survival animals at first week on each period.
(No. of dead and moribund animals with mass/No. of dead and moribund animals.)

TABLE 13 FOOD CONSUMPTION IN MALE MOUSE (TWO-YEAR STUDY)

Week on Study	Control Av.FC.	Control No.of Surviv. <50>	200ppm Av.FC.	200ppm % of cont. <50>	200ppm No.of Surviv.	800ppm Av.FC.	800ppm % of cont. <50>	800ppm No.of Surviv.	3200ppm Av.FC.	3200ppm % of cont. <50>	3200ppm No.of Surviv.
1	4.5 (50)	50/50	4.2 (50)	93	50/50	4.5 (50)	100	50/50	4.5 (50)	100	50/50
2	4.2 (50)	50/50	3.9 (50)	93	50/50	4.1 (50)	98	50/50	4.1 (50)	98	50/50
3	4.4 (50)	50/50	4.0 (50)	91	50/50	4.2 (50)	95	50/50	4.5 (50)	102	50/50
4	4.5 (50)	50/50	4.2 (49)	93	49/50	4.2 (50)	93	50/50	4.3 (50)	96	50/50
5	4.5 (50)	50/50	4.2 (49)	93	49/50	4.3 (50)	96	50/50	4.5 (50)	100	50/50
6	4.5 (50)	50/50	4.4 (49)	98	49/50	4.4 (50)	98	50/50	4.5 (50)	100	50/50
7	4.5 (50)	50/50	4.2 (49)	93	49/50	4.4 (50)	98	50/50	4.4 (50)	98	50/50
8	4.5 (50)	50/50	4.4 (49)	98	49/50	4.4 (50)	98	50/50	4.5 (50)	100	50/50
9	4.5 (50)	50/50	4.4 (49)	98	49/50	4.5 (50)	100	50/50	4.5 (50)	100	50/50
10	4.7 (50)	50/50	4.5 (49)	96	49/50	4.4 (50)	94	50/50	4.5 (50)	96	50/50
11	4.6 (50)	50/50	4.5 (49)	98	49/50	4.6 (50)	100	50/50	4.6 (50)	100	50/50
12	4.5 (50)	50/50	4.5 (49)	100	49/50	4.5 (50)	100	50/50	4.6 (50)	102	50/50
13	4.6 (50)	50/50	4.6 (49)	100	49/50	4.6 (50)	100	50/50	4.7 (50)	102	50/50
14	4.6 (50)	50/50	4.5 (49)	98	49/50	4.5 (50)	98	50/50	4.7 (50)	102	50/50
18	4.6 (50)	50/50	4.5 (49)	98	49/50	4.6 (50)	100	50/50	4.6 (50)	100	50/50
22	4.7 (50)	50/50	4.7 (47)	100	47/50	4.6 (50)	98	50/50	4.5 (50)	96	50/50
26	4.7 (50)	50/50	4.7 (47)	100	47/50	4.6 (50)	98	50/50	4.5 (50)	96	50/50
30	4.9 (50)	50/50	4.8 (47)	98	47/50	4.7 (50)	96	50/50	4.7 (50)	96	50/50
34	5.0 (50)	50/50	4.9 (47)	98	47/50	4.9 (50)	98	50/50	4.9 (50)	98	50/50
38	5.2 (50)	50/50	5.1 (47)	98	47/50	5.0 (50)	96	50/50	5.0 (50)	96	50/50
42	5.2 (50)	50/50	5.1 (47)	98	47/50	5.0 (50)	96	50/50	5.0 (50)	96	50/50
46	5.1 (50)	50/50	4.9 (47)	96	47/50	4.9 (50)	96	50/50	4.8 (50)	94	50/50
50	4.9 (50)	50/50	4.7 (46)	96	46/50	4.8 (50)	98	50/50	4.7 (50)	96	50/50
54	4.9 (50)	50/50	4.9 (46)	100	46/50	4.9 (50)	100	50/50	4.8 (50)	98	50/50
58	5.0 (50)	50/50	5.0 (46)	100	46/50	4.9 (50)	98	50/50	4.8 (50)	96	50/50
62	5.2 (50)	50/50	5.0 (46)	96	46/50	5.0 (50)	96	49/50	4.8 (50)	92	50/50
66	5.1 (50)	50/50	4.9 (46)	96	46/50	4.9 (49)	96	49/50	4.8 (49)	94	49/50
70	5.0 (50)	50/50	4.9 (46)	98	46/50	5.7 (49)	114	49/50	5.4 (49)	108	48/50
74	5.2 (50)	49/50	5.0 (46)	96	46/50	5.1 (48)	98	48/50	5.0 (46)	96	46/50
78	5.2 (49)	49/50	5.0 (45)	96	45/50	5.1 (47)	98	47/50	5.1 (46)	98	46/50
82	5.4 (49)	49/50	5.0 (45)	93	45/50	5.2 (46)	96	46/50	5.0 (45)	93	45/50
86	5.1 (49)	49/50	4.9 (44)	96	44/50	4.9 (45)	96	45/50	4.9 (42)	96	42/50
90	5.4 (48)	48/50	5.2 (41)	96	41/50	5.2 (44)	96	43/50	5.2 (41)	96	41/50
94	5.5 (46)	46/50	5.3 (40)	96	39/50	5.2 (41)	95	40/50	5.0 (38)	91	38/50
98	4.8 (45)	43/50	4.8 (38)	100	37/50	4.8 (39)	100	38/50	4.4 (36)	92	36/50
102	4.9 (42)	42/50	4.7 (35)	96	35/50	4.7 (37)	96	36/50	4.6 (32)	94	31/50
104	4.7 (41)	40/50	4.9 (34)	104	34/50	5.1 (35)	109	34/50	4.8 (31)	102	31/50

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

TABLE 14 FOOD CONSUMPTION IN FEMALE MOUSE (TWO-YEAR STUDY)

Week on Study	Control Av.FC.	Control No.of Surviv. <50>	200ppm Av.FC.	200ppm % of cont. <48>	200ppm No.of Surviv.	800ppm Av.FC.	800ppm % of cont. <50>	800ppm No.of Surviv.	3200ppm Av.FC.	3200ppm % of cont. <49>	3200ppm No.of Surviv.
1	4.0 (50)	50/50	3.7 (48)	93	49/49	3.9 (50)	98	50/50	4.1 (49)	103	50/50
2	3.7 (50)	50/50	3.5 (48)	95	49/49	3.5 (50)	95	50/50	3.6 (49)	97	50/50
3	4.1 (50)	50/50	3.7 (48)	90	49/49	3.9 (50)	95	50/50	4.2 (49)	102	50/50
4	4.3 (50)	50/50	4.0 (48)	93	49/49	4.0 (50)	93	50/50	4.1 (49)	95	50/50
5	4.4 (50)	50/50	4.1 (48)	93	49/49	4.1 (50)	93	50/50	4.3 (49)	98	50/50
6	4.5 (50)	50/50	4.3 (48)	96	49/49	4.3 (50)	96	50/50	4.4 (49)	98	50/50
7	4.4 (50)	50/50	4.3 (48)	98	48/48	4.3 (50)	98	50/50	4.3 (49)	98	50/50
8	4.6 (50)	50/50	4.4 (48)	96	48/48	4.3 (50)	93	50/50	4.4 (49)	96	50/50
9	4.5 (50)	50/50	4.5 (48)	100	48/48	4.4 (50)	98	50/50	4.5 (49)	100	50/50
10	4.5 (50)	50/50	4.5 (48)	100	48/48	4.3 (50)	96	50/50	4.4 (49)	98	50/50
11	4.4 (50)	50/50	4.4 (47)	100	48/48	4.4 (50)	100	50/50	4.5 (49)	102	50/50
12	4.4 (50)	50/50	4.4 (48)	100	48/48	4.3 (50)	98	50/50	4.4 (49)	100	50/50
13	4.5 (50)	50/50	4.4 (48)	98	48/48	4.4 (50)	98	50/50	4.5 (49)	100	50/50
14	4.5 (50)	50/50	4.3 (48)	96	48/48	4.3 (50)	96	50/50	4.5 (49)	100	50/50
18	4.4 (50)	50/50	4.4 (48)	100	48/48	4.3 (50)	98	50/50	4.3 (49)	98	49/49
22	4.6 (50)	50/50	4.4 (48)	96	48/48	4.4 (50)	96	50/50	4.5 (49)	98	49/49
26	4.5 (50)	50/50	4.5 (48)	100	48/48	4.4 (50)	98	50/50	4.2 (49)	93	49/49
30	4.6 (50)	50/50	4.5 (48)	98	48/48	4.3 (50)	93	50/50	4.5 (49)	98	49/49
34	4.7 (50)	50/50	4.7 (48)	100	48/48	4.5 (50)	96	50/50	4.6 (49)	98	49/49
38	4.8 (50)	50/50	4.9 (48)	102	48/48	4.7 (50)	98	50/50	4.7 (49)	98	48/49
42	4.8 (50)	50/50	4.8 (48)	100	48/48	4.7 (50)	98	50/50	4.7 (48)	98	48/49
46	4.8 (50)	50/50	4.6 (48)	96	48/48	4.4 (50)	92	50/50	4.3 (48)	90	48/49
50	4.6 (50)	50/50	4.4 (47)	96	47/48	4.4 (50)	96	50/50	4.3 (48)	93	48/49
54	4.5 (50)	50/50	4.5 (46)	100	46/48	4.4 (50)	98	50/50	4.2 (48)	93	48/49
58	4.5 (50)	50/50	4.4 (46)	98	46/48	4.4 (49)	98	49/50	4.3 (48)	96	47/49
62	4.6 (50)	50/50	4.6 (46)	100	46/48	4.6 (49)	100	49/50	4.3 (47)	93	47/49
66	4.6 (49)	49/50	4.4 (46)	96	46/48	4.3 (49)	93	49/50	4.3 (47)	93	47/49
70	4.6 (48)	48/50	4.5 (46)	98	46/48	5.2 (49)	113	49/50	5.1 (46)	111	46/49
74	4.8 (48)	48/50	4.7 (45)	98	45/48	4.5 (49)	94	48/50	4.7 (45)	98	45/49
78	4.7 (47)	47/50	4.6 (45)	98	45/48	4.6 (47)	98	45/50	4.7 (45)	100	45/49
82	4.8 (43)	43/50	4.6 (44)	96	44/48	4.7 (44)	98	44/50	4.6 (44)	96	44/49
86	4.5 (43)	43/50	4.5 (40)	100	39/48	4.4 (43)	98	43/50	4.3 (44)	96	43/49
90	4.5 (40)	40/50	4.8 (38)	107	38/48	4.7 (41)	104	41/50	4.8 (42)	107	41/49
94	4.8 (37)	37/50	4.8 (38)	100	37/48	4.8 (37)	100	36/50	4.5 (37)	94	37/49
98	4.2 (36)	35/50	4.5 (33)	107	32/48	4.4 (36)	105	36/50	4.3 (34)	102	34/49
102	4.6 (31)	31/50	4.4 (31)	96	29/48	4.3 (35)	93	33/50	4.2 (31)	91	30/49
104	4.6 (31)	29/50	4.5 (29)	98	28/48	4.7 (31)	102	29/50	4.5 (30)	98	29/49

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

TABLE 15 CAUSE OF DEATH:MOUSE

Group Name	Male				Female			
	Control	200ppm	800ppm	3200ppm	Control	200ppm	800ppm	3200ppm
Number of Dead/Moribund Animal	10	16	16	19	21	20	21	20
No microscopical confirmation	1	0	2	1	1	1	1	2
Renal lesion	1	0	0	0	0	0	0	0
Urinary retention	1	0	0	0	0	0	0	0
Arteritis	0	2	0	0	0	0	0	0
Hydronephrosis	1	3	0	0	1	1	1	0
Tumor death : leukemia	1	3	5	6	8	5	11	5
: subcutis	0	0	0	0	0	0	0	1
: lung	0	1	1	3	1	2	0	0
: spleen	1	2	0	0	0	0	0	1
: salivary gland	0	0	0	1	0	0	0	0
: large intestine	0	1	0	0	0	0	0	0
: liver	4	4	8	6	0	1	0	2
: pituitary gland	0	0	0	0	4	1	2	1
: epididymis	0	0	0	1	0	0	0	0
: seminal vesicle	0	0	0	1	0	0	0	0
: uterus	0	0	0	0	6	9	5	8
: bone	0	0	0	0	0	0	1	0