

ジクロロメタンのマウスを用いた
吸入によるがん原性試験報告書

試験番号：0279

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TABLE 1 EXPERIMENTAL DESIGN AND MATERIALS AND METHODS
IN THE 2-YEAR INHALATION STUDY OF DICHLOROMETHANE

<Method of Administration>	Inhalation
<Number of Groups>	Male 4, Female 4
<Size of Groups>	50 males and 50 females of each group
<Animals>	Strain and Species Crj:BDF1 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
<Doses>	Male and Female 0, 1000, 2000, or 4000ppm
<Duration of Dosing>	6h/d, 5d/wk, for 104wk
<Animal Maintenance>	Feed CRF-1 (Oriental Yeast Co., Ltd.) Sterilized by γ -ray Available <i>ad libitum</i>
	Water Filtrated and sterilized by ultraviolet ray Automatic watering system in duration of quarantine Available <i>ad libitum</i>
	Animal per Cage Single (stainless steel wire)
	Animal Room Environment Barrier system Temperature: 23 \pm 2 $^{\circ}$ C Fluorescent light 12h/d
	Chamber Environment Temperature: 22 \pm 2 $^{\circ}$ C Humidity : 55 \pm 15% Pressure : 0~-15mmAq 12 \pm 1 chamber air changes/h (6 \pm 1 chamber air changes/h during exposure)
<Type and Frequency of Observation>	Clinical Sign Observed 1 per d
	Body Weight Weighed first exposure and 1 per wk for 14wk Weighed 1 per 4wks thereafter
	Food Consumption Weighed 1 per wk for 14wk Weighed 1 per 4wks thereafter

TABLE 1 EXPERIMENTAL DESIGN AND MATERIALS AND METHODS
(continued) IN THE 2-YEAR INHALATION STUDY OF DICHLOROMETHANE

<Hematology>

Red blood cell (RBC), Hemoglobin, Hematocrit,
Mean Corpuscular Volume (MCV),
Mean Corpuscular hemoglobin (MCH),
Mean Corpuscular hemoglobin concentrate (MCHC),
Platelet, White blood cell (WBC),
Differential WBC.

<Biochemistry>

Total protein, Albumin, A/G ratio,
Total bilirubin, Glucose, Total cholesterol
Triglyceride,
Glutamic oxaloacetic transaminase (GOT),
Glutamic pyruvic transaminase (GPT),
Lactate dehydrogenase (LDH),
Alkaline phosphatase (ALP),
Creatine phosphokinase (CPK),
Urea nitrogen,
Sodium, Potassium, Chloride,
Calcium, Inorganic phosphorus.

<Urinalysis>

pH, Protein, Glucose, Ketone body,
Occult blood, Urobilinogen.

<Necropsy>

Necropsy performed on all animals.

<Organ Weight>

Organ weight measurement performed on scheduled
sacrificed animals.

The following organs were weighed;
brain, lung, liver, spleen, heart, kidney, adrenal,
testis, ovary.

<Histopathologic Examination>

Histopathologic examination performed on all animals.

The following organs were examined;
skin, nasal cavity, nasopharynx, larynx, trachea, lung, bone marrow,
lymph node, thymus, spleen, heart, tongue, salivary gland, esophagus,
stomach, small intestine, large intestine, liver, gall bladder, pancreas,
kidney, urinary bladder, pituitary, thyroid, parathyroid, adrenal,
testis, epididymis, seminal vesicle, prostate, ovary, uterus, vagina,
mammary gland, brain, spinal cord, peripheral nerve, eye,
Harderian gland, muscle, bone, other organs/tissues with gross lesions.

TABLE 2 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES OF MALE MICE
IN THE 2-YEAR INHALATION STUDY OF DICHLOROMETHANE

Weeks on Study	Control		1000ppm			2000ppm			4000ppm		
	Av.Wt.	No.of Surviv. <50>	Av.Wt.	% of cont. <50>	No.of Surviv. <50>	Av.Wt.	% of cont. <50>	No.of Surviv. <50>	Av.Wt.	% of cont. <50>	No.of Surviv. <50>
0	21.8 (50)	50/50	21.8 (50)	100	50/50	21.8 (50)	100	50/50	21.8 (50)	100	50/50
1	21.6 (50)	50/50	21.6 (50)	100	50/50	21.6 (50)	100	50/50	21.6 (50)	100	50/50
1	23.1 (50)	50/50	23.0 (50)	100	50/50	23.2 (50)	100	50/50	22.8 (50)	99	50/50
2	24.3 (50)	50/50	24.2 (50)	100	50/50	24.3 (50)	100	50/50	24.7 (49)	102	49/50
3	24.9 (50)	50/50	24.9 (50)	100	50/50	25.1 (50)	101	50/50	25.4 (49)	102	49/50
4	25.8 (50)	50/50	25.5 (50)	99	50/50	26.0 (50)	101	50/50	26.4 (49)	102	49/50
5	26.4 (50)	50/50	26.1 (50)	99	50/50	26.6 (50)	101	50/50	26.9 (49)	102	49/50
6	27.0 (50)	50/50	26.7 (50)	99	50/50	27.2 (50)	101	50/50	27.4 (49)	101	49/50
7	27.7 (50)	50/50	27.0 (50)	97	50/50	27.8 (50)	100	50/50	28.1 (49)	101	49/50
8	28.2 (50)	50/50	27.6 (50)	98	50/50	28.2 (50)	100	50/50	28.4 (49)	101	49/50
9	28.8 (50)	50/50	28.2 (50)	98	50/50	28.9 (50)	100	50/50	29.2 (49)	101	49/50
10	29.5 (50)	50/50	28.8 (50)	98	50/50	29.5 (50)	100	50/50	29.8 (49)	101	49/50
11	30.4 (50)	50/50	29.2 (50)	96	50/50	30.0 (50)	99	50/50	30.2 (49)	99	49/50
12	31.0 (50)	50/50	29.6 (50)	95	50/50	30.7 (50)	99	50/50	30.7 (49)	99	49/50
13	31.9 (50)	50/50	30.3 (50)	95	50/50	31.6 (49)	99	49/50	31.3 (49)	98	49/50
14	32.6 (50)	50/50	30.8 (50)	94	50/50	32.5 (49)	100	49/50	31.9 (49)	98	49/50
18	34.0 (50)	50/50	32.6 (50)	96	50/50	33.9 (49)	100	49/50	33.5 (49)	99	49/50
22	36.0 (50)	50/50	34.4 (50)	96	50/50	35.6 (49)	99	49/50	34.4 (49)	96	49/50
26	38.6 (49)	49/50	36.2 (50)	94	50/50	38.0 (49)	98	49/50	36.6 (49)	95	49/50
30	40.3 (49)	49/50	37.8 (50)	94	50/50	39.4 (49)	98	49/50	37.3 (49)	93	49/50
34	42.0 (49)	49/50	39.0 (50)	93	50/50	40.9 (49)	97	49/50	38.5 (49)	92	49/50
38	43.5 (49)	49/50	40.5 (50)	93	50/50	42.5 (49)	98	49/50	40.0 (49)	92	49/50
42	44.7 (49)	49/50	41.2 (50)	92	50/50	43.4 (49)	97	49/50	40.6 (49)	91	49/50
46	45.5 (49)	49/50	42.3 (50)	93	50/50	44.2 (49)	97	49/50	41.1 (48)	90	48/50
50	46.3 (49)	49/50	42.7 (50)	92	50/50	44.3 (49)	96	49/50	41.2 (48)	89	48/50
54	46.9 (49)	49/50	43.3 (49)	92	49/50	44.9 (49)	96	49/50	42.0 (48)	90	48/50
58	47.0 (49)	49/50	43.7 (49)	93	49/50	45.3 (49)	96	49/50	41.8 (48)	89	48/50
62	48.2 (48)	48/50	44.7 (48)	93	48/50	46.2 (49)	96	49/50	43.3 (47)	90	47/50
66	49.2 (48)	48/50	45.6 (48)	93	48/50	46.4 (49)	94	49/50	43.5 (45)	88	45/50
70	49.9 (47)	48/50	46.8 (48)	94	48/50	47.2 (49)	95	49/50	43.8 (44)	88	44/50
74	50.4 (47)	47/50	46.2 (48)	92	48/50	47.2 (48)	94	48/50	41.9 (44)	83	44/50
78	50.3 (47)	47/50	46.6 (47)	93	47/50	47.2 (47)	94	47/50	42.9 (42)	85	42/50
82	51.9 (47)	47/50	47.2 (47)	91	47/50	47.5 (44)	92	44/50	41.9 (41)	81	41/50
86	51.6 (47)	47/50	46.5 (47)	90	47/50	46.8 (42)	91	42/50	40.5 (40)	78	40/50
90	51.0 (45)	45/50	45.9 (45)	90	45/50	47.3 (38)	93	38/50	39.0 (39)	76	39/50
94	49.8 (43)	43/50	44.2 (44)	89	44/50	45.8 (37)	92	37/50	37.0 (34)	74	34/50
98	48.9 (42)	42/50	44.6 (39)	91	39/50	43.6 (36)	89	36/50	36.6 (28)	75	28/50
102	47.8 (40)	40/50	44.3 (36)	93	36/50	42.1 (32)	88	31/50	34.1 (23)	71	22/50
104	48.1 (38)	38/50	43.5 (35)	90	35/50	42.5 (27)	88	26/50	33.6 (20)	70	20/50

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

TABLE 3 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES OF FEMALE MICE IN THE 2-YEAR INHALATION STUDY OF DICHLOROMETHANE

Weeks on Study	Control		1000ppm		2000ppm		4000ppm				
	Av.Wt.	No.of Surviv. <50>	Av.Wt.	% of cont. Surviv. <50>	No.of Surviv.	Av.Wt.	% of cont. Surviv. <49>	No.of Surviv.	Av.Wt.	% of cont. Surviv. <50>	No.of Surviv.
0	18.3 (50)	50/50	18.3 (50)	100	50/50	18.3 (49)	100	50/50	18.3 (50)	100	50/50
1	17.5 (50)	50/50	17.7 (50)	101	50/50	17.8 (49)	102	49/49	17.7 (50)	101	50/50
1	18.8 (50)	50/50	19.1 (50)	102	50/50	19.0 (49)	101	49/49	18.9 (50)	101	50/50
2	19.9 (50)	50/50	20.0 (50)	101	50/50	20.3 (49)	102	49/49	20.3 (50)	102	50/50
3	20.7 (50)	50/50	20.8 (50)	100	50/50	20.9 (49)	101	49/49	21.3 (50)	103	50/50
4	21.3 (50)	50/50	21.6 (50)	101	50/50	21.9 (49)	103	49/49	22.1 (50)	104	50/50
5	21.9 (50)	50/50	21.9 (50)	100	50/50	22.2 (49)	101	49/49	22.5 (50)	103	50/50
6	22.4 (50)	50/50	22.5 (50)	100	50/50	22.8 (49)	102	49/49	22.9 (50)	102	50/50
7	22.7 (50)	50/50	22.9 (50)	101	50/50	23.0 (49)	101	49/49	22.9 (50)	101	50/50
8	23.3 (50)	50/50	23.6 (50)	101	50/50	23.7 (49)	102	49/49	23.7 (50)	102	50/50
9	23.5 (50)	50/50	23.7 (50)	101	50/50	23.5 (49)	100	49/49	23.6 (50)	100	50/50
10	23.8 (50)	50/50	23.7 (50)	100	50/50	24.2 (49)	102	49/49	24.1 (50)	101	50/50
11	24.2 (50)	50/50	24.0 (50)	99	50/50	24.3 (49)	100	49/49	24.3 (50)	100	50/50
12	24.6 (50)	50/50	24.5 (50)	100	50/50	24.6 (49)	100	49/49	24.5 (50)	100	50/50
13	25.0 (50)	50/50	24.8 (50)	99	50/50	24.9 (49)	100	49/49	25.0 (50)	100	50/50
14	25.0 (50)	50/50	24.9 (50)	100	50/50	24.8 (49)	99	49/49	25.2 (50)	101	50/50
18	26.3 (50)	50/50	25.9 (49)	98	49/50	26.0 (49)	99	49/49	25.5 (50)	97	50/50
22	27.1 (50)	50/50	26.8 (49)	99	49/50	26.4 (49)	97	49/49	26.0 (50)	96	50/50
26	27.8 (50)	50/50	27.2 (49)	98	49/50	27.2 (49)	98	49/49	26.8 (50)	96	50/50
30	28.9 (50)	50/50	27.7 (49)	96	49/50	27.4 (49)	95	49/49	26.7 (50)	92	50/50
34	29.5 (50)	50/50	28.4 (49)	96	49/50	28.1 (49)	95	49/49	27.2 (50)	92	50/50
38	29.9 (50)	50/50	29.0 (49)	97	49/50	28.3 (49)	95	49/49	27.6 (50)	92	50/50
42	30.2 (50)	50/50	29.0 (49)	96	49/50	28.6 (49)	95	49/49	27.5 (50)	91	50/50
46	30.8 (50)	50/50	29.5 (49)	96	49/50	28.8 (49)	94	49/49	27.8 (50)	90	50/50
50	30.8 (50)	50/50	29.6 (49)	96	49/50	28.9 (49)	94	49/49	27.7 (50)	90	50/50
54	31.2 (49)	49/50	29.4 (47)	94	47/50	29.1 (49)	93	49/49	27.8 (50)	89	50/50
58	21.7 (49)	49/50	29.8 (47)	94	47/50	29.6 (49)	93	49/49	27.9 (50)	88	50/50
62	32.2 (49)	49/50	30.7 (47)	95	47/50	30.2 (47)	94	47/49	28.3 (49)	88	49/50
66	33.0 (48)	48/50	31.5 (46)	95	46/50	30.5 (46)	92	46/49	28.1 (49)	85	49/50
70	33.5 (47)	46/50	31.8 (44)	95	44/50	31.6 (45)	94	45/49	28.7 (49)	86	49/50
74	33.6 (44)	44/50	31.5 (44)	94	44/50	31.0 (41)	92	41/49	28.3 (49)	84	49/50
78	34.1 (41)	41/50	31.6 (44)	93	44/50	31.4 (37)	92	37/49	28.9 (46)	85	46/50
82	35.7 (41)	41/50	32.2 (43)	90	43/50	31.4 (34)	88	34/49	28.3 (41)	79	41/50
86	35.7 (40)	40/50	32.9 (37)	92	37/50	32.0 (28)	90	28/49	28.6 (39)	80	39/50
90	35.7 (38)	38/50	32.4 (32)	91	32/50	32.6 (26)	91	26/49	28.1 (34)	79	34/50
94	34.3 (34)	34/50	32.0 (30)	93	30/50	32.0 (21)	93	21/49	27.8 (31)	81	31/50
98	34.0 (29)	29/50	32.6 (28)	96	28/50	31.8 (19)	94	19/49	27.9 (29)	82	29/50
102	33.8 (28)	28/50	32.3 (26)	96	26/50	31.1 (18)	92	18/49	28.0 (22)	83	22/50
104	33.3 (26)	26/50	32.0 (26)	96	26/50	30.8 (17)	92	17/49	27.5 (21)	83	21/50

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

TABLE 4 INCIDENCE OF EXTERNAL AND INTERNAL MASS IN CLINICAL OBSERVATION OF MALE MICE
IN THE 2-YEAR INHALATION STUDY OF DICHLOROMETHANE

Time of mass occurrence (weeks)	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	0/49	0/49	0/49	1/48	1/47	3/44	3/50(1/12)
1000ppm	0/50	0/50	0/50	0/50	0/50	0/48	1/47	6/45	6/50(2/15)
2000ppm	0/50	0/49	0/49	0/49	0/49	0/49	1/46	1/37	2/50(2/24)
4000ppm	0/50	0/49	0/49	0/49	0/48	0/45	0/42	2/35	2/50(1/30)
Internal mass									
Control	0/50	1/50	0/49	0/49	0/49	0/48	4/47	10/44	11/50(5/12)
1000ppm	0/50	0/50	0/50	0/50	0/50	0/48	5/47	7/45	7/50(4/15)
2000ppm	0/50	0/49	0/49	0/49	1/49	4/49	8/46	7/37	10/50(8/24)
4000ppm	0/50	2/49	2/49	3/49	3/48	1/45	6/42	8/35	13/50(11/30)

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 animal)

TABLE 5 INCIDENCE OF EXTERNAL AND INTERNAL MASS IN CLINICAL OBSERVATION OF FEMALE MICE
IN THE 2-YEAR INHALATION STUDY OF DICHLOROMETHANE

Time of mass occurrence (weeks)	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	1/48	0/41	2/36	3/50(2/24)
1000ppm	0/50	0/50	0/49	0/49	0/48	0/46	3/44	2/31	4/50(2/24)
2000ppm	0/49	0/49	0/49	0/49	0/49	0/46	3/37	2/23	3/49(3/32)
4000ppm	0/50	0/50	0/50	0/50	1/50	1/49	5/45	3/31	8/50(7/29)
Internal mass									
Control	0/50	0/50	0/50	1/50	3/50	4/48	6/41	13/36	20/50(11/24)
1000ppm	0/50	0/50	0/49	2/49	2/48	2/46	10/44	5/31	16/50(13/24)
2000ppm	0/49	0/49	1/49	1/49	1/49	10/46	11/37	6/23	19/49(17/32)
4000ppm	0/50	0/50	0/50	0/50	0/50	4/49	11/45	10/31	17/50(11/29)

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 animal)

TABLE 6 FOOD CONSUMPTION CHANGES OF MALE MICE
IN THE 2-YEAR INHALATION STUDY OF DICHLOROMETHANE

Weeks on Study	Control		1000ppm			2000ppm			4000ppm		
	Av.FC.	No.of Surviv. <50>	Av.FC.	% of cont. <50>	No.of Surviv. <50>	Av.FC.	% of cont. <50>	No.of Surviv. <50>	Av.FC.	% of cont. <50>	No.of Surviv. <50>
1	3.9 (50)	50/50	3.9 (50)	100	50/50	3.9 (50)	100	50/50	3.8 (50)	97	50/50
2	3.8 (50)	50/50	3.8 (50)	100	50/50	3.8 (50)	100	50/50	4.1 (50)	108	49/50
3	3.9 (50)	50/50	4.0 (50)	103	50/50	4.0 (50)	103	50/50	4.3 (49)	110	49/50
4	4.1 (50)	50/50	4.1 (50)	100	50/50	4.2 (50)	102	50/50	4.5 (49)	110	49/50
5	4.1 (50)	50/50	4.1 (50)	100	50/50	4.2 (50)	102	50/50	4.6 (49)	112	49/50
6	4.2 (50)	50/50	4.2 (50)	100	50/50	4.2 (50)	100	50/50	4.4 (49)	105	49/50
7	4.2 (50)	50/50	4.2 (50)	100	50/50	4.3 (50)	102	50/50	4.5 (49)	107	49/50
8	4.3 (50)	50/50	4.2 (50)	98	50/50	4.2 (50)	98	50/50	4.6 (49)	107	49/50
9	4.3 (50)	50/50	4.4 (50)	102	50/50	4.4 (50)	102	50/50	4.7 (49)	109	49/50
10	4.3 (50)	50/50	4.2 (50)	98	50/50	4.2 (50)	98	50/50	4.3 (49)	100	49/50
11	4.4 (50)	50/50	4.2 (50)	95	50/50	4.2 (50)	95	50/50	4.5 (49)	102	49/50
12	4.3 (50)	50/50	4.3 (50)	100	50/50	4.3 (50)	100	50/50	4.7 (49)	109	49/50
13	4.3 (50)	50/50	4.2 (50)	98	50/50	4.3 (50)	100	50/50	4.5 (49)	105	49/50
14	4.3 (50)	50/50	4.3 (50)	100	50/50	4.4 (49)	102	49/50	4.8 (49)	112	49/50
18	4.5 (50)	50/50	4.5 (50)	100	50/50	4.6 (49)	102	49/50	4.9 (49)	109	49/50
22	4.5 (50)	50/50	4.5 (50)	100	50/50	4.5 (49)	100	49/50	4.9 (49)	109	49/50
26	4.6 (49)	49/50	4.6 (50)	100	50/50	4.7 (49)	102	49/50	5.2 (49)	113	49/50
30	4.7 (49)	49/50	4.6 (50)	98	50/50	4.6 (49)	98	49/50	5.1 (48)	119	49/50
34	4.7 (49)	49/50	4.7 (50)	100	50/50	4.8 (49)	102	49/50	5.2 (49)	111	49/50
38	5.0 (49)	49/50	5.1 (50)	102	50/50	5.1 (49)	102	49/50	5.5 (49)	110	49/50
42	4.8 (49)	49/50	4.7 (50)	98	50/50	5.0 (49)	104	49/50	5.4 (49)	113	49/50
46	4.7 (49)	49/50	4.7 (50)	100	50/50	4.8 (49)	102	49/50	5.1 (48)	109	48/50
50	4.9 (49)	49/50	4.8 (50)	98	50/50	5.0 (49)	102	49/50	5.2 (48)	106	48/50
54	4.9 (49)	49/50	4.9 (49)	100	49/50	5.0 (49)	102	49/50	5.2 (48)	106	48/50
58	5.1 (49)	49/50	5.0 (49)	98	49/50	5.1 (49)	100	49/50	5.3 (48)	104	48/50
62	5.1 (48)	48/50	5.0 (48)	98	48/50	5.1 (49)	100	49/50	5.2 (47)	102	47/50
66	5.3 (48)	48/50	5.2 (48)	98	48/50	5.3 (49)	100	49/50	5.3 (45)	100	45/50
70	5.4 (48)	48/50	5.5 (48)	102	48/50	5.6 (49)	104	49/50	5.7 (44)	106	44/50
74	5.3 (47)	47/50	5.2 (48)	98	48/50	5.4 (48)	102	48/50	5.4 (44)	102	44/50
78	5.4 (46)	47/50	5.3 (47)	98	47/50	5.5 (47)	102	47/50	5.5 (42)	102	42/50
82	5.3 (47)	47/50	5.2 (47)	98	47/50	5.5 (44)	104	44/50	5.5 (41)	104	41/50
86	5.2 (47)	47/50	5.1 (47)	98	47/50	5.3 (42)	102	42/50	5.3 (40)	102	40/50
90	5.2 (45)	45/50	5.0 (45)	96	45/50	6.8 (38)	131	38/50	6.6 (39)	127	39/50
94	5.1 (43)	43/50	4.9 (44)	96	44/50	5.2 (37)	102	37/50	5.0 (34)	98	34/50
98	5.0 (42)	42/50	5.0 (39)	100	39/50	5.0 (36)	100	36/50	4.5 (28)	90	28/50
102	5.1 (40)	40/50	5.1 (36)	100	36/50	5.0 (32)	98	31/50	4.8 (23)	94	22/50
104	5.1 (38)	38/50	5.0 (35)	96	35/50	4.9 (27)	94	26/50	4.7 (20)	90	20/50

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

TABLE 7 FOOD CONSUMPTION CHANGES OF FEMALE MICE
IN THE 2-YEAR INHALATION STUDY OF DICHLOROMETHANE

Weeks on Study	Control		1000ppm		2000ppm		4000ppm				
	Av.FC.	No.of Surviv. <50>	Av.FC.	% of cont. Surviv. <50>	No.of Surviv.	Av.FC.	% of cont. Surviv. <50>	No.of Surviv.	Av.FC.	% of cont. Surviv. <50>	No.of Surviv.
1	3.4(49)	50/50	3.4(50)	100	50/50	3.3(49)	97	49/49	3.3(50)	97	50/50
2	3.3(50)	50/50	3.4(50)	103	50/50	3.4(49)	103	49/49	3.5(50)	106	50/50
3	3.6(49)	50/50	3.7(50)	103	50/50	3.6(49)	100	49/49	3.9(50)	108	50/50
4	3.8(49)	50/50	3.8(50)	100	50/50	3.8(49)	100	49/49	4.1(50)	108	50/50
5	4.0(50)	50/50	3.9(50)	98	50/50	4.0(49)	100	49/49	4.2(50)	105	50/50
6	4.2(50)	50/50	4.1(50)	98	50/50	4.1(49)	98	49/49	4.2(50)	100	50/50
7	4.1(49)	50/50	4.2(50)	102	50/50	4.1(49)	100	49/49	4.1(50)	100	50/50
8	4.2(50)	50/50	4.2(50)	100	50/50	4.2(49)	100	49/49	4.5(50)	107	50/50
9	4.2(50)	50/50	4.2(50)	100	50/50	4.2(49)	100	49/49	4.4(50)	105	50/50
10	4.2(50)	50/50	4.1(50)	98	50/50	3.9(49)	93	49/49	4.1(50)	98	50/50
11	4.1(50)	50/50	4.1(50)	100	50/50	4.0(49)	98	49/49	4.2(50)	102	50/50
12	4.1(50)	50/50	4.1(50)	100	50/50	4.1(49)	100	49/49	4.3(50)	105	50/50
13	4.2(50)	50/50	4.1(50)	98	50/50	4.0(49)	95	49/49	4.2(50)	100	50/50
14	4.0(50)	50/50	4.0(50)	100	50/50	4.0(49)	100	49/49	4.3(50)	108	50/50
18	4.4(50)	50/50	4.3(49)	98	49/50	4.2(49)	95	49/49	4.4(50)	100	50/50
22	4.3(50)	50/50	4.3(49)	100	49/50	4.2(49)	98	49/49	4.4(50)	102	50/50
26	4.4(50)	50/50	4.5(49)	102	49/50	4.4(49)	100	49/49	4.8(50)	109	50/50
30	4.5(50)	50/50	4.4(49)	98	49/50	4.3(49)	96	49/49	4.6(50)	102	50/50
34	4.6(50)	50/50	4.5(49)	98	49/50	4.4(49)	96	49/49	4.8(50)	104	50/50
38	4.7(50)	50/50	4.7(49)	100	49/50	4.7(49)	100	49/49	4.9(50)	104	50/50
42	4.5(50)	50/50	4.5(49)	100	49/50	4.5(49)	100	49/49	4.7(50)	104	50/50
46	4.4(50)	50/50	4.4(49)	100	49/50	4.7(49)	95	49/49	4.5(50)	102	50/50
50	4.4(50)	50/50	4.3(49)	98	49/50	4.3(49)	98	49/49	4.4(50)	100	50/50
54	4.4(49)	49/50	4.3(47)	98	47/50	4.4(49)	100	49/49	4.3(50)	98	50/50
58	4.7(49)	49/50	4.4(47)	94	47/50	4.5(49)	96	49/49	4.5(50)	96	50/50
62	4.6(49)	49/50	4.5(47)	98	47/50	4.5(47)	98	47/49	4.5(49)	98	49/50
66	4.6(48)	48/50	4.6(46)	100	46/50	4.5(46)	98	46/49	4.5(49)	98	49/50
70	4.7(46)	46/50	4.8(44)	102	44/50	4.9(45)	104	45/49	4.9(49)	104	49/50
74	4.5(44)	44/50	4.5(44)	100	44/50	4.6(41)	102	41/49	4.7(49)	104	49/50
78	4.6(41)	41/50	4.6(44)	100	44/50	4.7(37)	102	37/49	4.6(46)	100	46/50
82	4.8(41)	41/50	4.6(43)	96	43/50	4.8(34)	100	34/49	4.7(41)	98	41/50
86	4.5(40)	40/50	4.7(37)	104	37/50	4.8(28)	107	28/49	4.6(39)	102	39/50
90	4.5(38)	38/50	4.6(32)	102	32/50	6.2(26)	138	26/49	5.9(34)	131	34/50
94	4.5(34)	34/50	4.6(30)	102	30/50	4.8(21)	107	21/49	4.6(31)	102	31/50
98	4.5(29)	29/50	4.7(28)	104	28/50	4.8(19)	107	19/49	4.4(29)	98	29/50
102	4.7(28)	28/50	4.8(26)	102	26/50	4.8(18)	102	18/49	4.6(22)	98	22/50
104	4.7(26)	26/50	4.7(26)	100	26/50	4.8(17)	102	17/49	4.5(21)	96	21/50

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

TABLE 8 SELECTED NON NEOPLASTIC LESIONS OF MALE MICE
IN THE 2-YEAR INHALATION STUDY OF DICHLOROMETHANE

Organ	Findings	Group Name No. of Animals Grade a)	Control				1000 ppm				2000 ppm				4000 ppm			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
nasal cavit			<50> b)				<50>				<50>				<50>			
	eosinophilic change: olfactory epithelium		19	0	0	0	8	1	0	0*	6	1	0	0**	5	0	0	0**
lung			<50>				<50>				<50>				<50>			
	bronchiolar-alveolar cell hyperplasia		2	0	0	0	1	1	0	0	3	0	0	0	5	0	0	0
	hyperplasia: terminal bronchiole		0	0	0	0	1	0	0	0	5	0	0	0	13	0	0	0**
	hyperplasia:epithelium, alveolar duct		1	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0
tooth			<50>				<50>				<50>				<50>			
	dysplasia		39	5	0	0	31	3	1	0	26	4	0	0**	15	1	0	0**
stomach			<50>				<50>				<50>				<50>			
	hyperplasia: glandular stomach		12	21	9	0	9	22	7	0	14	26	6	0	30	11	0	0**
liver			<50>				<50>				<50>				<50>			
	granulation		27	0	0	0	16	2	0	0*	13	4	1	0**	9	1	0	0**
	clear cell focus		1	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0
	acidophilic cell focus		0	1	0	0	0	2	0	0	4	2	0	0	2	0	0	0
	basophilic cell focus		1	2	0	0	6	2	0	0	2	2	1	0	5	2	0	0
	vacuolated cell focus		0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
	mixed cell focus		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
	vacuolic change: peripheral		0	0	0	0	0	0	0	0	0	0	0	0	14	1	0	0**
kidney			<50>				<50>				<50>				<50>			
	basophilic change		36	1	0	0	24	3	1	0	21	1	0	0**	16	0	0	0**
	lymphocytic infiltration		20	0	0	0	2	0	0	0**	3	1	0	0**	1	0	0	0**
	vacuolization of proximal tubule		38	0	0	0	6	0	0	0**	0	0	0	0**	0	0	0	0**
adrenal			<50>				<50>				<50>				<50>			
	focal fatty change:cortex		8	0	0	0	0	0	0	0**	0	0	0	0**	1	0	0	0*
testis			<50>				<50>				<50>				<50>			
	atrophy		21	15	12	0	16	16	16	0	5	34	11	0**	5	23	16	0**
	mineralization		23	6	7	0	14	26	5	0**	15	26	6	0**	10	25	10	0**
brain			<50>				<50>				<50>				<50>			
	mineralization		31	1	0	0	28	0	0	0	27	2	0	0	11	0	0	0**

a) 1 : Slight 2 : Moderate 3 : Marked 4 : Severe

b) : Number of animals examined at the site

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Chi Square

TABLE 9 SELECTED NON NEOPLASTIC LESIONS OF FEMALE MICE
IN THE 2-YEAR INHALATION STUDY OF DICHLOROMETHANE

Organ	Findings	Group Name No. of Animals Grade a)	Control 50				1000 ppm 50				2000 ppm 49				4000 ppm 50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
nasal cavit			<50> b)				<50>				<49>				<50>			
	eosinophilic change: olfactory epithelium	23	3	0	0	15	5	0	0	5	0	0	0**	2	1	0	0**	
	eosinophilic change: respiratory epithelium	38	6	0	0	26	7	2	0*	24	6	1	0*	21	1	1	0**	
	respiratory metaplasia: olfactory epithelium	22	0	0	0	30	0	0	0	4	0	0	0**	4	0	0	0**	
lung			<50>				<50>				<49>				<50>			
	hemorrhage	1	0	0	0	1	0	0	0	3	2	0	0	1	0	0	0	
	bronchiolar-alveolar cell hyperplasia	0	0	0	0	2	0	0	0	0	0	0	0	2	0	0	0	
	hyperplasia:terminal bronchiole	0	0	0	0	3	0	0	0	2	0	0	0	9	0	0	0**	
	hyperplasia:epithelium, alveolar duct	0	0	0	0	0	0	0	0	1	0	0	0	3	0	0	0	
tooth			<50>				<50>				<49>				<50>			
	dysplasia	8	3	0	0	9	4	0	0	12	1	0	0	29	3	0	0**	
liver			<50>				<50>				<49>				<50>			
	granulation	9	11	0	0	14	4	0	0	11	5	0	0	10	0	0	0**	
	clear cell focus	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	
	acidophilic cell focus	0	1	0	0	0	1	0	0	1	2	0	0	1	1	0	0	
	basophilic cell focus	0	1	0	0	1	0	0	0	3	0	0	0	3	2	0	0	
	vacuolic change: peripheral	0	1	0	0	0	0	0	0	0	0	0	0	19	9	1	0**	
ovary			<50>				<50>				<48>				<50>			
	atrophy	2	25	20	0	1	24	23	0	1	20	24	0	2	9	30	0**	
uterus			<50>				<50>				<49>				<50>			
	cystic endometrial hyperplasia	27	8	0	0	27	3	0	0	24	3	0	0	25	1	0	0*	
brain			<50>				<50>				<49>				<50>			
	mineralization	12	0	0	0	11	0	0	0	10	0	0	0	2	0	0	0**	

a) 1 : Slight 2 : Moderate 3 : Marked 4 : Severe

b) : Number of animals examined at the site

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Chi Square

TABLE 10 NEOPLASTIC LESIONS INCIDENCE AND STATISTICAL ANALYSIS IN MALE MICE
IN THE 2-YEAR INHALATION STUDY OF DICHLOROMETHANE

Group Name	Control	1000ppm	2000ppm	4000ppm
SITE : lung				
TUMOR : bronchiolar-alveolar adenoma				
Tumor rate				
Overall rates(a)	7/50(14.0)	3/50(6.0)	4/50(8.0)	14/50(28.0)
Adjusted rates(b)	18.42	8.57	13.79	43.48
Terminal rates(c)	7/38(18.4)	3/35(8.6)	3/26(11.5)	8/20(40.0)
Statistical analysis				
Peto test				
Standard method(d)	P=-----			
Prevalence method(d)	P=0.0006**			
Combined analysis (d)	P=-----			
Cochran-Armitage test(e)	P=0.0001*			
Fisher Exact test(e)		P=0.1590	P=0.2624	P=0.0699
SITE : lung				
TUMOR : bronchiolar-alveolar carcinoma				
Tumor rate				
Overall rates(a)	1/50(2.0)	14/50(28.0)	22/50(44.0)	39/50(78.0)
Adjusted rates(b)	2.63	31.43	50.00	86.36
Terminal rates(c)	1/38(2.6)	11/35(31.4)	13/26(50.0)	17/20(85.0)
Statistical analysis				
Peto test				
Standard method(d)	P<0.0001**			
Prevalence method(d)	P<0.0001**?			
Combined analysis (d)	P<0.0001**?			
Cochran-Armitage test(e)	P<0.0001**			
Fisher Exact test(e)		P=0.0002**	P<0.0001**	P<0.0001**
SITE : lung				
TUMOR : bronchiolar-alveolar adenoma,bronchiolar-alveolar carcinoma				
Tumor rate				
Overall rates(a)	8/50(16.0)	17/50(34.0)	26/50(52.0)	42/50(84.0)
Adjusted rates(b)	21.05	40.0	62.96	91.67
Terminal rates(c)	8/38(21.1)	14/35(40.0)	16/26(61.5)	18/20(90.0)
Statistical analysis				
Peto test				
Standard method(d)	P<0.0001**			
Prevalence method(d)	P<0.0001**?			
Combined analysis (d)	P<0.0001**?			
Cochran-Armitage test(e)	P<0.0001**			
Fisher Exact test(e)		P=0.0318*	P=0.0001**	P<0.0001**
SITE : liver				
TUMOR : hepatocellular adenoma				
Tumor rate				
Overall rates(a)	10/50(20.0)	13/50(26.0)	14/50(28.0)	15/50(30.0)
Adjusted rates(b)	21.74	30.56	37.93	50.00
Terminal rates(c)	8/38(21.1)	10/35(28.6)	9/26(34.6)	10/20(50.0)
Statistical analysis				
Peto test				
Standard method(d)	P=0.5790			
Prevalence method(d)	P=0.0188*			
Combined analysis (d)	P=0.0245*			
Cochran-Armitage test(e)	P=0.2757			
Fisher Exact test(e)		P=0.3182	P=0.2419	P=0.1783

TABLE 10 NEOPLASTIC LESIONS INCIDENCE AND STATISTICAL ANALYSIS IN MALE MICE
IN THE 2-YEAR INHALATION STUDY OF DICHLOROMETHANE(continued)

Group Name	Control	1000ppm	2000ppm	4000ppm
SITE : liver				
TUMOR : hepatocellular carcinoma				
Tumor rate				
Overall rates(a)	10/50(20.0)	9/50(18.0)	14/50(28.0)	20/50(40.0)
Adjusted rates(b)	15.79	17.95	23.53	54.17
Terminal rates(c)	6/38(15.8)	5/35(14.3)	6/26(23.1)	10/20(50.0)
Statistical analysis				
Peto test				
Standard method(d)	P=0.0103*			
Prevalence method(d)	P=0.0044**			
Combined analysis (d)	P=0.0002**			
Cochran-Armitage test(e)	P=0.0086**			
Fisher Exact test(e)		P=0.4994	P=0.2419	P=0.0243*
SITE : liver				
TUMOR : hepatocellular adenoma,hepatocellular carcinoma,hepatoblastoma				
Tumor rate				
Overall rates(a)	15/50(30.0)	20/50(40.0)	25/50(50.0)	29/50(58.0)
Adjusted rates(b)	28.95	41.67	55.56	80.00
Terminal rates(c)	11/38(28.9)	14/35(40.0)	14/26(53.8)	15/20(75.0)
Statistical analysis				
Peto test				
Standard method(d)	P=0.0166*			
Prevalence method(d)	P=0.0002**			
Combined analysis (d)	P<0.0001**			
Cochran-Armitage test(e)	P=0.0036**			
Fisher Exact test(e)		P=0.2013	P=0.0328*	P=0.0042**
SITE : liver				
TUMOR : hemangioma				
Tumor rate				
Overall rates(a)	0/50(0.0)	4/50(8.0)	3/50(6.0)	5/50(10.0)
Adjusted rates(b)	0.0	8.57	11.54	10.00
Terminal rates(c)	0/50(0.0)	3/35(8.6)	3/26(11.5)	2/20(10.0)
Statistical analysis				
Peto test				
Standard method(d)	P=0.1682			
Prevalence method(d)	P=0.0182*			
Combined analysis (d)	P=0.0105*			
Cochran-Armitage test(e)	P=0.0700			
Fisher Exact test(e)		P=0.0587	P=0.1212	P=0.0281*
SITE : liver				
TUMOR : hemangioma, hemangiosarcoma				
Tumor rate				
Overall rates(a)	1/50(2.0)	4/50(8.0)	4/50(8.0)	6/50(12.0)
Adjusted rates(b)	2.63	8.57	15.38	10.26
Terminal rates(c)	1/38(2.6)	3/35(8.6)	4/26(15.4)	2/20(10.0)
Statistical analysis				
Peto test				
Standard method(d)	P=0.0409*			
Prevalence method(d)	P=0.0366*			
Combined analysis (d)	P=0.0078**			
Cochran-Armitage test(e)	P=0.0768			
Fisher Exact test(e)		P=0.1811	P=0.1811	P=0.0559

TABLE 10 NEOPLASTIC LESIONS INCIDENCE AND STATISTICAL ANALYSIS IN MALE MICE
IN THE 2-YEAR INHALATION STUDY OF DICHLOROMETHANE(continued)

Group Name	Control	1000ppm	2000ppm	4000ppm
SITE : ALL SITE				
TUMOR : hemangioma				
Tumor rate				
Overall rates(a)	1/50(2.0)	5/50(10.0)	6/50(12.0)	7/50(14.0)
Adjusted rates(b)	0.0	8.57	19.23	15.00
Terminal rates(c)	0/38(0.0)	3/35(8.6)	5/26(19.2)	3/20(15.0)
Statistical analysis				
Peto test				
Standard method(d)	P=0.1825			
Prevalence method(d)	P=0.0046**			
Combined analysis (d)	P=0.0042**			
Cochran-Armitage test(e)	P=0.0554			
Fisher Exact test(e)		P=0.1022	P=0.0559	P=0.0297*
SITE : adenal gland				
TUMOR : pheochromocytoma				
Tumor rate				
Overall rates(a)	1/50(2.0)	0/50(0.0)	1/50(2.0)	3/50(6.0)
Adjusted rates(b)	2.63	0.0	3.85	9.09
Terminal rates(c)	1/38(2.6)	0/35(0.0)	1/26(3.8)	0/20(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P=-----			
Prevalence method(d)	P=0.0367*			
Combined analysis (d)	P=-----			
Cochran-Armitage test(e)	P=0.1079			
Fisher Exact test(e)		P=0.4999	P=0.2475	P=0.3086
SITE : ALL SITE				
TUMOR : histiocytic sarcoma				
Tumor rate				
Overall rates(a)	5/50(10.0)	2/50(4.0)	3/50(6.0)	0/50(0.0)
Adjusted rates(b)	7.89	0.0	2.56	0.0
Terminal rates(c)	3/38(7.9)	0/35(0.0)	0/26(0.0)	0/20(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P=0.8588			
Prevalence method(d)	P=0.9551			
Combined analysis (d)	P=0.9735			
Cochran-Armitage test(e)	P=0.0372*			
Fisher Exact test(e)		P=0.2181	P=0.3576	P=0.0281*

(a):Number of tumor-bearing animals/number of animals examined at the site.

(b):Kaplan-Meire estimated tumor incidence at the end of the study after adjusting for intercurrent mortality.

(c):Observed tumor incidence at terminal kill.

(d):Beneath the control incidence are the P-values associated with the trend test.

Standard method :Death analysis

Prevalence metho :Incidental tumor test

Combined analysi :Death analysis + Incidental tumor test

(e):The Cochran-Armitage and Fisher exact test compare directly the overall incidence rates.

? :The conditional probabilities of the largest and smallest possible out comes can not be estimated
or this P-value is beyond the estimated P-value.

-----:There is no data which should be statistical analysis.

Significant difference;*: $P \leq 0.05$ **: $P \leq 0.01$

TABLE 11 NEOPLASTIC LESIONS INCIDENCE AND STATISTICAL ANALYSIS IN FEMALE MICE
IN THE 2-YEAR INHALATION STUDY OF DICHLOROMETHANE

Group Name	Control	1000ppm	2000ppm	4000ppm
SITE : lung				
TUMOR : bronchiolar-alveolar adenoma				
Tumor rate				
Overall rates(a)	2/50(4.0)	4/50(8.0)	5/49(10.2)	12/50(24.0)
Adjusted rates(b)	7.69	11.54	17.65	36.36
Terminal rates(c)	2/26(7.7)	3/26(11.5)	3/17(17.6)	7/21(33.3)
Statistical analysis				
Peto test				
Standard method(d)	P=-----			
Prevalence method(d)	P=0.0005**			
Combined analysis (d)	P=-----			
Cochran-Armitage test(e)	P=0.0011**			
Fisher Exact test(e)		P=0.3389	P=0.2097	P=0.0038**
SITE : lung				
TUMOR : bronchiolar-alveolar carcinoma				
Tumor rate				
Overall rates(a)	3/50(6.0)	1/50(2.0)	8/49(16.3)	20/50(40.0)
Adjusted rates(b)	3.85	3.85	35.29	39.13
Terminal rates(c)	1/26(3.8)	1/26(3.8)	6/17(35.3)	7/21(33.3)
Statistical analysis				
Peto test				
Standard method(d)	P=0.0145*			
Prevalence method(d)	P<0.0001**			
Combined analysis (d)	P<0.0001**			
Cochran-Armitage test(e)	P<0.0001**			
Fisher Exact test(e)		P=0.3086	P=0.0936	P<0.0001**
SITE : lung				
TUMOR : bronchiolar-alveolar adenoma,bronchiolar-alveolar carcinoma,adenosquamous carcinoma				
Tumor rate				
Overall rates(a)	5/50(10.0)	5/50(10.0)	12/49(24.5)	30/50(60.0)
Adjusted rates(b)	11.54	15.38	47.06	65.22
Terminal rates(c)	3/26(11.5)	4/26(15.4)	8/17(47.1)	13/21(61.9)
Statistical analysis				
Peto test				
Standard method(d)	P=0.0145*			
Prevalence method(d)	P<0.0001**			
Combined analysis (d)	P<0.0001**?			
Cochran-Armitage test(e)	P<0.0001**			
Fisher Exact test(e)		P=0.3701	P=0.0492*	P<0.0001**
SITE : liver				
TUMOR : hepatocellular adenoma				
Tumor rate				
Overall rates(a)	1/50(2.0)	7/49(14.3)	4/49(8.2)	16/50(32.0)
Adjusted rates(b)	3.85	22.22	16.00	45.71
Terminal rates(c)	1/26(3.8)	5/26(19.2)	1/17(5.9)	9/21(42.9)
Statistical analysis				
Peto test				
Standard method(d)	P=-----			
Prevalence method(d)	P<0.0001**			
Combined analysis (d)	P=-----			
Cochran-Armitage test(e)	P<0.0001**			
Fisher Exact test(e)		P=0.0277*	P=0.1748	P<0.0001**

TABLE 11 NEOPLASTIC LESIONS INCIDENCE AND STATISTICAL ANALYSIS IN FEMALE MICE
IN THE 2-YEAR INHALATION STUDY OF DICHLOROMETHANE(continued)

Group Name	Control	1000ppm	2000ppm	4000ppm
SITE : liver				
TUMOR : hepatocellular carcinoma				
Tumor rate				
Overall rates(a)	1/50(2.0)	1/49(2.0)	5/49(10.2)	19/50(38.0)
Adjusted rates(b)	3.85	3.85	17.65	46.15
Terminal rates(c)	1/26(3.8)	1/26(3.8)	3/17(17.6)	9/21(42.9)
Statistical analysis				
Peto test				
Standard method(d)	P=0.0159*			
Prevalence method(d)	P<0.0001**			
Combined analysis (d)	P<0.0001**			
Cochran-Armitage test(e)	P<0.0001**			
Fisher Exact test(e)		P=0.2526	P=0.0976	P<0.0001**
SITE : liver				
TUMOR : hepatocellular adenoma,hepatocellular carcinoma				
Tumor rate				
Overall rates(a)	2/50(4.0)	8/49(16.3)	9/49(18.4)	30/50(60.0)
Adjusted rates(b)	7.69	25.93	30.0	72.73
Terminal rates(c)	2/26(7.7)	6/26(23.1)	4/17(23.5)	14/21(66.7)
Statistical analysis				
Peto test				
Standard method(d)	P=0.0159*			
Prevalence method(d)	P<0.0001**?			
Combined analysis (d)	P<0.0001**?			
Cochran-Armitage test(e)	P<0.0001**			
Fisher Exact test(e)		P=0.0426*	P=0.0235*	P<0.0001**
SITE : liver				
TUMOR : hemangioma				
Tumor rate				
Overall rates(a)	2/50(4.0)	2/49(4.1)	0/49(0.0)	5/50(10.0)
Adjusted rates(b)	5.41	7.69	0.0	19.05
Terminal rates(c)	1/26(3.8)	2/26(7.7)	0/17(0.0)	4/21(19.0)
Statistical analysis				
Peto test				
Standard method(d)	P=0.1288			
Prevalence method(d)	P=0.1204			
Combined analysis (d)	P=0.0557			
Cochran-Armitage test(e)	P=0.1526			
Fisher Exact test(e)		P=0.3164	P=0.2525	P=0.2181
SITE : liver				
TUMOR : hemangioma,hemangiosarcoma				
Tumor rate				
Overall rates(a)	3/50(6.0)	2/49(4.1)	0/49(0.0)	7/50(14.0)
Adjusted rates(b)	8.11	7.69	0.0	19.05
Terminal rates(c)	2/26(7.7)	2/26(7.7)	0/17(0.0)	4/21(19.0)
Statistical analysis				
Peto test				
Standard method(d)	P=0.0046**			
Prevalence method(d)	P=0.2157			
Combined analysis (d)	P=0.0239*			
Cochran-Armitage test(e)	P=0.0721			
Fisher Exact test(e)		P=0.4903	P=0.1250	P=0.1590

TABLE 11 NEOPLASTIC LESIONS INCIDENCE AND STATISTICAL ANALYSIS IN FEMALE MICE
IN THE 2-YEAR INHALATION STUDY OF DICHLOROMETHANE(continued)

Group Name	Control	1000ppm	2000ppm	4000ppm
SITE : subcutis				
TUMOR : hemangioma,hemangiosarcoma				
Tumor rate				
Overall rates(a)	3/50(6.0)	1/50(2.0)	0/49(0.0)	0/50(0.0)
Adjusted rates(b)	11.54	3.85	0.0	0.0
Terminal rates(c)	3/26(11.5)	1/26(3.8)	0/17(0.0)	0/21(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P=-----			
Prevalence method(d)	P=0.9817			
Combined analysis (d)	P=-----			
Cochran-Armitage test(e)	P=0.0411*			
Fisher Exact test(e)		P=0.3086	P=0.1250	P=0.1212
SITE : lymph node				
TUMOR : malignant lymphoma				
Tumor rate				
Overall rates(a)	23/50(46.0)	31/50(62.0)	19/49(38.8)	15/50(30.0)
Adjusted rates(b)	48.15	69.23	47.06	34.78
Terminal rates(c)	12/26(46.2)	18/26(69.2)	8/17(47.1)	7/21(33.3)
Statistical analysis				
Peto test				
Standard method(d)	P=0.8474			
Prevalence method(d)	P=0.8771			
Combined analysis (d)	P=0.9387			
Cochran-Armitage test(e)	P=0.0166*			
Fisher Exact test(e)		P=0.0801	P=0.3009	P=0.0746
SITE : ALL SITE				
TUMOR : malignant lymphoma				
Tumor rate				
Overall rates(a)	25/50(50.0)	33/50(66.0)	21/49(42.9)	17/50(34.0)
Adjusted rates(b)	55.56	76.92	52.94	34.78
Terminal rates(c)	14/26(53.8)	20/26(76.9)	9/17(52.9)	7/21(33.3)
Statistical analysis				
Peto test				
Standard method(d)	P=0.6794			
Prevalence method(d)	P=0.9488			
Combined analysis (d)	P=0.9208			
Cochran-Armitage test(e)	P=0.0173*			
Fisher Exact test(e)		P=0.0780	P=0.3054	P=0.0780

(a):Number of tumor-bearing animals/number of animals examined at the site.

(b):Kaplan-Meire estimated tumor incidence at the end of the study after adjusting for intercurrent mortality.

(c):Observed tumor incidence at terminal kill.

(d):Beneath the control incidence are the P-values associated with the trend test.

Standard method :Death analysis

Prevalence metho :Incidental tumor test

Combined analysi :Death analysis + Incidental tumor test

(e):The Cochran-Armitage and Fisher exact test compare directly the overall incidence rates.

? :The conditional probabilities of the largest and smallest possible out comes can not be estimated or this P-value is beyond the estimated P-value.

-----:There is no data which should be statistical analysis.

Significant difference;*: $P \leq 0.05$ **: $P \leq 0.01$

TABLE 12

CAUSE OF DEATH OF MICE IN THE 2-YEAR INHALATION STUDY
OF DICHLOROMETHANE

Group	Male				Female			
	Control	1000ppm	2000ppm	4000ppm	Control	1000ppm	2000ppm	4000ppm
Number of dead or moribund animals	12	15	24	30	24	24	32	29
No microscopical confirmation	0	0	0	2	0	2	1	1
Respiratory system lesion	0	1	0	1	0	0	0	0
Cardiovascular lesion	0	0	1	0	0	0	0	0
Hepatic lesion	0	0	0	0	0	0	2	1
Reproductive system lesion	0	0	0	0	1	0	0	0
Hydronephrosis	1	1	2	3	0	0	0	0
Tumor death : leukemia	5	5	6	3	9	13	8	6
subcutis	0	1	0	0	0	0	1	1
lung	0	2	6	14	2	0	1	4
tooth	0	1	0	0	0	0	0	0
liver	4	3	6	6	0	0	3	5
urinary bladder	0	1	2	0	0	0	0	0
pituitary	0	0	0	0	1	1	1	1
ovary	-	-	-	-	0	0	2	0
uterus	-	-	-	-	9	8	13	8
peripheral nerve	1	0	0	0	0	0	0	0
muscle	0	0	1	0	0	0	0	1
pleura	0	0	0	0	0	0	0	1
peritoneum	1	0	0	0	2	0	0	0
reperitoneum	0	0	0	1	0	0	0	0