

p-ニトロアニソールのマウスを用いた経口投与による
13週間毒性試験（混餌試験）報告書

試験番号：0370

TABLES

TABLES

- TABLE 1 EXPERIMENTAL DESIGN AND MATERIALS AND METHODS IN THE 13-WEEK FEED STUDY OF p-NITROANISOLE
- TABLE 2 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES OF MALE MICE IN THE 13-WEEK FEED STUDY OF p-NITROANISOLE
- TABLE 3 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES OF FEMALE MICE IN THE 13-WEEK FEED STUDY OF p-NITROANISOLE
- TABLE 4 FOOD CONSUMPTION CHANGES OF MALE MICE IN THE 13-WEEK FEED STUDY OF p-NITROANISOLE
- TABLE 5 FOOD CONSUMPTION CHANGES OF FEMALE MICE IN THE 13-WEEK FEED STUDY OF p-NITROANISOLE

TABLE 1 EXPERIMENTAL DESIGN AND MATERIALS AND METHODS
IN THE 13-WEEK FEED STUDY OF p-NITROANISOLE

13-week study

<Method of Administration>	Mixed feed
<Number of Groups>	Male 6, Female 6
<Size of Groups>	10 males and 10 females of each group
<Animals>	
Strain and Species	BDF ₁ /DuCrj mouse
Animal Source	Charles River Japan, Inc.
Duration Held Before Study	3 wk
Age When Placed on Study	7 wk
Age When Killed	20 wk
<Doses>	
<Male>	0, 2500, 5000, 10000, 20000 or 30000 ppm
<Female>	0, 2500, 5000, 10000, 20000 or 30000 ppm
<Duration of Dosing>	7d/wk for 13wk
<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 Available <i>ad libitum</i>
Animal per Cage	Single (stainless steel wire)
Animal Room Environment	Barrier system Temperature : 23±2°C Humidity : 55±15% Fluorescent light 12h/d 15~17 room air changes /h
<Type and Frequency of Observation>	
Clinical Sign	Observed 1×wk for 13wk
Body Weight	Weighed 1×wk for 13wk
Food Consumption	Weighed 1×wk for 13wk

TABLE 1 EXPERIMENTAL DESIGN AND MATERIALS AND METHODS
(Continued) IN THE 13-WEEK FEED STUDY OF p-NITROANISOLE

13-week study

<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
Phospholipid, Glutamic oxaloacetic transaminase (GOT),
Glutamic pyruvic transaminase (GPT),
Lactate dehydrogenase (LDH),
Alkaline phosphatase (ALP)
 γ -Glutamyl transpeptidase (G-GTP),
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
schedule sacrificed animals.

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

<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, 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 13-WEEK FEED STUDY OF p-NITROANISOLE

Week on Study	Control			2500ppm			5000ppm			10000ppm			20000ppm			30000ppm		
	Av.Wt.	No. of Surviv. <10>	No. of Surviv. <10>	Av.Wt.	% of cont. <10>	No. of Surviv. <10>	Av.Wt.	% of cont. <10>	No. of Surviv. <10>	Av.Wt.	% of cont. <10>	No. of Surviv. <10>	Av.Wt.	% of cont. <10>	No. of Surviv. <10>	Av.Wt.	% of cont. <10>	No. of Surviv. <10>
0	23.2	(10)	10/10	23.1	(10)	100	23.1	(10)	100	23.1	(10)	100	23.2	(10)	100	23.1	(10)	100
1	23.8	(10)	10/10	23.6	(10)	99	23.5	(10)	99	23.9	(10)	100	23.7	(10)	100	23.1	(10)	97
2	24.4	(10)	10/10	24.2	(10)	99	24.1	(10)	99	24.3	(10)	100	22.3	(10)	91	18.2	(8)	75
3	25.8	(10)	10/10	25.2	(10)	98	25.5	(10)	99	25.7	(10)	100	24.9	(10)	97	17.3	(6)	67
4	26.9	(10)	10/10	25.9	(10)	96	26.4	(10)	98	26.1	(10)	97	25.6	(10)	95	18.1	(5)	67
5	27.1	(10)	10/10	26.8	(10)	99	27.5	(10)	101	26.8	(10)	99	25.8	(10)	95	20.1	(5)	74
6	28.2	(10)	10/10	27.6	(10)	98	28.1	(10)	100	27.1	(10)	96	26.4	(10)	94	21.3	(5)	76
7	28.0	(10)	10/10	27.3	(10)	98	27.4	(10)	98	26.6	(10)	95	25.9	(10)	92	22.4	(5)	80
8	28.9	(10)	10/10	28.2	(10)	98	28.3	(10)	98	27.8	(10)	96	26.8	(10)	93	22.7	(5)	79
9	29.7	(10)	10/10	28.5	(10)	96	28.8	(10)	97	28.1	(10)	95	27.0	(10)	91	23.7	(5)	80
10	30.0	(10)	10/10	28.9	(10)	96	29.2	(10)	97	28.1	(10)	94	27.3	(10)	91	24.2	(5)	81
11	31.1	(10)	10/10	29.9	(10)	96	30.1	(10)	97	28.8	(10)	93	27.3	(10)	88	24.4	(5)	78
12	31.3	(10)	10/10	29.9	(10)	96	30.0	(10)	96	28.7	(10)	92	27.3	(10)	87	24.2	(5)	77
13	31.9	(10)	10/10	30.8	(10)	97	30.7	(10)	96	28.9	(10)	91	28.0	(10)	88	24.6	(5)	77
14	32.4	(10)	10/10	31.5	(10)	97	31.6	(10)	98	29.5	(10)	91	28.3	(10)	87	25.0	(5)	77

< > : 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 13-WEEK FEED STUDY OF p-NITROANISOLE

Week on Study	Control			2500ppm			5000ppm			10000ppm			20000ppm			30000ppm			
	Av.Wt.	No. of Surviv. <10>	No. of Surviv.	Av.Wt.	% of cont. <10>	No. of Surviv.	Av.Wt.	% of cont. <10>	No. of Surviv.	Av.Wt.	% of cont. <10>	No. of Surviv.	Av.Wt.	% of cont. <10>	No. of Surviv.	Av.Wt.	% of cont. <10>	No. of Surviv.	
0	18.3	(10)	10/10	18.3	(10)	100	10/10	18.3	(10)	100	10/10	18.3	(10)	100	10/10	18.3	(10)	100	10/10
1	18.4	(10)	10/10	18.5	(10)	101	10/10	18.5	(10)	101	10/10	18.7	(10)	102	10/10	18.5	(10)	101	10/10
2	19.0	(10)	10/10	19.1	(10)	101	10/10	19.1	(10)	101	10/10	19.0	(10)	100	10/10	17.3	(10)	91	10/10
3	19.7	(10)	10/10	19.8	(10)	101	10/10	19.8	(10)	101	10/10	19.8	(10)	101	10/10	19.8	(10)	101	10/10
4	19.6	(10)	10/10	20.2	(10)	103	10/10	20.1	(10)	103	10/10	20.3	(10)	104	10/10	21.0	(10)	107	10/10
5	21.1	(10)	10/10	20.6	(10)	98	10/10	20.7	(10)	98	10/10	20.8	(10)	99	10/10	21.6	(10)	102	10/10
6	21.0	(10)	10/10	21.1	(10)	100	10/10	21.6	(10)	103	10/10	21.6	(10)	103	10/10	21.4	(10)	102	10/10
7	20.7	(10)	10/10	20.9	(10)	101	10/10	20.2	(10)	98	10/10	20.9	(10)	101	10/10	20.6	(10)	100	10/10
8	21.3	(10)	10/10	21.3	(10)	100	10/10	21.3	(10)	100	10/10	22.1	(10)	104	10/10	21.4	(10)	100	10/10
9	21.3	(10)	10/10	21.2	(10)	100	10/10	21.5	(10)	101	10/10	21.8	(10)	102	10/10	21.7	(10)	102	10/10
10	22.1	(10)	10/10	21.8	(10)	99	10/10	22.0	(10)	100	10/10	22.2	(10)	100	10/10	21.7	(10)	98	10/10
11	21.5	(10)	10/10	21.7	(10)	101	10/10	21.7	(10)	101	10/10	22.8	(10)	106	10/10	21.8	(10)	101	10/10
12	22.1	(10)	10/10	21.6	(10)	98	10/10	22.3	(10)	101	10/10	22.7	(10)	103	10/10	22.0	(10)	100	10/10
13	22.3	(10)	10/10	22.0	(10)	99	10/10	22.5	(10)	101	10/10	23.4	(10)	105	10/10	22.2	(10)	100	10/10
14	22.4	(10)	10/10	22.1	(10)	99	10/10	22.8	(10)	102	10/10	23.5	(10)	105	10/10	22.3	(10)	100	10/10

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

TABLE 4 FOOD CONSUMPTION CHANGES OF MALE MICE IN THE 13-WEEK FEED STUDY OF p-NITROANISOLE

Week on Study	Control			2500ppm			5000ppm			10000ppm			20000ppm			30000ppm							
	Av.FC.	No. of Surviv. <10>	No. of Surviv. <10>	Av.FC.	% of cont. <10>	No. of Surviv. <10>	Av.FC.	% of cont. <10>	No. of Surviv. <10>	Av.FC.	% of cont. <10>	No. of Surviv. <10>	Av.FC.	% of cont. <10>	No. of Surviv. <10>	Av.FC.	% of cont. <10>	No. of Surviv. <10>					
1	4.2	(10)	10/10	4.0	(10)	95	10/10	4.1	(10)	98	10/10	4.0	(10)	95	10/10	4.2	(10)	100	10/10	3.9	(10)	93	10/10
2	3.8	(10)	10/10	3.7	(10)	97	10/10	3.8	(10)	100	10/10	3.8	(10)	100	10/10	3.9	(10)	103	10/10	2.0	(10)	53	10/10
3	4.2	(10)	10/10	4.0	(10)	95	10/10	4.0	(10)	95	10/10	3.9	(10)	93	10/10	4.7	(10)	112	10/10	2.4	(8)	57	8/10
4	3.9	(10)	10/10	4.0	(10)	103	10/10	4.0	(10)	103	10/10	3.8	(10)	97	10/10	4.2	(10)	108	10/10	3.1	(6)	79	6/10
5	4.0	(10)	10/10	3.9	(10)	97	10/10	4.0	(10)	100	10/10	3.8	(10)	95	10/10	4.4	(10)	110	10/10	3.7	(5)	92	5/10
6	4.0	(10)	10/10	4.0	(10)	100	10/10	4.0	(10)	100	10/10	3.9	(10)	97	10/10	4.3	(10)	108	10/10	4.1	(5)	103	5/10
7	4.1	(10)	10/10	3.9	(10)	95	10/10	3.8	(10)	93	10/10	3.9	(10)	95	10/10	4.4	(10)	107	10/10	4.5	(5)	110	5/10
8	3.9	(10)	10/10	4.0	(10)	103	10/10	4.1	(10)	105	10/10	4.0	(10)	103	10/10	4.6	(10)	118	10/10	4.5	(5)	115	5/10
9	4.1	(10)	10/10	4.0	(10)	98	10/10	3.9	(10)	95	10/10	4.0	(10)	98	10/10	4.3	(10)	105	10/10	4.5	(4)	110	5/10
10	4.1	(10)	10/10	4.0	(10)	98	10/10	4.0	(10)	98	10/10	3.9	(10)	95	10/10	4.2	(10)	102	10/10	4.2	(4)	102	5/10
11	4.2	(10)	10/10	4.1	(10)	98	10/10	4.0	(10)	95	10/10	4.1	(10)	98	10/10	4.1	(10)	98	10/10	4.0	(4)	95	5/10
12	3.9	(10)	10/10	3.9	(10)	100	10/10	3.8	(10)	97	10/10	4.0	(10)	103	10/10	4.2	(10)	108	10/10	4.1	(4)	105	5/10
13	4.0	(10)	10/10	4.0	(10)	100	10/10	4.0	(10)	100	10/10	3.7	(10)	92	10/10	4.3	(10)	108	10/10	4.8	(4)	120	5/10
14	4.1	(10)	10/10	4.2	(10)	102	10/10	4.2	(10)	102	10/10	4.1	(10)	100	10/10	4.4	(10)	107	10/10	4.8	(4)	117	5/10

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

TABLE 5 FOOD CONSUMPTION CHANGES OF FEMALE MICE IN THE 13-WEEK FEED STUDY OF p-NITROANISOLE

Week on Study	Control			2500ppm			5000ppm			10000ppm			20000ppm			30000ppm			
	Av.FC.	No. of Surviv. <10>	No. of Surviv.	Av.FC.	% of cont. <10>	No. of Surviv.	Av.FC.	% of cont. <10>	No. of Surviv.	Av.FC.	% of cont. <10>	No. of Surviv.	Av.FC.	% of cont. <10>	No. of Surviv.	Av.FC.	% of cont. <10>	No. of Surviv.	
1	3.7	(10)	10/10	3.6	(10)	97	10/10	3.6	(10)	97	10/10	3.6	(10)	97	10/10	3.5	(10)	95	10/10
2	3.5	(10)	10/10	3.4	(10)	97	10/10	3.4	(10)	97	10/10	3.3	(10)	94	10/10	3.3	(10)	94	10/10
3	3.5	(10)	10/10	3.4	(10)	97	10/10	3.4	(10)	97	10/10	3.5	(10)	100	10/10	3.8	(10)	109	10/10
4	3.5	(10)	10/10	3.3	(10)	94	10/10	3.5	(10)	100	10/10	3.5	(10)	100	10/10	3.5	(10)	100	10/10
5	3.6	(10)	10/10	3.6	(10)	100	10/10	3.6	(10)	100	10/10	3.6	(10)	100	10/10	3.4	(10)	94	10/10
6	3.5	(10)	10/10	3.5	(10)	100	10/10	3.5	(10)	100	10/10	3.6	(10)	103	10/10	3.1	(10)	89	10/10
7	3.5	(10)	10/10	3.5	(10)	100	10/10	3.5	(10)	100	10/10	3.5	(10)	100	10/10	3.2	(10)	91	10/10
8	3.7	(10)	10/10	3.7	(10)	100	10/10	3.8	(10)	103	10/10	3.7	(10)	100	10/10	3.4	(10)	92	10/10
9	3.7	(10)	10/10	3.7	(10)	100	10/10	3.8	(10)	103	10/10	3.6	(10)	97	10/10	3.4	(10)	92	10/10
10	3.8	(10)	10/10	3.7	(10)	97	10/10	3.7	(10)	97	10/10	3.7	(10)	97	10/10	3.5	(10)	92	10/10
11	3.7	(10)	10/10	3.8	(10)	103	10/10	3.8	(10)	103	10/10	3.9	(10)	105	10/10	3.7	(10)	100	10/10
12	3.7	(10)	10/10	3.5	(10)	95	10/10	3.8	(10)	103	10/10	3.7	(10)	100	10/10	3.6	(10)	97	10/10
13	3.8	(10)	10/10	3.7	(10)	97	10/10	3.8	(10)	100	10/10	3.9	(10)	103	10/10	3.7	(10)	97	10/10
14	3.7	(10)	10/10	3.7	(10)	100	10/10	3.8	(10)	103	10/10	3.7	(10)	100	10/10	3.6	(10)	97	10/10

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