

o-クロロニトロベンゼンのラットを用いた
経口投与による2週間毒性試験（混餌試験）報告書

試験番号： 0433

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TABLE 1 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES OF MALE RATS IN THE 2-WEEK FEED STUDY OF *o*-CHLORONITROBENZENE

Week-Day on Study	Control		625 ppm			1250 ppm			2500 ppm			5000 ppm			10000 ppm		
	Av. Wt. <5>	No. of Surviv.	Av. Wt.	% of cont.	No. of Surviv.	Av. Wt.	% of cont.	No. of Surviv.	Av. Wt.	% of cont.	No. of Surviv.	Av. Wt.	% of cont.	No. of Surviv.	Av. Wt.	% of cont.	No. of Surviv.
0-0	125 (5)	5 / 5	125 (5)	100	5 / 5	125 (5)	100	5 / 5	125 (5)	100	5 / 5	124 (5)	99	5 / 5	125 (5)	100	5 / 5
1-3	138 (5)	5 / 5	138 (5)	100	5 / 5	136 (5)	99	5 / 5	129 (5)	93	5 / 5	117 (5)	85	5 / 5	103 (5)	75	5 / 5
1-7	158 (5)	5 / 5	156 (5)	99	5 / 5	153 (5)	97	5 / 5	142 (5)	90	5 / 5	127 (5)	80	5 / 5	107 (5)	68	5 / 5
2-3	171 (5)	5 / 5	169 (5)	99	5 / 5	166 (5)	97	5 / 5	154 (5)	90	5 / 5	134 (5)	78	5 / 5	107 (5)	63	5 / 5
2-7	186 (5)	5 / 5	183 (5)	98	5 / 5	181 (5)	97	5 / 5	168 (5)	90	5 / 5	143 (5)	77	5 / 5	106 (5)	57	5 / 5

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

TABLE 2 SURVIVAL ANIMAL NUMBERS AND BODY WEIGHT CHANGES OF FEMALE RATS IN THE 2-WEEK FEED STUDY OF *o*-CHLORONITROBENZENE

Week-Day on Study	Control		625 ppm			1250 ppm			2500 ppm			5000 ppm			10000 ppm		
	Av. Wt. <5>	No. of Surviv.	Av. Wt.	% of cont.	No. of Surviv.	Av. Wt.	% of cont.	No. of Surviv.	Av. Wt.	% of cont.	No. of Surviv.	Av. Wt.	% of cont.	No. of Surviv.	Av. Wt.	% of cont.	No. of Surviv.
0-0	97 (5)	5 / 5	97 (5)	100	5 / 5	97 (5)	100	5 / 5	97 (5)	100	5 / 5	97 (5)	100	5 / 5	97 (5)	100	5 / 5
1-3	103 (5)	5 / 5	103 (5)	100	5 / 5	103 (5)	100	5 / 5	94 (5)	91	5 / 5	89 (5)	86	5 / 5	80 (5)	78	5 / 5
1-7	111 (5)	5 / 5	111 (5)	100	5 / 5	110 (5)	99	5 / 5	102 (5)	92	5 / 5	96 (5)	86	5 / 5	85 (5)	77	5 / 5
2-3	119 (5)	5 / 5	119 (5)	100	5 / 5	118 (5)	99	5 / 5	109 (5)	92	5 / 5	99 (5)	83	5 / 5	86 (5)	72	5 / 5
2-7	123 (5)	5 / 5	124 (5)	101	5 / 5	124 (5)	101	5 / 5	116 (5)	94	5 / 5	105 (5)	85	5 / 5	87 (5)	71	5 / 5

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

TABLE 3 FOOD CONSUMPTION CHANGES OF MALE RATS IN THE 2-WEEK FEED STUDY OF *o*-CHLORONITROBENZENE

Week-Day on Study	Control		625 ppm			1250 ppm			2500 ppm			5000 ppm			10000 ppm		
	Av. Fc. <5>	No. of Surviv. 5 / 5	Av. Fc.	% of cont. <5>	No. of Surviv. 5 / 5	Av. Fc.	% of cont. <5>	No. of Surviv. 5 / 5	Av. Fc.	% of cont. <5>	No. of Surviv. 5 / 5	Av. Fc.	% of cont. <5>	No. of Surviv. 5 / 5	Av. Fc.	% of cont. <5>	No. of Surviv. 5 / 5
1-3	12.7 (5)	5 / 5	12.3 (5)	97	5 / 5	11.7 (5)	92	5 / 5	9.0 (5)	71	5 / 5	5.6 (5)	44	5 / 5	3.3 (5)	26	5 / 5
1-7	13.2 (5)	5 / 5	13.7 (5)	104	5 / 5	13.3 (5)	101	5 / 5	11.8 (5)	89	5 / 5	10.1 (5)	77	5 / 5	7.1 (5)	54	5 / 5
2-3	13.4 (5)	5 / 5	14.3 (5)	107	5 / 5	13.7 (5)	102	5 / 5	12.4 (5)	93	5 / 5	10.6 (5)	79	5 / 5	7.1 (5)	53	5 / 5
2-7	13.9 (5)	5 / 5	14.4 (5)	104	5 / 5	13.9 (5)	100	5 / 5	13.1 (5)	94	5 / 5	11.0 (5)	79	5 / 5	7.0 (5)	50	5 / 5

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

TABLE 4 FOOD CONSUMPTION CHANGES OF FEMALE RATS IN THE 2-WEEK FEED STUDY OF *o*-CHLORONITROBENZENE

Week-Day on Study	Control		625 ppm			1250 ppm			2500 ppm			5000 ppm			10000 ppm		
	Av. Fc. <5>	No. of Surviv. 5 / 5	Av. Fc.	% of cont. <5>	No. of Surviv. 5 / 5	Av. Fc.	% of cont. <5>	No. of Surviv. 5 / 5	Av. Fc.	% of cont. <5>	No. of Surviv. 5 / 5	Av. Fc.	% of cont. <5>	No. of Surviv. 5 / 5	Av. Fc.	% of cont. <5>	No. of Surviv. 5 / 5
1-3	9.5 (5)	5 / 5	8.9 (5)	94	5 / 5	8.0 (5)	84	5 / 5	5.4 (5)	57	5 / 5	3.8 (5)	40	5 / 5	2.5 (5)	26	5 / 5
1-7	10.1 (5)	5 / 5	9.8 (5)	97	5 / 5	9.7 (5)	96	5 / 5	8.7 (5)	86	5 / 5	7.2 (5)	71	5 / 5	5.8 (5)	57	5 / 5
2-3	10.0 (5)	5 / 5	10.1 (5)	101	5 / 5	10.3 (5)	103	5 / 5	9.2 (5)	92	5 / 5	7.8 (5)	78	5 / 5	6.2 (5)	62	5 / 5
2-7	10.3 (5)	5 / 5	10.2 (5)	99	5 / 5	10.0 (5)	97	5 / 5	9.5 (5)	92	5 / 5	8.0 (5)	78	5 / 5	6.5 (5)	63	5 / 5

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

TABLE 5 HEMATOLOGY OF MALE RATS IN THE 2-WEEK FEED STUDY OF *o*-CHLORONITROBENZENE

Group Name	Control	625 ppm	1250 ppm	2500 ppm	5000 ppm	10000 ppm
No. of examined animals	5	5	5	5	5	5
Red blood cell ($10^6/\mu\text{L}$)	7.80 \pm 0.23	7.67 \pm 0.17	6.93 \pm 0.04	6.03 \pm 0.11	5.00 \pm 0.33 **	4.45 \pm 0.26 **
Hemoglobin(g/dL)	14.7 \pm 0.5	14.0 \pm 0.2	12.8 \pm 0.0	12.7 \pm 0.5 *	12.2 \pm 0.7 **	11.3 \pm 0.5 **
Hematocrit (%)	42.7 \pm 1.0	41.8 \pm 0.5	39.1 \pm 0.3 *	39.8 \pm 1.5 *	39.4 \pm 1.2 **	40.4 \pm 2.5
MCV (fL)	54.7 \pm 0.5	54.5 \pm 1.0	56.4 \pm 0.4	66.0 \pm 2.4	78.9 \pm 3.7 *	90.8 \pm 4.0 **
MCH(pg)	18.8 \pm 0.2	18.2 \pm 0.2	18.5 \pm 0.2	21.1 \pm 0.7	24.3 \pm 0.3	25.3 \pm 0.5 *
MCHC(g/dL)	34.3 \pm 0.6	33.4 \pm 0.4	32.7 \pm 0.2	32.1 \pm 0.4 *	30.9 \pm 1.1 **	27.9 \pm 0.8 **
Platlet ($10^3/\mu\text{L}$)	977 \pm 41	917 \pm 70	934 \pm 17	788 \pm 30 **	613 \pm 51 **	589 \pm 55 **
Reticulocyte(%)	3.5 \pm 0.3	4.0 \pm 0.6	8.2 \pm 0.6	14.7 \pm 0.6 **	23.5 \pm 5.3 **	13.3 ^{a)}
Methemoglobin (%)	0.3 \pm 0.1	0.5 \pm 0.2	1.0 \pm 0.4	1.7 \pm 0.5 *	2.6 \pm 1.5 **	2.8 \pm 0.6 **
Prothrombin time (sec)	14.1 \pm 0.4	14.4 \pm 0.5	14.3 \pm 0.5	15.4 \pm 0.9	17.0 \pm 0.5 *	18.1 \pm 1.7 **
Differential WBC (%)						
N-SEG	14 \pm 2	12 \pm 3	14 \pm 4	13 \pm 2	18 \pm 4	21 \pm 3 **
LYMPHO	81 \pm 2	84 \pm 5	82 \pm 5	83 \pm 3	78 \pm 6	73 \pm 5 *

Mean \pm S.D.^{*)} Significant difference, $p < 0.05$ (Test of Dunnett)^{**)} Significant difference, $p < 0.01$ (Test of Dunnett)^{a)} Number of animals examined is 1.TABLE 6 HEMATOLOGY OF FEMALE RATS IN THE 2-WEEK FEED STUDY OF *o*-CHLORONITROBENZENE

Group Name	Control	625 ppm	1250 ppm	2500 ppm	5000 ppm	10000 ppm
No. of examined animals	5	5	5	5	5	5
Red blood cell ($10^6/\mu\text{L}$)	8.21 \pm 0.29	7.74 \pm 0.28 *	6.84 \pm 0.25 **	6.12 \pm 0.25 **	5.91 \pm 0.14 **	4.60 \pm 0.12 **
Hemoglobin(g/dL)	15.5 \pm 0.5	14.3 \pm 0.5 **	12.7 \pm 0.3 **	12.6 \pm 0.5 **	13.4 \pm 0.3 **	11.4 \pm 0.3 **
Hematocrit (%)	43.7 \pm 1.7	41.3 \pm 1.3 *	38.1 \pm 0.9 **	39.0 \pm 1.6 **	41.2 \pm 1.2 *	41.4 \pm 1.4
MCV (fL)	53.3 \pm 0.4	53.4 \pm 0.6	55.7 \pm 1.2	63.6 \pm 1.4	69.7 \pm 1.9 **	90.0 \pm 2.5 **
MCH(pg)	18.9 \pm 0.2	18.5 \pm 0.2	18.6 \pm 0.4	20.6 \pm 0.4 **	22.6 \pm 0.6 **	24.8 \pm 0.5 **
MCHC(g/dL)	35.5 \pm 0.2	34.6 \pm 0.5 **	33.4 \pm 0.3 **	32.4 \pm 0.3 **	32.4 \pm 0.5 **	27.5 \pm 0.5 **
Platlet ($10^3/\mu\text{L}$)	798 \pm 64	813 \pm 66	867 \pm 64	720 \pm 57	546 \pm 27 **	595 \pm 107 **
Reticulocyte(%)	1.7 \pm 0.1	3.8 \pm 0.8	8.1 \pm 1.8	14.8 \pm 2.2 **	14.6 \pm 1.8 **	11.5 ^{a)}
Methemoglobin (%)	0.4 \pm 0.2	0.6 \pm 0.2	1.1 \pm 0.3 *	1.2 \pm 0.3 *	1.1 \pm 0.4 *	2.5 \pm 0.7 **
Prothrombin time (sec)	15.5 \pm 0.6	15.2 \pm 0.2	15.3 \pm 0.8	16.7 \pm 0.7	19.5 \pm 0.8 **	19.0 \pm 1.0 **
Differential WBC (%)						
N-SEG	18 \pm 6	12 \pm 3	17 \pm 8	13 \pm 5	16 \pm 4	18 \pm 5
LYMPHO	77 \pm 6	83 \pm 3	78 \pm 9	83 \pm 6	78 \pm 2	78 \pm 6

Mean \pm S.D.^{*)} Significant difference, $p < 0.05$ (Test of Dunnett)^{**)} Significant difference, $p < 0.01$ (Test of Dunnett)^{a)} Number of animals examined is 2.

TABLE 7 BIOCHEMISTRY OF MALE RATS IN THE 2-WEEK FEED STUDY OF *o*-CHLORONITROBENZENE

Group Name	Control	625 ppm	1250 ppm	2500 ppm	5000 ppm	10000 ppm
No. of examined animals	5	5	5	5	5	5
Total protein (g/dL)	5.7 ± 0.0	6.4 ± 0.2 **	6.5 ± 0.1 **	6.4 ± 0.1 **	6.4 ± 0.2 **	5.8 ± 0.2
Albumin (g/dL)	3.5 ± 0.1	4.0 ± 0.1 **	4.1 ± 0.1 **	4.0 ± 0.1 **	4.0 ± 0.1 **	3.8 ± 0.1 *
A/G ratio	1.6 ± 0.1	1.6 ± 0.1	1.7 ± 0.1	1.7 ± 0.1	1.7 ± 0.1 *	1.9 ± 0.1 **
T-Bilirubin (mg/dL)	0.13 ± #####	0.16 ± #####	0.22 ± #####	0.33 ± ##### *	0.76 ± ##### **	0.65 ± 0.08 **
Glucose (mg/dL)	182 ± 9	173 ± 6	164 ± 6 **	155 ± 8 **	135 ± 5 **	118 ± 3 **
T-Cholesterol (mg/dL)	68 ± 3	119 ± 9	148 ± 11	181 ± 22 **	186 ± 27 **	142 ± 20
Phospholipid (mg/dL)	137 ± 3	229 ± 11	283 ± 24	347 ± 36 **	394 ± 55 **	329 ± 45 *
GOT (IU/L)	56 ± 9	51 ± 3	60 ± 4	88 ± 8 *	100 ± 23 **	77 ± 12
GPT (IU/L)	33 ± 8	37 ± 4	58 ± 8	138 ± 33 **	169 ± 83 **	90 ± 22 *
LDH (IU/L)	237 ± 27	224 ± 44	196 ± 42	274 ± 92	445 ± 145	413 ± 165
γ-GTP(IU/L)	2 ± 1	1 ± 1	4 ± 1	30 ± 11	131 ± 33 **	85 ± 7 **
Urea Nitrogen(mg/L)	14.4 ± 1.5	16.4 ± 2.4	15.8 ± 2.0	16.9 ± 2.1	18.4 ± 0.6 *	24.3 ± 2.2 **
Sodium (mEq/L)	138 ± 1	139 ± 1	138 ± 1	138 ± 1	137 ± 0 *	138 ± 1
Potassium (mEq/L)	4.4 ± 0.2	4.4 ± 0.3	4.2 ± 0.3	4.6 ± 0.1	4.9 ± 0.4 *	5.6 ± 0.3 **

Mean ± S.D.
^{*)} Significant difference, p<0.05 (Test of Dunnett)
^{**)} Significant difference, p<0.01 (Test of Dunnett)

TABLE 8 BIOCHEMISTRY OF FEMALE RATS IN THE 2-WEEK FEED STUDY OF *o*-CHLORONITROBENZENE

Group Name	Control	625 ppm	1250 ppm	2500 ppm	5000 ppm	10000 ppm
No. of examined animals	5	5	5	5	5	5
Total protein (g/dL)	5.7 ± 0.2	6.2 ± 0.1 **	6.3 ± 0.2 **	6.6 ± 0.2 **	6.5 ± 0.1 **	6.0 ± 0.2
Albumin (g/dL)	3.6 ± 0.1	4.0 ± 0.1	4.0 ± 0.2	4.2 ± 0.1 **	4.2 ± 0.0 **	3.8 ± 0.3
T-Bilirubin (mg/dL)	0.14 ± ###	0.18 ± ###	0.21 ± ###	0.30 ± ### *	0.58 ± ### **	0.80 ± ### **
Glucose (mg/dL)	180 ± 7	172 ± 8	163 ± 3 *	159 ± 9 **	140 ± 12 **	118 ± 12 **
T-Cholesterol (mg/dL)	75 ± 5	103 ± 6 **	115 ± 9 **	158 ± 14 **	180 ± 7 **	178 ± 16 **
Phospholipid (mg/dL)	148 ± 9	197 ± 13 **	226 ± 20 **	314 ± 30 **	392 ± 13 **	434 ± 36 **
GOT (IU/L)	57 ± 5	49 ± 5	48 ± 7	77 ± 11	114 ± 3 *	93 ± 31
GPT (IU/L)	28 ± 3	26 ± 2	28 ± 3	60 ± 16	144 ± 18 **	120 ± 29 *
γ-GTP(IU/L)	2 ± 1	2 ± 1	6 ± 2	44 ± 13	156 ± 23 **	117 ± 8 **
Urea Nitrogen(mg/L)	16.6 ± 2.4	17.4 ± 1.9	16.7 ± 2.4	18.7 ± 1.2	21.2 ± 1.2 **	27.4 ± 2.1 **
Potassium (mEq/L)	4.1 ± 0.4	4.0 ± 0.2	4.2 ± 0.2	4.5 ± 0.2	5.0 ± 0.3 **	6.0 ± 0.6 **
Calcium(mg/dL)	10.5 ± 0.1	10.9 ± 0.1 *	10.9 ± 0.2 **	11.1 ± 0.2 **	11.0 ± 0.2 **	10.8 ± 0.4

Mean ± S.D.

*) Significant difference, p<0.05 (Test of Dunnett)

**) Significant difference, p<0.01 (Test of Dunnett)

TABLE 9 ORGAN WEIGHTS OF MALE RATS THE 2-WEEK FEED STUDY OF *o*-CHLORONITROBENZENE

Group Name	Control	625 ppm	1250 ppm	2500 ppm	5000 ppm	10000 ppm
No. of examined animals	5	5	5	5	5	5
Body weight (g)	186 ± 7	181 ± 5	180 ± 8	167 ± 5 **	142 ± 6 **	105 ± 8 **
Thymus (g)	0.357 ± 0.024	0.332 ± 0.018	0.347 ± 0.045	0.338 ± 0.021	0.264 ± 0.007 *	0.129 ± 0.014 **
Thymus (%)	0.192 ± 0.016	0.183 ± 0.010	0.194 ± 0.028	0.203 ± 0.014	0.186 ± 0.011	0.122 ± 0.007 **
Adrenals (g)	0.045 ± 0.006	0.043 ± 0.005	0.043 ± 0.004	0.039 ± 0.003	0.041 ± 0.005	0.038 ± 0.004
Adrenals (%)	0.024 ± 0.004	0.024 ± 0.003	0.024 ± 0.002	0.023 ± 0.002	0.029 ± 0.004	0.036 ± 0.003 **
Testes (g)	2.369 ± 0.120	2.427 ± 0.155	2.395 ± 0.066	2.157 ± 0.250	1.320 ± 0.261	0.717 ± 0.067 **
Testes (%)	1.272 ± 0.030	1.339 ± 0.097	1.336 ± 0.063	1.290 ± 0.126	0.931 ± 0.190 *	0.680 ± 0.028 **
Heart (g)	0.664 ± 0.025	0.665 ± 0.022	0.664 ± 0.038	0.621 ± 0.033	0.567 ± 0.010 **	0.446 ± 0.022 **
Heart (%)	0.357 ± 0.008	0.367 ± 0.011	0.370 ± 0.034	0.372 ± 0.019	0.400 ± 0.019 **	0.425 ± 0.038 **
Lungs (g)	0.839 ± 0.060	0.813 ± 0.017	0.797 ± 0.032	0.734 ± 0.028 **	0.679 ± 0.044 **	0.599 ± 0.015 **
Lungs (%)	0.450 ± 0.015	0.449 ± 0.017	0.444 ± 0.019	0.440 ± 0.019	0.479 ± 0.030	0.570 ± 0.042 **
Kidneys (g)	1.431 ± 0.077	1.515 ± 0.070	1.493 ± 0.082	1.452 ± 0.066	1.423 ± 0.047	1.289 ± 0.057 *
Kidneys (%)	0.768 ± 0.029	0.835 ± 0.026 *	0.831 ± 0.027 *	0.870 ± 0.030 **	1.003 ± 0.036 **	1.225 ± 0.044 **
Spleen (g)	0.466 ± 0.029	0.479 ± 0.022	0.683 ± 0.065	0.871 ± 0.082 *	1.114 ± 0.122 **	0.895 ± 0.057 *
Spleen (%)	0.250 ± 0.015	0.264 ± 0.006	0.381 ± 0.042 **	0.521 ± 0.038 **	0.784 ± 0.071 **	0.850 ± 0.029 **
Liver (g)	7.187 ± 0.432	10.446 ± 0.263 **	11.221 ± 0.356 **	11.762 ± 0.587 **	10.994 ± 0.847 **	8.069 ± 0.268 *
Liver (%)	3.858 ± 0.123	5.762 ± 0.208 **	6.252 ± 0.142 **	7.042 ± 0.271 **	7.735 ± 0.326 **	7.673 ± 0.318 **
Brain (g)	1.690 ± 0.036	1.690 ± 0.033	1.688 ± 0.032	1.635 ± 0.042	1.609 ± 0.048 *	1.583 ± 0.049 **
Brain (%)	0.908 ± 0.018	0.933 ± 0.034	0.941 ± 0.027	0.980 ± 0.037	1.134 ± 0.034 **	1.506 ± 0.080 **

Mean ± S.D.

*) Significant difference, p<0.05 (Test of Dunnett)

**) Significant difference, p<0.01 (Test of Dunnett)

TABLE 10 ORGAN WEIGHTS OF FEMALE RATS THE 2-WEEK FEED STUDY OF *o*-CHLORONITROBENZENE

Group Name	Control	625 ppm	1250 ppm	2500 ppm	5000 ppm	10000 ppm
No. of examined animals	5	5	5	5	5	5
Body weight (g)	122 ± 5	123 ± 4	122 ± 3	115 ± 4 *	104 ± 4 **	86 ± 3 **
Thymus (g)	0.280 ± 0.021	0.276 ± 0.012	0.268 ± 0.020	0.271 ± 0.012	0.225 ± 0.018 **	0.131 ± 0.023 **
Thymus (%)	0.229 ± 0.026	0.225 ± 0.005	0.220 ± 0.020	0.237 ± 0.009	0.217 ± 0.013	0.152 ± 0.024 **
Adrenals (g)	0.048 ± 0.003	0.047 ± 0.003	0.044 ± 0.006	0.037 ± 0.004 **	0.041 ± 0.005	0.036 ± 0.004 **
Adrenals (%)	0.039 ± 0.001	0.038 ± 0.003	0.036 ± 0.005	0.033 ± 0.004	0.040 ± 0.005	0.042 ± 0.005
Ovaries (g)	0.077 ± 0.009	0.089 ± 0.015	0.083 ± 0.009	0.063 ± 0.017	0.052 ± 0.008 **	0.041 ± 0.004 **
Ovaries (%)	0.063 ± 0.006	0.072 ± 0.011	0.068 ± 0.007	0.055 ± 0.015	0.051 ± 0.006	0.048 ± 0.004
Heart (g)	0.472 ± 0.015	0.496 ± 0.045	0.490 ± 0.036	0.459 ± 0.016	0.429 ± 0.016	0.374 ± 0.019 **
Heart (%)	0.385 ± 0.011	0.404 ± 0.031	0.400 ± 0.023	0.400 ± 0.015	0.414 ± 0.018	0.437 ± 0.031 **
Lungs (g)	0.644 ± 0.023	0.622 ± 0.017	0.640 ± 0.016	0.585 ± 0.020 **	0.563 ± 0.026 **	0.529 ± 0.017 **
Lungs (%)	0.527 ± 0.034	0.507 ± 0.025	0.524 ± 0.012	0.510 ± 0.009	0.544 ± 0.026	0.619 ± 0.023 **
Kidneys (g)	0.993 ± 0.057	1.074 ± 0.037	1.048 ± 0.057	1.071 ± 0.034	1.058 ± 0.055	1.088 ± 0.030
Kidneys (%)	0.812 ± 0.034	0.875 ± 0.018	0.858 ± 0.036	0.934 ± 0.030 **	1.022 ± 0.053 **	1.272 ± 0.060 **
Spleen (g)	0.312 ± 0.009	0.352 ± 0.024	0.500 ± 0.057	0.613 ± 0.051 *	0.656 ± 0.046 **	0.720 ± 0.073 **
Spleen (%)	0.255 ± 0.008	0.286 ± 0.014 **	0.409 ± 0.038 **	0.534 ± 0.030 **	0.632 ± 0.026 **	0.841 ± 0.072 **
Liver (g)	4.408 ± 0.387	6.388 ± 0.578 **	7.173 ± 0.373 **	7.943 ± 0.310 **	7.890 ± 0.232 **	7.349 ± 0.197 **
Liver (%)	3.600 ± 0.258	5.196 ± 0.330 **	5.871 ± 0.281 **	6.919 ± 0.192 **	7.619 ± 0.103 **	8.594 ± 0.343 **
Brain (g)	1.592 ± 0.037	1.565 ± 0.036	1.597 ± 0.032	1.576 ± 0.040	1.531 ± 0.035 *	1.520 ± 0.022 *
Brain (%)	1.302 ± 0.050	1.275 ± 0.038	1.308 ± 0.038	1.374 ± 0.051	1.479 ± 0.055 **	1.778 ± 0.076 **

Mean ± S.D.

*) Significant difference, p<0.05 (Test of Dunnett)

**) Significant difference, p<0.01 (Test of Dunnett)

TABLE 11 INCIDENCES OF SELECTED LESIONS OF MALE RATS IN THE 2-WEEK FEED STUDY OF *o*-CHLORONITROBENZENE

Group		Control	625 ppm	1250 ppm	2500 ppm	5000 ppm	10000 ppm
Number of examined animals		5	5	5	5	5	5
Organ	Grade of Nonneoplastic lesion						
Findings							
Bone marrow							
Erythropoiesis:increased	1+	0	0	4	5	5	5
Thymus							
Atrophy	1+	0	0	0	0	0	5
Spleen							
Deposit of hemosiderin	1+	0	0	5	5	0	0
	2+	0	0	0	0	5	5
Extramedullary hematopoiesis	1+	0	5	0	0	0	0
	2+	0	0	5	5	5	5
Engorgement of erythrocyte	1+	0	5	1	0	0	0
	2+	0	0	4	5	5	5
Liver							
Increase in mitosis	1+	0	0	0	4	3	0
Necrosis:single cell	1+	0	0	0	3	4	3
Deposit of hemosiderin	1+	0	0	0	0	5	5
Extramedullary hematopoiesis	1+	0	0	0	0	0	1
Hepatocellular hypertrophy: central	1+	0	5	5	1	0	0
	2+	0	0	0	4	5	0
	3+	0	0	0	0	0	5
Kidney							
Deposit of hemosiderin	1+	0	0	0	0	5	5
Eosinophilic body	1+	5	5	4	0	0	0
Testis							
Germ cell necrosis	1+	0	0	0	1	0	0
	2+	0	0	0	0	5	5
Epididymis							
Decreased:sperma	2+	0	0	0	0	5	0
	3+	0	0	0	0	0	5
Debris of spermatic elements	1+	0	0	0	1	0	0
	2+	0	0	0	0	0	0
	3+	0	0	0	0	5	0
Brain							
Hemorrhage	1+	0	0	0	0	0	2
Grade	1+: Slight	2+: Moderate	3+: Marked	4+: Severe			

TABLE 12 INCIDENCES OF SELECTED LESIONS OF FEMALE RATS IN THE 2-WEEK FEED STUDY OF *o*-CHLORONITROBENZENE

Group		Control	625 ppm	1250 ppm	2500 ppm	5000 ppm	10000 ppm
Number of examined animals		5	5	5	5	5	5
Organ	Grade of Nonneoplastic lesion						
Findings							
Lung							
Hemorrhage	1+	0	0	0	0	1	0
Bone marrow							
Erythropoiesis:increased	1+	0	3	5	5	5	5
Thymus							
Atrophy	1+	0	0	0	0	0	1
Spleen							
Deposit of hemosiderin	1+	0	0	5	4	0	0
	2+	0	0	0	1	5	5
Extramedullary hematopoiesis	1+	0	5	0	0	0	0
	2+	0	0	5	5	5	5
Engorgement of erythrocyte	1+	0	5	0	0	0	0
	2+	0	0	5	5	5	5
Liver							
Increase in mitosis	1+	0	2	2	4	5	0
Necrosis:single cell	1+	0	0	2	4	5	5
Deposit of hemosiderin	1+	0	0	0	0	5	5
Hepatocellular hypertrophy: central	1+	0	5	5	0	0	0
	2+	0	0	0	5	5	0
	3+	0	0	0	0	0	5
Kidney							
Deposit of hemosiderin	1+	0	0	0	0	5	5
Brain							
Hemorrhage	1+	0	0	0	0	0	1
Grade	1+: Slight	2+: Moderate	3+: Marked	4+: Severe			