メタリルクロライドのマウスを用いた
吸入によるがん原性試験報告書

試験番号：0270

APPENDIX

APPENDIXES

APPENDIX A 1	CLINICAL OBSERVATION : SUMMARY, MOUSE : MALE (2-YEAR STUDY)
APPENDIX A 2	CLINICAL OBSERVATION : SUMMARY, MOUSE : FEMALE (2-YEAR STUDY)
APPENDIX B 1	BODY WEIGHT CHANGES : SUMMARY, MOUSE : MALE (2-YEAR STUDY)
APPENDIX B 2	BODY WEIGHT CHANGES : SUMMARY, MOUSE : FEMALE (2-YEAR STUDY)
APPENDIX C 1	FOOD CONSUMPTION CHANGES : SUMMARY, MOUSE : MALE (2-YEAR STUDY)
APPENDIX C 2	FOOD CONSUMPTION CHANGES : SUMMARY, MOUSE : FEMALE (2-YEAR STUDY)
APPENDIX D 1	HEMATOLOGY : SUMMARY, MOUSE : MALE (2-YEAR STUDY)
APPENDIX D 2	HEMATOLOGY : SUMMARY, MOUSE : FEMALE (2-YEAR STUDY)
APPENDIX E 1	BIOCHEMISTRY : SUMMARY, MOUSE : MALE (2-YEAR STUDY)
APPENDIX E 2	BIOCHEMISTRY : SUMMARY, MOUSE : FEMALE (2-YEAR STUDY)
APPENDIX F 1	URINALYSIS : SUMMARY, MOUSE : MALE (2-YEAR STUDY)
APPENDIX F 2	URINALYSIS : SUMMARY, MOUSE : FEMALE (2-YEAR STUDY)
APPENDIX G 1	GROSS FINDINGS : SUMMARY, MOUSE : MALE : ALL ANIMALS (2-YEAR STUDY)
APPENDIX G 2	GROSS FINDINGS : SUMMARY, MOUSE : MALE : DEAD AND MORIBUND ANIMALS (2-YEAR STUDY)
APPENDIX G 3	GROSS FINDINGS : SUMMARY, MOUSE : MALE : SACRIFICED ANIMALS (2-YEAR STUDY)
APPENDIX G 4	GROSS FINDINGS : SUMMARY, MOUSE : FEMALE : ALL ANIMALS (2-YEAR STUDY)
APPENDIX G 5	GROSS FINDINGS : SUMMARY, MOUSE : FEMALE : DEAD AND MORIBUND ANIMALS (2-YEAR STUDY)
APPENDIX G 6	GROSS FINDINGS : SUMMARY, MOUSE : FEMALE : SACRIFICED ANIMALS (2-YEAR STUDY)

APPENDIXES (CONTINUED)

APPENDIX H 1	ORGAN WEIGHT, ABSOLUTE : SUMMARY, MOUSE : MALE (2-YEAR STUDY)
APPENDIX H 2	ORGAN WEIGHT, ABSOLUTE : SUMMARY, MOUSE : FEMALE (2-YEAR STUDY)
APPENDIX I 1	ORGAN WEIGHT, RELATIVE : SUMMARY, MOUSE : MALE (2-YEAR STUDY)
APPENDIX I 2	ORGAN WEIGHT, RELATIVE : SUMMARY, MOUSE : FEMALE (2-YEAR STUDY)
APPENDIX J 1	HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS : SUMMARY, MOUSE : MALE : ALL ANIMALS (2-YEAR STUDY)
APPENDIX J 2	HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS : SUMMARY, MOUSE : MALE : DEAD AND MORIBUND ANIMALS (2-YEAR STUDY)
APPENDIX J 3	HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS : SUMMARY, MOUSE : MALE SACRIFICED ANIMALS (2-YEAR STUDY)
APPENDIX J 4	HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS : SUMMARY, MOUSE : FEMALE : ALL ANIMALS (2-YEAR STUDY)
APPENDIX J 5	HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS : SUMMARY, MOUSE : FEMALE : DEAD AND MORIBUND ANIMALS (2-YEAR STUDY)
APPENDIX J 6	HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS : SUMMARY, MOUSE : FEMALE : SACRIFICED ANIMALS (2-YEAR STUDY)
APPENDIX K 1	NUMBER OF ANIMALS WITH TUMORS AND NUMBER OF TUMORS-TIME RELATED, MOUSE : MALE
APPENDIX K 2	NUMBER OF ANIMALS WITH TUMORS AND NUMBER OF TUMORS-TIME RELATED, MOUSE : FEMALE
APPENDIX L 1	HISTOLOGICAL FINDINGS : NEOPLASTIC LESIONS : SUMMARY, MOUSE : MALE (2-YEAR STUDY)
APPENDIX L 2	HISTOLOGICAL FINDINGS : NEOPLASTIC LESIONS : SUMMARY, MOUSE : FEMALE (2-YEAR STUDY)
APPENDIX M 1	NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS, MOUSE : MALE (2-YEAR STUDY)
APPENDIX M 2	NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS, MOUSE : FEMALE (2-YEAR STUDY)

APPENDIXES (CONTINUED)

APPENDIX N 1	HISTOLOGICAL FINDINGS : METASTASIS OF TUMOR : SUMMARY, MOUSE : MALE : ALL ANIMALS (2-YEAR STUDY)
APPENDIX N 2	HISTOLOGICAL FINDINGS : METASTASIS OF TUMOR : SUMMARY, MOUSE : MALE : DEAD AND MORIBUND ANIMALS (2-YEAR STUDY)
APPENDIX N 3	HISTOLOGICAL FINDINGS : METASTASIS OF TUMOR : SUMMARY, MOUSE : MALE : SACRIFICED ANIMALS (2-YEAR STUDY)
APPENDIX N 4	HISTOLOGICAL FINDINGS : METASTASIS OF TUMOR : SUMMARY, MOUSE : FEMALE : ALL ANIMALS (2-YEAR STUDY)
APPENDIX N 5	HISTOLOGICAL FINDINGS : METASTASIS OF TUMOR : SUMMARY, MOUSE : FEMALE : DEAD AND MORIBUND ANIMALS (2-YEAR STUDY)
APPENDIX N 6	HISTOLOGICAL FINDINGS : METASTASIS OF TUMOR : SUMMARY, MOUSE : FEMALE : SACRIFICED ANIMALS (2-YEAR STUDY)
APPENDIX O 1	IDENTITY OF 2-METHALLYL CHLORIDE IN THE 2-YEAR INHALATION STUDY
APPENDIX O 2	STABILITY OF 2-METHALLYL CHLORIDE IN THE 2-YEAR INHALATION STUDY
APPENDIX P 1	CONCENTRATION OF 2-METHALLYL CHLORIDE IN THE INHALATION CHAMBER OF THE 2-YEAR INHALATION STUDY
APPENDIX P 2	ENVIRONMENTAL CONDITIONS OF INHALATION CHAMBER IN THE 2-YEAR INHALATION STUDY OF 2-METHALLYL CHLORIDE
APPENDIX Q 1	METHODS FOR HEMATOLOGY, BIOCHEMISTRY AND URINALYSIS IN THE 2-YEAR INHALATION STUDY OF 2-METHALLYL CHLORIDE
APPENDIX Q 2	UNITS AND DECIMAL PLACE FOR HEMATOLOGY AND BIOCHEMISTRY IN THE 2-YEAR INHALATION STUDY OF 2-METHALLYL CHLORIDE

APPENDIX A 1

CLINICAL OBSERVATION: SUMMARY, MOUSE: MALE

(2-YEAR STUDY)

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

Clinical sign	Group Name	Administration Week-day 1-1	1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	1	1	1	1	1	1	1	1	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	1	0	0	0	0	0	0	0	0	0	0	0
HUNCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	1	0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	1	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	1	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

Clinical sign	Group Name	Administration Week-day 14-7	15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HUNCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 28-7	29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	100 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	200 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HUNCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 42-7	43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	1	1	1	2
	50 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	100 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	200 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HUNCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

Clinical sign	Group Name	Administration Week-day 56-7	57-7	58-7	59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7
DEATH	Control	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	50 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	100 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	200 ppm	2	2	2	2	2	2	2	2	2	2	2	2	2	2
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HUNCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 70-7	71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7
DEATH	Control	2	2	3	3	3	4	4	4	4	4	4	4	4	4
	50 ppm	1	1	1	1	1	1	1	1	1	1	1	1	2	2
	100 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	200 ppm	2	2	2	2	2	2	2	2	2	2	2	2	2	2
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HUNCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

Clinical sign	Group Name	Administration Week-day 84-7	85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7
DEATH	Control	4	4	4	4	4	4	4	6	6	6	6	6	6	7
	50 ppm	2	2	2	2	2	2	2	2	3	3	3	3	3	3
	100 ppm	1	1	1	1	1	3	3	3	3	3	3	3	3	3
	200 ppm	2	2	2	2	2	2	2	3	3	3	3	3	3	3
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	1	1	1	1	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HUNCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	1	1	1	1	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 98-7	99-7	100-7	101-7	102-7	103-7	104-7
DEATH	Control	7	7	7	9	10	10	10
	50 ppm	4	4	4	4	5	5	5
	100 ppm	3	3	3	3	3	4	4
	200 ppm	3	3	3	3	3	3	3
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0
	50 ppm	1	1	1	1	1	1	1
	100 ppm	2	2	2	2	2	3	3
	200 ppm	1	1	1	1	1	1	1
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0
	100 ppm	1	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0
HUNCHBACK POSITION	Control	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	1	0	0
	200 ppm	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0
	100 ppm	1	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

Clinical sign	Group Name	Administration Week-day 1-1	1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EYE OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.PERI MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 14-7	15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EYE OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	Control	0	0	1	1	1	1	1	1	2	2	2	2	2	2
	50 ppm	0	0	1	2	2	2	2	3	3	3	3	3	3	3
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.PERI MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

Clinical sign	Group Name	Administration Week-day 28-7	29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EYE OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	0	0	0	0	0	0	0	0	1	1	1	1	1	1
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	Control	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	50 ppm	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
M.EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.PERI MOUTH	Control	0	0	0	0	0	0	0	0	1	1	1	1	1	1
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

Clinical sign	Group Name	Administration Week-day 42-7	43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EYE OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	Control	2	2	2	2	2	2	2	2	2	2	1	1	1	1
	50 ppm	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
M.EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.PERI MOUTH	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

Clinical sign	Group Name	Administration Week-day 56-7	57-7	58-7	59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EYE OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	1	1	1	1	1	1	1	2	2	2	2	2	2	3
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	1	1	1	1	1	1	1	1	1	2	2
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	50 ppm	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	100 ppm	0	0	0	1	1	1	1	1	1	1	1	1	0	0
	200 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
M.EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.PERI MOUTH	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

Clinical sign	Group Name	Administration Week-day 70-7	71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	1	1	1	1	1	1	1	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EYE OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	3	3	2	2	2	2	2	2	2	2	2	2	2	2
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	Control	1	1	1	1	1	1	1	1	1	1	1	2	2	2
	50 ppm	3	3	3	3	3	3	3	3	3	3	3	3	4	4
	100 ppm	0	0	1	1	1	1	1	1	1	1	1	1	1	2
	200 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
M.EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.PERI MOUTH	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 84-7	85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	1	1	0	0	0	0	0	0	0	0	0	0	0	2
	200 ppm	0	0	0	1	1	1	1	1	2	2	2	2	2	2
EYE OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	1
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	1
EXTERNAL MASS	Control	2	2	3	3	3	3	3	4	4	4	4	4	4	4
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	100 ppm	2	2	3	4	4	4	5	5	5	5	5	5	6	5
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	Control	2	2	2	2	2	2	2	3	3	3	4	4	4	4
	50 ppm	4	4	4	4	4	3	3	3	2	2	2	2	2	2
	100 ppm	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	200 ppm	1	1	1	1	1	2	2	1	1	1	0	0	0	0
M.EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	1	1	2	2	2	2	2	2	2	2	2	2	2	2
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.PERI MOUTH	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.EAR	Control	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 98-7	99-7	100-7	101-7	102-7	103-7	104-7
EXOPHTHALMOS	Control	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0
	100 ppm	2	2	2	2	1	1	1
	200 ppm	2	2	2	2	1	1	1
EYE OPACITY	Control	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0
	100 ppm	0	4	4	4	2	2	2
	200 ppm	1	2	2	2	1	1	1
CORNEAL OPACITY	Control	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0
	200 ppm	1	1	1	1	1	1	1
EXTERNAL MASS	Control	4	4	4	3	3	3	3
	50 ppm	1	1	1	1	0	0	0
	100 ppm	5	5	5	6	6	5	5
	200 ppm	0	0	0	1	2	2	3
INTERNAL MASS	Control	5	5	5	5	5	5	6
	50 ppm	3	3	3	3	3	3	3
	100 ppm	2	2	2	2	2	2	2
	200 ppm	0	0	0	0	1	1	1
M.EYE	Control	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0
	100 ppm	2	2	2	3	3	3	3
	200 ppm	0	0	0	0	1	1	2
M.PERI MOUTH	Control	1	1	1	1	1	1	1
	50 ppm	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0
M.EAR	Control	1	1	1	1	1	1	1
	50 ppm	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

Clinical sign	Group Name	Administration Week-day 1-1	1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7
M.NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.ANTERIOR.DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.TAIL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EROSION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 14-7	15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7
M.NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.ANTERIOR.DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.TAIL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EROSION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

Clinical sign	Group Name	Administration Week-day 28-7	29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7
M.NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.ANTERIOR.DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.TAIL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EROSION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

Clinical sign	Group Name	Administration Week-day 42-7	43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7
M.NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.ANTERIOR.DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.TAIL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EROSION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 56-7	57-7	58-7	59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7
M.NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.ANTERIOR.DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	1	1	1	1	1	1	1	1	1	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.TAIL	Control	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EROSION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 70-7	71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7
M.NECK	Control	1	1	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.ANTERIOR.DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.TAIL	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EROSION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 84-7	85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7
M.NECK	Control	0	0	1	1	1	1	1	1	1	1	1	1	1	1
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.ABDOMEN	Control	0	0	1	1	1	1	1	1	1	1	1	1	1	1
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.ANTERIOR.DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.TAIL	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	1	1	1	1	1	1	1	1	1	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EROSION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 98-7	99-7	100-7	101-7	102-7	103-7	104-7
M.NECK	Control	1	1	1	0	0	0	0
	50 ppm	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0
M.ABDOMEN	Control	1	1	1	0	0	0	0
	50 ppm	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0
M.ANTERIOR.DORSUM	Control	0	0	0	0	0	0	0
	50 ppm	1	1	1	1	0	0	0
	100 ppm	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0
M.HINDLIMB	Control	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0
	100 ppm	1	1	1	1	1	0	0
	200 ppm	0	0	0	0	0	0	0
M.GENITALIA	Control	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0
	100 ppm	1	1	1	1	1	1	1
	200 ppm	0	0	0	0	0	0	0
M.TAIL	Control	1	1	1	1	1	1	1
	50 ppm	0	0	0	0	0	0	0
	100 ppm	1	1	1	1	1	1	1
	200 ppm	0	0	0	1	1	1	1
EDEMA	Control	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0
EROSION	Control	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	2	2
	100 ppm	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 1-1	1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7
TORTICOLLIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	1	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	1	0	0	0	0	0	0	0	0	0	0	0
TACHYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BRADYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	1	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 14-7	15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7
TORTICOLLIS	Control	0	0	0	0	0	0	0	0	0	1	1	1	1	1
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TACHYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BRADYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 28-7	29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7
TORTICOLLIS	Control	1	1	1	1	1	1	1	1	1	1	1	1	0	0
	50 ppm	1	1	1	1	1	1	1	1	1	1	1	1	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TACHYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BRADYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 42-7	43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7
TORTICOLLIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TACHYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BRADYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

Clinical sign	Group Name	Administration Week-day 56-7	57-7	58-7	59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7
TORTICOLLIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TACHYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BRADYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 70-7	71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7
TORTICOLLIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TACHYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BRADYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 84-7	85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7
TORTICOLLIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TACHYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BRADYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 98-7	99-7	100-7	101-7	102-7	103-7	104-7
TORTICOLLIS	Control	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	1	0	0
	200 ppm	0	0	0	0	0	0	0
ABNORMAL RESPIRATION	Control	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0
	100 ppm	1	0	0	0	1	0	0
	200 ppm	0	0	0	0	0	0	0
TACHYPNEA	Control	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0
BRADYPNEA	Control	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0
	100 ppm	1	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0
	100 ppm	1	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0

APPENDIX A 2

CLINICAL OBSERVATION: SUMMARY, MOUSE: FEMALE

(2-YEAR STUDY)

Clinical sign	Group Name	Administration Week-day 1-1	1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EYE OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 14-7	15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EYE OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 28-7	29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EYE OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 42-7	43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7
DEATH	Control	0	0	0	0	0	0	0	1	2	2	2	2	2	2
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	1	1	1	1	1	1	1	1	1	1	1	1
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	1	1	1	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	0	1	1	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	1	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EYE OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 56-7	57-7	58-7	59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7
DEATH	Control	2	2	2	2	2	2	2	2	2	3	3	3	3	3
	50 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	100 ppm	0	0	0	0	0	0	0	0	1	1	1	1	1	1
	200 ppm	1	1	1	2	2	3	3	3	3	3	3	3	3	3
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	1	1	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EYE OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 70-7	71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7
DEATH	Control	3	3	3	3	3	5	6	6	7	8	8	9	9	10
	50 ppm	1	1	1	1	2	2	2	2	2	2	2	2	3	3
	100 ppm	1	1	2	3	3	3	4	4	5	6	6	7	7	7
	200 ppm	3	3	3	3	3	3	3	3	3	3	4	4	4	4
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	1	1	1	1	1	1	1	1	1	1	1	2	2	2
	100 ppm	0	0	0	0	0	1	1	1	1	1	1	1	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	1	1	1	0	0
	100 ppm	0	1	0	0	0	0	0	0	1	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	1	1	1	1	2	2	2	3
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EYE OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	1	1	1	1	1	1	0	1	1	1	1	0	0	0
	50 ppm	1	1	1	1	0	0	0	0	0	0	0	0	0	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	1

Clinical sign	Group Name	Administration Week-day 84-7	85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7
DEATH	Control	10	10	10	10	10	10	10	10	10	10	11	12	13	13
	50 ppm	3	3	5	7	7	7	7	7	9	9	9	11	11	11
	100 ppm	7	8	8	8	8	8	9	9	9	9	10	10	10	10
	200 ppm	4	4	5	5	6	7	7	7	7	8	8	8	9	10
MORIBUND SACRIFICE	Control	0	0	0	1	1	1	1	1	1	1	1	1	1	1
	50 ppm	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	100 ppm	1	1	1	1	1	1	1	2	2	2	2	2	2	2
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	Control	0	0	1	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	1	0	0	0	0	0	0	0	2	1	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	1	1	1	1	1	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	3	3	3	3	3	3	3	2	2	2	2	2	2	1
	200 ppm	1	1	1	2	2	2	2	2	2	2	2	2	2	2
EYE OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	50 ppm	1	1	2	2	2	2	2	2	2	2	2	2	2	3
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	200 ppm	1	1	0	0	0	1	1	1	1	1	1	1	2	2

Clinical sign	Group Name	Administration Week-day 98-7	99-7	100-7	101-7	102-7	103-7	104-7
DEATH	Control	14	15	17	19	19	20	20
	50 ppm	11	11	14	15	15	16	17
	100 ppm	10	10	11	13	14	16	17
	200 ppm	10	12	12	13	15	15	15
MORIBUND SACRIFICE	Control	1	1	1	1	1	1	1
	50 ppm	2	2	2	2	2	2	2
	100 ppm	2	2	2	2	2	2	2
	200 ppm	1	1	1	1	1	1	1
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	1	1
	100 ppm	0	0	0	1	1	1	1
	200 ppm	0	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	1	1	0	0
	50 ppm	1	1	0	0	0	1	1
	100 ppm	0	0	0	0	0	0	0
	200 ppm	0	0	1	1	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0
	100 ppm	1	1	1	2	2	2	2
	200 ppm	2	2	2	2	0	0	0
EYE OPACITY	Control	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0
	100 ppm	0	2	2	2	2	2	2
	200 ppm	0	1	1	1	1	1	1
EXTERNAL MASS	Control	1	1	1	0	0	2	2
	50 ppm	2	2	2	2	2	3	3
	100 ppm	1	2	2	2	2	1	1
	200 ppm	2	1	1	1	2	2	2

Clinical sign	Group Name	Administration Week-day 1-1	1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.PERI MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.FORLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 14-7	15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.PERI MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.FORLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 28-7	29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.PERI MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.FORLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 42-7	43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7
INTERNAL MASS	Control	0	0	0	1	1	1	1	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	1	1	1	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	1	0	0	0	0	0	0	0	0	0	0	0	0
M.EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.PERI MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.FORLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

Clinical sign	Group Name	Administration Week-day 56-7	57-7	58-7	59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	1	1	2
	50 ppm	1	1	1	1	2	2	2	2	2	2	1	2	2	2
	100 ppm	0	0	0	1	1	2	2	2	2	2	2	2	3	4
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	2
M.EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.PERI MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.PERI EAR	Control	0	0	0	0	0	0	0	1	1	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.FORLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 70-7	71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7
INTERNAL MASS	Control	2	3	3	3	4	4	4	4	4	3	3	2	2	1
	50 ppm	2	2	2	2	3	3	3	4	4	4	4	4	4	4
	100 ppm	4	5	4	4	4	3	3	3	3	2	2	2	2	2
	200 ppm	2	2	2	2	2	2	2	2	2	2	2	3	3	4
M.EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.PERI MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.FORLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.BREAST	Control	0	0	0	0	0	0	0	1	1	1	1	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 84-7	85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7
INTERNAL MASS	Control	1	1	1	0	1	1	1	2	2	2	2	2	1	1
	50 ppm	4	5	4	2	2	2	2	2	3	3	3	2	2	2
	100 ppm	2	2	3	3	3	4	4	3	4	6	6	6	7	7
	200 ppm	4	4	5	5	5	4	4	4	4	4	4	4	4	3
M.EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
M.PERI MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	1	1	1	1	1	1	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0
M.FORLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 98-7	99-7	100-7	101-7	102-7	103-7	104-7
INTERNAL MASS	Control	1	2	1	1	1	2	3
	50 ppm	6	6	5	6	6	7	8
	100 ppm	7	10	9	7	6	5	5
	200 ppm	3	5	6	5	4	4	5
M.EYE	Control	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0
	100 ppm	1	1	1	1	1	1	1
	200 ppm	1	1	1	1	2	2	2
M.PERI MOUTH	Control	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0
M.EAR	Control	0	0	0	0	0	0	0
	50 ppm	1	1	1	1	1	2	2
	100 ppm	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0
M.PERI EAR	Control	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0
M.NECK	Control	0	0	0	0	0	1	1
	50 ppm	0	0	0	0	0	0	0
	100 ppm	0	1	1	1	1	0	0
	200 ppm	0	0	0	0	0	0	0
M.FORLIMB	Control	0	0	0	0	0	1	1
	50 ppm	1	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0
M.BREAST	Control	1	1	1	0	0	0	0
	50 ppm	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 1-1	1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7
M.ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.ANTERIOR.DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.ANUS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 14-7	15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7
M.ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.ANTERIOR.DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.ANUS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 28-7	29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7
M.ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.ANTERIOR.DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.ANUS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

Clinical sign	Group Name	Administration Week-day 42-7	43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7
M.ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.ANTERIOR.DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.ANUS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 56-7	57-7	58-7	59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7
M.ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.ANTERIOR.DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.ANUS	Control	0	0	0	0	0	0	0	0	0	1	1	1	1	1
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 70-7	71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7
M.ABDOMEN	Control	0	0	0	0	0	0	0	1	1	1	1	0	0	0
	50 ppm	1	1	1	1	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.ANTERIOR.DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	1	1	1	1	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	1
M.GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.ANUS	Control	1	1	1	1	1	1	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 84-7	85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7
M.ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.ANTERIOR.DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M.HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	1	1	0	0	0	0	0	0	0	0	0	0	0	0
M.GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	1	1	1	1	1	1	1	1	1
M.ANUS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	1	1	0	0

Clinical sign	Group Name	Administration Week-day 98-7	99-7	100-7	101-7	102-7	103-7	104-7
M.ABDOMEN	Control	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0
M.ANTERIOR.DORSUM	Control	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0
M.HINDLIMB	Control	0	0	0	0	0	1	1
	50 ppm	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0
M.GENITALIA	Control	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0
	200 ppm	1	0	0	0	0	0	0
M.ANUS	Control	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0
EDEMA	Control	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0
HEMORRHAGE	Control	0	0	0	0	0	0	0
	50 ppm	0	1	1	0	0	0	0
	100 ppm	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0
TORTICOLLIS	Control	0	0	0	0	0	1	1
	50 ppm	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 1-1	1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BRADYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 14-7	15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BRADYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

Clinical sign	Group Name	Administration Week-day 28-7	29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BRADYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 42-7	43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BRADYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

Clinical sign	Group Name	Administration Week-day 56-7	57-7	58-7	59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	1	1	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	1	1	0	0	0	0	0	0	0	0	0
BRADYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 70-7	71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BRADYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

Clinical sign	Group Name	Administration Week-day 84-7	85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BRADYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 98-7	99-7	100-7	101-7	102-7	103-7	104-7
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0
ABNORMAL RESPIRATION	Control	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0
BRADYPNEA	Control	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0

APPENDIX B 1

BODY WEIGHT CHANGES: SUMMARY, MOUSE: MALE

(2-YEAR STUDY)

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week 0	1	1	2	3	4	5
Control	22.2± 0.8	22.5± 0.9	23.8± 0.9	25.0± 0.9	25.8± 1.0	26.5± 1.2	27.1± 1.3
50 ppm	22.2± 0.8	22.2± 0.8	23.6± 0.9	24.6± 1.0	25.1± 1.5*	26.0± 1.2	26.6± 1.3
100 ppm	22.2± 0.8	22.5± 0.9	23.9± 0.9	24.8± 1.2	25.7± 1.1	26.4± 1.3	27.0± 1.3
200 ppm	22.2± 0.8	22.2± 0.8	22.6± 1.8**	23.9± 1.9**	25.0± 1.1**	25.7± 1.2**	26.7± 1.3

Significant difference : * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week 6	7	8	9	10	11	12
Control	27.8± 1.4	28.4± 1.6	29.1± 1.8	29.7± 1.9	30.4± 2.0	31.0± 2.2	31.5± 2.3
50 ppm	27.4± 1.5	27.9± 1.4	28.5± 1.7	29.1± 1.8	29.8± 1.9	30.3± 2.0	30.5± 2.2
100 ppm	27.4± 1.5	28.0± 1.6	28.6± 1.8	29.0± 2.0	29.5± 2.0	29.9± 2.2*	30.4± 2.3*
200 ppm	26.8± 1.4**	27.2± 1.5**	27.8± 1.7**	28.4± 1.8**	28.8± 1.8**	28.7± 1.9**	29.1± 1.9**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

(HAN260)

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week 13	14	18	22	26	30	34
Control	32.2± 2.3	32.7± 2.4	34.2± 2.5	35.8± 2.8	37.6± 3.4	39.5± 3.9	41.3± 4.4
50 ppm	31.1± 2.2*	31.6± 2.4	33.2± 2.6	34.9± 3.0	36.6± 3.3	37.9± 4.0	39.5± 4.6
100 ppm	31.2± 2.4	31.6± 2.6	33.0± 2.7*	34.4± 3.0*	36.2± 3.3	37.7± 3.7	38.9± 3.9*
200 ppm	29.5± 2.1**	30.2± 2.1**	31.3± 2.4**	32.8± 2.8**	33.9± 4.0**	35.9± 3.6**	37.3± 3.9**

Significant difference : * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week 38	42	46	50	54	58	62
Control	41.7± 4.3	43.4± 4.9	44.7± 5.1	46.0± 5.1	47.0± 5.3	48.2± 4.9	48.6± 5.1
50 ppm	40.0± 4.8	41.3± 4.8	42.5± 4.9*	43.8± 4.9*	44.6± 4.9*	45.8± 5.2*	46.0± 5.3*
100 ppm	39.1± 4.0**	39.7± 4.1**	40.9± 4.4**	41.6± 4.4**	42.0± 4.6**	42.7± 4.9**	42.7± 5.0**
200 ppm	37.3± 4.0**	37.9± 4.2**	38.8± 4.3**	39.5± 4.3**	39.9± 4.4**	40.1± 4.3**	40.1± 4.2**

Significant difference : * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week 66	70	74	78	82	86	90
Control	48.8± 5.4	48.5± 5.9	49.3± 5.4	49.1± 5.6	49.4± 5.5	49.4± 6.0	49.6± 7.6
50 ppm	46.0± 5.2*	45.3± 5.7*	45.2± 5.6**	45.3± 5.7**	46.2± 6.0	47.0± 6.4	46.8± 6.3
100 ppm	42.6± 4.9**	42.1± 4.8**	41.3± 4.8**	41.7± 5.0**	42.1± 4.6**	42.6± 5.1**	43.3± 4.7**
200 ppm	39.9± 4.0**	39.1± 4.0**	38.7± 3.9**	38.9± 4.0**	39.1± 3.8**	40.0± 4.1**	40.6± 4.4**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week 94	98	102	104
Control	50.2± 6.8	49.8± 6.9	49.5± 7.1	49.2± 7.2
50 ppm	46.6± 6.4	46.7± 6.7	46.8± 6.6	46.8± 6.8
100 ppm	43.2± 4.6**	42.6± 5.7**	42.7± 5.8**	43.0± 5.8**
200 ppm	40.1± 4.4**	40.5± 4.4**	40.6± 4.8**	40.4± 5.3**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

APPENDIX B 2

BODY WEIGHT CHANGES: SUMMARY, MOUSE: FEMALE

(2-YEAR STUDY)

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week 0	1	1	2	3	4	5
Control	18.6± 0.7	18.3± 0.7	19.4± 0.7	20.6± 0.7	21.1± 0.7	22.1± 0.9	22.4± 1.0
50 ppm	18.6± 0.7	18.2± 0.7	19.4± 0.7	20.3± 0.8	20.9± 0.7	21.8± 1.0	22.1± 0.8
100 ppm	18.6± 0.7	18.3± 0.8	19.4± 0.8	20.4± 0.8	20.9± 0.8	21.7± 0.9	22.0± 0.8
200 ppm	18.6± 0.7	18.2± 0.6	19.2± 1.4	19.7± 1.4**	20.5± 0.8**	21.3± 0.8**	22.1± 0.9

Significant difference : * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week 6	7	8	9	10	11	12
Control	23.2± 1.1	23.5± 1.1	23.9± 1.1	24.0± 1.1	24.0± 1.1	24.3± 1.0	24.8± 1.3
50 ppm	22.7± 1.0*	23.1± 1.1	23.3± 1.0*	23.3± 0.9**	23.6± 1.0	23.9± 1.1	24.3± 1.3
100 ppm	22.5± 0.9**	22.9± 1.0*	23.4± 1.1	23.2± 1.1**	23.4± 0.9*	23.8± 1.2	24.2± 1.1*
200 ppm	22.2± 1.0**	22.4± 1.0**	22.8± 1.1**	23.1± 1.3**	23.1± 1.1**	23.4± 1.1**	23.4± 1.2**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

(HAN260)

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week 13	14	18	22	26	30	34
Control	24.8± 1.1	25.1± 1.3	26.4± 1.4	26.8± 1.5	27.5± 1.3	28.0± 1.8	29.0± 2.1
50 ppm	24.5± 1.2	24.7± 1.2	25.1± 1.4**	25.5± 1.3**	25.7± 1.3**	26.3± 1.6**	27.0± 1.8**
100 ppm	24.0± 1.4**	24.0± 1.2**	24.8± 1.1**	25.3± 1.4**	25.4± 1.2**	25.6± 1.1**	25.7± 1.3**
200 ppm	23.7± 1.3**	23.8± 1.3**	24.4± 1.4**	24.5± 1.2**	24.8± 1.1**	24.7± 1.4**	25.1± 1.5**

Significant difference : * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week 38	42	46	50	54	58	62
Control	29.3± 2.1	30.3± 2.5	31.0± 2.9	31.3± 3.1	31.7± 2.7	32.2± 2.7	32.4± 3.1
50 ppm	26.8± 1.5**	27.5± 1.5**	28.0± 1.9**	28.4± 2.0**	28.8± 1.9**	29.6± 2.5**	29.8± 3.0**
100 ppm	26.1± 1.2**	26.6± 1.3**	26.5± 1.6**	26.9± 1.5**	27.2± 1.8**	27.2± 1.8**	27.8± 2.0**
200 ppm	25.2± 1.6**	25.3± 1.8**	25.7± 1.5**	26.0± 1.7**	26.1± 1.7**	26.3± 1.9**	26.5± 1.6**

Significant difference : * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week 66	70	74	78	82	86	90
Control	32.0± 3.2	32.0± 3.2	32.3± 3.4	32.1± 3.0	32.2± 2.8	32.9± 3.7	33.0± 3.3
50 ppm	29.5± 2.5**	29.6± 2.4**	30.3± 2.2	30.3± 2.9**	31.0± 2.7	31.1± 3.4*	32.2± 3.4
100 ppm	27.9± 1.8**	28.2± 3.0**	28.0± 2.2**	28.3± 2.8**	28.4± 2.7**	28.9± 3.1**	29.0± 2.9**
200 ppm	26.5± 1.9**	26.8± 1.8**	26.5± 1.9**	27.1± 2.0**	27.3± 2.8**	27.9± 2.6**	28.1± 2.3**

Significant difference : * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week 94	98	102	104
Control	32.6± 3.5	33.0± 2.9	33.6± 4.0	34.2± 4.9
50 ppm	32.4± 3.8	32.6± 3.4	32.9± 3.3	32.6± 3.3
100 ppm	28.9± 2.8**	29.6± 3.0**	30.9± 3.5**	30.6± 3.5**
200 ppm	28.1± 3.0**	27.8± 3.0**	28.6± 2.6**	28.8± 2.6**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

APPENDIX C 1

FOOD CONSUMPTION CHANGES: SUMMARY, MOUSE: MALE

(2-YEAR STUDY)

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week 1	2	3	4	5	6	7
Control	4.2± 0.2	4.1± 0.3	4.2± 0.3	4.3± 0.3	4.3± 0.3	4.3± 0.3	4.4± 0.3
50 ppm	4.2± 0.2	4.0± 0.2*	4.0± 0.3*	4.1± 0.3*	4.1± 0.2**	4.2± 0.3	4.2± 0.2*
100 ppm	4.2± 0.3	4.3± 0.3**	4.3± 0.3	4.4± 0.4	4.2± 0.2	4.4± 0.3	4.5± 0.3
200 ppm	3.7± 0.5**	4.4± 0.4**	4.2± 0.4	4.3± 0.3	4.1± 0.2*	4.2± 0.3*	4.3± 0.3

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week 8	9	10	11	12	13	14
Control	4.5± 0.3	4.4± 0.3	4.5± 0.2	4.5± 0.3	4.4± 0.3	4.4± 0.3	4.4± 0.2
50 ppm	4.3± 0.3**	4.3± 0.3*	4.3± 0.2*	4.2± 0.3**	4.2± 0.3**	4.2± 0.2**	4.3± 0.2
100 ppm	4.5± 0.4	4.4± 0.3	4.4± 0.3	4.3± 0.3*	4.4± 0.3	4.3± 0.3	4.4± 0.3
200 ppm	4.4± 0.3	4.4± 0.3	4.3± 0.3*	4.1± 0.3**	4.4± 0.3	4.4± 0.3	4.4± 0.3

Significant difference : * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week 18	22	26	30	34	38	42
Control	4.4± 0.3	4.5± 0.3	4.7± 0.3	4.8± 0.3	4.7± 0.4	4.8± 0.3	5.0± 0.4
50 ppm	4.3± 0.3	4.4± 0.3	4.6± 0.4	4.6± 0.3**	4.6± 0.4*	4.7± 0.3	4.7± 0.3**
100 ppm	4.3± 0.3	4.5± 0.4	4.6± 0.3	4.6± 0.3**	4.5± 0.3**	4.5± 0.3**	4.6± 0.3**
200 ppm	4.2± 0.3**	4.4± 0.3	4.5± 0.5	4.6± 0.3*	4.3± 0.3**	4.4± 0.3**	4.5± 0.3**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week 46	50	54	58	62	66	70
Control	5.0± 0.4	5.0± 0.4	5.2± 0.5	5.2± 0.4	5.2± 0.3	5.0± 0.5	5.0± 0.4
50 ppm	4.7± 0.3**	4.8± 0.3*	4.9± 0.3**	5.0± 0.4*	4.8± 0.4**	4.7± 0.3**	4.7± 0.3**
100 ppm	4.7± 0.3**	4.8± 0.3**	4.8± 0.4**	4.9± 0.6**	4.8± 0.4**	4.6± 0.4**	4.6± 0.3**
200 ppm	4.6± 0.3**	4.6± 0.3**	4.7± 0.4**	4.7± 0.4**	4.6± 0.4**	4.4± 0.3**	4.5± 0.3**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week 74	78	82	86	90	94	98
Control	5.2± 0.3	5.2± 0.4	5.4± 0.4	5.4± 0.6	5.4± 0.8	5.3± 0.4	5.3± 0.5
50 ppm	4.7± 0.3**	4.7± 0.4**	5.0± 0.4**	5.1± 0.5*	5.1± 0.4**	5.0± 0.4**	4.9± 0.6**
100 ppm	4.7± 0.4**	4.8± 0.4**	4.8± 0.3**	4.9± 0.4**	5.0± 0.4**	5.2± 0.4	4.7± 0.6**
200 ppm	4.6± 0.3**	4.6± 0.3**	4.6± 0.4**	4.7± 0.3**	4.8± 0.4**	5.2± 0.3	4.7± 0.3**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week 102	104
Control	5.1± 0.5	5.1± 0.7
50 ppm	4.9± 0.4	4.9± 0.5
100 ppm	4.7± 0.5**	4.8± 0.5*
200 ppm	4.6± 0.4**	4.7± 0.5**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

APPENDIX C 2

FOOD CONSUMPTION CHANGES: SUMMARY, MOUSE: FEMALE

(2-YEAR STUDY)

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week 1	2	3	4	5	6	7
Control	3.6± 0.3	3.6± 0.2	3.9± 0.2	4.1± 0.2	4.1± 0.2	4.3± 0.3	4.4± 0.3
50 ppm	3.5± 0.2	3.5± 0.2	3.7± 0.2**	3.9± 0.2**	3.9± 0.3**	4.1± 0.3**	4.1± 0.2**
100 ppm	3.6± 0.3	3.8± 0.2	3.8± 0.2	4.0± 0.2	4.0± 0.2**	4.2± 0.3	4.4± 0.3
200 ppm	3.4± 0.5**	3.7± 0.5	3.7± 0.3**	3.8± 0.3**	3.8± 0.2**	3.9± 0.3**	4.0± 0.3**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week 8	9	10	11	12	13	14
Control	4.5± 0.2	4.3± 0.3	4.3± 0.3	4.3± 0.3	4.4± 0.3	4.2± 0.3	4.3± 0.3
50 ppm	4.2± 0.2**	4.1± 0.2**	4.1± 0.2**	4.0± 0.2**	4.1± 0.3**	4.0± 0.3**	4.0± 0.3**
100 ppm	4.3± 0.3**	4.2± 0.2	4.2± 0.3*	4.1± 0.2**	4.2± 0.2	4.0± 0.3**	4.1± 0.2**
200 ppm	4.1± 0.3**	4.1± 0.3**	4.1± 0.3**	3.9± 0.3**	4.1± 0.3**	4.3± 0.3	4.1± 0.3**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week 18	22	26	30	34	38	42
Control	4.3± 0.3	4.3± 0.4	4.4± 0.3	4.4± 0.5	4.4± 0.5	4.5± 0.5	4.7± 0.5
50 ppm	4.0± 0.3**	3.9± 0.3**	4.0± 0.3**	4.1± 0.3**	4.0± 0.3**	4.1± 0.3**	4.1± 0.3**
100 ppm	4.0± 0.3**	4.0± 0.3**	4.1± 0.4**	4.0± 0.2**	3.9± 0.3**	4.0± 0.3**	4.2± 0.3**
200 ppm	3.9± 0.3**	3.9± 0.3**	3.9± 0.3**	3.8± 0.3**	3.6± 0.4**	3.8± 0.3**	3.9± 0.3**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week 46	50	54	58	62	66	70
Control	4.6± 0.5	4.5± 0.8	4.7± 0.5	4.7± 0.5	4.7± 0.5	4.4± 0.5	4.4± 0.5
50 ppm	4.2± 0.6**	4.1± 0.4**	4.3± 0.3**	4.4± 0.4**	4.3± 0.4**	4.1± 0.4**	4.2± 0.5
100 ppm	4.1± 0.3**	4.2± 0.3**	4.3± 0.4**	4.3± 0.3**	4.3± 0.3**	4.1± 0.3*	4.1± 0.3*
200 ppm	3.9± 0.3**	3.9± 0.3**	4.0± 0.4**	4.1± 0.4**	4.1± 0.5**	3.9± 0.3**	4.0± 0.3**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week 74	78	82	86	90	94	98
Control	4.5± 0.4	4.4± 0.4	4.5± 0.5	4.7± 0.5	4.9± 0.4	4.6± 0.6	4.6± 0.5
50 ppm	4.3± 0.5*	4.1± 0.5**	4.4± 0.5	4.3± 0.5**	4.6± 0.5*	4.4± 0.5	4.4± 0.5
100 ppm	4.2± 0.3**	4.2± 0.4	4.2± 0.4**	4.4± 0.4*	4.4± 0.4**	4.8± 0.6	4.4± 0.5
200 ppm	4.0± 0.3**	4.0± 0.4**	4.0± 0.3**	4.1± 0.4**	4.3± 0.4**	4.8± 0.4	4.2± 0.5**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week 102	104
Control	4.7± 0.8	4.8± 0.8
50 ppm	4.5± 0.6	4.4± 0.7*
100 ppm	4.4± 0.6	4.4± 0.6
200 ppm	4.2± 0.4**	4.2± 0.4**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

APPENDIX D 1

HEMATOLOGY: SUMMARY, MOUSE: MALE

(2-YEAR STUDY)

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
SAMPLING DATE : 105-1
SEX : MALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
ALL ANIMALS (105W)

Group Name	NO. of Animals	RED BLOOD CELL $10^6/\mu\ell$	HEMOGLOBIN g/dℓ	HEMATOCRIT %	MCV f ℓ	MCH p g	MCHC g/dℓ	PLATELET $10^3/\mu\ell$
Control	38	9.78± 1.43	13.9± 1.6	44.4± 5.0	45.6± 2.1	14.3± 0.7	31.3± 0.9	1606± 412
50 ppm	43	9.58± 0.77	13.9± 1.0	43.7± 3.6	45.6± 1.3	14.6± 0.8	31.9± 1.8	1697± 339
100 ppm	43	9.72± 0.93	14.0± 1.2	44.3± 3.8	45.6± 1.5	14.5± 0.6	31.7± 0.7	1738± 238
200 ppm	45	9.51± 0.80*	13.9± 0.8	44.0± 3.2	46.3± 1.1*	14.7± 0.7*	31.8± 1.3	1683± 257

Significant difference : * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
SAMPLING DATE : 105-1
SEX : MALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
ALL ANIMALS (105W)

Group Name	NO. of Animals	WBC $10^3/\mu\ell$	Differential WBC (%) N-BAND	N-SEG	EOSINO	BASO	MONO	LYMPHO	OTHERS
Control	38	3.03± 1.95	0± 1	33± 15	1± 1	0± 0	5± 2	59± 16	2± 4
50 ppm	43	2.69± 1.29	1± 2	29± 13	2± 1	0± 0	3± 2*	64± 14	1± 1
100 ppm	43	2.55± 1.41	1± 1	28± 13	2± 1	0± 0	4± 1	65± 13	1± 2
200 ppm	45	2.01± 0.78**	1± 1	26± 13	2± 1*	0± 0	3± 1*	67± 12	1± 1

Significant difference ; * : $P \leqq 0.05$ ** : $P \leqq 0.01$ Test of Dunnett

APPENDIX D 2

HEMATOLOGY: SUMMARY, MOUSE: FEMALE

(2-YEAR STUDY)

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
SAMPLING DATE : 105-1
SEX : FEMALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
ALL ANIMALS (105W)

Group Name	NO. of Animals	RED BLOOD CELL $10^6/\mu\ell$	HEMOGLOBIN g/dℓ	HEMATOCRIT %	MCV fℓ	MCH pg	MCHC g/dℓ	PLATELET $10^3/\mu\ell$
Control	25	9.66± 0.64	14.2± 0.8	43.9± 2.6	45.5± 1.9	14.7± 0.7	32.3± 1.2	1105± 215
50 ppm	28	8.52± 2.33	12.6± 3.1	40.4± 8.3	49.3± 7.8	15.0± 1.4	30.7± 2.5	1008± 376
100 ppm	30	9.06± 1.63	13.5± 1.8	42.1± 4.9	47.7± 8.6	15.1± 1.8	31.9± 2.1	1018± 404
200 ppm	32	9.11± 0.87	13.3± 1.3*	42.1± 3.5	46.3± 1.6	14.6± 0.5	31.6± 1.0	1091± 351

Significant difference ; * : $P \leqq 0.05$ ** : $P \leqq 0.01$ Test of Dunnett

(HCL070)

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
SAMPLING DATE : 105-1
SEX : FEMALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
ALL ANIMALS (105W)

Group Name	NO. of Animals	WBC $10^3/\mu\ell$	Differential WBC (%) N-BAND	N-SEG	EOSINO	BASO	MONO	LYMPHO	OTHERS
Control	25	3.03± 5.82	0± 1	34± 16	2± 2	0± 0	5± 2	55± 16	4± 9
50 ppm	28	4.21± 9.09	2± 4	38± 19	1± 1	0± 0	5± 3	50± 19	5± 8
100 ppm	30	5.04± 17.32	1± 1	33± 15	1± 2	0± 0	5± 2	55± 15	5± 9
200 ppm	32	3.01± 5.42	1± 1	30± 11	2± 2	0± 0	4± 2	59± 12	4± 7

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

(HCL070)

APPENDIX E1

BIOCHEMISTRY: SUMMARY, MOUSE: MALE

(2-YEAR STUDY)

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
SAMPLING DATE : 105-2
SEX : MALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
ALL ANIMALS (105W)

Group Name	NO. of Animals	TOTAL PROTEIN g/dℓ	ALBUMIN g/dℓ	A/G RATIO	T-BILIRUBIN mg/dℓ	GLUCOSE mg/dℓ	T-CHOLESTEROL mg/dℓ	TRIGLYCERIDE mg/dℓ
Control	38	5.3± 0.9	2.8± 0.4	1.1± 0.2	0.16± 0.06	175± 39	106± 53	40± 15
50 ppm	43	5.1± 0.5	2.7± 0.3	1.2± 0.2	0.15± 0.02	187± 39	94± 27	39± 16
100 ppm	43	5.0± 0.7**	2.8± 0.3	1.3± 0.1**	0.15± 0.02	196± 27*	94± 44**	37± 17
200 ppm	45	4.9± 0.5**	2.8± 0.2	1.4± 0.1**	0.16± 0.03**	198± 40*	87± 37**	32± 10*

Significant defference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
SAMPLING DATE : 105-2
SEX : MALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
ALL ANIMALS (105W)

Group Name	NO. of Animals	GOT IU/ℓ		GPT IU/ℓ		LDH IU/ℓ		ALP IU/ℓ		CPK IU/ℓ		UREA NITROGEN mg/dℓ		SODIUM mEq/ℓ	
Control	38	457±	2117	348±	1731	2664±	13949	160±	116	50±	30	21.4±	5.8	153±	2
50 ppm	43	238±	858	83±	252	430±	906	148±	104	42±	22	22.3±	5.6	152±	2
100 ppm	43	83±	141**	77±	273**	326±	543**	273±	907	36±	13**	23.1±	8.8	152±	1
200 ppm	45	107±	323**	50±	129**	291±	420**	163±	132	35±	34**	22.1±	4.9	153±	2

Significant defference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

(HCL074)

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
SAMPLING DATE : 105-2
SEX : MALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
ALL ANIMALS (105W)

Group Name	NO. of Animals	POTASSIUM mEq/ℓ		CHLORIDE mEq/ℓ		CALCIUM mg/dℓ		INORGANIC PHOSPHORUS mg/dℓ	
Control	38	4.1±	0.5	121±	3	9.0±	0.6	6.2±	0.8
50 ppm	43	4.2±	0.3	122±	3	8.8±	0.4	6.1±	0.7
100 ppm	43	4.2±	0.4	121±	4	8.8±	0.6*	6.0±	0.9
200 ppm	45	4.2±	0.3	123±	3*	8.7±	0.5**	6.1±	0.8

Significant defference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

(HCL074)

APPENDIX E2

BIOCHEMISTRY: SUMMARY, MOUSE: FEMALE

(2-YEAR STUDY)

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
SAMPLING DATE : 105-2
SEX : FEMALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
ALL ANIMALS (105W)

Group Name	NO. of Animals	TOTAL PROTEIN g/dℓ		ALBUMIN g/dℓ		A/G RATIO		T-BILIRUBIN mg/dℓ		GLUCOSE mg/dℓ		T-CHOLESTEROL mg/dℓ		TRIGLYCERIDE mg/dℓ	
Control	25	5.0±	0.4	2.8±	0.2	1.3±	0.1	0.15±	0.02	139±	26	70±	25	28±	16
50 ppm	28	4.6±	0.8	2.6±	0.4	1.4±	0.3	0.19±	0.12	123±	48	63±	14	26±	16
100 ppm	30	4.8±	0.9	2.7±	0.3	1.4±	0.3*	0.16±	0.04	134±	34	65±	14	27±	18
200 ppm	32	4.8±	0.4	2.8±	0.2	1.5±	0.1**	0.16±	0.02*	147±	30	69±	13	26±	19

Significant defference : * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

(HCL074)

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
SAMPLING DATE : 105-2
SEX : FEMALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
ALL ANIMALS (105W)

Group Name	NO. of Animals	GOT IU/ℓ		GPT IU/ℓ		LDH IU/ℓ		ALP IU/ℓ		CPK IU/ℓ		UREA NITROGEN mg/dℓ		SODIUM mEq/ℓ	
Control	25	98±	33	37±	9	331±	175	259±	106	64±	25	17.4±	5.6	151±	1
50 ppm	28	154±	148	71±	88	1615±	3212	231±	104	177±	319	23.7±	16.1	153±	2*
100 ppm	30	96±	66	34±	15	482±	591	296±	160	77±	63	21.1±	13.0	152±	2
200 ppm	32	99±	116**	28±	11**	1038±	4278	343±	111*	95±	272*	19.9±	8.1	152±	2

Significant defference : * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

(HCL074)

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
SAMPLING DATE : 105-2
SEX : FEMALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
ALL ANIMALS (105W)

Group Name	NO. of Animals	POTASSIUM mEq/ℓ		CHLORIDE mEq/ℓ		CALCIUM mg/dℓ		INORGANIC PHOSPHORUS mg/dℓ	
Control	25	4.0±	0.5	122±	2	9.0±	0.4	6.4±	1.1
50 ppm	28	4.3±	0.7	124±	4	8.9±	0.6	6.8±	1.5
100 ppm	30	4.2±	0.5	123±	3	8.8±	0.4	6.4±	1.1
200 ppm	32	4.1±	0.3	123±	3	8.8±	0.3	6.5±	1.0

Significant defference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

(HCL074)

APPENDIX F 1

URINALYSIS: SUMMARY, MOUSE: MALE

(2-YEAR STUDY)

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
SAMPLING DATE : 106-2
SEX : MALE REPORT TYPE : A1

URINALYSIS

Group Name	NO. of Animals	pH 5.0	6.0	6.5	7.0	7.5	8.0	8.5	CHI	Protein −	±	+	2+	3+	4+	CHI	Glucose −	±	+	2+	3+	4+	CHI	Ketone body −	±	+	2+	3+	4+	CHI	Occult blood −	±	+	2+	3+	CHI
Control	40	0	8	15	11	4	2	0		1	2	26	11	0	0		40	0	0	0	0	0		32	8	0	0	0	0		34	0	1	4	1	
50 ppm	44	0	2	14	13	10	5	0		0	0	33	11	0	0		44	0	0	0	0	0		30	14	0	0	0	0		39	2	1	1	1	
100 ppm	43	0	3	5	16	10	7	2	**	0	1	29	11	2	0		43	0	0	0	0	0		18	23	2	0	0	0	**	40	0	0	1	2	
200 ppm	46	0	8	8	15	10	5	0		0	0	18	28	0	0	**	46	0	0	0	0	0		11	32	3	0	0	0	**	38	3	2	2	1	

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of CHI SQUARE

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
SAMPLING DATE : 106-2
SEX : MALE REPORT TYPE : A1

URINALYSIS

Group Name	NO. of Animals	Urobilinogen ±	+	2+	3+	4+	CHI
Control	40	40	0	0	0	0	
50 ppm	44	44	0	0	0	0	
100 ppm	43	43	0	0	0	0	
200 ppm	46	46	0	0	0	0	

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of CHI SQUARE

APPENDIX F 2

URINALYSIS: SUMMARY, MOUSE: FEMALE

(2-YEAR STUDY)

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
SAMPLING DATE : 106-2
SEX : FEMALE REPORT TYPE : A1

URINALYSIS

Group Name	NO. of Animals	pH 5.0	6.0	6.5	7.0	7.5	8.0	8.5	CHI	Protein −	±	+	2+	3+	4+	CHI	Glucose −	±	+	2+	3+	4+	CHI	Ketone body −	±	+	2+	3+	4+	CHI	Occult blood −	±	+	2+	3+	CHI
Control	29	0	2	2	6	7	12	0		0	1	18	8	2	0		29	0	0	0	0	0		13	14	2	0	0	0		25	1	0	1	2	
50 ppm	30	0	5	7	4	4	9	1		0	6	10	14	0	0	*	30	0	0	0	0	0		13	15	1	1	0	0		24	1	0	3	2	
100 ppm	30	0	1	2	3	8	16	0		0	2	12	15	1	0		30	0	0	0	0	0		9	21	0	0	0	0		27	0	0	1	2	
200 ppm	33	0	0	6	3	7	15	2		0	0	11	22	0	0	*	33	0	0	0	0	0		2	29	1	1	0	0	**	21	1	0	3	8	

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of CHI SQUARE

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
SAMPLING DATE : 106-2
SEX : FEMALE REPORT TYPE : A1

URINALYSIS

Group Name	NO. of Animals	Urobilinogen ±	+	2+	3+	4+	CHI
Control	29	29	0	0	0	0	
50 ppm	30	30	0	0	0	0	
100 ppm	30	30	0	0	0	0	
200 ppm	33	33	0	0	0	0	

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of CHI SQUARE

APPENDIX G 1

GROSS FINDINGS: SUMMARY, MOUSE: MALE: ALL ANIMALS

(2-YEAR STUDY)

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

GROSS FINDINGS (SUMMARY)
ALL ANIMALS (0-105W)

Organ	Findings	Group Name NO. of Animals	Control 50 (%)	50 ppm 50 (%)	100 ppm 50 (%)	200 ppm 50 (%)
skin/app	nodule		1 (2)	0 (0)	0 (0)	0 (0)
subcutis	edema		0 (0)	1 (2)	1 (2)	0 (0)
	mass		3 (6)	1 (2)	1 (2)	0 (0)
lung	red		0 (0)	0 (0)	1 (2)	0 (0)
	red zone		0 (0)	0 (0)	0 (0)	1 (2)
	nodule		2 (4)	5 (10)	3 (6)	5 (10)
lymph node	enlarged		7 (14)	3 (6)	4 (8)	0 (0)
	nodule		1 (2)	0 (0)	0 (0)	0 (0)
spleen	enlarged		8 (16)	0 (0)	2 (4)	2 (4)
	black zone		1 (2)	3 (6)	2 (4)	3 (6)
	nodule		1 (2)	4 (8)	2 (4)	1 (2)
	accentuation of white pulp		1 (2)	0 (0)	0 (0)	0 (0)
heart	enlarged		0 (0)	0 (0)	0 (0)	1 (2)
forestomach	nodule		0 (0)	0 (0)	3 (6)	3 (6)
small intes	nodule		0 (0)	0 (0)	0 (0)	1 (2)
	adhesion		0 (0)	0 (0)	1 (2)	0 (0)
large intes	adhesion		0 (0)	0 (0)	1 (2)	0 (0)
liver	enlarged		1 (2)	0 (0)	0 (0)	0 (0)
	atrophic		1 (2)	0 (0)	0 (0)	0 (0)
	pale		1 (2)	0 (0)	0 (0)	0 (0)
	white zone		0 (0)	0 (0)	0 (0)	1 (2)
	nodule		16 (32)	13 (26)	9 (18)	6 (12)

Organ	Findings	Group Name NO. of Animals	Control 50 (%)	50 ppm 50 (%)	100 ppm 50 (%)	200 ppm 50 (%)
liver	cyst		1 (2)	0 (0)	0 (0)	0 (0)
	adhesion		0 (0)	0 (0)	1 (2)	0 (0)
kidney	enlarged		0 (0)	0 (0)	1 (2)	0 (0)
	hydronephrosis		2 (4)	3 (6)	1 (2)	1 (2)
urin bladd	nodule		1 (2)	0 (0)	0 (0)	0 (0)
	urine:marked retention		3 (6)	1 (2)	0 (0)	0 (0)
testis	atrophic		0 (0)	1 (2)	0 (0)	1 (2)
	red zone		0 (0)	1 (2)	0 (0)	0 (0)
epididymis	nodule		2 (4)	0 (0)	0 (0)	0 (0)
brain	red zone		1 (2)	0 (0)	0 (0)	0 (0)
	deformed		0 (0)	1 (2)	0 (0)	0 (0)
	adhesion		0 (0)	0 (0)	1 (2)	0 (0)
spinal cord	red zone		1 (2)	0 (0)	0 (0)	0 (0)
Harder gl	enlarged		0 (0)	0 (0)	2 (4)	1 (2)
	nodule		0 (0)	1 (2)	3 (6)	3 (6)
muscle	nodule		1 (2)	0 (0)	0 (0)	0 (0)
mediastinum	mass		1 (2)	0 (0)	1 (2)	0 (0)
peritoneum	nodule		0 (0)	0 (0)	0 (0)	1 (2)
abdominal c	ascites		2 (4)	2 (4)	1 (2)	2 (4)
mesenterium	nodule		0 (0)	1 (2)	0 (0)	0 (0)
thoracic ca	hemorrhage		1 (2)	0 (0)	1 (2)	0 (0)
	pleural fluid		1 (2)	1 (2)	3 (6)	1 (2)

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

GROSS FINDINGS (SUMMARY)
ALL ANIMALS (0-105W)

Organ	Findings	Group Name NO. of Animals	Control 50 (%)	50 ppm 50 (%)	100 ppm 50 (%)	200 ppm 50 (%)
other	tail:nodule		1 (2)	0 (0)	1 (2)	1 (2)
whole body	anemic		1 (2)	0 (0)	0 (0)	0 (0)

APPENDIX G 2

GROSS FINDINGS: SUMMARY, MOUSE: MALE: DEAD AND MORIBUND ANIMALS

(2-YEAR STUDY)

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

GROSS FINDINGS (SUMMARY)
DEAD AND MORIBUND ANIMALS (0-105W)

Organ	Findings	Group Name NO. of Animals	Control 10 (%)	50 ppm 6 (%)	100 ppm 7 (%)	200 ppm 4 (%)
subcutis	edema		0 (0)	1 (17)	1 (14)	0 (0)
	mass		2 (20)	1 (17)	0 (0)	0 (0)
lung	red		0 (0)	0 (0)	1 (14)	0 (0)
	nodule		1 (10)	0 (0)	0 (0)	0 (0)
lymph node	enlarged		1 (10)	1 (17)	1 (14)	0 (0)
spleen	enlarged		2 (20)	0 (0)	2 (29)	1 (25)
	nodule		1 (10)	2 (33)	1 (14)	0 (0)
small intes	nodule		0 (0)	0 (0)	0 (0)	1 (25)
liver	atrophic		1 (10)	0 (0)	0 (0)	0 (0)
	pale		1 (10)	0 (0)	0 (0)	0 (0)
	nodule		2 (20)	2 (33)	3 (43)	1 (25)
kidney	hydronephrosis		1 (10)	1 (17)	1 (14)	1 (25)
urin bladd	urine:marked retention		2 (20)	0 (0)	0 (0)	0 (0)
brain	red zone		1 (10)	0 (0)	0 (0)	0 (0)
spinal cord	red zone		1 (10)	0 (0)	0 (0)	0 (0)
muscle	nodule		1 (10)	0 (0)	0 (0)	0 (0)
mediastinum	mass		1 (10)	0 (0)	1 (14)	0 (0)
peritoneum	nodule		0 (0)	0 (0)	0 (0)	1 (25)
abdominal c	ascites		1 (10)	2 (33)	1 (14)	2 (50)
thoracic ca	hemorrhage		1 (10)	0 (0)	1 (14)	0 (0)
	pleural fluid		1 (10)	1 (17)	2 (29)	1 (25)
whole body	anemic		1 (10)	0 (0)	0 (0)	0 (0)

APPENDIX G 3

GROSS FINDINGS: SUMMARY, MOUSE : MALE : SACRIFICED ANIMALS

(2-YEAR STUDY)

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

GROSS FINDINGS (SUMMARY)
SACRIFICED ANIMALS (105W)

Organ	Findings	Group Name NO. of Animals	Control 40 (%)	50 ppm 44 (%)	100 ppm 43 (%)	200 ppm 46 (%)
skin/app	nodule		1 (3)	0 (0)	0 (0)	0 (0)
subcutis	mass		1 (3)	0 (0)	1 (2)	0 (0)
lung	red zone		0 (0)	0 (0)	0 (0)	1 (2)
	nodule		1 (3)	5 (11)	3 (7)	5 (11)
lymph node	enlarged		6 (15)	2 (5)	3 (7)	0 (0)
	nodule		1 (3)	0 (0)	0 (0)	0 (0)
spleen	enlarged		6 (15)	0 (0)	0 (0)	1 (2)
	black zone		1 (3)	3 (7)	2 (5)	3 (7)
	nodule		0 (0)	2 (5)	1 (2)	1 (2)
	accentuation of white pulp		1 (3)	0 (0)	0 (0)	0 (0)
heart	enlarged		0 (0)	0 (0)	0 (0)	1 (2)
forestomach	nodule		0 (0)	0 (0)	3 (7)	3 (7)
small intes	adhesion		0 (0)	0 (0)	1 (2)	0 (0)
large intes	adhesion		0 (0)	0 (0)	1 (2)	0 (0)
liver	enlarged		1 (3)	0 (0)	0 (0)	0 (0)
	white zone		0 (0)	0 (0)	0 (0)	1 (2)
	nodule		14 (35)	11 (25)	6 (14)	5 (11)
	cyst		1 (3)	0 (0)	0 (0)	0 (0)
	adhesion		0 (0)	0 (0)	1 (2)	0 (0)
kidney	enlarged		0 (0)	0 (0)	1 (2)	0 (0)
	hydronephrosis		1 (3)	2 (5)	0 (0)	0 (0)
urin bladd	nodule		1 (3)	0 (0)	0 (0)	0 (0)

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

GROSS FINDINGS (SUMMARY)
SACRIFICED ANIMALS (105W)

Organ	Findings	Group Name NO. of Animals	Control 40 (%)	50 ppm 44 (%)	100 ppm 43 (%)	200 ppm 46 (%)
urin bladd	urine:marked retention		1 (3)	1 (2)	0 (0)	0 (0)
testis	atrophic		0 (0)	1 (2)	0 (0)	1 (2)
	red zone		0 (0)	1 (2)	0 (0)	0 (0)
epididymis	nodule		2 (5)	0 (0)	0 (0)	0 (0)
brain	deformed		0 (0)	1 (2)	0 (0)	0 (0)
	adhesion		0 (0)	0 (0)	1 (2)	0 (0)
Harder gl	enlarged		0 (0)	0 (0)	2 (5)	1 (2)
	nodule		0 (0)	1 (2)	3 (7)	3 (7)
abdominal c	ascites		1 (3)	0 (0)	0 (0)	0 (0)
mesenterium	nodule		0 (0)	1 (2)	0 (0)	0 (0)
thoracic ca	pleural fluid		0 (0)	0 (0)	1 (2)	0 (0)
other	tail:nodule		1 (3)	0 (0)	1 (2)	1 (2)

APPENDIX G 4

GROSS FINDINGS: SUMMARY, MOUSE: FEMALE: ALL ANIMALS

(2-YEAR STUDY)

Organ	Findings	Group Name NO. of Animals	Control 50 (%)	50 ppm 48 (%)	100 ppm 50 (%)	200 ppm 49 (%)
skin/app	nodule		0 (0)	2 (4)	0 (0)	0 (0)
subcutis	edema		2 (4)	4 (8)	7 (14)	5 (10)
	mass		3 (6)	1 (2)	0 (0)	1 (2)
lung	red		2 (4)	1 (2)	1 (2)	0 (0)
	red zone		1 (2)	0 (0)	0 (0)	0 (0)
	nodule		0 (0)	1 (2)	2 (4)	2 (4)
lymph node	enlarged		7 (14)	7 (15)	7 (14)	3 (6)
spleen	enlarged		12 (24)	12 (25)	10 (20)	6 (12)
	pale		0 (0)	0 (0)	1 (2)	0 (0)
	black zone		0 (0)	0 (0)	0 (0)	2 (4)
	nodule		0 (0)	2 (4)	2 (4)	0 (0)
oral cavity	nodule		1 (2)	0 (0)	0 (0)	0 (0)
tongue	nodule		0 (0)	0 (0)	1 (2)	0 (0)
salivary gl	nodule		0 (0)	1 (2)	0 (0)	0 (0)
forestomach	nodule		0 (0)	0 (0)	4 (8)	2 (4)
liver	enlarged		5 (10)	6 (13)	5 (10)	4 (8)
	white zone		3 (6)	6 (13)	4 (8)	4 (8)
	red zone		1 (2)	0 (0)	2 (4)	1 (2)
	nodule		7 (14)	8 (17)	3 (6)	5 (10)
	cyst		1 (2)	0 (0)	0 (0)	1 (2)
	rough		0 (0)	0 (0)	1 (2)	0 (0)
pancreas	nodule		0 (0)	1 (2)	2 (4)	0 (0)

Organ	Findings	Group Name NO. of Animals	Control 50 (%)	50 ppm 48 (%)	100 ppm 50 (%)	200 ppm 49 (%)
kidney	enlarged		0 (0)	1 (2)	3 (6)	0 (0)
	pale		0 (0)	0 (0)	1 (2)	0 (0)
	white		0 (0)	0 (0)	0 (0)	1 (2)
	white zone		1 (2)	0 (0)	0 (0)	0 (0)
	deformed		0 (0)	1 (2)	0 (0)	0 (0)
	hydronephrosis		0 (0)	1 (2)	4 (8)	2 (4)
urin bladd	urine:marked retention		1 (2)	0 (0)	0 (0)	0 (0)
pituitary	enlarged		3 (6)	1 (2)	0 (0)	2 (4)
	nodule		4 (8)	1 (2)	3 (6)	0 (0)
ovary	enlarged		5 (10)	6 (13)	5 (10)	4 (8)
	cyst		10 (20)	9 (19)	13 (26)	10 (20)
uterus	nodule		8 (16)	12 (25)	14 (28)	9 (18)
	cyst		0 (0)	1 (2)	0 (0)	0 (0)
	fluid:transparent		0 (0)	0 (0)	0 (0)	1 (2)
brain	nodule		0 (0)	1 (2)	0 (0)	0 (0)
	adhesion		0 (0)	1 (2)	0 (0)	0 (0)
eye	exophthalmos		0 (0)	0 (0)	1 (2)	0 (0)
Harder gl	enlarged		0 (0)	0 (0)	2 (4)	1 (2)
	nodule		0 (0)	1 (2)	3 (6)	3 (6)
mediastinum	nodule		1 (2)	0 (0)	0 (0)	0 (0)
	mass		4 (8)	1 (2)	0 (0)	1 (2)
peritoneum	thick		0 (0)	2 (4)	0 (0)	0 (0)

Organ	Findings	Group Name / NO. of Animals	Control 50 (%)	50 ppm 48 (%)	100 ppm 50 (%)	200 ppm 49 (%)
abdominal c	hemorrhage		0 (0)	2 (4)	0 (0)	1 (2)
	ascites		12 (24)	15 (31)	13 (26)	5 (10)
thoracic ca	hemorrhage		1 (2)	0 (0)	1 (2)	0 (0)
	mass		1 (2)	0 (0)	0 (0)	0 (0)
	pleural fluid		12 (24)	12 (25)	13 (26)	9 (18)
other	forelimb:nodule		1 (2)	0 (0)	0 (0)	0 (0)
	hindlimb:nodule		0 (0)	0 (0)	0 (0)	1 (2)
whole body	anemic		0 (0)	1 (2)	1 (2)	0 (0)

APPENDIX G 5

GROSS FINDINGS: SUMMARY, MOUSE: FEMALE: DEAD AND MORIBUND ANIMALS

(2-YEAR STUDY)

Organ	Findings	Group Name NO. of Animals	Control 21 (%)	50 ppm 19 (%)	100 ppm 19 (%)	200 ppm 16 (%)
subcutis	edema		1 (5)	4 (21)	7 (37)	5 (31)
	mass		2 (10)	0 (0)	0 (0)	1 (6)
lung	red		2 (10)	1 (5)	1 (5)	0 (0)
	red zone		1 (5)	0 (0)	0 (0)	0 (0)
	nodule		0 (0)	0 (0)	1 (5)	0 (0)
lymph node	enlarged		4 (19)	4 (21)	5 (26)	1 (6)
spleen	enlarged		7 (33)	5 (26)	6 (32)	3 (19)
	pale		0 (0)	0 (0)	1 (5)	0 (0)
	nodule		0 (0)	1 (5)	0 (0)	0 (0)
oral cavity	nodule		1 (5)	0 (0)	0 (0)	0 (0)
salivary gl	nodule		0 (0)	1 (5)	0 (0)	0 (0)
forestomach	nodule		0 (0)	0 (0)	1 (5)	0 (0)
liver	enlarged		4 (19)	4 (21)	4 (21)	4 (25)
	white zone		2 (10)	4 (21)	4 (21)	3 (19)
	red zone		0 (0)	0 (0)	1 (5)	0 (0)
	nodule		2 (10)	1 (5)	2 (11)	3 (19)
	rough		0 (0)	0 (0)	1 (5)	0 (0)
pancreas	nodule		0 (0)	0 (0)	2 (11)	0 (0)
kidney	enlarged		0 (0)	1 (5)	2 (11)	0 (0)
	pale		0 (0)	0 (0)	1 (5)	0 (0)
	deformed		0 (0)	1 (5)	0 (0)	0 (0)
	hydronephrosis		0 (0)	0 (0)	3 (16)	1 (6)

Organ	Findings	Group Name NO. of Animals	Control 21 (%)	50 ppm 19 (%)	100 ppm 19 (%)	200 ppm 16 (%)
urin bladd	urine:marked retention		1 (5)	0 (0)	0 (0)	0 (0)
pituitary	enlarged		1 (5)	0 (0)	0 (0)	1 (6)
	nodule		1 (5)	1 (5)	1 (5)	0 (0)
ovary	enlarged		3 (14)	3 (16)	5 (26)	3 (19)
	cyst		1 (5)	0 (0)	4 (21)	0 (0)
uterus	nodule		4 (19)	7 (37)	9 (47)	5 (31)
brain	nodule		0 (0)	1 (5)	0 (0)	0 (0)
Harder gl	enlarged		0 (0)	0 (0)	1 (5)	0 (0)
	nodule		0 (0)	0 (0)	1 (5)	1 (6)
mediastinum	nodule		1 (5)	0 (0)	0 (0)	0 (0)
	mass		4 (19)	1 (5)	0 (0)	1 (6)
peritoneum	thick		0 (0)	2 (11)	0 (0)	0 (0)
abdominal c	hemorrhage		0 (0)	2 (11)	0 (0)	1 (6)
	ascites		7 (33)	8 (42)	9 (47)	5 (31)
thoracic ca	hemorrhage		1 (5)	0 (0)	1 (5)	0 (0)
	mass		1 (5)	0 (0)	0 (0)	0 (0)
	pleural fluid		9 (43)	7 (37)	9 (47)	8 (50)
other	hindlimb:nodule		0 (0)	0 (0)	0 (0)	1 (6)
whole body	anemic		0 (0)	1 (5)	1 (5)	0 (0)

APPENDIX G 6

GROSS FINDINGS: SUMMARY, MOUSE : FEMALE : SACRIFICED ANIMALS

(2-YEAR STUDY)

Organ	Findings	Group Name NO. of Animals	Control 29 (%)	50 ppm 29 (%)	100 ppm 31 (%)	200 ppm 33 (%)
skin/app	nodule		0 (0)	2 (7)	0 (0)	0 (0)
subcutis	edema		1 (3)	0 (0)	0 (0)	0 (0)
	mass		1 (3)	1 (3)	0 (0)	0 (0)
lung	nodule		0 (0)	1 (3)	1 (3)	2 (6)
lymph node	enlarged		3 (10)	3 (10)	2 (6)	2 (6)
spleen	enlarged		5 (17)	7 (24)	4 (13)	3 (9)
	black zone		0 (0)	0 (0)	0 (0)	2 (6)
	nodule		0 (0)	1 (3)	2 (6)	0 (0)
tongue	nodule		0 (0)	0 (0)	1 (3)	0 (0)
forestomach	nodule		0 (0)	0 (0)	3 (10)	2 (6)
liver	enlarged		1 (3)	2 (7)	1 (3)	0 (0)
	white zone		1 (3)	2 (7)	0 (0)	1 (3)
	red zone		1 (3)	0 (0)	1 (3)	1 (3)
	nodule		5 (17)	7 (24)	1 (3)	2 (6)
	cyst		1 (3)	0 (0)	0 (0)	1 (3)
pancreas	nodule		0 (0)	1 (3)	0 (0)	0 (0)
kidney	enlarged		0 (0)	0 (0)	1 (3)	0 (0)
	white		0 (0)	0 (0)	0 (0)	1 (3)
	white zone		1 (3)	0 (0)	0 (0)	0 (0)
	hydronephrosis		0 (0)	1 (3)	1 (3)	1 (3)
pituitary	enlarged		2 (7)	1 (3)	0 (0)	1 (3)
	nodule		3 (10)	0 (0)	2 (6)	0 (0)

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

GROSS FINDINGS (SUMMARY)
SACRIFICED ANIMALS (105W)

Organ	Findings	Group Name NO. of Animals	Control 29 (%)	50 ppm 29 (%)	100 ppm 31 (%)	200 ppm 33 (%)
ovary	enlarged		2 (7)	3 (10)	0 (0)	1 (3)
	cyst		9 (31)	9 (31)	9 (29)	10 (30)
uterus	nodule		4 (14)	5 (17)	5 (16)	4 (12)
	cyst		0 (0)	1 (3)	0 (0)	0 (0)
	fluid:transparent		0 (0)	0 (0)	0 (0)	1 (3)
brain	adhesion		0 (0)	1 (3)	0 (0)	0 (0)
eye	exophthalmos		0 (0)	0 (0)	1 (3)	0 (0)
Harder gl	enlarged		0 (0)	0 (0)	1 (3)	1 (3)
	nodule		0 (0)	1 (3)	2 (6)	2 (6)
abdominal c	ascites		5 (17)	7 (24)	4 (13)	0 (0)
thoracic ca	pleural fluid		3 (10)	5 (17)	4 (13)	1 (3)
other	forelimb:nodule		1 (3)	0 (0)	0 (0)	0 (0)

APPENDIX H 1

ORGAN WEIGHT , ABSOLUTE: SUMMARY, MOUSE: MALE

(2-YEAR STUDY)

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE
UNIT: g

ORGAN WEIGHT:ABSOLUTE (SUMMARY)
SURVIVAL ANIMALS (105W)

Group Name	NO. of Animals	Body Weight	ADRENALS	OVARIES	HEART	LUNGS	KIDNEYS
Control	29	30.1± 5.8	0.014± 0.004	0.059± 0.039	0.181± 0.030	0.216± 0.052	0.478± 0.073
50 ppm	29	28.9± 2.9	0.012± 0.004	0.083± 0.112	0.171± 0.026	0.214± 0.017	0.582± 0.669
100 ppm	31	27.0± 3.4*	0.012± 0.003	0.054± 0.043	0.160± 0.018**	0.216± 0.034	0.459± 0.175*
200 ppm	33	25.5± 2.4**	0.012± 0.003	0.078± 0.103	0.151± 0.014**	0.243± 0.118	0.475± 0.336**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE
UNIT: g

ORGAN WEIGHT:ABSOLUTE (SUMMARY)
SURVIVAL ANIMALS (105W)

Group Name	NO. of Animals	SPLEEN	LIVER	BRAIN
Control	29	0.193± 0.250	1.458± 0.366	0.478± 0.028
50 ppm	29	0.316± 0.430	1.668± 0.728	0.491± 0.117
100 ppm	31	0.200± 0.235	1.461± 0.605	0.463± 0.014**
200 ppm	33	0.137± 0.236*	1.202± 0.257**	0.454± 0.014**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

APPENDIX H 2

ORGAN WEIGHT , ABSOLUTE: SUMMARY, MOUSE: FEMALE

(2-YEAR STUDY)

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE
UNIT: g

ORGAN WEIGHT:ABSOLUTE (SUMMARY)
SURVIVAL ANIMALS (105W)

Group Name	NO. of Animals	Body Weight	ADRENALS	TESTES	HEART	LUNGS	KIDNEYS
Control	40	45.2± 7.2	0.011± 0.005	0.202± 0.037	0.229± 0.023	0.210± 0.025	0.780± 0.763
50 ppm	44	42.7± 6.8	0.010± 0.003	0.208± 0.038	0.219± 0.033	0.224± 0.045	0.677± 0.201
100 ppm	43	39.5± 5.8**	0.010± 0.004	0.195± 0.045	0.206± 0.016**	0.219± 0.028	0.639± 0.141**
200 ppm	46	36.9± 5.2**	0.010± 0.004	0.188± 0.041	0.201± 0.035**	0.237± 0.151	0.600± 0.048**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE
UNIT: g

ORGAN WEIGHT:ABSOLUTE (SUMMARY)
SURVIVAL ANIMALS (105W)

Group Name	NO. of Animals	SPLEEN		LIVER		BRAIN	
Control	40	0.181±	0.223	1.827±	0.670	0.454±	0.021
50 ppm	44	0.083±	0.050*	1.533±	0.295*	0.457±	0.010
100 ppm	43	0.068±	0.034**	1.599±	0.771**	0.454±	0.013
200 ppm	46	0.111±	0.373**	1.388±	0.342**	0.441±	0.013**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

APPENDIX I 1

ORGAN WEIGHT, RELATIVE: SUMMARY, MOUSE: MALE

(2-YEAR STUDY)

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE
UNIT: %

ORGAN WEIGHT:RELATIVE (SUMMARY)
SURVIVAL ANIMALS (105W)

Group Name	NO. of Animals	Body Weight (g)	ADRENALS	TESTES	HEART	LUNGS	KIDNEYS
Control	40	45.2± 7.2	0.024± 0.011	0.454± 0.099	0.519± 0.097	0.482± 0.128	1.842± 2.293
50 ppm	44	42.7± 6.8	0.024± 0.010	0.500± 0.122	0.526± 0.137	0.540± 0.150	1.635± 0.626
100 ppm	43	39.5± 5.8**	0.026± 0.010	0.501± 0.126	0.528± 0.071	0.567± 0.119**	1.669± 0.615
200 ppm	46	36.9± 5.2**	0.027± 0.012	0.520± 0.137	0.552± 0.106*	0.690± 0.717**	1.648± 0.200**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE
UNIT: %

ORGAN WEIGHT:RELATIVE (SUMMARY)
SURVIVAL ANIMALS (105W)

Group Name	NO. of Animals	SPLEEN	LIVER	BRAIN
Control	40	0.439± 0.614	4.265± 2.488	1.032± 0.180
50 ppm	44	0.208± 0.169	3.677± 1.000	1.097± 0.179
100 ppm	43	0.176± 0.101*	4.193± 2.584	1.172± 0.171**
200 ppm	46	0.282± 0.850**	3.798± 0.925	1.219± 0.186**

Significant difference : * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

APPENDIX I 2

ORGAN WEIGHT, RELATIVE: SUMMARY, MOUSE: FEMALE

(2-YEAR STUDY)

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE
UNIT: %

ORGAN WEIGHT:RELATIVE (SUMMARY)
SURVIVAL ANIMALS (105W)

Group Name	NO. of Animals	Body Weight (g)	ADRENALS	OVARIES	HEART	LUNGS	KIDNEYS
Control	29	30.1± 5.8	0.047± 0.014	0.191± 0.109	0.609± 0.067	0.725± 0.124	1.613± 0.231
50 ppm	29	28.9± 2.9	0.043± 0.012	0.275± 0.340	0.596± 0.101	0.747± 0.078	2.015± 2.306
100 ppm	31	27.0± 3.4*	0.046± 0.012	0.203± 0.165	0.594± 0.053	0.808± 0.160*	1.684± 0.454
200 ppm	33	25.5± 2.4**	0.047± 0.012	0.306± 0.399	0.594± 0.051	0.961± 0.508**	1.854± 1.274

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE
UNIT: %

ORGAN WEIGHT:RELATIVE (SUMMARY)
SURVIVAL ANIMALS (105W)

Group Name	NO. of Animals	SPLEEN	LIVER	BRAIN
Control	29	0.595± 0.567	4.835± 0.426	1.644± 0.313
50 ppm	29	1.076± 1.426	5.691± 2.022	1.723± 0.476
100 ppm	31	0.708± 0.782	5.304± 1.557	1.735± 0.204
200 ppm	33	0.515± 0.827	4.687± 0.693	1.790± 0.137*

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

APPENDIX J 1

HISTOLOGICAL FINDINGS: NON-NEOPLASTIC LESIONS: SUMMARY, MOUSE: MALE: ALL ANIMALS (2-YEAR STUDY)

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 50 1 (%)	Control 50 2 (%)	Control 50 3 (%)	Control 50 4 (%)	50 ppm 50 1 (%)	50 ppm 50 2 (%)	50 ppm 50 3 (%)	50 ppm 50 4 (%)	100 ppm 50 1 (%)	100 ppm 50 2 (%)	100 ppm 50 3 (%)	100 ppm 50 4 (%)	200 ppm 50 1 (%)	200 ppm 50 2 (%)	200 ppm 50 3 (%)	200 ppm 50 4 (%)
[Integumentary system/appandage]																		
skin/app		<50>																
	epidermal cyst		1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
subcutis		<50>																
	xanthogranuloma		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
[Respiratory system]																		
nasal cavit		<50>																
	exudate		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (4)	4 (8)	0 (0)	0 * (0)	2 (4)	21 (42)	0 (0)	0 ** (0)
	inflammation		1 (2)	0 (0)	0 (0)	0 (0)	7 (14)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
	eosinophilic change:olfactory epithelium		5 (10)	2 (4)	0 (0)	0 (0)	8 (16)	3 (6)	0 (0)	0 (0)	20 (40)	3 (6)	0 (0)	0 ** (0)	29 (58)	4 (8)	0 (0)	0 ** (0)
	eosinophilic change:respiratory epithelium		5 (10)	1 (2)	1 (2)	0 (0)	28 (56)	3 (6)	0 (0)	0 ** (0)	31 (62)	4 (8)	1 (2)	0 ** (0)	21 (42)	24 (48)	2 (4)	0 ** (0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name	Control				50 ppm				100 ppm				200 ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
[Respiratory system]																		
nasal cavit			<50>				<50>				<50>				<50>			
	respiratory metaplasia:olfactory epithelium		9	0	0	0	4	0	0	0	15	0	0	0	4	45	0	0 **
			(18)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(30)	(0)	(0)	(0)	(8)	(90)	(0)	(0)
	respiratory metaplasia:gland		4	0	0	0	3	0	0	0	5	0	0	0	1	47	0	0 **
			(8)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(2)	(94)	(0)	(0)
	atrophy:olfactory epithelium		0	0	0	0	0	0	0	0	3	0	0	0	13	8	0	0 **
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(26)	(16)	(0)	(0)
lung			<50>				<50>				<50>				<50>			
	congestion		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	inflammation		0	1	0	0	0	0	0	0	2	0	0	0	0	0	0	0
			(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	granulation		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	accumulation of foamy cells		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	bronchiolar-alveolar cell hyperplasia		0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 50 1 (%)	Control 50 2 (%)	Control 50 3 (%)	Control 50 4 (%)	50 ppm 50 1 (%)	50 ppm 50 2 (%)	50 ppm 50 3 (%)	50 ppm 50 4 (%)	100 ppm 50 1 (%)	100 ppm 50 2 (%)	100 ppm 50 3 (%)	100 ppm 50 4 (%)	200 ppm 50 1 (%)	200 ppm 50 2 (%)	200 ppm 50 3 (%)	200 ppm 50 4 (%)
[Hematopoietic system]																		
bone marrow		<50>																
	osteosclerosis		1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
lymph node		<50>																
	lymphadenitis		1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
spleen		<50>																
	deposit of melanin		2 (4)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)
	extramedullary hematopoiesis		7 (14)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)	3 (6)	1 (2)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)
	follicular hyperplasia		7 (14)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)
[Circulatory system]																		
heart		<50>																
	mineralization		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 50				50 ppm 50				100 ppm 50				200 ppm 50			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
[Circulatory system]																		
heart																		
	inflammation		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		<a>	<50>				<50>				<50>				<50>			
		(c)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	arteritis		0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
[Digestive system]																		
stomach																		
	erosion:forestomach		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		<a>	<50>				<49>				<50>				<50>			
		(c)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	ulcer:forestomach		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia:forestomach		3	0	0	0	0	0	0	0	8	0	0	0	21	0	0	0 **
			(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(16)	(0)	(0)	(0)	(42)	(0)	(0)	(0)
	erosion:glandular stomach		3	0	0	0	4	0	0	0	9	0	0	0	4	0	0	0
			(6)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(18)	(0)	(0)	(0)	(8)	(0)	(0)	(0)
	hyperplasia:glandular stomach		20	20	0	0	17	19	0	0	21	19	0	0	20	14	0	0
			(40)	(40)	(0)	(0)	(35)	(39)	(0)	(0)	(42)	(38)	(0)	(0)	(40)	(28)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference : * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 50				50 ppm 50				100 ppm 50				200 ppm 50			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
[Digestive system]																		
liver			<50>				<50>				<50>				<50>			
	exudate		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	peliosis-like lesion		1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	granulation		2 (4)	0 (0)	0 (0)	0 (0)	3 (6)	1 (2)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	clear cell focus		6 (12)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
	acidophilic cell focus		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	basophilic cell focus		2 (4)	1 (2)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	vacuolated cell focus		1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	biliary cyst		1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 50 1 (%)	Control 50 2 (%)	Control 50 3 (%)	Control 50 4 (%)	50 ppm 50 1 (%)	50 ppm 50 2 (%)	50 ppm 50 3 (%)	50 ppm 50 4 (%)	100 ppm 50 1 (%)	100 ppm 50 2 (%)	100 ppm 50 3 (%)	100 ppm 50 4 (%)	200 ppm 50 1 (%)	200 ppm 50 2 (%)	200 ppm 50 3 (%)	200 ppm 50 4 (%)
[Urinary system]																		
kidney		<50>																
	hyaline droplet		2 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	mineralization		1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	inflammatory polyp		0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	hydronephrosis		2 (4)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
[Endocrine system]																		
pituitary		<50>																
	hyperplasia		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	Rathke pouch		10 (20)	0 (0)	0 (0)	0 (0)	12 (24)	0 (0)	0 (0)	0 (0)	8 (16)	0 (0)	0 (0)	0 (0)	8 (16)	0 (0)	0 (0)	0 (0)
adrenal		<50>																
	spindle-cell hyperplasia		3 (6)	0 (0)	0 (0)	0 (0)	6 (12)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name	Control				50 ppm				100 ppm				200 ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
[Endocrine system]																		
adrenal			<50>				<50>				<50>				<50>			
	hyperplasia:cortical cell		2	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0
			(4)	(2)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
[Reproductive system]																		
testis			<50>				<50>				<50>				<50>			
	atrophy		22	1	0	0	23	1	0	0	17	2	0	0	13	2	1	0
			(44)	(2)	(0)	(0)	(46)	(2)	(0)	(0)	(34)	(4)	(0)	(0)	(26)	(4)	(2)	(0)
	mineralization		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
epididymis			<50>				<50>				<50>				<50>			
	lymphocytic infiltration		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	spermatogenic granuloma		2	0	0	0	3	0	0	0	2	0	0	0	3	0	0	0
			(4)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
semin ves			<50>				<50>				<50>				<50>			
	inflammation		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 50				50 ppm 50				100 ppm 50				200 ppm 50			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
[Reproductive system]																		
prostate		<50>																
	inflammation		0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
prep/cli gl		<50>																
	xanthogranuloma		1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
[Nervous system]																		
brain		<50>																
	hemorrhage		1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	mineralization		19 (38)	0 (0)	0 (0)	0 (0)	24 (48)	0 (0)	0 (0)	0 (0)	31 (62)	0 (0)	0 (0)	0 * (0)	21 (42)	0 (0)	0 (0)	0 (0)
[Special sense organs/appandage]																		
eye		<50>																
	cataract		35 (70)	3 (6)	0 (0)	0 (0)	32 (64)	2 (4)	0 (0)	0 (0)	30 (60)	2 (4)	0 (0)	0 (0)	32 (64)	1 (2)	0 (0)	0 (0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 50 1 (%)	Control 50 2 (%)	Control 50 3 (%)	Control 50 4 (%)	50 ppm 50 1 (%)	50 ppm 50 2 (%)	50 ppm 50 3 (%)	50 ppm 50 4 (%)	100 ppm 50 1 (%)	100 ppm 50 2 (%)	100 ppm 50 3 (%)	100 ppm 50 4 (%)	200 ppm 50 1 (%)	200 ppm 50 2 (%)	200 ppm 50 3 (%)	200 ppm 50 4 (%)
[Special sense organs/appandage]																		
eye		<50>	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
	phthisis bulbi		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Harder gl		<50>	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	degeneration		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference : * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

APPENDIX J 2

HISTOLOGICAL FINDINGS: NON-NEOPLASTIC LESIONS: SUMMARY, MOUSE: MALE: DEAD AND MORIBUND ANIMALS (2-YEAR STUDY)

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
DEAD AND MORIBUND ANIMALS (0-105W)

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 10				50 ppm 6				100 ppm 7				200 ppm 4			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
[Respiratory system]																		
nasal cavit			<10>				< 6>				< 7>				< 4>			
	exudate		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (14)	0 (0)	0 (0)	0 (0)	2 (50)	0 (0)	0 (0)
	inflammation		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (29)	0 (0)	0 (0)	0 (0)	1 (25)	0 (0)	0 (0)	0 (0)
	eosinophilic change:olfactory epithelium		1 (10)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (29)	0 (0)	0 (0)	0 (0)	2 (50)	0 (0)	0 (0)	0 (0)
	eosinophilic change:respiratory epithelium		0 (0)	0 (0)	1 (10)	0 (0)	3 (50)	0 (0)	0 (0)	0 * (0)	3 (43)	0 (0)	0 (0)	0 (0)	2 (50)	1 (25)	0 (0)	0 * (0)
	respiratory metaplasia:olfactory epithelium		1 (10)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (29)	0 (0)	0 (0)	0 (0)	1 (25)	2 (50)	0 (0)	0 * (0)
	respiratory metaplasia:gland		1 (10)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (14)	0 (0)	0 (0)	0 (0)	0 (0)	3 (75)	0 (0)	0 ** (0)
	atrophy:olfactory epithelium		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (14)	0 (0)	0 (0)	0 (0)	1 (25)	1 (25)	0 (0)	0 (0)
lung			<10>				< 6>				< 7>				< 4>			
	congestion		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (14)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 10				50 ppm 6				100 ppm 7				200 ppm 4			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
[Hematopoietic system]																		
spleen			<10>				< 6>				< 7>				< 4>			
	extramedullary hematopoiesis		2	0	0	0	1	0	0	0	2	1	0	0	0	0	0	0
			(20)	(0)	(0)	(0)	(17)	(0)	(0)	(0)	(29)	(14)	(0)	(0)	(0)	(0)	(0)	(0)
[Circulatory system]																		
heart			<10>				< 6>				< 7>				< 4>			
	mineralization		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	inflammation		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	arteritis		0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(17)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
[Digestive system]																		
stomach			<10>				< 6>				< 7>				< 4>			
	erosion:forestomach		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name	Control				50 ppm				100 ppm				200 ppm			
		No. of Animals on Study	10				6				7				4			
		Grade	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
[Digestive system]																		
stomach			<10>				< 6>				< 7>				< 4>			
	hyperplasia:forestomach		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (14)	0 (0)	0 (0)	0 (0)	1 (25)	0 (0)	0 (0)	0 (0)
	erosion:glandular stomach		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (14)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	hyperplasia:glandular stomach		1 (10)	2 (20)	0 (0)	0 (0)	1 (17)	0 (0)	0 (0)	0 (0)	2 (29)	1 (14)	0 (0)	0 (0)	1 (25)	0 (0)	0 (0)	0 (0)
liver			<10>				< 6>				< 7>				< 4>			
	acidophilic cell focus		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (14)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
[Urinary system]																		
kidney			<10>				< 6>				< 7>				< 4>			
	hyaline droplet		1 (10)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	inflammatory polyp		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (14)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name	Control				50 ppm				100 ppm				200 ppm			
		No. of Animals on Study	10				6				7				4			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
[Urinary system]																		
kidney			<10>				< 6>				< 7>				< 4>			
	hydronephrosis		1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
			(10)	(0)	(0)	(0)	(17)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(25)	(0)	(0)	(0)
[Endocrine system]																		
pituitary			<10>				< 6>				< 7>				< 4>			
	Rathke pouch		1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(10)	(0)	(0)	(0)	(17)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
[Reproductive system]																		
testis			<10>				< 6>				< 7>				< 4>			
	atrophy		1	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0
			(10)	(0)	(0)	(0)	(33)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
epididymis			<10>				< 6>				< 7>				< 4>			
	spermatogenic granuloma		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
prostate			<10>				< 6>				< 7>				< 4>			
	inflammation		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(17)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name	Control				50 ppm				100 ppm				200 ppm			
		No. of Animals on Study	10				6				7				4			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
[Nervous system]																		
brain			<10>				< 6>				< 7>				< 4>			
	hemorrhage		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	mineralization		3	0	0	0	3	0	0	0	4	0	0	0	0	0	0	0
			(30)	(0)	(0)	(0)	(50)	(0)	(0)	(0)	(57)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
[Special sense organs/appandage]																		
eye			<10>				< 6>				< 7>				< 4>			
	cataract		4	3	0	0	2	1	0	0	3	2	0	0	2	1	0	0
			(40)	(30)	(0)	(0)	(33)	(17)	(0)	(0)	(43)	(29)	(0)	(0)	(50)	(25)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

APPENDIX J 3

HISTOLOGICAL FINDINGS: NON-NEOPLASTIC LESIONS: SUMMARY, MOUSE: MALE: SACRIFICED ANIMALS (2-YEAR STUDY)

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
SACRIFICED ANIMALS (105W)

Organ	Findings	Group Name	Control				50 ppm				100 ppm				200 ppm			
		No. of Animals on Study	40				44				43				46			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
[Integumentary system/appandage]																		
skin/app			<40>				<44>				<43>				<46>			
	epidermal cyst		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
subcutis			<40>				<44>				<43>				<46>			
	xanthogranuloma		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
[Respiratory system]																		
nasal cavit			<40>				<44>				<43>				<46>			
	exudate		0	0	0	0	0	0	0	0	2	3	0	0	2	19	0	0 **
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(7)	(0)	(0)	(4)	(41)	(0)	(0)
	inflammation		1	0	0	0	7	0	0	0	1	0	0	0	0	0	0	0
			(3)	(0)	(0)	(0)	(16)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	eosinophilic change:olfactory epithelium		4	2	0	0	8	3	0	0	18	3	0	0 **	27	4	0	0 **
			(10)	(5)	(0)	(0)	(18)	(7)	(0)	(0)	(42)	(7)	(0)	(0)	(59)	(9)	(0)	(0)
	eosinophilic change:respiratory epithelium		5	1	0	0	25	3	0	0 **	28	4	1	0 **	19	23	2	0 **
			(13)	(3)	(0)	(0)	(57)	(7)	(0)	(0)	(65)	(9)	(2)	(0)	(41)	(50)	(4)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 40				50 ppm 44				100 ppm 43				200 ppm 46			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
[Respiratory system]																		
nasal cavit			<40>				<44>				<43>				<46>			
	respiratory metaplasia:olfactory epithelium		8	0	0	0	4	0	0	0	13	0	0	0	3	43	0	0 **
			(20)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(30)	(0)	(0)	(0)	(7)	(93)	(0)	(0)
	respiratory metaplasia:gland		3	0	0	0	3	0	0	0	4	0	0	0	1	44	0	0 **
			(8)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(2)	(96)	(0)	(0)
	atrophy:olfactory epithelium		0	0	0	0	0	0	0	0	2	0	0	0	12	7	0	0 **
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(26)	(15)	(0)	(0)
lung			<40>				<44>				<43>				<46>			
	inflammation		0	1	0	0	0	0	0	0	2	0	0	0	0	0	0	0
			(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	granulation		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	accumulation of foamy cells		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	bronchiolar-alveolar cell hyperplasia		0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
[Hematopoietic system]																		
bone marrow			<40>				<44>				<43>				<46>			
	osteosclerosis		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference : * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 40				50 ppm 44				100 ppm 43				200 ppm 46			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
[Hematopoietic system]																		
lymph node			<40>				<44>				<43>				<46>			
	lymphadenitis		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
spleen			<40>				<44>				<43>				<46>			
	deposit of melanin		2	0	0	0	3	0	0	0	2	0	0	0	3	0	0	0
			(5)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(7)	(0)	(0)	(0)
	extramedullary hematopoiesis		5	0	0	0	2	0	0	0	1	0	0	0	2	0	0	0
			(13)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(4)	(0)	(0)	(0)
	follicular hyperplasia		7	0	0	0	3	0	0	0	3	0	0	0	3	0	0	0
			(18)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(7)	(0)	(0)	(0)
[Circulatory system]																		
heart			<40>				<44>				<43>				<46>			
	mineralization		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	arteritis		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference : * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name	Control				50 ppm				100 ppm				200 ppm			
		No. of Animals on Study	40				44				43				46			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
[Digestive system]																		
stomach			<40>				<43>				<43>				<46>			
	ulcer:forestomach		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia:forestomach		3	0	0	0	0	0	0	0	7	0	0	0	20	0	0	0 **
			(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(16)	(0)	(0)	(0)	(43)	(0)	(0)	(0)
	erosion:glandular stomach		3	0	0	0	4	0	0	0	8	0	0	0	4	0	0	0
			(8)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(19)	(0)	(0)	(0)	(9)	(0)	(0)	(0)
	hyperplasia:glandular stomach		19	18	0	0	16	19	0	0	19	18	0	0	19	14	0	0 *
			(48)	(45)	(0)	(0)	(37)	(44)	(0)	(0)	(44)	(42)	(0)	(0)	(41)	(30)	(0)	(0)
liver			<40>				<44>				<43>				<46>			
	exudate		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	peliosis-like lesion		1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	granulation		2	0	0	0	3	1	0	0	1	0	0	0	0	0	0	0
			(5)	(0)	(0)	(0)	(7)	(2)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	clear cell focus		6	0	0	0	3	0	0	0	1	0	0	0	1	0	0	0
			(15)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name	Control				50 ppm				100 ppm				200 ppm			
		No. of Animals on Study	40				44				43				46			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
[Digestive system]																		
liver			<40>				<44>				<43>				<46>			
	basophilic cell focus		2	1	0	0	2	0	0	0	1	0	0	0	0	0	0	0
			(5)	(3)	(0)	(0)	(5)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	vacuolated cell focus		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	biliary cyst		1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
[Urinary system]																		
kidney			<40>				<44>				<43>				<46>			
	hyaline droplet		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	mineralization		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	inflammatory polyp		0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hydronephrosis		1	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0
			(3)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 40				50 ppm 44				100 ppm 43				200 ppm 46			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
[Endocrine system]																		
pituitary			<40>				<44>				<43>				<46>			
	hyperplasia		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	Rathke pouch		9 (23)	0 (0)	0 (0)	0 (0)	11 (25)	0 (0)	0 (0)	0 (0)	8 (19)	0 (0)	0 (0)	0 (0)	8 (17)	0 (0)	0 (0)	0 (0)
adrenal			<40>				<44>				<43>				<46>			
	spindle-cell hyperplasia		3 (8)	0 (0)	0 (0)	0 (0)	6 (14)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	3 (7)	0 (0)	0 (0)	0 (0)
	hyperplasia:cortical cell		2 (5)	1 (3)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
[Reproductive system]																		
testis			<40>				<44>				<43>				<46>			
	atrophy		21 (53)	1 (3)	0 (0)	0 (0)	21 (48)	1 (2)	0 (0)	0 (0)	16 (37)	2 (5)	0 (0)	0 (0)	13 (28)	2 (4)	1 (2)	0 (0)
	mineralization		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name	Control				50 ppm				100 ppm				200 ppm			
		No. of Animals on Study	40				44				43				46			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
[Reproductive system]																		
epididymis			<40>				<44>				<43>				<46>			
	lymphocytic infiltration		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	spermatogenic granuloma		2	0	0	0	3	0	0	0	1	0	0	0	3	0	0	0
			(5)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(7)	(0)	(0)	(0)
semin ves			<40>				<44>				<43>				<46>			
	inflammation		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)
prostate			<40>				<44>				<43>				<46>			
	inflammation		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
prep/cli gl			<40>				<44>				<43>				<46>			
	xanthogranuloma		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
[Nervous system]																		
brain			<40>				<44>				<43>				<46>			
	mineralization		16	0	0	0	21	0	0	0	27	0	0	0	21	0	0	0
			(40)	(0)	(0)	(0)	(48)	(0)	(0)	(0)	(63)	(0)	(0)	(0)	(46)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 40				50 ppm 44				100 ppm 43				200 ppm 46			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
[Special sense organs/appandage]																		
eye			<40>				<44>				<43>				<46>			
	cataract		31	0	0	0	30	1	0	0	27	0	0	0	30	0	0	0
			(78)	(0)	(0)	(0)	(68)	(2)	(0)	(0)	(63)	(0)	(0)	(0)	(65)	(0)	(0)	(0)
	phthisis bulbi		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Harder gl			<40>				<44>				<43>				<46>			
	degeneration		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference : * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

APPENDIX J 4

HISTOLOGICAL FINDINGS: NON-NEOPLASTIC LESIONS: SUMMARY, MOUSE: FEMALE: ALL ANIMALS (2-YEAR STUDY)

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 50				50 ppm 48				100 ppm 50				200 ppm 49			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
[Integumentary system/appandage]																		
skin/app			<50>				<48>				<50>				<49>			
	inflammation		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
[Respiratory system]																		
nasal cavit			<49>				<48>				<48>				<49>			
	exudate		0	0	0	0	3	2	0	0	4	19	0	0 **	2	41	0	0 **
			(0)	(0)	(0)	(0)	(6)	(4)	(0)	(0)	(8)	(40)	(0)	(0)	(4)	(84)	(0)	(0)
	inflammation		2	0	0	0	4	0	0	0	5	0	0	0	1	0	0	0
			(4)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	eosinophilic change:olfactory epithelium		22	2	0	0	18	1	0	0	41	4	0	0 **	38	3	0	0 **
			(45)	(4)	(0)	(0)	(38)	(2)	(0)	(0)	(85)	(8)	(0)	(0)	(78)	(6)	(0)	(0)
	eosinophilic change:respiratory epithelium		26	10	2	0	18	15	7	0	11	25	4	0 **	14	30	4	1 **
			(53)	(20)	(4)	(0)	(38)	(31)	(15)	(0)	(23)	(52)	(8)	(0)	(29)	(61)	(8)	(2)
	inflammation:respiratory epithelium		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	respiratory metaplasia:olfactory epithelium		2	0	0	0	5	0	0	0	15	0	0	0 **	2	46	1	0 **
			(4)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(31)	(0)	(0)	(0)	(4)	(94)	(2)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 50				50 ppm 48				100 ppm 50				200 ppm 49			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
[Respiratory system]																		
nasal cavit			<49>				<48>				<48>				<49>			
	respiratory metaplasia:gland		4 (8)	0 (0)	0 (0)	0 (0)	8 (17)	1 (2)	0 (0)	0 (0)	6 (13)	0 (0)	0 (0)	0 (0)	5 (10)	44 (90)	0 (0)	0 (0) **
	atrophy:olfactory epithelium		0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	1 (2)	0 (0)	0 (0)	7 (15)	2 (4)	0 (0)	0 (0) **	10 (20)	29 (59)	0 (0)	0 (0) **
lung			<50>				<48>				<50>				<49>			
	congestion		1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	hemorrhage		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
	inflammation		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)
	bronchiolar-alveolar cell hyperplasia		1 (2)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
[Hematopoietic system]																		
bone marrow			<50>				<48>				<48>				<49>			
	osteosclerosis		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 50				50 ppm 48				100 ppm 50				200 ppm 49			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
[Hematopoietic system]																		
lymph node			<50>				<48>				<50>				<49>			
	follicular hyperplasia		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
spleen			<50>				<48>				<50>				<49>			
	deposit of melanin		12 (24)	0 (0)	0 (0)	0 (0)	4 (8)	0 (0)	0 (0)	0 (0)	4 (8)	0 (0)	0 (0)	0 (0)	10 (20)	0 (0)	0 (0)	0 (0)
	extramedullary hematopoiesis		5 (10)	2 (4)	3 (6)	0 (0)	2 (4)	9 (19)	0 (0)	0 * (0)	3 (6)	7 (14)	1 (2)	0 (0)	2 (4)	5 (10)	1 (2)	0 (0)
	follicular hyperplasia		1 (2)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)
[Circulatory system]																		
heart			<50>				<48>				<50>				<49>			
	thrombus		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	mineralization		1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 50				50 ppm 48				100 ppm 50				200 ppm 49			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
[Circulatory system]																		
heart			<50>				<48>				<50>				<49>			
	inflammation		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	arteritis		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
[Digestive system]																		
salivary gl			<50>				<48>				<50>				<49>			
	cyst		0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
stomach			<50>				<48>				<50>				<49>			
	hyperplasia:forestomach		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	3 (6)	1 (2)	0 (0)	0 (0)	17 (35)	2 (4)	0 (0)	0 (0) **
	erosion:glandular stomach		2 (4)	0 (0)	0 (0)	0 (0)	4 (8)	1 (2)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)
	hyperplasia:glandular stomach		21 (42)	7 (14)	0 (0)	0 (0)	22 (46)	9 (19)	0 (0)	0 (0)	18 (36)	4 (8)	0 (0)	0 (0)	20 (41)	4 (8)	0 (0)	0 (0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference : * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 50				50 ppm 48				100 ppm 50				200 ppm 49			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
[Digestive system]																		
liver			<50>				<48>				<50>				<49>			
	peliosis-like lesion		0 (0)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	granulation		12 (24)	0 (0)	0 (0)	0 (0)	10 (21)	0 (0)	0 (0)	0 (0)	14 (28)	0 (0)	0 (0)	0 (0)	10 (20)	0 (0)	0 (0)	0 (0)
	clear cell focus		0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)
	basophilic cell focus		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
	biliary cyst		1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)
[Urinary system]																		
kidney			<50>				<48>				<50>				<49>			
	hyaline droplet		6 (12)	0 (0)	0 (0)	0 (0)	11 (23)	0 (0)	0 (0)	0 (0)	12 (24)	0 (0)	0 (0)	0 (0)	8 (16)	0 (0)	1 (2)	0 (0)
	basophilic change		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference : * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 50				50 ppm 48				100 ppm 50				200 ppm 49			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
[Urinary system]																		
kidney			<50>				<48>				<50>				<49>			
	lymphocytic infiltration		3 (6)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	inflammatory polyp		1 (2)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
	hydronephrosis		0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	4 (8)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)
[Endocrine system]																		
pituitary			<49>				<48>				<50>				<48>			
	hyperplasia		3 (6)	0 (0)	0 (0)	0 (0)	5 (10)	0 (0)	0 (0)	0 (0)	7 (14)	0 (0)	0 (0)	0 (0)	4 (8)	0 (0)	0 (0)	0 (0)
	Rathke pouch		5 (10)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	5 (10)	0 (0)	0 (0)	0 (0)
adrenal			<50>				<48>				<50>				<49>			
	spindle-cell hyperplasia		28 (56)	0 (0)	0 (0)	0 (0)	25 (52)	0 (0)	0 (0)	0 (0)	26 (52)	0 (0)	0 (0)	0 (0)	27 (55)	0 (0)	0 (0)	0 (0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 50				50 ppm 48				100 ppm 50				200 ppm 49			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
[Endocrine system]																		
adrenal			<50>				<48>				<50>				<49>			
	hyperplasia:cortical cell		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
[Reproductive system]																		
ovary			<50>				<48>				<50>				<49>			
	thrombus		2 (4)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	1 (2)	0 (0)	0 (0)
	cyst		8 (16)	0 (0)	0 (0)	0 (0)	12 (25)	0 (0)	0 (0)	0 (0)	7 (14)	0 (0)	0 (0)	0 (0)	12 (24)	0 (0)	0 (0)	0 (0)
uterus			<50>				<48>				<50>				<49>			
	dilatation		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
	thrombus		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
mammary gl			<50>				<48>				<50>				<49>			
	atypical hyperplasia		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 50				50 ppm 48				100 ppm 50				200 ppm 49			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
[Nervous system]																		
brain			<50>				<48>				<50>				<49>			
	mineralization		24 (48)	0 (0)	0 (0)	0 (0)	22 (46)	0 (0)	0 (0)	0 (0)	6 (12)	0 (0)	0 (0)	0 ** (0)	9 (18)	0 (0)	0 (0)	0 ** (0)
spinal cord			<50>				<48>				<50>				<49>			
	epidermal cyst		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
[Special sense organs/appandage]																		
eye			<50>				<48>				<50>				<49>			
	inflammation		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	cataract		27 (54)	6 (12)	0 (0)	0 (0)	17 (35)	8 (17)	0 (0)	0 (0)	18 (36)	8 (16)	0 (0)	0 (0)	20 (41)	8 (16)	0 (0)	0 (0)
[Musculoskeletal system]																		
muscle			<50>				<48>				<50>				<49>			
	mineralization		1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

APPENDIX J 5

HISTOLOGICAL FINDINGS: NON-NEOPLASTIC LESIONS: SUMMARY, MOUSE: FEMALE: DEAD AND MORIBUND ANIMALS (2-YEAR STUDY)

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 21				50 ppm 19				100 ppm 19				200 ppm 16			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
[Integumentary system/appandage]																		
skin/app			<21>				<19>				<19>				<16>			
	inflammation		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (6)	0 (0)	0 (0)	0 (0)
[Respiratory system]																		
nasal cavit			<20>				<19>				<18>				<16>			
	exudate		0 (0)	0 (0)	0 (0)	0 (0)	1 (5)	1 (5)	0 (0)	0 (0)	3 (17)	5 (28)	0 (0)	0 (0)	0 (0)	15 (94)	0 (0)	0 (0)
	eosinophilic change:olfactory epithelium		4 (20)	0 (0)	0 (0)	0 (0)	3 (16)	0 (0)	0 (0)	0 (0)	13 (72)	2 (11)	0 (0)	0 (0)	12 (75)	0 (0)	0 (0)	0 (0)
	eosinophilic change:respiratory epithelium		7 (35)	4 (20)	0 (0)	0 (0)	7 (37)	2 (11)	2 (11)	0 (0)	5 (28)	6 (33)	1 (6)	0 (0)	8 (50)	7 (44)	1 (6)	0 (0)
	respiratory metaplasia:olfactory epithelium		1 (5)	0 (0)	0 (0)	0 (0)	1 (5)	0 (0)	0 (0)	0 (0)	2 (11)	0 (0)	0 (0)	0 (0)	1 (6)	15 (94)	0 (0)	0 (0)
	respiratory metaplasia:gland		0 (0)	0 (0)	0 (0)	0 (0)	1 (5)	0 (0)	0 (0)	0 (0)	2 (11)	0 (0)	0 (0)	0 (0)	2 (13)	14 (88)	0 (0)	0 (0)
	atrophy:olfactory epithelium		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (5)	0 (0)	0 (0)	3 (17)	0 (0)	0 (0)	0 (0)	3 (19)	11 (69)	0 (0)	0 (0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name	Control				50 ppm				100 ppm				200 ppm			
		No. of Animals on Study	21				19				19				16			
		Grade	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
[Respiratory system]																		
lung			<21>				<19>				<19>				<16>			
	congestion		1 (5)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	hemorrhage		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (6)	0 (0)	0 (0)	0 (0)
	inflammation		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (5)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
[Hematopoietic system]																		
spleen			<21>				<19>				<19>				<16>			
	deposit of melanin		4 (19)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (5)	0 (0)	0 (0)	0 (0)	1 (6)	0 (0)	0 (0)	0 (0)
	extramedullary hematopoiesis		4 (19)	1 (5)	3 (14)	0 (0)	1 (5)	5 (26)	0 (0)	0 (0)	2 (11)	6 (32)	1 (5)	0 (0)	1 (6)	5 (31)	1 (6)	0 (0)
[Circulatory system]																		
heart			<21>				<19>				<19>				<16>			
	thrombus		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (5)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 21				50 ppm 19				100 ppm 19				200 ppm 16			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
[Circulatory system]																		
heart			<21>				<19>				<19>				<16>			
	mineralization		1 (5)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (5)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
[Digestive system]																		
salivary gl			<21>				<19>				<19>				<16>			
	cyst		0 (0)	0 (0)	0 (0)	0 (0)	1 (5)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
stomach			<21>				<19>				<19>				<16>			
	hyperplasia:forestomach		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (6)	1 (6)	0 (0)	0 (0)
	erosion:glandular stomach		1 (5)	0 (0)	0 (0)	0 (0)	0 (0)	1 (5)	0 (0)	0 (0)	2 (11)	0 (0)	0 (0)	0 (0)	2 (13)	0 (0)	0 (0)	0 (0)
	hyperplasia:glandular stomach		7 (33)	1 (5)	0 (0)	0 (0)	6 (32)	1 (5)	0 (0)	0 (0)	4 (21)	0 (0)	0 (0)	0 (0)	2 (13)	1 (6)	0 (0)	0 (0)
liver			<21>				<19>				<19>				<16>			
	peliosis-like lesion		0 (0)	0 (0)	0 (0)	0 (0)	1 (5)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 21				50 ppm 19				100 ppm 19				200 ppm 16			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
[Digestive system]																		
liver			<21>				<19>				<19>				<16>			
	biliary cyst		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (6)	0 (0)	0 (0)	0 (0)
[Urinary system]																		
kidney			<21>				<19>				<19>				<16>			
	hyaline droplet		4 (19)	0 (0)	0 (0)	0 (0)	8 (42)	0 (0)	0 (0)	0 (0)	8 (42)	0 (0)	0 (0)	0 (0)	5 (31)	0 (0)	1 (6)	0 (0)
	lymphocytic infiltration		0 (0)	0 (0)	0 (0)	0 (0)	1 (5)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	inflammatory polyp		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (5)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	hydronephrosis		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	3 (16)	0 (0)	0 (0)	0 (0)	1 (6)	0 (0)	0 (0)	0 (0)
[Endocrine system]																		
pituitary			<20>				<19>				<19>				<15>			
	hyperplasia		0 (0)	0 (0)	0 (0)	0 (0)	1 (5)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference : * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name	Control				50 ppm				100 ppm				200 ppm			
		No. of Animals on Study	21				19				19				16			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
[Endocrine system]																		
pituitary			<20>				<19>				<19>				<15>			
	Rathke pouch		3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(15)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
adrenal			<21>				<19>				<19>				<16>			
	spindle-cell hyperplasia		8	0	0	0	2	0	0	0	5	0	0	0	2	0	0	0
			(38)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(26)	(0)	(0)	(0)	(13)	(0)	(0)	(0)
[Reproductive system]																		
ovary			<21>				<19>				<19>				<16>			
	thrombus		0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0
			(0)	(5)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	cyst		2	0	0	0	1	0	0	0	2	0	0	0	1	0	0	0
			(10)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
[Nervous system]																		
brain			<21>				<19>				<19>				<16>			
	mineralization		7	0	0	0	9	0	0	0	3	0	0	0	1	0	0	0
			(33)	(0)	(0)	(0)	(47)	(0)	(0)	(0)	(16)	(0)	(0)	(0)	(6)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
DEAD AND MORIBUND ANIMALS (0-105W)

Organ	Findings	Group Name	Control				50 ppm				100 ppm				200 ppm			
		No. of Animals on Study	21				19				19				16			
		Grade	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
[Special sense organs/appandage]																		
eye			<21>				<19>				<19>				<16>			
	inflammation		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (5)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	cataract		11 (52)	6 (29)	0 (0)	0 (0)	7 (37)	8 (42)	0 (0)	0 (0)	5 (26)	8 (42)	0 (0)	0 (0)	7 (44)	8 (50)	0 (0)	0 (0)
[Musculoskeletal system]																		
muscle			<21>				<19>				<19>				<16>			
	mineralization		1 (5)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference : * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

APPENDIX J 6

HISTOLOGICAL FINDINGS: NON-NEOPLASTIC LESIONS: SUMMARY, MOUSE: FEMALE: SACRIFICED ANIMALS (2-YEAR STUDY)

Organ	Findings	Group Name	Control				50 ppm				100 ppm				200 ppm			
		No. of Animals on Study	29				29				31				33			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
[Respiratory system]																		
nasal cavit			<29>				<29>				<30>				<33>			
	exudate		0	0	0	0	2	1	0	0	1	14	0	0 **	2	26	0	0 **
			(0)	(0)	(0)	(0)	(7)	(3)	(0)	(0)	(3)	(47)	(0)	(0)	(6)	(79)	(0)	(0)
	inflammation		2	0	0	0	4	0	0	0	5	0	0	0	1	0	0	0
			(7)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(17)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
	eosinophilic change:olfactory epithelium		18	2	0	0	15	1	0	0	28	2	0	0 **	26	3	0	0
			(62)	(7)	(0)	(0)	(52)	(3)	(0)	(0)	(93)	(7)	(0)	(0)	(79)	(9)	(0)	(0)
	eosinophilic change:respiratory epithelium		19	6	2	0	11	13	5	0 *	6	19	3	0 **	6	23	3	1 **
			(66)	(21)	(7)	(0)	(38)	(45)	(17)	(0)	(20)	(63)	(10)	(0)	(18)	(70)	(9)	(3)
	inflammation:respiratory epithelium		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
	respiratory metaplasia:olfactory epithelium		1	0	0	0	4	0	0	0	13	0	0	0 **	1	31	1	0 **
			(3)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(43)	(0)	(0)	(0)	(3)	(94)	(3)	(0)
	respiratory metaplasia:gland		4	0	0	0	7	1	0	0	4	0	0	0	3	30	0	0 **
			(14)	(0)	(0)	(0)	(24)	(3)	(0)	(0)	(13)	(0)	(0)	(0)	(9)	(91)	(0)	(0)
	atrophy:olfactory epithelium		0	0	0	0	1	0	0	0	4	2	0	0 *	7	18	0	0 **
			(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(13)	(7)	(0)	(0)	(21)	(55)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name	Control				50 ppm				100 ppm				200 ppm			
		No. of Animals on Study	29				29				31				33			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
[Respiratory system]																		
lung			<29>				<29>				<31>				<33>			
	inflammation		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)
	bronchiolar-alveolar cell hyperplasia		1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(3)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
[Hematopoietic system]																		
bone marrow			<29>				<29>				<30>				<33>			
	osteosclerosis		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
lymph node			<29>				<29>				<31>				<33>			
	follicular hyperplasia		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
spleen			<29>				<29>				<31>				<33>			
	deposit of melanin		8	0	0	0	4	0	0	0	3	0	0	0	9	0	0	0
			(28)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(27)	(0)	(0)	(0)
	extramedullary hematopoiesis		1	1	0	0	1	4	0	0	1	1	0	0	1	0	0	0
			(3)	(3)	(0)	(0)	(3)	(14)	(0)	(0)	(3)	(3)	(0)	(0)	(3)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference : * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 29 1 (%)	Control 29 2 (%)	Control 29 3 (%)	Control 29 4 (%)	50 ppm 29 1 (%)	50 ppm 29 2 (%)	50 ppm 29 3 (%)	50 ppm 29 4 (%)	100 ppm 31 1 (%)	100 ppm 31 2 (%)	100 ppm 31 3 (%)	100 ppm 31 4 (%)	200 ppm 33 1 (%)	200 ppm 33 2 (%)	200 ppm 33 3 (%)	200 ppm 33 4 (%)
[Hematopoietic system]																		
spleen			<29>				<29>				<31>				<33>			
	follicular hyperplasia		1	0	0	0	1	0	0	0	1	0	0	0	2	0	0	0
			(3)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
[Circulatory system]																		
heart			<29>				<29>				<31>				<33>			
	inflammation		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	arteritis		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
[Digestive system]																		
stomach			<29>				<29>				<31>				<33>			
	hyperplasia:forestomach		0	0	0	0	0	1	0	0	3	1	0	0	16	1	0	0 **
			(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(10)	(3)	(0)	(0)	(48)	(3)	(0)	(0)
	erosion:glandular stomach		1	0	0	0	4	0	0	0	1	0	0	0	0	0	0	0
			(3)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name	Control				50 ppm				100 ppm				200 ppm			
		No. of Animals on Study	29				29				31				33			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
[Digestive system]																		
stomach			<29>				<29>				<31>				<33>			
	hyperplasia:glandular stomach		14	6	0	0	16	8	0	0	14	4	0	0	18	3	0	0
			(48)	(21)	(0)	(0)	(55)	(28)	(0)	(0)	(45)	(13)	(0)	(0)	(55)	(9)	(0)	(0)
liver			<29>				<29>				<31>				<33>			
	peliosis-like lesion		0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	granulation		12	0	0	0	10	0	0	0	14	0	0	0	10	0	0	0
			(41)	(0)	(0)	(0)	(34)	(0)	(0)	(0)	(45)	(0)	(0)	(0)	(30)	(0)	(0)	(0)
	clear cell focus		0	0	0	0	1	0	0	0	1	0	0	0	2	0	0	0
			(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
	basophilic cell focus		0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
	biliary cyst		1	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0
			(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
[Urinary system]																		
kidney			<29>				<29>				<31>				<33>			
	hyaline droplet		2	0	0	0	3	0	0	0	4	0	0	0	3	0	0	0
			(7)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(9)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name	Control				50 ppm				100 ppm				200 ppm			
		No. of Animals on Study	29				29				31				33			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
[Urinary system]																		
kidney			<29>				<29>				<31>				<33>			
	basophilic change		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	lymphocytic infiltration		3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(10)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	inflammatory polyp		1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
			(3)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
	hydronephrosis		0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
[Endocrine system]																		
pituitary			<29>				<29>				<31>				<33>			
	hyperplasia		3	0	0	0	4	0	0	0	7	0	0	0	4	0	0	0
			(10)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(23)	(0)	(0)	(0)	(12)	(0)	(0)	(0)
	Rathke pouch		2	0	0	0	1	0	0	0	0	0	0	0	5	0	0	0
			(7)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(15)	(0)	(0)	(0)
adrenal			<29>				<29>				<31>				<33>			
	spindle-cell hyperplasia		20	0	0	0	23	0	0	0	21	0	0	0	25	0	0	0
			(69)	(0)	(0)	(0)	(79)	(0)	(0)	(0)	(68)	(0)	(0)	(0)	(76)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name	Control				50 ppm				100 ppm				200 ppm			
		No. of Animals on Study	29				29				31				33			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
[Endocrine system]																		
adrenal			<29>				<29>				<31>				<33>			
	hyperplasia:cortical cell		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
[Reproductive system]																		
ovary			<29>				<29>				<31>				<33>			
	thrombus		2	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
			(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(3)	(0)	(0)
	cyst		6	0	0	0	11	0	0	0	5	0	0	0	11	0	0	0
			(21)	(0)	(0)	(0)	(38)	(0)	(0)	(0)	(16)	(0)	(0)	(0)	(33)	(0)	(0)	(0)
uterus			<29>				<29>				<31>				<33>			
	dilatation		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
	thrombus		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
mammary gl			<29>				<29>				<31>				<33>			
	atypical hyperplasia		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 29 1 (%)	Control 29 2 (%)	Control 29 3 (%)	Control 29 4 (%)	50 ppm 29 1 (%)	50 ppm 29 2 (%)	50 ppm 29 3 (%)	50 ppm 29 4 (%)	100 ppm 31 1 (%)	100 ppm 31 2 (%)	100 ppm 31 3 (%)	100 ppm 31 4 (%)	200 ppm 33 1 (%)	200 ppm 33 2 (%)	200 ppm 33 3 (%)	200 ppm 33 4 (%)
[Nervous system]																		
brain			<29>				<29>				<31>				<33>			
	mineralization		17	0	0	0	13	0	0	0	3	0	0	0 **	8	0	0	0 *
			(59)	(0)	(0)	(0)	(45)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(24)	(0)	(0)	(0)
spinal cord			<29>				<29>				<31>				<33>			
	epidermal cyst		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
[Special sense organs/appandage]																		
eye			<29>				<29>				<31>				<33>			
	cataract		16	0	0	0	10	0	0	0	13	0	0	0	13	0	0	0
			(55)	(0)	(0)	(0)	(34)	(0)	(0)	(0)	(42)	(0)	(0)	(0)	(39)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

APPENDIX K 1

NUMBER OF ANIMALS WITH TUMORS AND NUMBER OF TUMORS-TIME RELATED
MOUSE: MALE
(2-YEAR STUDY)

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

NUMBER OF ANIMALS WITH TUMORS AND NUMBER OF TUMORS - TIME RELATED

Time-related Weeks	Items	Group Name	Control	50 ppm	100 ppm	200 ppm
0 - 52	NO. OF EXAMINED ANIMALS		1	1	1	0
	NO. OF ANIMALS WITH TUMORS		1	0	0	0
	NO. OF ANIMALS WITH SINGLE TUMORS		0	0	0	0
	NO. OF ANIMALS WITH MULTIPLE TUMORS		1	0	0	0
	NO. OF BENIGN TUMORS		0	0	0	0
	NO. OF MALIGNANT TUMORS		2	0	0	0
	NO. OF TOTAL TUMORS		2	0	0	0
53 - 78	NO. OF EXAMINED ANIMALS		3	0	0	1
	NO. OF ANIMALS WITH TUMORS		1	0	0	1
	NO. OF ANIMALS WITH SINGLE TUMORS		1	0	0	1
	NO. OF ANIMALS WITH MULTIPLE TUMORS		0	0	0	0
	NO. OF BENIGN TUMORS		0	0	0	1
	NO. OF MALIGNANT TUMORS		1	0	0	0
	NO. OF TOTAL TUMORS		1	0	0	1
79 - 104	NO. OF EXAMINED ANIMALS		6	5	6	2
	NO. OF ANIMALS WITH TUMORS		6	5	6	2
	NO. OF ANIMALS WITH SINGLE TUMORS		5	4	4	2
	NO. OF ANIMALS WITH MULTIPLE TUMORS		1	1	2	0
	NO. OF BENIGN TUMORS		1	0	2	0
	NO. OF MALIGNANT TUMORS		6	7	7	2
	NO. OF TOTAL TUMORS		7	7	9	2
105 - 105	NO. OF EXAMINED ANIMALS		40	44	43	46
	NO. OF ANIMALS WITH TUMORS		25	27	25	23
	NO. OF ANIMALS WITH SINGLE TUMORS		17	15	17	18
	NO. OF ANIMALS WITH MULTIPLE TUMORS		8	12	8	5
	NO. OF BENIGN TUMORS		13	22	20	19
	NO. OF MALIGNANT TUMORS		24	18	14	10
	NO. OF TOTAL TUMORS		37	40	34	29

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

NUMBER OF ANIMALS WITH TUMORS AND NUMBER OF TUMORS - TIME RELATED

Time-related Weeks	Items	Group Name	Control	50 ppm	100 ppm	200 ppm
0 - 105	NO. OF EXAMINED ANIMALS		50	50	50	49
	NO. OF ANIMALS WITH TUMORS		33	32	31	26
	NO. OF ANIMALS WITH SINGLE TUMORS		23	19	21	21
	NO. OF ANIMALS WITH MULTIPLE TUMORS		10	13	10	5
	NO. OF BENIGN TUMORS		14	22	22	20
	NO. OF MALIGNANT TUMORS		33	25	21	12
	NO. OF TOTAL TUMORS		47	47	43	32

APPENDIX K 2

NUMBER OF ANIMALS WITH TUMORS AND NUMBER OF TUMORS-TIME RELATED
MOUSE: FEMALE
(2-YEAR STUDY)

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

NUMBER OF ANIMALS WITH TUMORS AND NUMBER OF TUMORS - TIME RELATED

Time-related Weeks	Items	Group Name	Control	50 ppm	100 ppm	200 ppm
0 - 52	NO. OF EXAMINED ANIMALS		2	1	0	1
	NO. OF ANIMALS WITH TUMORS		2	1	0	1
	NO. OF ANIMALS WITH SINGLE TUMORS		2	1	0	1
	NO. OF ANIMALS WITH MULTIPLE TUMORS		0	0	0	0
	NO. OF BENIGN TUMORS		0	0	0	0
	NO. OF MALIGNANT TUMORS		2	1	0	1
	NO. OF TOTAL TUMORS		2	1	0	1
53 - 78	NO. OF EXAMINED ANIMALS		5	2	6	2
	NO. OF ANIMALS WITH TUMORS		4	2	5	1
	NO. OF ANIMALS WITH SINGLE TUMORS		3	2	5	1
	NO. OF ANIMALS WITH MULTIPLE TUMORS		1	0	0	0
	NO. OF BENIGN TUMORS		1	0	0	0
	NO. OF MALIGNANT TUMORS		4	2	5	1
	NO. OF TOTAL TUMORS		5	2	5	1
79 - 104	NO. OF EXAMINED ANIMALS		14	16	13	13
	NO. OF ANIMALS WITH TUMORS		14	16	13	13
	NO. OF ANIMALS WITH SINGLE TUMORS		11	15	6	9
	NO. OF ANIMALS WITH MULTIPLE TUMORS		3	1	7	4
	NO. OF BENIGN TUMORS		5	1	5	5
	NO. OF MALIGNANT TUMORS		12	16	15	14
	NO. OF TOTAL TUMORS		17	17	20	19
105 - 105	NO. OF EXAMINED ANIMALS		29	29	31	33
	NO. OF ANIMALS WITH TUMORS		22	24	21	19
	NO. OF ANIMALS WITH SINGLE TUMORS		16	16	9	12
	NO. OF ANIMALS WITH MULTIPLE TUMORS		6	8	12	7
	NO. OF BENIGN TUMORS		18	17	19	15
	NO. OF MALIGNANT TUMORS		11	18	17	13
	NO. OF TOTAL TUMORS		29	35	36	28

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

NUMBER OF ANIMALS WITH TUMORS AND NUMBER OF TUMORS - TIME RELATED

Time-related Weeks	Items	Group Name	Control	50 ppm	100 ppm	200 ppm
0 - 105	NO. OF EXAMINED ANIMALS		50	48	50	49
	NO. OF ANIMALS WITH TUMORS		42	43	39	34
	NO. OF ANIMALS WITH SINGLE TUMORS		32	34	20	23
	NO. OF ANIMALS WITH MULTIPLE TUMORS		10	9	19	11
	NO. OF BENIGN TUMORS		24	18	24	20
	NO. OF MALIGNANT TUMORS		29	37	37	29
	NO. OF TOTAL TUMORS		53	55	61	49

APPENDIX L 1

HISTOLOGICAL FINDINGS: NEOPLASTIC LESIONS: SUMMARY, MOUSE: MALE (2-YEAR STUDY)

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

HISTOLOGICAL FINDINGS : NEOPLASTIC LESIONS (SUMMARY)
ALL ANIMALS (0-105W)

Organ	Findings	Group Name / No. of animals on Study	Control 50	50 ppm 50	100 ppm 50	200 ppm 50
[Integumentary system/appandage]						
subcutis			<50>	<50>	<50>	<50>
	fibroma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
	lipoma		0 (0%)	0 (0%)	1 (2%)	0 (0%)
	histiocytic sarcoma		0 (0%)	0 (0%)	1 (2%)	0 (0%)
	mastcytoma:malignant		2 (4%)	0 (0%)	0 (0%)	0 (0%)
[Respiratory system]						
lung			<50>	<50>	<50>	<50>
	bronchiolar-alveolar adenoma		1 (2%)	8 (16%)	5 (10%)	7 (14%)
	bronchiolar-alveolar carcinoma		0 (0%)	3 (6%)	2 (4%)	3 (6%)
[Hematopoietic system]						
lymph node			<50>	<50>	<50>	<50>
	malignant lymphoma		10 (20%)	8 (16%)	6 (12%)	1 (2%)
spleen			<50>	<50>	<50>	<50>
	hemangioma		1 (2%)	2 (4%)	0 (0%)	0 (0%)
	malignant lymphoma		4 (8%)	0 (0%)	0 (0%)	2 (4%)
	hemangiosarcoma		2 (4%)	3 (6%)	1 (2%)	1 (2%)
[Circulatory system]						
heart			<50>	<50>	<50>	<50>
	hemangiosarcoma		0 (0%)	0 (0%)	0 (0%)	1 (2%)

< a > a : Number of animals examined at the site
b (c) b : Number of animals with neoplasm c : b / a * 100

Organ	Findings	Group Name / No. of animals on Study	Control 50	50 ppm 50	100 ppm 50	200 ppm 50
[Digestive system]						
stomach			<50>	<49>	<50>	<50>
	squamous cell papilloma		1 (2%)	0 (0%)	3 (6%)	4 (8%)
	squamous cell carcinoma		0 (0%)	0 (0%)	1 (2%)	0 (0%)
liver			<50>	<50>	<50>	<50>
	hemangioma		2 (4%)	0 (0%)	1 (2%)	1 (2%)
	hepatocellular adenoma		5 (10%)	5 (10%)	2 (4%)	3 (6%)
	histiocytic sarcoma		1 (2%)	0 (0%)	1 (2%)	0 (0%)
	hemangiosarcoma		4 (8%)	7 (14%)	1 (2%)	2 (4%)
	hepatocellular carcinoma		5 (10%)	2 (4%)	5 (10%)	1 (2%)
pancreas			<50>	<50>	<50>	<50>
	histiocytic sarcoma		0 (0%)	1 (2%)	0 (0%)	0 (0%)
[Urinary system]						
kidney			<50>	<50>	<50>	<50>
	renal cell adenoma		0 (0%)	0 (0%)	1 (2%)	0 (0%)
urin bladd			<50>	<50>	<50>	<50>
	histiocytic sarcoma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
[Reproductive system]						
testis			<50>	<50>	<50>	<50>
	histiocytic sarcoma		0 (0%)	1 (2%)	1 (2%)	0 (0%)

< a > a : Number of animals examined at the site
b (c) b : Number of animals with neoplasm c : b / a * 100

Organ	Findings	Group Name / No. of animals on Study	Control 50	50 ppm 50	100 ppm 50	200 ppm 50
[Reproductive system]						
epididymis			<50>	<50>	<50>	<50>
	histiocytic sarcoma		3 (6%)	0 (0%)	0 (0%)	0 (0%)
[Nervous system]						
brain			<50>	<50>	<50>	<50>
	meningioma:malignant		0 (0%)	0 (0%)	1 (2%)	0 (0%)
periph nerv			<50>	<50>	<50>	<50>
	histiocytic sarcoma		0 (0%)	0 (0%)	1 (2%)	0 (0%)
[Special sense organs/appandage]						
Harder gl			<50>	<50>	<50>	<50>
	adenoma		3 (6%)	7 (14%)	9 (18%)	5 (10%)
	histiocytic sarcoma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
[Musculoskeletal system]						
muscle			<50>	<50>	<50>	<50>
	hemangiosarcoma		1 (2%)	0 (0%)	0 (0%)	0 (0%)

< a > a : Number of animals examined at the site
b (c) b : Number of animals with neoplasm c : b / a * 100

APPENDIX L 2

HISTOLOGICAL FINDINGS: NEOPLASTIC LESIONS: SUMMARY, MOUSE: FEMALE (2-YEAR STUDY)

Organ	Findings	Group Name	Control	50 ppm	100 ppm	200 ppm
		No. of animals on Study	50	48	50	49
[Integumentary system/appandage]						
skin/app			<50>	<48>	<50>	<49>
	basal cell adenoma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
subcutis			<50>	<48>	<50>	<49>
	fibroma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
	histiocytic sarcoma		0 (0%)	2 (4%)	0 (0%)	1 (2%)
[Respiratory system]						
lung			<50>	<48>	<50>	<49>
	bronchiolar-alveolar adenoma		1 (2%)	3 (6%)	1 (2%)	0 (0%)
	bronchiolar-alveolar carcinoma		0 (0%)	0 (0%)	0 (0%)	2 (4%)
[Hematopoietic system]						
bone marrow			<50>	<48>	<48>	<49>
	hemangioma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
lymph node			<50>	<48>	<50>	<49>
	malignant lymphoma		11 (22%)	10 (21%)	12 (24%)	7 (14%)
	mastcytoma:malignant		0 (0%)	1 (2%)	0 (0%)	0 (0%)
spleen			<50>	<48>	<50>	<49>
	malignant lymphoma		8 (16%)	9 (19%)	5 (10%)	5 (10%)
	hemangiosarcoma		0 (0%)	1 (2%)	0 (0%)	0 (0%)
[Digestive system]						
oral cavity			<50>	<48>	<50>	<49>
	sarcoma:NOS		1 (2%)	0 (0%)	0 (0%)	0 (0%)

< a > a : Number of animals examined at the site
b (c) b : Number of animals with neoplasm c : b / a * 100

Organ	Findings	Group Name / No. of animals on Study	Control 50	50 ppm 48	100 ppm 50	200 ppm 49
[Digestive system]						
stomach			<50>	<48>	<50>	<49>
	squamous cell papilloma		1 (2%)	0 (0%)	5 (10%)	4 (8%)
liver			<50>	<48>	<50>	<49>
	hemangioma		1 (2%)	1 (2%)	0 (0%)	0 (0%)
	hepatocellular adenoma		3 (6%)	4 (8%)	1 (2%)	3 (6%)
	histiocytic sarcoma		1 (2%)	0 (0%)	2 (4%)	0 (0%)
	hemangiosarcoma		1 (2%)	0 (0%)	1 (2%)	1 (2%)
	hepatocellular carcinoma		1 (2%)	0 (0%)	0 (0%)	1 (2%)
[Endocrine system]						
pituitary			<49>	<48>	<50>	<48>
	adenoma		11 (22%)	4 (8%)	4 (8%)	2 (4%)
[Reproductive system]						
ovary			<50>	<48>	<50>	<49>
	cystadenoma		2 (4%)	1 (2%)	4 (8%)	1 (2%)
	histiocytic sarcoma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
uterus			<50>	<48>	<50>	<49>
	hemangioma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
	endometrial stromal polyp		2 (4%)	1 (2%)	2 (4%)	1 (2%)

< a > a : Number of animals examined at the site
b (c) b : Number of animals with neoplasm c : b / a * 100

Organ	Findings	Group Name / No. of animals on Study	Control 50	50 ppm 48	100 ppm 50	200 ppm 49
[Reproductive system]						
uterus			<50>	<48>	<50>	<49>
	histiocytic sarcoma		5 (10%)	11 (23%)	16 (32%)	10 (20%)
mammary gl			<50>	<48>	<50>	<49>
	adenocarcinoma		0 (0%)	1 (2%)	1 (2%)	0 (0%)
[Nervous system]						
brain			<50>	<48>	<50>	<49>
	schwannoma:malignant		0 (0%)	1 (2%)	0 (0%)	0 (0%)
periph nerv			<50>	<48>	<50>	<49>
	histiocytic sarcoma		0 (0%)	1 (2%)	0 (0%)	0 (0%)
[Special sense organs/appandage]						
Harder gl			<50>	<48>	<50>	<49>
	adenoma		0 (0%)	4 (8%)	7 (14%)	8 (16%)
[Musculoskeletal system]						
bone			<50>	<48>	<48>	<49>
	osteosarcoma		1 (2%)	0 (0%)	0 (0%)	1 (2%)

< a > a : Number of animals examined at the site
b (c) b : Number of animals with neoplasm c : b / a * 100

APPENDIX M 1

NEOPLASTIC LESIONS - INCIDENCE AND STATISTICAL ANALYSIS, MOUSE: MALE

(2-YEAR STUDY)

Group Name	Control	50 ppm	100 ppm	200 ppm
	SITE : lung TUMOR : bronchiolar-alveolar adenoma			
Tumor rate				
Overall rates(a)	1/50(2.0)	8/50(16.0)	5/50(10.0)	7/50(14.0)
Adjusted rates(b)	2.50	18.18	11.63	15.22
Terminal rates(c)	1/40(2.5)	8/44(18.2)	5/43(11.6)	7/46(15.2)
Statistical analysis				
Peto test				
Standard method(d)	P = ------			
Prevalence method(d)	P = 0.1111			
Combined analysis(d)	P = ------			
Cochran-Armitage test(e)	P = 0.1491			
Fisher Exact test(e)		P = 0.0254*	P = 0.1210	P = 0.0430*
	SITE : lung TUMOR : bronchiolar-alveolar carcinoma			
Tumor rate				
Overall rates(a)	0/50(0.0)	3/50(6.0)	2/50(4.0)	3/50(6.0)
Adjusted rates(b)	0.0	6.82	4.65	6.52
Terminal rates(c)	0/40(0.0)	3/44(6.8)	2/43(4.7)	3/46(6.5)
Statistical analysis				
Peto test				
Standard method(d)	P = ------			
Prevalence method(d)	P = 0.1425			
Combined analysis(d)	P = ------			
Cochran-Armitage test(e)	P = 0.2225			
Fisher Exact test(e)		P = 0.1325	P = 0.2574	P = 0.1325
	SITE : lung TUMOR : bronchiolar-alveolar adenoma,bronchiolar-alveolar carcinoma			
Tumor rate				
Overall rates(a)	1/50(2.0)	9/50(18.0)	7/50(14.0)	9/50(18.0)
Adjusted rates(b)	2.50	20.45	16.28	19.57
Terminal rates(c)	1/40(2.5)	9/44(20.5)	7/43(16.3)	9/46(19.6)
Statistical analysis				
Peto test				
Standard method(d)	P = ------			
Prevalence method(d)	P = 0.0477*			
Combined analysis(d)	P = ------			
Cochran-Armitage test(e)	P = 0.0550			
Fisher Exact test(e)		P = 0.0150*	P = 0.0430*	P = 0.0150*

Group Name	Control	50 ppm	100 ppm	200 ppm
	SITE : lymph node			
	TUMOR : malignant lymphoma			
Tumor rate				
Overall rates(a)	10/50(20.0)	8/50(16.0)	6/50(12.0)	1/50(2.0)
Adjusted rates(b)	20.00	13.64	6.98	0.0
Terminal rates(c)	8/40(20.0)	6/44(13.6)	3/43(7.0)	0/46(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.6952			
Prevalence method(d)	P = 0.9998			
Combined analysis(d)	P = 0.9990			
Cochran-Armitage test(e)	P = 0.0043**			
Fisher Exact test(e)		P = 0.4300	P = 0.2557	P = 0.0088**
	SITE : spleen			
	TUMOR : malignant lymphoma			
Tumor rate				
Overall rates(a)	4/50(8.0)	0/50(0.0)	0/50(0.0)	2/50(4.0)
Adjusted rates(b)	5.00	0.0	0.0	2.17
Terminal rates(c)	2/40(5.0)	0/44(0.0)	0/43(0.0)	1/46(2.2)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.6720			
Prevalence method(d)	P = 0.6905			
Combined analysis(d)	P = 0.7679			
Cochran-Armitage test(e)	P = 0.4835			
Fisher Exact test(e)		P = 0.0688	P = 0.0688	P = 0.3574
	SITE : spleen			
	TUMOR : hemangiosarcoma			
Tumor rate				
Overall rates(a)	2/50(4.0)	3/50(6.0)	1/50(2.0)	1/50(2.0)
Adjusted rates(b)	4.00	4.26	2.04	2.17
Terminal rates(c)	1/40(2.5)	1/44(2.3)	0/43(0.0)	1/46(2.2)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.5956			
Prevalence method(d)	P = 0.7432			
Combined analysis(d)	P = 0.7916			
Cochran-Armitage test(e)	P = 0.3979			
Fisher Exact test(e)		P = 0.4909	P = 0.4926	P = 0.4926

Group Name	Control	50 ppm	100 ppm	200 ppm
	SITE : spleen			
	TUMOR : hemangioma,hemangiosarcoma			
Tumor rate				
Overall rates(a)	3/50(6.0)	5/50(10.0)	1/50(2.0)	1/50(2.0)
Adjusted rates(b)	6.00	8.51	2.04	2.17
Terminal rates(c)	2/40(5.0)	3/44(6.8)	0/43(0.0)	1/46(2.2)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.5956			
Prevalence method(d)	P = 0.9061			
Combined analysis(d)	P = 0.9231			
Cochran-Armitage test(e)	P = 0.1539			
Fisher Exact test(e)		P = 0.3790	P = 0.3235	P = 0.3235
	SITE : stomach			
	TUMOR : squamous cell papilloma			
Tumor rate				
Overall rates(a)	1/50(2.0)	0/49(0.0)	3/50(6.0)	4/50(8.0)
Adjusted rates(b)	2.50	0.0	6.98	8.70
Terminal rates(c)	1/40(2.5)	0/43(0.0)	3/43(7.0)	4/46(8.7)
Statistical analysis				
Peto test				
Standard method(d)	P = ------			
Prevalence method(d)	P = 0.0392*			
Combined analysis(d)	P = ------			
Cochran-Armitage test(e)	P = 0.0523			
Fisher Exact test(e)		P = 0.4900	P = 0.3235	P = 0.1998
	SITE : stomach			
	TUMOR : squamous cell papilloma,squamous cell carcinoma			
Tumor rate				
Overall rates(a)	1/50(2.0)	0/49(0.0)	4/50(8.0)	4/50(8.0)
Adjusted rates(b)	2.50	0.0	9.30	8.70
Terminal rates(c)	1/40(2.5)	0/43(0.0)	4/43(9.3)	4/46(8.7)
Statistical analysis				
Peto test				
Standard method(d)	P = ------			
Prevalence method(d)	P = 0.0438*			
Combined analysis(d)	P = ------			
Cochran-Armitage test(e)	P = 0.0586			
Fisher Exact test(e)		P = 0.4900	P = 0.1998	P = 0.1998

Group Name	Control	50 ppm	100 ppm	200 ppm
	SITE : liver			
	TUMOR : hepatocellular adenoma			
Tumor rate				
Overall rates(a)	5/50(10.0)	5/50(10.0)	2/50(4.0)	3/50(6.0)
Adjusted rates(b)	10.00	11.36	4.65	4.35
Terminal rates(c)	4/40(10.0)	5/44(11.4)	2/43(4.7)	2/46(4.3)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.4005			
Prevalence method(d)	P = 0.8997			
Combined analysis(d)	P = 0.8640			
Cochran-Armitage test(e)	P = 0.3406			
Fisher Exact test(e)		P = 0.3710	P = 0.2425	P = 0.3790
	SITE : liver			
	TUMOR : hemangiosarcoma			
Tumor rate				
Overall rates(a)	4/50(8.0)	7/50(14.0)	1/50(2.0)	2/50(4.0)
Adjusted rates(b)	7.50	11.36	0.0	4.35
Terminal rates(c)	3/40(7.5)	5/44(11.4)	0/43(0.0)	2/46(4.3)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.8436			
Prevalence method(d)	P = 0.8686			
Combined analysis(d)	P = 0.9368			
Cochran-Armitage test(e)	P = 0.1599			
Fisher Exact test(e)		P = 0.2958	P = 0.1998	P = 0.3574
	SITE : liver			
	TUMOR : hepatocellular carcinoma			
Tumor rate				
Overall rates(a)	5/50(10.0)	2/50(4.0)	5/50(10.0)	1/50(2.0)
Adjusted rates(b)	12.50	4.55	9.30	2.17
Terminal rates(c)	5/40(12.5)	2/44(4.5)	4/43(9.3)	1/46(2.2)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.4195			
Prevalence method(d)	P = 0.9436			
Combined analysis(d)	P = 0.9303			
Cochran-Armitage test(e)	P = 0.1905			
Fisher Exact test(e)		P = 0.2425	P = 0.3710	P = 0.1210

Group Name	Control	50 ppm	100 ppm	200 ppm
	SITE : liver			
	TUMOR : hemangioma,hemangiosarcoma			
Tumor rate				
Overall rates(a)	6/50(12.0)	7/50(14.0)	2/50(4.0)	3/50(6.0)
Adjusted rates(b)	12.50	11.36	2.33	6.52
Terminal rates(c)	5/40(12.5)	5/44(11.4)	1/43(2.3)	3/46(6.5)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.8436			
Prevalence method(d)	P = 0.8847			
Combined analysis(d)	P = 0.9418			
Cochran-Armitage test(e)	P = 0.1556			
Fisher Exact test(e)		P = 0.4863	P = 0.1606	P = 0.2728
	SITE : liver			
	TUMOR : hepatocellular adenoma,hepatocellular carcinoma			
Tumor rate				
Overall rates(a)	10/50(20.0)	7/50(14.0)	7/50(14.0)	4/50(8.0)
Adjusted rates(b)	22.50	15.91	13.95	6.52
Terminal rates(c)	9/40(22.5)	7/44(15.9)	6/43(14.0)	3/46(6.5)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.3922			
Prevalence method(d)	P = 0.9834			
Combined analysis(d)	P = 0.9711			
Cochran-Armitage test(e)	P = 0.0982			
Fisher Exact test(e)		P = 0.3417	P = 0.3417	P = 0.1108
	SITE : epididymis			
	TUMOR : histiocytic sarcoma			
Tumor rate				
Overall rates(a)	3/50(6.0)	0/50(0.0)	0/50(0.0)	0/50(0.0)
Adjusted rates(b)	7.50	0.0	0.0	0.0
Terminal rates(c)	3/40(7.5)	0/44(0.0)	0/43(0.0)	0/46(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = ------			
Prevalence method(d)	P = 0.9948 ?			
Combined analysis(d)	P = ------			
Cochran-Armitage test(e)	P = 0.0389*			
Fisher Exact test(e)		P = 0.1325	P = 0.1325	P = 0.1325

Group Name	Control	50 ppm	100 ppm	200 ppm
	SITE : Harderian gland			
	TUMOR : adenoma			
Tumor rate				
Overall rates(a)	3/50(6.0)	7/50(14.0)	9/50(18.0)	5/50(10.0)
Adjusted rates(b)	7.50	15.91	18.75	10.87
Terminal rates(c)	3/40(7.5)	7/44(15.9)	8/43(18.6)	5/46(10.9)
Statistical analysis				
Peto test				
Standard method(d)	P = ------			
Prevalence method(d)	P = 0.3842			
Combined analysis(d)	P = ------			
Cochran-Armitage test(e)	P = 0.6589			
Fisher Exact test(e)		P = 0.1917	P = 0.0899	P = 0.3790

(HPT360A)

BAIS3

(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 method : Incidental tumor test
Combined analysis : Death analysis + Incidental tumor test
(e): The Cochran-Armitage and Fisher exact test compare directly the overall incidence rates.
? : The conditional probabities of the largest and smallest possible out comes can not estimated or this P-value is beyond the estimated P-value.
------ : There is no data which should be statistical analysis.
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01

Group Name	Control	50 ppm	100 ppm	200 ppm
	SITE : ALL SITE TUMOR : histiocytic sarcoma			
Tumor rate				
Overall rates(a)	5/50(10.0)	2/50(4.0)	4/50(8.0)	1/50(2.0)
Adjusted rates(b)	12.20	4.17	6.98	2.17
Terminal rates(c)	4/40(10.0)	1/44(2.3)	3/43(7.0)	1/46(2.2)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.4195			
Prevalence method(d)	P = 0.9445			
Combined analysis(d)	P = 0.9300			
Cochran-Armitage test(e)	P = 0.1588			
Fisher Exact test(e)		P = 0.2425	P = 0.4883	P = 0.1210
	SITE : ALL SITE TUMOR : malignant lymphoma			
Tumor rate				
Overall rates(a)	14/50(28.0)	8/50(16.0)	6/50(12.0)	3/50(6.0)
Adjusted rates(b)	25.00	13.64	6.98	2.17
Terminal rates(c)	10/40(25.0)	6/44(13.6)	3/43(7.0)	1/46(2.2)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.7613			
Prevalence method(d)	P = 0.9997			
Combined analysis(d)	P = 0.9991			
Cochran-Armitage test(e)	P = 0.0033**			
Fisher Exact test(e)		P = 0.1781	P = 0.0810	P = 0.0114*

Group Name	Control	50 ppm	100 ppm	200 ppm
	SITE : ALL SITE TUMOR : hemangiosarcoma			
Tumor rate				
Overall rates(a)	5/50(10.0)	10/50(20.0)	1/50(2.0)	4/50(8.0)
Adjusted rates(b)	7.50	15.22	0.0	8.70
Terminal rates(c)	3/40(7.5)	6/44(13.6)	0/43(0.0)	4/46(8.7)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.9450			
Prevalence method(d)	P = 0.6407			
Combined analysis(d)	P = 0.8819			
Cochran-Armitage test(e)	P = 0.2646			
Fisher Exact test(e)		P = 0.1771	P = 0.1210	P = 0.4883

(HPT360A)

(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 method : Incidental tumor test
Combined analysis : Death analysis + Incidental tumor test
(e): The Cochran-Armitage and Fisher exact test compare directly the overall incidence rates.
? : The conditional probabities of the largest and smallest possible out comes can not estimated or this P-value is beyond the estimated P-value.
------ : There is no data which should be statistical analysis.
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01

APPENDIX M 2

NEOPLASTIC LESIONS - INCIDENCE AND STATISTICAL ANALYSIS, MOUSE: FEMALE

(2-YEAR STUDY)

Group Name	Control	50 ppm	100 ppm	200 ppm
	SITE : lung			
	TUMOR : bronchiolar-alveolar adenoma			
Tumor rate				
Overall rates(a)	1/50(2.0)	3/48(6.3)	1/50(2.0)	0/49(0.0)
Adjusted rates(b)	2.44	10.34	3.23	0.0
Terminal rates(c)	0/29(0.0)	3/29(10.3)	1/31(3.2)	0/33(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = ------			
Prevalence method(d)	P = 0.8876			
Combined analysis(d)	P = ------			
Cochran-Armitage test(e)	P = 0.2534			
Fisher Exact test(e)		P = 0.3087	P = 0.2475	P = 0.4900
	SITE : lung			
	TUMOR : bronchiolar-alveolar adenoma,bronchiolar-alveolar carcinoma			
Tumor rate				
Overall rates(a)	1/50(2.0)	3/48(6.3)	1/50(2.0)	2/49(4.1)
Adjusted rates(b)	2.44	10.34	3.23	6.06
Terminal rates(c)	0/29(0.0)	3/29(10.3)	1/31(3.2)	2/33(6.1)
Statistical analysis				
Peto test				
Standard method(d)	P = ------			
Prevalence method(d)	P = 0.4586			
Combined analysis(d)	P = ------			
Cochran-Armitage test(e)	P = 0.8399			
Fisher Exact test(e)		P = 0.3087	P = 0.2475	P = 0.5000
	SITE : lymph node			
	TUMOR : malignant lymphoma			
Tumor rate				
Overall rates(a)	11/50(22.0)	10/48(20.8)	12/50(24.0)	7/49(14.3)
Adjusted rates(b)	13.79	17.24	22.58	7.89
Terminal rates(c)	4/29(13.8)	5/29(17.2)	7/31(22.6)	2/33(6.1)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.8338			
Prevalence method(d)	P = 0.7363			
Combined analysis(d)	P = 0.8763			
Cochran-Armitage test(e)	P = 0.3475			
Fisher Exact test(e)		P = 0.4490	P = 0.4826	P = 0.2847

Group Name	Control	50 ppm	100 ppm	200 ppm
	SITE : spleen TUMOR : malignant lymphoma			
Tumor rate				
Overall rates(a)	8/50(16.0)	9/48(18.8)	5/50(10.0)	5/49(10.2)
Adjusted rates(b)	13.79	17.24	6.45	9.09
Terminal rates(c)	4/29(13.8)	5/29(17.2)	2/31(6.5)	3/33(9.1)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.8409			
Prevalence method(d)	P = 0.8040			
Combined analysis(d)	P = 0.9085			
Cochran-Armitage test(e)	P = 0.2540			
Fisher Exact test(e)		P = 0.4844	P = 0.3141	P = 0.3267
	SITE : stomach TUMOR : squamous cell papilloma			
Tumor rate				
Overall rates(a)	1/50(2.0)	0/48(0.0)	5/50(10.0)	4/49(8.2)
Adjusted rates(b)	3.45	0.0	12.90	9.30
Terminal rates(c)	1/29(3.4)	0/29(0.0)	4/31(12.9)	3/33(9.1)
Statistical analysis				
Peto test				
Standard method(d)	P = ------			
Prevalence method(d)	P = 0.0437*			
Combined analysis(d)	P = ------			
Cochran-Armitage test(e)	P = 0.0611			
Fisher Exact test(e)		P = 0.4848	P = 0.1210	P = 0.1936
	SITE : liver TUMOR : hepatocellular adenoma			
Tumor rate				
Overall rates(a)	3/50(6.0)	4/48(8.3)	1/50(2.0)	3/49(6.1)
Adjusted rates(b)	10.34	13.79	3.23	7.89
Terminal rates(c)	3/29(10.3)	4/29(13.8)	1/31(3.2)	2/33(6.1)
Statistical analysis				
Peto test				
Standard method(d)	P = ------			
Prevalence method(d)	P = 0.6507			
Combined analysis(d)	P = ------			
Cochran-Armitage test(e)	P = 0.8000			
Fisher Exact test(e)		P = 0.4893	P = 0.3235	P = 0.3483

Group Name	Control	50 ppm	100 ppm	200 ppm
	SITE : liver TUMOR : hepatocellular adenoma,hepatocellular carcinoma			
Tumor rate				
Overall rates(a)	4/50(8.0)	4/48(8.3)	1/50(2.0)	3/49(6.1)
Adjusted rates(b)	13.79	13.79	3.23	7.89
Terminal rates(c)	4/29(13.8)	4/29(13.8)	1/31(3.2)	2/33(6.1)
Statistical analysis				
Peto test				
Standard method(d)	P = ------			
Prevalence method(d)	P = 0.7719			
Combined analysis(d)	P = ------			
Cochran-Armitage test(e)	P = 0.5520			
Fisher Exact test(e)		P = 0.3793	P = 0.1998	P = 0.4788
	SITE : pituitary gland TUMOR : adenoma			
Tumor rate				
Overall rates(a)	11/49(22.4)	4/48(8.3)	4/50(8.0)	2/48(4.2)
Adjusted rates(b)	31.43	10.34	11.43	3.03
Terminal rates(c)	9/29(31.0)	3/29(10.3)	3/31(9.7)	1/33(3.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.2620			
Prevalence method(d)	P = 0.9995			
Combined analysis(d)	P = 0.9978			
Cochran-Armitage test(e)	P = 0.0092**			
Fisher Exact test(e)		P = 0.0838	P = 0.0727	P = 0.0187*
	SITE : ovary TUMOR : cystadenoma			
Tumor rate				
Overall rates(a)	2/50(4.0)	1/48(2.1)	4/50(8.0)	1/49(2.0)
Adjusted rates(b)	3.45	3.45	12.90	3.03
Terminal rates(c)	1/29(3.4)	1/29(3.4)	4/31(12.9)	1/33(3.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.9251 ?			
Prevalence method(d)	P = 0.4706			
Combined analysis(d)	P = 0.6396			
Cochran-Armitage test(e)	P = 0.8130			
Fisher Exact test(e)		P = 0.4775	P = 0.3574	P = 0.4851

Group Name	Control	50 ppm	100 ppm	200 ppm
	SITE : uterus TUMOR : histiocytic sarcoma			
Tumor rate				
Overall rates(a)	5/50(10.0)	11/48(22.9)	16/50(32.0)	10/49(20.4)
Adjusted rates(b)	6.90	14.71	22.86	12.82
Terminal rates(c)	2/29(6.9)	4/29(13.8)	7/31(22.6)	4/33(12.1)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.3623			
Prevalence method(d)	P = 0.1801			
Combined analysis(d)	P = 0.1905			
Cochran-Armitage test(e)	P = 0.2561			
Fisher Exact test(e)		P = 0.1150	P = 0.0238*	P = 0.1680
	SITE : Harderian gland TUMOR : adenoma			
Tumor rate				
Overall rates(a)	0/50(0.0)	4/48(8.3)	7/50(14.0)	8/49(16.3)
Adjusted rates(b)	0.0	13.79	17.07	23.53
Terminal rates(c)	0/29(0.0)	4/29(13.8)	5/31(16.1)	7/33(21.2)
Statistical analysis				
Peto test				
Standard method(d)	P = ------			
Prevalence method(d)	P = 0.0056**			
Combined analysis(d)	P = ------			
Cochran-Armitage test(e)	P = 0.0061**			
Fisher Exact test(e)		P = 0.0637	P = 0.0101*	P = 0.0051**

(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 method : Incidental tumor test
Combined analysis : Death analysis + Incidental tumor test
(e): The Cochran-Armitage and Fisher exact test compare directly the overall incidence rates.
? : The conditional probabities of the largest and smallest possible out comes can not estimated or this P-value is beyond the estimated P-value.
------ : There is no data which should be statistical analysis.
Significant difference : * : P ≦ 0.05 ** : P ≦ 0.01

Group Name	Control	50 ppm	100 ppm	200 ppm
	SITE : ALL SITE TUMOR : histiocytic sarcoma			
Tumor rate				
Overall rates(a)	6/50(12.0)	14/48(29.2)	18/50(36.0)	12/49(24.5)
Adjusted rates(b)	6.90	21.21	23.68	13.51
Terminal rates(c)	2/29(6.9)	6/29(20.7)	7/31(22.6)	4/33(12.1)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.2775			
Prevalence method(d)	P = 0.2381			
Combined analysis(d)	P = 0.1824			
Cochran-Armitage test(e)	P = 0.2369			
Fisher Exact test(e)		P = 0.0697	P = 0.0222*	P = 0.1388
	SITE : ALL SITE TUMOR : malignant lymphoma			
Tumor rate				
Overall rates(a)	19/50(38.0)	19/48(39.6)	17/50(34.0)	12/49(24.5)
Adjusted rates(b)	27.59	34.48	29.03	16.22
Terminal rates(c)	8/29(27.6)	10/29(34.5)	9/31(29.0)	5/33(15.2)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.9189			
Prevalence method(d)	P = 0.8832			
Combined analysis(d)	P = 0.9676			
Cochran-Armitage test(e)	P = 0.1040			
Fisher Exact test(e)		P = 0.4666	P = 0.4638	P = 0.1997

(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 method : Incidental tumor test
Combined analysis : Death analysis + Incidental tumor test
(e): The Cochran-Armitage and Fisher exact test compare directly the overall incidence rates.
? : The conditional probabities of the largest and smallest possible out comes can not estimated or this P-value is beyond the estimated P-value.
——— : There is no data which should be statistical analysis.
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01

APPENDIX N 1

HISTOLOGICAL FINDINGS: METASTASIS OF TUMOR: SUMMARY,
MOUSE: MALE: ALL ANIMALS
(2-YEAR STUDY)

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

HISTOLOGICAL FINDINGS : METASTASIS OF TUMOR (SUMMARY)
ALL ANIMALS (0-105W)

Organ	Findings	Group Name / No. of Animals on Study	Control 50	50 ppm 50	100 ppm 50	200 ppm 50
[Integumentary system/appandage]						
skin/app			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	0	0	1
subcutis			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	1	0	0
[Respiratory system]						
nasal cavit			<50>	<50>	<50>	<50>
	leukemic cell infiltration		1	0	0	2
	metastasis:liver tumor		0	0	1	0
	metastasis:muscle tumor		1	0	0	0
	metastasis:urinary bladder tumor		1	0	0	0
	metastasis:Harderian gland tumor		0	0	0	1
lung			<50>	<50>	<50>	<50>
	leukemic cell infiltration		4	3	4	3
	metastasis:liver tumor		2	0	0	0
[Hematopoietic system]						
bone marrow			<50>	<50>	<50>	<50>
	leukemic cell infiltration		3	2	1	1
	metastasis:liver tumor		0	0	1	0
	metastasis:subcutis tumor		1	0	0	0
	metastasis:spleen tumor		0	1	0	0

< a > a : Number of animals examined at the site
b b : Number of animals with lesion

Organ	Findings	Group Name / No. of Animals on Study	Control 50	50 ppm 50	100 ppm 50	200 ppm 50
[Hematopoietic system]						
bone marrow			<50>	<50>	<50>	<50>
	metastasis:muscle tumor		1	0	0	0
	metastasis:urinary bladder tumor		1	0	0	0
lymph node			<50>	<50>	<50>	<50>
	leukemic cell infiltration		2	0	0	1
spleen			<50>	<50>	<50>	<50>
	leukemic cell infiltration		5	3	1	1
	metastasis:subcutis tumor		1	0	0	0
[Circulatory system]						
heart			<50>	<50>	<50>	<50>
	leukemic cell infiltration		1	0	0	1
[Digestive system]						
tongue			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	0	0	1
stomach			<50>	<50>	<50>	<50>
	leukemic cell infiltration		2	2	2	1
small intes			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	0	0	1
large intes			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	0	1	0
liver			<50>	<50>	<50>	<50>
	leukemic cell infiltration		3	0	2	2

< a > a : Number of animals examined at the site
b b : Number of animals with lesion

Organ	Findings	Group Name / No. of Animals on Study	Control 50	50 ppm 50	100 ppm 50	200 ppm 50
[Digestive system]						
liver			<50>	<50>	<50>	<50>
	metastasis:subcutis tumor		1	0	0	0
[Urinary system]						
kidney			<50>	<50>	<50>	<50>
	leukemic cell infiltration		2	0	1	1
	metastasis:subcutis tumor		1	0	0	0
urin bladd			<50>	<50>	<50>	<50>
	leukemic cell infiltration		2	1	1	1
[Endocrine system]						
pituitary			<50>	<50>	<50>	<50>
	leukemic cell infiltration		1	0	0	0
thyroid			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	0	0	1
adrenal			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	2	0	0
[Reproductive system]						
testis			<50>	<50>	<50>	<50>
	leukemic cell infiltration		1	0	0	0
	metastasis:urinary bladder tumor		1	0	0	0
epididymis			<50>	<50>	<50>	<50>
	leukemic cell infiltration		3	0	0	0

< a > a : Number of animals examined at the site
b b : Number of animals with lesion

Organ	Findings	Group Name / No. of Animals on Study	Control 50	50 ppm 50	100 ppm 50	200 ppm 50
[Reproductive system]						
epididymis			<50>	<50>	<50>	<50>
	metastasis:urinary bladder tumor		1	0	0	0
semin ves			<50>	<50>	<50>	<50>
	leukemic cell infiltration		1	0	0	1
prostate			<50>	<50>	<50>	<50>
	leukemic cell infiltration		2	0	1	1
[Nervous system]						
brain			<50>	<50>	<50>	<50>
	leukemic cell infiltration		1	0	0	2
[Special sense organs/appandage]						
Harder gl			<50>	<50>	<50>	<50>
	leukemic cell infiltration		1	1	0	1
[Musculoskeletal system]						
muscle			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	0	1	1

< a > a : Number of animals examined at the site
b b : Number of animals with lesion

APPENDIX N 2

HISTOLOGICAL FINDINGS: METASTASIS OF TUMOR: SUMMARY,
MOUSE: MALE: DEAD AND MORIBUND ANIMALS
(2-YEAR STUDY)

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

HISTOLOGICAL FINDINGS : METASTASIS OF TUMOR (SUMMARY)
DEAD AND MORIBUND ANIMALS (0-105W)

Organ	Findings	Group Name / No. of Animals on Study	Control 10	50 ppm 6	100 ppm 7	200 ppm 4
[Integumentary system/appandage]						
skin/app			<10>	< 6>	< 7>	< 4>
	leukemic cell infiltration		0	0	0	1
subcutis			<10>	< 6>	< 7>	< 4>
	leukemic cell infiltration		0	1	0	0
[Respiratory system]						
nasal cavit			<10>	< 6>	< 7>	< 4>
	leukemic cell infiltration		1	0	0	1
	metastasis:liver tumor		0	0	1	0
	metastasis:muscle tumor		1	0	0	0
lung			<10>	< 6>	< 7>	< 4>
	leukemic cell infiltration		3	2	3	2
	metastasis:liver tumor		1	0	0	0
[Hematopoietic system]						
bone marrow			<10>	< 6>	< 7>	< 4>
	leukemic cell infiltration		2	1	1	0
	metastasis:liver tumor		0	0	1	0
	metastasis:subcutis tumor		1	0	0	0
	metastasis:muscle tumor		1	0	0	0
lymph node			<10>	< 6>	< 7>	< 4>
	leukemic cell infiltration		2	0	0	1

< a > a : Number of animals examined at the site
b b : Number of animals with lesion

Organ	Findings	Group Name / No. of Animals on Study	Control 10	50 ppm 6	100 ppm 7	200 ppm 4
[Hematopoietic system]						
spleen			<10>	< 6>	< 7>	< 4>
	leukemic cell infiltration		0	1	1	1
	metastasis:subcutis tumor		1	0	0	0
[Circulatory system]						
heart			<10>	< 6>	< 7>	< 4>
	leukemic cell infiltration		1	0	0	1
[Digestive system]						
tongue			<10>	< 6>	< 7>	< 4>
	leukemic cell infiltration		0	0	0	1
stomach			<10>	< 6>	< 7>	< 4>
	leukemic cell infiltration		2	2	1	1
small intes			<10>	< 6>	< 7>	< 4>
	leukemic cell infiltration		0	0	0	1
liver			<10>	< 6>	< 7>	< 4>
	leukemic cell infiltration		3	0	2	1
	metastasis:subcutis tumor		1	0	0	0
[Urinary system]						
kidney			<10>	< 6>	< 7>	< 4>
	leukemic cell infiltration		1	0	1	1
	metastasis:subcutis tumor		1	0	0	0

< a > a : Number of animals examined at the site
b b : Number of animals with lesion

Organ	Findings	Group Name / No. of Animals on Study	Control	50 ppm	100 ppm	200 ppm
			10	6	7	4
[Urinary system]						
urin bladd			<10>	< 6>	< 7>	< 4>
	leukemic cell infiltration		2	1	1	1
[Endocrine system]						
pituitary			<10>	< 6>	< 7>	< 4>
	leukemic cell infiltration		1	0	0	0
thyroid			<10>	< 6>	< 7>	< 4>
	leukemic cell infiltration		0	0	0	1
adrenal			<10>	< 6>	< 7>	< 4>
	leukemic cell infiltration		0	1	0	0
[Reproductive system]						
testis			<10>	< 6>	< 7>	< 4>
	leukemic cell infiltration		1	0	0	0
epididymis			<10>	< 6>	< 7>	< 4>
	leukemic cell infiltration		3	0	0	0
semin ves			<10>	< 6>	< 7>	< 4>
	leukemic cell infiltration		1	0	0	1
prostate			<10>	< 6>	< 7>	< 4>
	leukemic cell infiltration		2	0	1	1
[Nervous system]						
brain			<10>	< 6>	< 7>	< 4>
	leukemic cell infiltration		1	0	0	1

< a > a : Number of animals examined at the site
b b : Number of animals with lesion

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

HISTOLOGICAL FINDINGS : METASTASIS OF TUMOR (SUMMARY)
DEAD AND MORIBUND ANIMALS (0-105W)

Organ	Findings	Group Name / No. of Animals on Study	Control	50 ppm	100 ppm	200 ppm
			10	6	7	4
[Special sense organs/appandage]						
Harder gl			<10>	< 6>	< 7>	< 4>
	leukemic cell infiltration		1	1	0	1
[Musculoskeletal system]						
muscle			<10>	< 6>	< 7>	< 4>
	leukemic cell infiltration		0	0	1	1

< a > a : Number of animals examined at the site
b b : Number of animals with lesion

APPENDIX N 3

HISTOLOGICAL FINDINGS: METASTASIS OF TUMOR: SUMMARY, MOUSE: MALE: SACRIFICED ANIMALS (2-YEAR STUDY)

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

HISTOLOGICAL FINDINGS : METASTASIS OF TUMOR (SUMMARY)
SACRIFICED ANIMALS (105W)

Organ	Findings	Group Name / No. of Animals on Study	Control 40	50 ppm 44	100 ppm 43	200 ppm 46
[Respiratory system]						
nasal cavit			<40>	<44>	<43>	<46>
	leukemic cell infiltration		0	0	0	1
	metastasis:urinary bladder tumor		1	0	0	0
	metastasis:Harderian gland tumor		0	0	0	1
lung			<40>	<44>	<43>	<46>
	leukemic cell infiltration		1	1	1	1
	metastasis:liver tumor		1	0	0	0
[Hematopoietic system]						
bone marrow			<40>	<44>	<43>	<46>
	leukemic cell infiltration		1	1	0	1
	metastasis:spleen tumor		0	1	0	0
	metastasis:urinary bladder tumor		1	0	0	0
spleen			<40>	<44>	<43>	<46>
	leukemic cell infiltration		5	2	0	0
[Digestive system]						
stomach			<40>	<44>	<43>	<46>
	leukemic cell infiltration		0	0	1	0
large intes			<40>	<44>	<43>	<46>
	leukemic cell infiltration		0	0	1	0
liver			<40>	<44>	<43>	<46>
	leukemic cell infiltration		0	0	0	1

< a > a : Number of animals examined at the site
b b : Number of animals with lesion

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

HISTOLOGICAL FINDINGS : METASTASIS OF TUMOR (SUMMARY)
SACRIFICED ANIMALS (105W)

Organ	Findings	Group Name / No. of Animals on Study	Control 40	50 ppm 44	100 ppm 43	200 ppm 46
[Urinary system]						
kidney			<40>	<44>	<43>	<46>
	leukemic cell infiltration		1	0	0	0
[Endocrine system]						
adrenal			<40>	<44>	<43>	<46>
	leukemic cell infiltration		0	1	0	0
[Reproductive system]						
testis			<40>	<44>	<43>	<46>
	metastasis:urinary bladder tumor		1	0	0	0
epididymis			<40>	<44>	<43>	<46>
	metastasis:urinary bladder tumor		1	0	0	0
[Nervous system]						
brain			<40>	<44>	<43>	<46>
	leukemic cell infiltration		0	0	0	1

< a > a : Number of animals examined at the site
b b : Number of animals with lesion

APPENDIX N 4

HISTOLOGICAL FINDINGS: METASTASIS OF TUMOR: SUMMARY,
MOUSE: FEMALE: ALL ANIMALS
(2-YEAR STUDY)

Organ	Findings	Group Name / No. of Animals on Study	Control	50 ppm	100 ppm	200 ppm
			50	48	50	49
[Integumentary system/appandage]						
skin/app			<50>	<48>	<50>	<49>
	leukemic cell infiltration		2	1	1	1
subcutis			<50>	<48>	<50>	<49>
	metastasis:liver tumor		1	0	0	0
[Respiratory system]						
nasal cavit			<50>	<48>	<50>	<49>
	leukemic cell infiltration		0	0	3	1
	metastasis:liver tumor		1	0	0	0
	metastasis:uterus tumor		1	0	2	0
	metastasis:muscle tumor		0	1	0	0
lung			<50>	<48>	<50>	<49>
	leukemic cell infiltration		9	9	9	9
	metastasis:liver tumor		1	0	1	0
	metastasis:uterus tumor		1	6	4	1
	metastasis:bone tumor		1	0	0	1
[Hematopoietic system]						
bone marrow			<50>	<48>	<50>	<49>
	leukemic cell infiltration		6	3	6	7
	metastasis:liver tumor		1	0	0	0
	metastasis:uterus tumor		1	1	3	1

< a > a : Number of animals examined at the site
b b : Number of animals with lesion

Organ	Findings	Group Name / No. of Animals on Study	Control 50	50 ppm 48	100 ppm 50	200 ppm 49
[Hematopoietic system]						
lymph node			<50>	<48>	<50>	<49>
	leukemic cell infiltration		7	6	4	2
	metastasis:uterus tumor		1	0	0	0
spleen			<50>	<48>	<50>	<49>
	leukemic cell infiltration		7	4	3	2
[Circulatory system]						
heart			<50>	<48>	<50>	<49>
	leukemic cell infiltration		2	0	4	0
	metastasis:liver tumor		1	0	0	0
	metastasis:uterus tumor		0	1	1	3
[Digestive system]						
tongue			<50>	<48>	<50>	<49>
	leukemic cell infiltration		0	3	2	0
salivary gl			<50>	<48>	<50>	<49>
	leukemic cell infiltration		1	3	3	1
stomach			<50>	<48>	<50>	<49>
	leukemic cell infiltration		7	5	8	3
	metastasis:uterus tumor		0	1	1	0
liver			<50>	<48>	<50>	<49>
	leukemic cell infiltration		10	7	6	5
	metastasis:uterus tumor		4	9	10	6

< a > a : Number of animals examined at the site
b b : Number of animals with lesion

Organ	Findings	Group Name / No. of Animals on Study	Control 50	50 ppm 48	100 ppm 50	200 ppm 49
[Digestive system]						
liver			<50>	<48>	<50>	<49>
	metastasis:ovary tumor		0	0	0	1
pancreas			<50>	<48>	<50>	<49>
	leukemic cell infiltration		0	0	1	0
[Urinary system]						
kidney			<50>	<48>	<50>	<49>
	leukemic cell infiltration		5	3	6	2
	metastasis:uterus tumor		1	5	4	3
	metastasis:lympho node tumor		0	1	0	0
urin bladd			<50>	<48>	<50>	<49>
	leukemic cell infiltration		7	2	7	5
[Endocrine system]						
thyroid			<50>	<48>	<50>	<49>
	leukemic cell infiltration		1	0	0	1
adrenal			<50>	<48>	<50>	<49>
	leukemic cell infiltration		2	0	3	1
	metastasis:uterus tumor		2	0	0	0
[Reproductive system]						
ovary			<50>	<48>	<50>	<49>
	leukemic cell infiltration		9	6	9	4

< a > a : Number of animals examined at the site
b b : Number of animals with lesion

Organ	Findings	Group Name / No. of Animals on Study	Control 50	50 ppm 48	100 ppm 50	200 ppm 49
[Reproductive system]						
ovary			<50>	<48>	<50>	<49>
	metastasis:liver tumor		1	0	0	0
	metastasis:uterus tumor		4	9	9	5
uterus			<50>	<48>	<50>	<49>
	leukemic cell infiltration		4	2	5	4
	metastasis:liver tumor		1	0	0	0
[Nervous system]						
brain			<50>	<48>	<50>	<49>
	leukemic cell infiltration		0	0	3	0
spinal cord			<50>	<48>	<50>	<49>
	leukemic cell infiltration		0	0	1	0
[Special sense organs/appandage]						
Harder gl			<50>	<48>	<50>	<49>
	leukemic cell infiltration		0	0	4	0
[Musculoskeletal system]						
muscle			<50>	<48>	<50>	<49>
	leukemic cell infiltration		1	0	2	0

< a > a : Number of animals examined at the site
b b : Number of animals with lesion

APPENDIX N 5

HISTOLOGICAL FINDINGS: METASTASIS OF TUMOR: SUMMARY,
MOUSE : FEMALE: DEAD AND MORIBUND ANIMALS
(2-YEAR STUDY)

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

HISTOLOGICAL FINDINGS : METASTASIS OF TUMOR (SUMMARY)
DEAD AND MORIBUND ANIMALS (0-105W)

Organ	Findings	Group Name / No. of Animals on Study	Control 21	50 ppm 19	100 ppm 19	200 ppm 16
[Integumentary system/appandage]						
skin/app			<21>	<19>	<19>	<16>
	leukemic cell infiltration		1	0	1	1
subcutis			<21>	<19>	<19>	<16>
	metastasis:liver tumor		1	0	0	0
[Respiratory system]						
nasal cavit			<20>	<19>	<18>	<16>
	leukemic cell infiltration		0	0	3	1
	metastasis:liver tumor		1	0	0	0
	metastasis:uterus tumor		1	0	2	0
lung			<21>	<19>	<19>	<16>
	leukemic cell infiltration		6	6	6	7
	metastasis:liver tumor		1	0	1	0
	metastasis:uterus tumor		0	3	3	1
	metastasis:bone tumor		1	0	0	1
[Hematopoietic system]						
bone marrow			<21>	<19>	<19>	<16>
	leukemic cell infiltration		3	1	3	3
	metastasis:liver tumor		1	0	0	0
	metastasis:uterus tumor		0	1	3	1
lymph node			<21>	<19>	<19>	<16>
	leukemic cell infiltration		4	2	3	1

< a > a : Number of animals examined at the site
b b : Number of animals with lesion

Organ	Findings	Group Name / No. of Animals on Study	Control 21	50 ppm 19	100 ppm 19	200 ppm 16
[Hematopoietic system]						
lymph node			<21>	<19>	<19>	<16>
	metastasis:uterus tumor		1	0	0	0
spleen			<21>	<19>	<19>	<16>
	leukemic cell infiltration		4	2	2	2
[Circulatory system]						
heart			<21>	<19>	<19>	<16>
	leukemic cell infiltration		1	0	3	0
	metastasis:liver tumor		1	0	0	0
	metastasis:uterus tumor		0	0	0	2
[Digestive system]						
tongue			<21>	<19>	<19>	<16>
	leukemic cell infiltration		0	1	1	0
salivary gl			<21>	<19>	<19>	<16>
	leukemic cell infiltration		0	1	3	0
stomach			<21>	<19>	<19>	<16>
	leukemic cell infiltration		4	1	6	2
	metastasis:uterus tumor		0	0	1	0
liver			<21>	<19>	<19>	<16>
	leukemic cell infiltration		7	3	5	4
	metastasis:uterus tumor		3	6	6	5
	metastasis:ovary tumor		0	0	0	1

< a > a : Number of animals examined at the site
b b : Number of animals with lesion

Organ	Findings	Group Name / No. of Animals on Study	Control 21	50 ppm 19	100 ppm 19	200 ppm 16
[Digestive system]						
pancreas			<21>	<19>	<19>	<16>
	leukemic cell infiltration		0	0	1	0
[Urinary system]						
kidney			<21>	<19>	<19>	<16>
	leukemic cell infiltration		1	3	5	1
	metastasis:uterus tumor		0	3	3	3
	metastasis:lympho node tumor		0	1	0	0
urin bladd			<21>	<19>	<19>	<16>
	leukemic cell infiltration		2	2	4	3
[Endocrine system]						
adrenal			<21>	<19>	<19>	<16>
	leukemic cell infiltration		1	0	3	1
	metastasis:uterus tumor		2	0	0	0
[Reproductive system]						
ovary			<21>	<19>	<19>	<16>
	leukemic cell infiltration		7	4	5	3
	metastasis:liver tumor		1	0	0	0
	metastasis:uterus tumor		3	6	6	5
uterus			<21>	<19>	<19>	<16>
	leukemic cell infiltration		3	1	3	2

< a > a : Number of animals examined at the site
b b : Number of animals with lesion

Organ	Findings	Group Name / No. of Animals on Study	Control	50 ppm	100 ppm	200 ppm
			21	19	19	16
[Reproductive system]						
uterus			<21>	<19>	<19>	<16>
	metastasis:liver tumor		1	0	0	0
[Nervous system]						
brain			<21>	<19>	<19>	<16>
	leukemic cell infiltration		0	0	3	0
spinal cord			<21>	<19>	<19>	<16>
	leukemic cell infiltration		0	0	1	0
[Special sense organs/appandage]						
Harder gl			<21>	<19>	<19>	<16>
	leukemic cell infiltration		0	0	4	0
[Musculoskeletal system]						
muscle			<21>	<19>	<19>	<16>
	leukemic cell infiltration		0	0	2	0

< a > a : Number of animals examined at the site
b b : Number of animals with lesion

APPENDIX N 6

HISTOLOGICAL FINDINGS: METASTASIS OF TUMOR: SUMMARY,
MOUSE: FEMALE: SACRIFICED ANIMALS
(2-YEAR STUDY)

Organ	Findings	Group Name / No. of Animals on Study	Control 29	50 ppm 29	100 ppm 31	200 ppm 33
[Integumentary system/appandage]						
skin/app			<29>	<29>	<31>	<33>
	leukemic cell infiltration		1	1	0	0
[Respiratory system]						
nasal cavit			<29>	<29>	<31>	<33>
	metastasis:muscle tumor		0	1	0	0
lung			<29>	<29>	<31>	<33>
	leukemic cell infiltration		3	3	3	2
	metastasis:uterus tumor		1	3	1	0
[Hematopoietic system]						
bone marrow			<29>	<29>	<31>	<33>
	leukemic cell infiltration		3	2	3	4
	metastasis:uterus tumor		1	0	0	0
lymph node			<29>	<29>	<31>	<33>
	leukemic cell infiltration		3	4	1	1
spleen			<29>	<29>	<31>	<33>
	leukemic cell infiltration		3	2	1	0
[Circulatory system]						
heart			<29>	<29>	<31>	<33>
	leukemic cell infiltration		1	0	1	0
	metastasis:uterus tumor		0	1	1	1

< a > a : Number of animals examined at the site
b b : Number of animals with lesion

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

HISTOLOGICAL FINDINGS : METASTASIS OF TUMOR (SUMMARY)
SACRIFICED ANIMALS (105W)

Organ	Findings	Group Name / No. of Animals on Study	Control 29	50 ppm 29	100 ppm 31	200 ppm 33
[Digestive system]						
tongue			<29>	<29>	<31>	<33>
	leukemic cell infiltration		0	2	1	0
salivary gl			<29>	<29>	<31>	<33>
	leukemic cell infiltration		1	2	0	1
stomach			<29>	<29>	<31>	<33>
	leukemic cell infiltration		3	4	2	1
	metastasis:uterus tumor		0	1	0	0
liver			<29>	<29>	<31>	<33>
	leukemic cell infiltration		3	4	1	1
	metastasis:uterus tumor		1	3	4	1
[Urinary system]						
kidney			<29>	<29>	<31>	<33>
	leukemic cell infiltration		4	0	1	1
	metastasis:uterus tumor		1	2	1	0
urin bladd			<29>	<29>	<31>	<33>
	leukemic cell infiltration		5	0	3	2
[Endocrine system]						
thyroid			<29>	<29>	<31>	<33>
	leukemic cell infiltration		1	0	0	1
adrenal			<29>	<29>	<31>	<33>
	leukemic cell infiltration		1	0	0	0

< a > a : Number of animals examined at the site
b b : Number of animals with lesion

STUDY NO. : 0270
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

HISTOLOGICAL FINDINGS : METASTASIS OF TUMOR (SUMMARY)
SACRIFICED ANIMALS (105W)

Organ	Findings	Group Name / No. of Animals on Study	Control	50 ppm	100 ppm	200 ppm
			29	29	31	33
[Reproductive system]						
ovary			<29>	<29>	<31>	<33>
	leukemic cell infiltration		2	2	4	1
	metastasis:uterus tumor		1	3	3	0
uterus			<29>	<29>	<31>	<33>
	leukemic cell infiltration		1	1	2	2
[Musculoskeletal system]						
muscle			<29>	<29>	<31>	<33>
	leukemic cell infiltration		1	0	0	0

< a > a : Number of animals examined at the site
b b : Number of animals with lesion

(JPT150)

APPENDIX O 1

IDENTITY OF 2-METHALLYL CHLORIDE IN THE 2-YEAR INHALATION STUDY

IDENTITY OF 2-METHALLYL CHLORIDE IN THE 2-YEAR INHALATION STUDY

A. Test Substance Lot No.: LKG5978

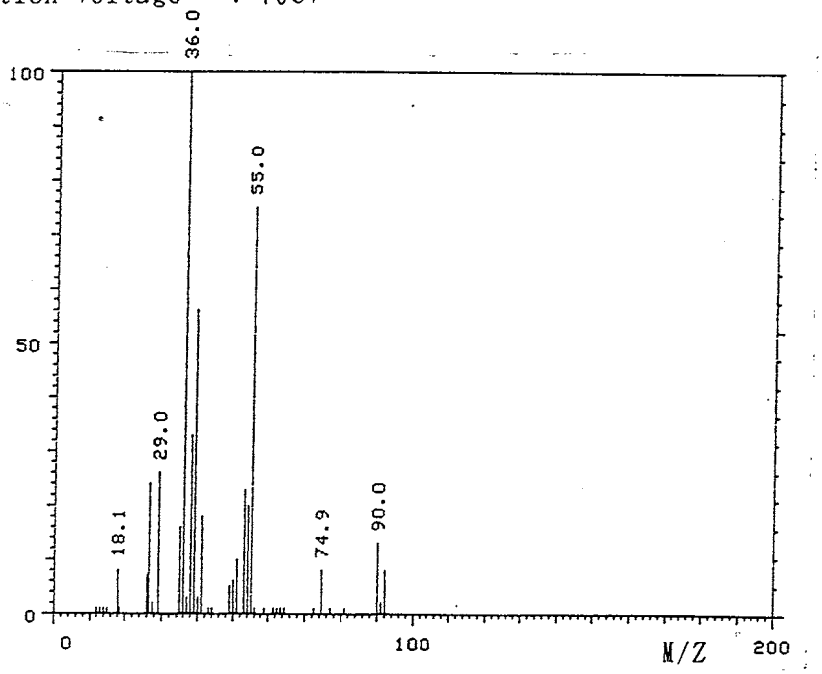
1. Spectral data

Mass Spectrometry

Instrument : Hitachi M-80B Mass Spectrometer

Ionization : EI(Electron Ionization)

Ionization Voltage : 70eV



Mass Spectrum of Test Substance

Results: The mass spectrum was consistent with literature spectrum.

Determined Fragment Peak(M/Z)	Literature Value* Fragment Peak(M/Z)
36.0	36
39.0	39
55.0	55
90.0	90

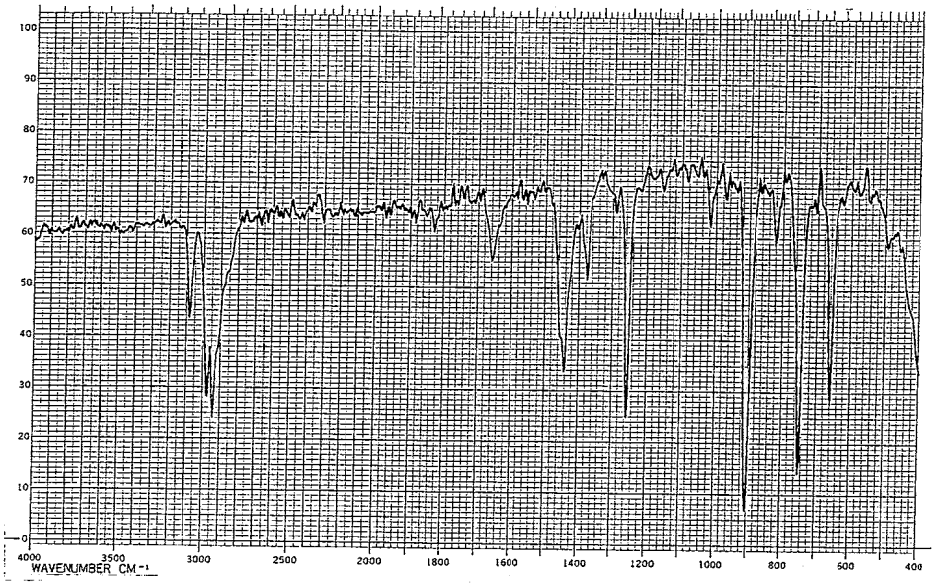
(*EPA/NIH Mass Spectral Data Base (1978) Vol. 1, p. 53.)

Infrared Spectrometry

Instrument : Hitachi 270-30 Infrared Spectrometer

Cell : KBr

Slit : Medium



Infrared Spectrum of Test Substance

Results: The infrared spectrum was consistent with literature spectrum.

Determined Value Wave Number(cm^{-1})	Literature Value* Wave Number(cm^{-1})
480～ 520	
640～ 690	640～ 670
720～ 780	720～ 770
800～ 840	800～ 830
880～ 940	880～ 940
970～ 990	960～ 990
1000～1040	1000～1040
1150～1180	1140～1170
1220～1240	1210～1230
1240～1280	1230～1280
1290～1310	1280～1300
1360～1400	1360～1390
1410～1480	1410～1480
1620～1680	1620～1680
1780～1860	1780～1860
2800～3030	2800～3000
3050～3130	3050～3130

(*Performed by the WAKO PURE PURE CHEMICAL INDUSTRIES, LTD)

2. Conclusions: The result of the mass spectrum and the infrared spectrum agreed with the literature values.
Consequently, the test substance was identified as Methallylchloride.

B. Test Substance Lot No.: CAK4434

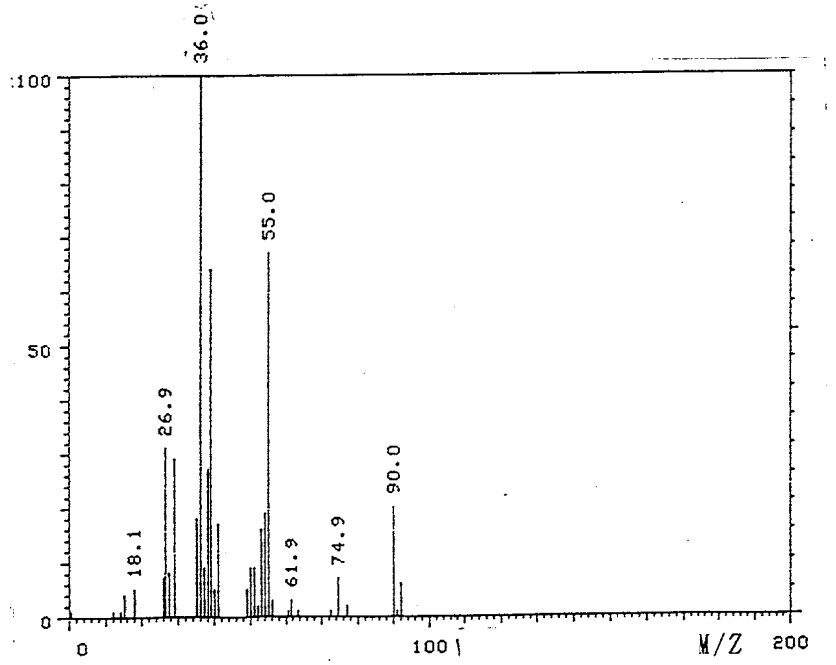
1. Spectral data

Mass Spectrometry

Instrument : Hitachi M-80B Mass Spectrometer

Ionization : EI(Electron Ionization)

Ionization Voltage : 70eV



Mass Spectrum of Test Substance

Results: The mass spectrum was consistent with literature spectrum.

Determined Fragment Peak(M/Z)	Literature Value* Fragment Peak(M/Z)
36.0	36
39.0	39
55.0	55
90.0	90

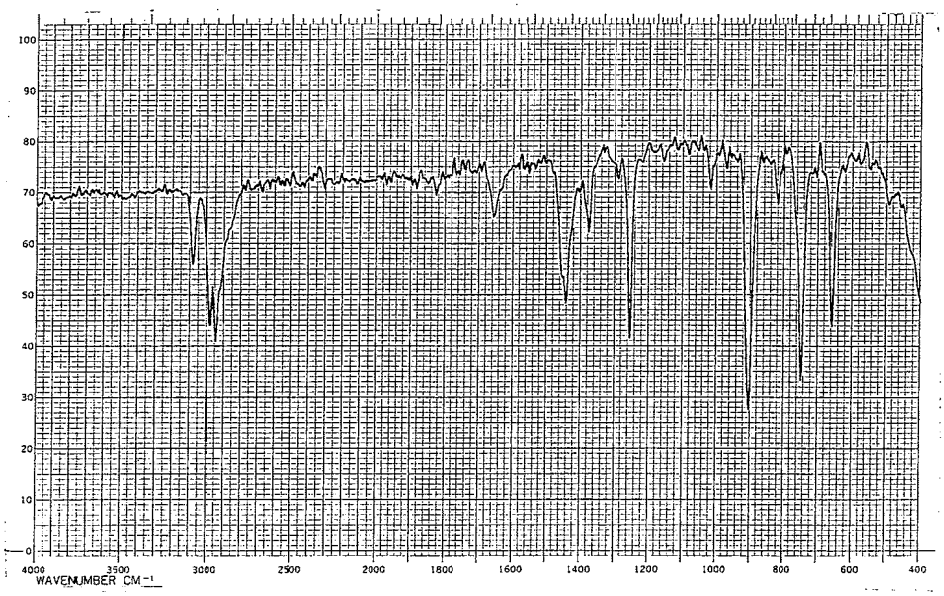
(*EPA/NIH Mass Spectral Data Base (1978) Vol. 1, p. 53.)

Infrared Spectrometry

Instrument : Hitachi 270-30 Infrared Spectrometer

Cell : KBr

Slit : Medium



Infrared Spectrum of Test Substance

Results: The infrared spectrum was consistent with literature spectrum.

Determined Value Wave Number(cm^{-1})	Literature Value* Wave Number(cm^{-1})
480～ 520	
640～ 690	640～ 670
720～ 780	720～ 770
800～ 840	800～ 830
880～ 940	880～ 940
970～ 990	960～ 990
1000～1040	1000～1040
1150～1180	1140～1170
1220～1240	1210～1230
1240～1280	1230～1280
1290～1310	1280～1300
1360～1400	1360～1390
1410～1480	1410～1480
1620～1680	1620～1680
1780～1860	1780～1860
2800～3030	2800～3000
3050～3130	3050～3130

(*Performed by the WAKO PURE PURE CHEMICAL INDUSTRIES, LTD)

2. Conclusions: The result of the mass spectrum and the infrared spectrum agreed with the literature values.
Consequently, the test substance was identified as Methallylchloride.

C. Test Substance Lot No.: SKK4584

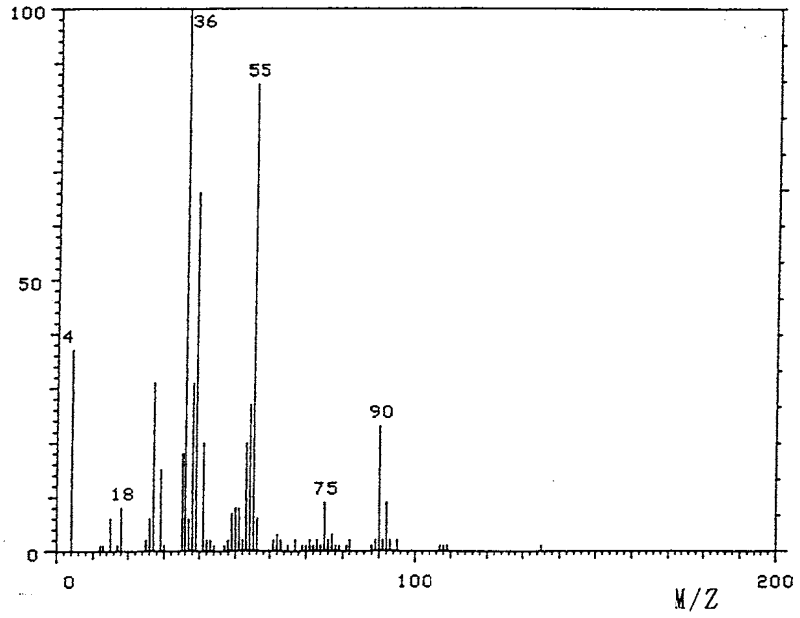
1. Spectral data

Mass Spectrometry

Instrument : Hitachi M-80B Mass Spectrometer

Ionization : EI(Electron Ionization)

Ionization Voltage : 70eV



Mass Spectrum of Test Substance

Results: The mass spectrum was consistent with literature spectrum.

Determined Fragment Peak(M/Z)	Literature Value* Fragment Peak(M/Z)
36.0	36
39.0	39
55.0	55
90.0	90

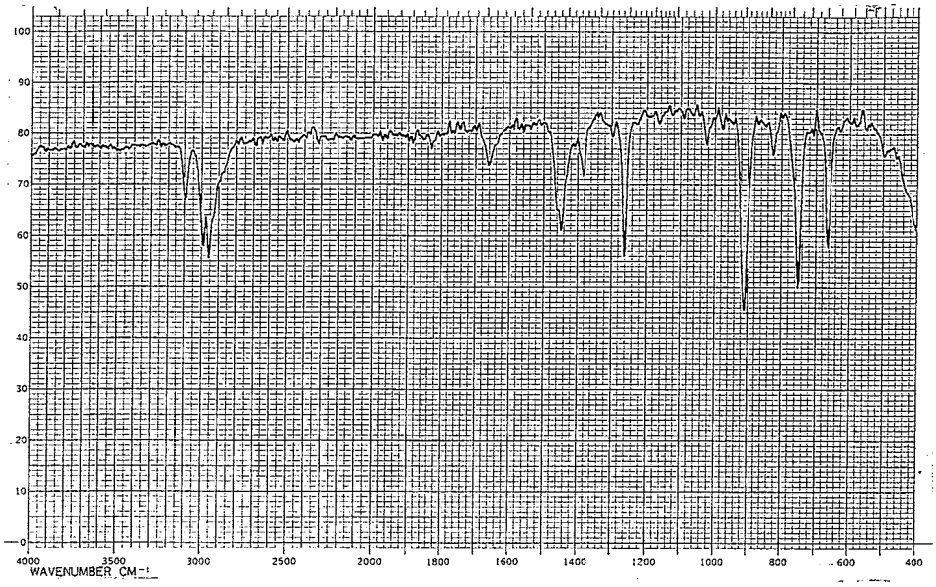
(*EPA/NIH Mass Spectral Data Base (1978) Vol. 1, p. 53.)

Infrared Spectrometry

Instrument : Hitachi 270-30 Infrared Spectrometer

Cell : KBr

Slit : Medium



Infrared Spectrum of Test Substance

Results: The infrared spectrum was consistent with literature spectrum.

Determined Value Wave Number(cm^{-1})	Literature Value* Wave Number(cm^{-1})
480～ 520	
640～ 690	640～ 670
720～ 780	720～ 770
800～ 840	800～ 830
880～ 940	880～ 940
970～ 990	960～ 990
1000～1040	1000～1040
1150～1180	1140～1170
1220～1240	1210～1230
1240～1280	1230～1280
1290～1310	1280～1300
1360～1400	1360～1390
1410～1480	1410～1480
1620～1680	1620～1680
1780～1860	1780～1860
2800～3030	2800～3000
3050～3130	3050～3130

(*Performed by the WAKO PURE PURE CHEMICAL INDUSTRIES, LTD)

2. Conclusions: The result of the mass spectrum and the infrared spectrum agreed with the literature values.
Consequently, the test substance was identified as Methallylchloride.

APPENDIX O 2
STABILITY OF 2-METHALLYL CHLORIDE IN THE 2-YEAR INHALATION STUDY

STABILITY OF 2-METHALLYL CHLORIDE IN THE 2-YEAR INHALATION STUDY

A. Test Substance Lot No. : LKG5978

1. Sample: This lot was used from 1994.5.25 to 1994.11.8. Test substance was stored at room temperature .

2. Infrared Spectrometry

Instrument : Hitachi 270-30 Infrared Spectrometer

Cell : KBr

Slit : Medium

Results: Infrared spectrum of the test substance agreed with before use and after use.

1994.05.25(date analyzed) Wave Number(cm^{-1})	1994.11.08(date analyzed) Wave Number(cm^{-1})
480～ 520	480～ 520
640～ 690	640～ 690
720～ 780	720～ 780
800～ 840	800～ 840
880～ 940	880～ 940
970～ 990	970～ 990
1000～1040	1000～1040
1150～1180	1150～1180
1220～1240	1220～1240
1240～1280	1240～1280
1290～1310	1290～1310
1360～1400	1360～1400
1410～1480	1410～1480
1620～1680	1620～1680
1780～1860	1780～1860
2800～3030	2800～3030
3050～3130	3050～3130

3. Gas Chromatography

Instrument : Hewlett Packard 5890A

Column : Carbowax 20M(0.2mmϕ × 50m)

Column Temperature : 80°C

Flow Rate : 0.9 ml/min

Detector : FID(Flame Ionization Detector)

Injection Volume : 1 μl

Results: Gas chromatography indicated one major peak(peak No. 2) and two impurities(peak No. 1, 3 < 2% of total area) analyzed at 1994. 5. 25 and one major peak(peak No. 2) and two impurities(peak No. 1, 3 < 2% of total area) analyzed at 1994. 11. 8. It was identified only by comparing its gas chromatograph with that of the 1-Chloro-2-methyl-1-propene(peak No. 1) and 1, 2-Dichloroisobutane (peak No. 3) in the Methallylchloride, the amount in the test substance were 1. 4% and 0. 15% at 1994. 5. 25. No new trace impurity peak in the test substance analyzed at 1994. 11. 8 was detected.

Date (date analyzed)	Peak No.	Retention Time(min)	AREA(%)
1994. 05. 25	1	4. 14	1. 6
	2	4. 442	98. 3
	3	5. 86	0. 1
1994. 11. 08	1	4. 138	1. 6
	2	4. 442	98. 3
	3	5. 86	0. 1

4. Conclusions: The results indicated that the test substance did not change when stored in the dark at room temperature during this period(for about 5 months).

B. Test Substance Lot No.: CAK4434

1. Sample: This lot was used from 1994.11.9 to 1995.8.8. Test substance was stored at room temperature .

2. Infrared Spectrometry

Instrument : Hitachi 270-30 Infrared Spectrometer

Cell : KBr

Slit : Medium

Results: Infrared spectrum of the test substance agreed with before use and after use.

1994.11.02(date analyzed) Wave Number(cm^{-1})	1995.08.08(date analyzed) Wave Number(cm^{-1})
480～ 520	480～ 520
640～ 690	640～ 690
720～ 780	720～ 780
800～ 840	800～ 840
880～ 940	880～ 940
970～ 990	970～ 990
1000～1040	1000～1040
1150～1180	1150～1180
1220～1240	1220～1240
1240～1280	1240～1280
1290～1310	1290～1310
1360～1400	1360～1400
1410～1480	1410～1480
1620～1680	1620～1680
1780～1860	1780～1860
2800～3030	2800～3030
3050～3130	3050～3130

3. Gas Chromatography

Instrument : Hewlett Packard 5890A

Column : Carbowax 20M(0.2mmϕ × 50m)

Column Temperature : 80°C

Flow Rate : 0.9 ml/min

Detector : FID(Flame Ionization Detector)

Injection Volume : 1 μl

Results: Gas chromatography indicated one major peak(peak No. 2) and two impurities(peak No. 1, 3 < 2% of total area) analyzed at 1994. 11. 2 and one major peak(peak No. 2) and two impurities(peak No. 1, 3 < 2% of total area) analyzed at 1995. 8. 8. It was identified only by comparing its gas chromatograph with that of the 1-Chloro-2-methyl-1-propene(peak No. 1) and 1, 2-Dichloroisobutane (peak No. 3) in the Methallylchloride, the amount in the test substance were 1. 4% and 0. 15% at 1994. 11. 2. No new trace impurity peak in the test substance analyzed at 1995. 8. 8 was detected.

Date (date analyzed)	Peak No.	Retention Time(min)	AREA(%)
1994. 11. 02	1	4. 14	1. 6
	2	4. 442	98. 3
	3	5. 863	0. 1
1995. 08. 08	1	4. 142	1. 6
	2	4. 445	98. 3
	3	5. 863	0. 1

4. Conclusions: The results indicated that the test substance did not change when stored in the dark at room temperature during this period(for about 9 months).

C. Test Substance Lot No. : SKK4584

1. Sample: This lot was used from 1994.8.9 to 1996.6.20. Test substance was stored at room temperature .

2. Infrared Spectrometry

Instrument : Hitachi 270-30 Infrared Spectrometer

Cell : KBr

Slit : Medium

Results: Infrared spectrum of the test substance agreed with before use and after use.

1995.08.08(date analyzed) Wave Number(cm^{-1})	1996.07.09(date analyzed) Wave Number(cm^{-1})
480～ 520	480～ 520
640～ 690	640～ 690
720～ 780	720～ 780
800～ 840	800～ 840
880～ 940	880～ 940
970～ 990	970～ 990
1000～1040	1000～1040
1150～1180	1150～1180
1220～1240	1220～1240
1240～1280	1240～1280
1290～1310	1290～1310
1360～1400	1360～1400
1410～1480	1410～1480
1620～1680	1620～1680
1780～1860	1780～1860
2800～3030	2800～3030
3050～3130	3050～3130

3. Gas Chromatography

Instrument : Hewlett Packard 5890A

Column : Carbowax 20M(0.2mmϕ × 50m)

Column Temperature : 80°C

Flow Rate : 0.9 ml/min

Detector : FID(Flame Ionization Detector)

Injection Volume : 1 μl

Results: Gas chromatography indicated one major peak(peak No. 2) and two impurities(peak No. 1, 3 < 2% of total area) analyzed at 1995. 8. 8 and one major peak(peak No. 2) and two impurities(peak No. 1, 3 < 2% of total area) analyzed at 1996. 7. 9. It was identified only by comparing its gas chromatograph with that of the 1-Chloro-2-methyl-1-propene(peak No. 1) and 1, 2-Dichloroisobutane (peak No. 3) in the Methallylchloride, the amount in the test substance were 1. 4% and 0. 15% at 1995. 8. 8. No new trace impurity peak in the test substance analyzed at 1996. 7. 9 was detected.

Date (date analyzed)	Peak No.	Retention Time(min)	AREA(%)
1995. 08. 08	1	4. 14	1. 6
	2	4. 442	98. 3
	3	5. 863	0. 1
1996. 07. 09	1	4. 143	1. 6
	2	4. 445	98. 3
	3	5. 865	0. 1

4. Conclusions: The results indicated that the test substance did not change when stored in the dark at room temperature during this period(for about 11 months).

APPENDIX P 1

CONCENTRATION OF 2-METHALLYL CHLORIDE IN THE INHALATION CHAMBER OF THE 2-YEAR INHALATION STUDY

CONCENTRATION OF 2-METHALLYL CHLORIDE IN THE INHALATION CHAMBER OF THE 2-YEAR INHALTION STUDY

Group Name	Concentration (ppm) Mean ± S.D.
Control	0.0 ± 0.0
50ppm	49.6 ± 0.3
100ppm	99.5 ± 0.4
200ppm	199.8 ± 0.8

APPENDIX P 2

ENVIRONMENTAL CONDITIONS OF INHALATION CHAMBER IN THE 2-YEAR INHALATION STUDY OF 2-METHALLYL CHLORIDE

ENVIRONMENTAL CONDITIONS OF INHALATION CHAMBER IN THE 2-YEAR INHALATION STUDY OF 2-METHALLYL CHLORIDE

Group Name	Temperature(℃) Mean ± S.D.	Humidity(%) Mean ± S.D.	Ventilation Rate(L/min) Mean ± S.D.	Room Air Change(time/h) Mean
Control	22.1 ± 0.1	52.0 ± 1.9	738.3 ± 5.5	12.1
50ppm	22.1 ± 0.1	50.3 ± 1.8	736.8 ± 4.5	11.9
100ppm	22.2 ± 0.2	51.8 ± 2.0	739.7 ± 4.7	12.0
200ppm	22.1 ± 0.2	52.4 ± 1.7	735.6 ± 5.4	11.9

APPENDIX Q 1

METHODS FOR HEMATOLOGY, BIOCHEMISTRY AND URINALYSIS IN THE 2-YEAR INHALATION STUDY OF 2-METHALLYL CHLORIDE

METHODS FOR HEMATOLOGY, BIOCHEMISTRY AND URINALYSIS IN THE 2-YEAR INHALATION STUDY OF 2-METHALLYL CHLORIDE

Item	Method
Hematology	
Red blood cell (RBC)	Light scattering method [1]
Hemoglobin (Hgb)	Cyanmethemoglobin method [1]
Hematocrit (Hct)	Calculated as RBC × MCV/10 [1]
Mean corpuscular volume (MCV)	Light scattering method [1]
Mean corpuscular hemoglobin (MCH)	Calculated as Hgb/RBC × 10 [1]
Mean corpuscular hemoglobin concentration (MCHC)	Calculated as Hgb/Hct × 100 [1]
Platelet	Light scattering method [1]
White blood cell (WBC)	Light scattering method [1]
Differential WBC	Pattern recognition method [2] (May-Grunwald-Giemsa staining)
Biochemistry	
Total protein (TP)	Biuret method [3]
Albumin (Alb)	BCG method [3]
A/G ratio	Calculated as Alb/(TP-Alb) [3]
T-bilirubin	Alkaline azobilirubin method [3]
Glucose	Enzymatic method (GLK·G-6-PDH) [3]
T-cholesterol	Enzymatic method (CE·COD·POD) [3]
Triglyceride	Enzymatic method (LPL·GK·GPO·POD) [3]
Glutamic oxaloacetic transaminase (GOT)	UV·Rate method [3]
Glutamic pyruvic transaminase (GPT)	UV·Rate method [3]
Lactate dehydrogenase (LDH)	UV·Rate method [3]
Alkaline phosphatase (ALP)	p-Nitrophenylphosphate method [3]
Creatine phosphokinase (CPK)	UV·Rate method [3]
Urea nitrogen	Enzymatic method (Urease·GLDH) [3]
Sodium	Ion selective electrode method [3]
Potassium	Ion selective electrode method [3]
Chloride	Ion selective electrode method [3]
Calcium	OCPC method [3]
Inorganic phosphorus	Enzymatic method (PNP·XOD·POD) [3]
Urinalysis	
pH,Protein,Glucose,Ketone body,Occult Blood, Urobilinogen	Urinalysis reagent paper method [4]

1) Automatic blood cell analyzer (Technicon H·1 : Technicon Instruments Corporation,USA)

2) Automatic blood cell differential analyzer (Hitachi 8200 : Hitachi,Ltd.,Japan)

3) Automatic analyzer (Hitachi 7070 : Hitachi,Ltd.,Japan)

4) Ames reagent strips for urinalysis (Uro-Labstix : Bayer-Sankyo Co.,Ltd.,Japan)

APPENDIX Q 2

UNITS AND DECIMAL PLACE FOR HEMATOLOGY AND BIOCHEMISTRY IN THE 2-YEAR INHALATION STUDY OF 2-METHALLYL CHLORIDE

UNITS AND DECIMAL PLACE FOR HEMATOLOGY AND BIOCHEMISTRY IN THE 2-YEAR INHALATION STUDY OF 2-METHALLYL CHLORIDE

Item	Unit	Decimal place
Hematology		
Red blood cell (RBC)	$\times 10^{6} / \mu L$	2
Hemoglobin	g/dL	1
Hematocrit	%	1
Mean corpuscular volume (MCV)	fL	1
Mean corpuscular hemoglobin (MCH)	pg	1
Mean corpuscular hemoglobin concentration (MCHC)	g/dL	1
Platelet	$\times 10^{3} / \mu L$	0
White blood cell (WBC)	$\times 10^{3} / \mu L$	2
Differential WBC	%	0
Biochemistry		
Total protein	g/dL	1
Albumin	g/dL	1
A/G ratio	-	1
T-bilirubin	mg/dL	2
Glucose	mg/dL	0
T-cholesterol	mg/dL	0
Triglyceride	mg/dL	0
Glutamic oxaloacetic transminase (GOT)	IU/L	0
Glutamic pyruvic transaminase (GPT)	IU/L	0
Lactate dehydrogenase (LDH)	IU/L	0
Alkaline phosphatase (ALP)	IU/L	0
Creatine phosphokinase (CPK)	IU/L	0
Urea nitrogen	mg/dL	1
Sodium	mEq/L	0
Potassium	mEq/L	1
Chloride	mEq/L	0
Calcium	mg/dL	1
Inorganic phosphorus	mg/dL	1