

o-フェニレンジアミン二塩酸塩のマウスを用いた
経口投与によるがん原性試験(混水試験)報告書

試験番号：0372

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APPENDIX A 1

CLINICAL OBSERVATION : SUMMARY, MOUSE : MALE

(2-YEAR STUDY)

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		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	14-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MORBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOBRECTION	Control	0	1	1	0	1	1	1	1	1	1	0	0	0	0
	500 ppm	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	1	1	1	1	1	1	0	0	0	0
	2000 ppm	0	0	2	0	1	1	2	2	3	2	2	2	2	2
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED PERI GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0372
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 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		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	28-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MORTBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	1	1	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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED PERI GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	1	1	1	1	1	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED PERI GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

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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	0	0	0	0
	500 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED PERI GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0372
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CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

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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	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	1	1	2	2	2	2	2	2	3	3	3	3	3	3
	1000 ppm	0	0	0	0	1	1	1	1	1	1	1	1	1	1
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED PERI GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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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	0	0	0	0	0	0	0	0	0	1	2	2	2	2
	500 ppm	4	4	4	4	4	4	4	5	5	5	6	6	6	6
	1000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2000 ppm	1	1	1	1	1	1	1	2	2	2	2	2	2	2
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	1	0	1	1	1	1	1	1	1	1	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	1	1	1	1	1	0	0	0	0	0	0	1
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED PERI GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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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	2	2	2	2	2	2	2	2	2	3	4	5	6	6
	500 ppm	6	6	7	7	7	7	7	7	7	9	9	9	10	10
	1000 ppm	1	1	1	1	1	1	1	1	1	2	2	2	2	3
	2000 ppm	2	2	3	4	4	5	5	5	6	6	7	7	7	7
MORTUEND SACRIFICE	Control	0	0	0	0	1	1	1	1	1	1	1	1	1	2
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	1	1	1	1	1	1	1	1	1	1	1
	2000 ppm	0	0	0	0	0	1	2	2	2	2	2	2	2	3
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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	1
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	1	1	1	0	0	0	0	0
	2000 ppm	0	0	0	0	0	1	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	1	0	0	0	0	0	0	1	1	0	1
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	1000 ppm	0	0	0	0	0	0	1	1	1	0	0	0	1	1
	2000 ppm	1	2	1	1	1	0	2	1	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED PERI GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day						
		98-7	99-7	100-7	101-7	102-7	103-7	104-7
DEATH	Control	7	8	8	9	9	10	10
	500 ppm	10	10	10	10	10	10	10
	1000 ppm	3	4	4	7	7	7	7
	2000 ppm	7	7	7	7	7	8	8
MORTUARY SACRIFICE	Control	2	2	2	2	2	2	2
	500 ppm	0	0	0	1	1	1	2
	1000 ppm	1	1	1	1	1	1	1
	2000 ppm	3	3	3	3	3	3	3
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0
	500 ppm	0	0	0	1	0	0	0
	1000 ppm	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0
HUNCHBACK POSITION	Control	1	0	0	1	1	1	0
	500 ppm	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0
WASTING	Control	0	0	0	1	1	1	0
	500 ppm	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0
PILOERECTION	Control	2	1	2	2	2	1	2
	500 ppm	0	0	0	0	2	2	1
	1000 ppm	1	1	1	0	0	0	0
	2000 ppm	0	0	0	0	1	0	0
FROG BELLY	Control	0	0	0	1	2	5	2
	500 ppm	0	0	0	0	0	3	1
	1000 ppm	0	0	0	0	0	1	0
	2000 ppm	0	0	0	0	0	1	0
SOILED PERI GENITALIA	Control	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	1	0
	1000 ppm	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		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	14-7
EXOPIHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. MANDIBULAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		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	28-7
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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	1	1	1	1	1	1
	500 ppm	0	0	1	1	1	1	1	1	1	1	1	1	1	1
	1000 ppm	0	1	1	1	1	1	1	1	1	1	1	1	1	1
	2000 ppm	0	0	1	1	1	1	1	1	1	1	1	1	1	1
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. MANDIBULAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	Control	1	1	1	0	1	1	1	1	1	1	1	1	1	1
	500 ppm	1	1	1	0	1	1	1	1	1	1	1	1	1	1
	1000 ppm	2	2	2	0	2	2	2	2	2	3	3	3	3	3
	2000 ppm	1	1	1	0	1	1	1	1	1	1	0	0	0	0
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. MANDIBULAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1000 ppm	3	3	3	3	3	3	3	3	3	3	3	3	4	4
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. MANDIBULAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	1
	2000 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	2	2
	500 ppm	1	1	1	2	2	2	2	2	1	1	1	1	1	1
	1000 ppm	4	4	4	4	4	4	3	3	3	3	3	3	5	4
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. MANDIBULAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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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
	500 ppm	1	1	1	1	2	2	2	2	2	2	2	2	2	2
	1000 ppm	0	0	1	1	1	1	1	1	1	1	1	1	1	1
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	1	1	1	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	1	1	1	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	1000 ppm	1	1	0	0	0	0	0	0	0	0	0	0	2	2
	2000 ppm	0	0	0	0	1	1	1	0	0	0	0	0	0	0
INTERNAL MASS	Control	2	2	2	1	1	1	1	1	6	6	5	5	7	2
	500 ppm	0	0	1	1	1	1	1	0	0	0	0	0	1	1
	1000 ppm	4	4	4	4	3	3	3	3	3	3	3	3	3	3
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. MANDIBULAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day			87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7
		84-7	85-7	86-7											
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	2	2	2	2	2	2	2	2	2	1	1	1	1	1
	1000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	1	0	0	0	0	0	2	1	1	1	0	0	0
	1000 ppm	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	Control	2	2	2	2	2	2	4	4	4	4	5	4	4	4
	500 ppm	1	1	1	1	1	1	1	1	1	1	1	3	3	4
	1000 ppm	4	4	4	4	4	4	5	5	5	5	6	6	6	5
	2000 ppm	1	2	1	1	1	2	1	2	1	1	3	3	3	2
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. MANDIBULAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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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
	500 ppm	1	1	1	1	1	1	1
	1000 ppm	1	1	1	1	1	1	1
	2000 ppm	0	0	0	0	0	0	0
EYE OPACITY	Control	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0
CATARACT	Control	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0
EXTERNAL MASS	Control	1	0	1	1	1	0	0
	500 ppm	0	0	0	0	0	0	0
	1000 ppm	2	2	2	1	1	1	1
	2000 ppm	0	0	0	0	1	2	2
INTERNAL MASS	Control	3	3	3	4	5	6	6
	500 ppm	4	4	6	6	5	7	6
	1000 ppm	5	5	6	6	8	11	11
	2000 ppm	2	2	3	5	5	4	4
M. NOSE	Control	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0
M. EYE	Control	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0
	1000 ppm	1	1	1	1	1	1	1
	2000 ppm	0	0	0	0	0	0	0
M. MANDIBULAR	Control	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		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	14-7
M. EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		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	28-7
M. EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7
M. EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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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. EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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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. EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	1
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day				73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7
		70-7	71-7	72-7												
M. EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	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	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	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	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	2000 ppm	0	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	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	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	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	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	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day				87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7
		84-7	85-7	86-7												
M. EAR	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0		0	0	0	0	1	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	1	1	1		1	1	1	1	1	1	1	1	1	1	1
	2000 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
	500 ppm	0	0	0		0	0	0	0	1	1	1	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	1	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0		0	0	0	0	0	0	0	1	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0		0	0	0	0	0	1	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day						
		98-7	99-7	100-7	101-7	102-7	103-7	104-7
M. EAR	Control	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0
M. NECK	Control	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0
M. BREAST	Control	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0
	1000 ppm	1	1	1	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0
M. ABDOMEN	Control	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0
M. HINDLIMB	Control	0	0	1	1	1	0	0
	500 ppm	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0
M. GENITALIA	Control	1	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	1	2	2
ANEMIA	Control	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		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	14-7
TORTICOLLIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NOISY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRA. SOUND	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration		Week-day											
		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	28-7
TORTICOLLIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NOISY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRA. SOUND	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7
TORTICOLLIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	1	1	1	1	1	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NOISY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRA. SOUND	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NOISY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRA. SOUND	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NOISY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRA. SOUND	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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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	1	1	1	1	1	1	1	1	1	1	1
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	1	1	1	1	1	1	1	1	1	1	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NOISY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	1	1	1	1	1	1	1	1	1	1	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	1	1	1	1	1	1	1	1	1	1	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	1	1	1	1	1	1	1	1	1	1	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRA. SOUND	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	1	1	1	1	1	1	1	1	1	1	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day				87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7
		84-7	85-7	86-7												
TORTICOLLIS	Control	1	1	1		1	1	2	2	2	2	1	1	1	1	0
	500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	2000 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	1	2	1	1	0
	500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	1	1
	2000 ppm	0	0	0		0	1	1	0	0	0	0	0	0	1	0
NOISY	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	2000 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	1	2	1	1	0
	500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	1	1
	2000 ppm	0	0	0		0	1	1	0	0	0	0	0	0	1	0
TACHYPNEA	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRA. SOUND	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
RED URINE	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
YELLOW URINE	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0

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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
	500 ppm	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	1	0	0	0	1	1	0
	500 ppm	0	0	0	1	0	1	0
	1000 ppm	1	1	2	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0
NOISY	Control	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0
ABNORMAL RESPIRATION	Control	1	0	0	0	1	1	0
	500 ppm	0	0	0	1	0	1	0
	1000 ppm	1	1	2	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0
TACHYPNEA	Control	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0
ABNORMAL RESPIRA. SOUND	Control	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0
RED URINE	Control	0	0	0	0	0	0	0
	500 ppm	1	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0
YELLOW URINE	Control	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	1	0	0

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Clinical sign	Group Name	Administration Week-day													
		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	14-7
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OLIGO STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	2	0	2	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	2	0	1	0	0	0	0	0
	2000 ppm	0	0	2	0	0	0	0	0	0	0	1	1	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	50	49	49	50	49	49	49	49	49	49	50	50	50	50
	500 ppm	50	50	50	50	48	50	48	50	50	50	50	50	50	50
	1000 ppm	50	50	50	50	49	49	47	49	48	49	50	50	50	50
	2000 ppm	50	50	48	50	49	49	48	48	47	48	47	47	48	48

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Clinical sign	Group Name	Administration Week-day		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	28-7
		15-7	16-7														
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OLIGO-STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	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	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	50	50	50	50	50	50	50	50	50	49	49	49	49	49	49	49
	500 ppm	50	50	49	49	49	49	49	49	49	49	49	49	49	49	49	49
	1000 ppm	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49
	2000 ppm	49	49	48	49	49	49	49	49	49	49	49	49	49	49	49	49

(HAN190)

BAIS 4

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OLIGO-STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	1	1	0	0	0	1	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	49	49	49	50	49	49	49	49	49	49	49	49	49	49
	500 ppm	49	49	49	50	49	48	48	48	48	48	48	48	48	48
	1000 ppm	48	48	48	50	48	48	48	48	48	47	47	47	47	46
	2000 ppm	49	49	49	50	49	49	49	49	49	49	50	49	49	49

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

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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
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OLIGO-STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 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
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	49	49	49	49	49	49	49	49	49	49	49	49	49	49
	500 ppm	48	48	48	48	48	48	48	48	48	48	48	48	48	48
	1000 ppm	47	47	47	47	47	47	47	47	47	47	47	47	46	46
	2000 ppm	49	49	49	49	49	49	49	49	49	49	49	49	49	49

(HANI90)

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STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 101

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

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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
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	1	0	0	1	0	0	0	1	2	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OLIGO-STOOL	Control	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	500 ppm	0	0	0	0	1	0	0	2	0	0	1	1	2	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	1	0	0	0	0	0	0	1	0	0	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	49	49	49	49	49	49	49	48	49	49	49	49	48	48
	500 ppm	48	48	47	46	45	46	46	44	46	46	45	45	44	44
	1000 ppm	46	46	46	46	45	45	45	45	45	45	45	45	43	44
	2000 ppm	48	49	49	49	49	49	49	48	49	49	49	49	49	49

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
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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
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	1	0	0	0	0	0	1	1	1	1	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OLIGO-STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	1	0	0	0	0	0	0	0	1	1	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	1	1	1	1	0	0	1	0	0	0	1	2
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	48	48	48	48	48	48	48	48	43	42	42	42	40	45
	500 ppm	44	44	43	43	42	42	42	42	42	42	42	42	41	41
	1000 ppm	44	44	44	44	45	45	45	45	45	45	45	45	44	44
	2000 ppm	49	49	48	48	48	48	48	48	47	48	48	48	47	46

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
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Clinical sign	Group Name	Administration Week-day				87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7
		84-7	85-7	86-7												
SMALL STOOL	Control	0	0	1	1	0	0	0	0	0	1	3	3	3	1	2
	500 ppm	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0
	1000 ppm	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	1	2	1	1	2	0	0	0	0	0	0	1	1	1	0
OLIGO-STOOL	Control	0	0	1	0	0	0	0	0	1	1	3	3	2	1	1
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	1000 ppm	0	0	1	0	0	0	0	1	1	0	0	0	0	1	0
	2000 ppm	2	3	3	2	3	0	1	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	0
	500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	45	45	44	44	44	44	44	42	41	41	40	39	39	39	37
	500 ppm	41	40	40	40	40	40	40	40	38	38	38	38	36	36	35
	1000 ppm	43	43	42	42	42	42	42	40	40	40	40	39	39	39	39
	2000 ppm	46	45	44	44	43	42	41	41	41	41	41	38	38	38	38

(HAN190)

BAIS 4

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day						
		98-7	99-7	100-7	101-7	102-7	103-7	104-7
SMALL STOOL	Control	0	0	0	0	0	0	0
	500 ppm	0	0	0	1	0	0	0
	1000 ppm	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0
OLIGO-STOOL	Control	2	1	1	0	2	2	0
	500 ppm	0	0	1	1	2	1	0
	1000 ppm	0	0	1	0	0	0	0
	2000 ppm	0	0	0	0	2	0	1
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0
	500 ppm	0	0	0	1	0	0	0
	1000 ppm	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0
NON REMARKABLE	Control	36	36	35	34	33	27	30
	500 ppm	34	35	33	33	32	28	30
	1000 ppm	39	38	36	35	33	29	30
	2000 ppm	38	38	37	35	34	32	33

(IAN190)

BAIS 4

APPENDIX A 2

CLINICAL OBSERVATION : SUMMARY, MOUSE : FEMALE
(2-YEAR STUDY)

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day													
		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	14-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERRECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	3	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day													
		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	28-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
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CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

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Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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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	1	1	1	1	1	2	2	2	2	2
	1000 ppm	0	0	0	0	0	1	1	1	1	1	1	1	1	1
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	1	1	1	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	1	1	0	1	1	1	1	1	0	0
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	1	1	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	1	1	0	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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		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
	1000 ppm	1	1	1	1	1	1	1	1	1	2	2	2	2	2
	2000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	4000 ppm	1	1	1	1	1	1	1	2	2	2	2	2	2	2
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	4000 ppm	0	0	0	0	0	0	0	0	1	1	1	1	1	2
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0	1	1	1	1	1	1	1	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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		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	2	2	2	2	3	3	3	4	6	8	9	9
	1000 ppm	2	2	2	3	4	4	4	5	5	5	6	6	7	8
	2000 ppm	1	1	2	2	2	3	3	3	4	4	5	5	5	6
	4000 ppm	2	2	2	2	3	3	3	3	4	4	4	5	5	5
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTON	Control	1	1	1	1	1	2	1	1	1	1	1	1	1	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	0
	4000 ppm	1	1	1	1	0	0	0	0	0	1	1	1	2	2
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	1	1	1	1	1	1	1	1	1	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1

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		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	11	11	11	11	11	13	13	14	14	14	15	15
	1000 ppm	8	8	8	9	9	9	10	12	13	13	13	14	14	16
	2000 ppm	6	7	7	8	10	10	10	11	11	12	13	13	13	14
	4000 ppm	5	5	6	6	7	7	7	7	8	9	9	9	9	9
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	1	1	1	1	1
	2000 ppm	0	0	1	1	1	1	1	1	1	1	3	3	3	3
	4000 ppm	0	0	0	0	0	0	0	1	1	1	1	1	1	1
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	2	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	1	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1000 ppm	0	0	0	0	0	0	0	0	1	0	0	0	1	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	2
	4000 ppm	2	2	2	2	2	4	5	5	4	3	2	2	2	6
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1

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		98-7	99-7	100-7	101-7	102-7	103-7	104-7
DEATH	Control	15	16	18	19	20	22	24
	1000 ppm	16	17	17	17	19	20	20
	2000 ppm	14	15	16	17	19	19	19
	4000 ppm	9	10	11	11	13	14	14
MORIBUND SACRIFICE	Control	0	0	0	0	0	1	2
	1000 ppm	1	1	1	1	1	1	1
	2000 ppm	3	3	3	3	3	3	3
	4000 ppm	1	1	1	2	2	2	2
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	1	0
	1000 ppm	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0
HUNCHBACK POSITION	Control	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0
	2000 ppm	1	1	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	1
	2000 ppm	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0
PILOERECTION	Control	1	1	2	2	2	2	1
	1000 ppm	0	0	0	0	0	0	0
	2000 ppm	2	1	1	0	0	0	0
	4000 ppm	6	6	8	9	8	8	8
FROG BELLY	Control	0	1	1	0	1	2	1
	1000 ppm	0	0	0	1	0	0	0
	2000 ppm	0	0	1	0	0	0	0
	4000 ppm	0	0	0	0	2	2	3
EXOPHTHALMOS	Control	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0
	4000 ppm	1	1	1	1	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		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	14-7
EXTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ORAL CAVITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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		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	28-7
EXTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ORAL CAVITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7
EXTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	1	1	1	0	1	1	1	1	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	1	1	1	1	1	1
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ORAL CAVITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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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
EXTERNAL MASS	Control	0	0	0	0	0	0	0	0	1	1	1	1	1	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	1	1	1	1	1	1	2	2	1	1	1	1
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	4000 ppm	1	1	1	1	1	1	0	0	0	0	1	1	1	1
M. NOSE	Control	0	0	0	0	0	0	0	0	1	1	1	1	1	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ORAL CAVITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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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
EXTERNAL MASS	Control	1	1	1	1	2	2	2	2	2	2	2	2	2	2
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	1	1	1	1	1
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	2	3	3	3	3	3	3	3	5	4	4	5	5	6
	2000 ppm	1	2	2	2	2	2	2	2	2	2	3	3	3	4
	4000 ppm	1	1	1	0	1	1	2	1	1	1	1	1	1	4
M. NOSE	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ORAL CAVITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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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
		70-7	71-7														
EXTERNAL MASS	Control	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2
INTERNAL MASS	Control	1	2	2	3	3	3	1	2	2	3	1	1	0	0	0	0
	1000 ppm	6	6	7	8	8	9	9	8	8	9	9	10	8	7	7	7
	2000 ppm	4	4	4	7	7	8	8	9	8	9	9	9	11	11	11	11
	4000 ppm	4	4	5	6	5	5	5	5	5	4	5	5	4	5	5	5
M. NOSE	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	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	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ORAL CAVITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	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	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	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	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	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	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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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
EXTERNAL MASS	Control	2	2	2	2	2	3	3	3	3	3	3	3	3	3
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	4000 ppm	2	2	1	1	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	Control	0	0	0	0	0	0	1	2	2	1	1	2	1	1
	1000 ppm	7	7	8	7	7	8	8	8	7	6	8	10	11	9
	2000 ppm	12	11	13	12	10	10	10	9	9	8	11	12	12	12
	4000 ppm	5	5	6	7	8	8	10	10	9	8	9	11	12	12
M. NOSE	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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	1	1	1	1	1	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ORAL CAVITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	1	1	1	1	1	1	1	1	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day						
		98-7	99-7	100-7	101-7	102-7	103-7	104-7
EXTERNAL MASS	Control	3	3	2	2	2	2	2
	1000 ppm	0	0	0	0	0	0	0
	2000 ppm	1	1	1	1	1	1	1
	4000 ppm	0	2	1	1	0	0	0
INTERNAL MASS	Control	1	3	4	4	3	2	2
	1000 ppm	9	8	9	9	8	7	7
	2000 ppm	12	12	11	10	10	13	13
	4000 ppm	13	13	13	12	13	13	14
M. NOSE	Control	1	1	1	1	1	1	1
	1000 ppm	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0
M. EYE	Control	1	1	1	1	1	1	1
	1000 ppm	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0
	4000 ppm	0	1	1	1	0	0	0
M. ORAL CAVITY	Control	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0
	4000 ppm	0	1	0	0	0	0	0
M. PERI EAR	Control	1	1	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0
M. FORLIMB	Control	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0
	2000 ppm	1	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0
M. HINDLIMB	Control	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0
	2000 ppm	0	1	1	1	1	1	1
	4000 ppm	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		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	14-7
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NOISY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration				Week-day									
		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	28-7
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRIAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NOISY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHIAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NOISY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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		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. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NOISY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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		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. GENITALIA	Control	0	0	0	0	1	1	1	1	1	1	1	1	1	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	1	1	1	1	1
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NOISY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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		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. GENITALIA	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	1	1	1	2	2	2	2	2	2	2	2	2	2	2
ANEMIA	Control	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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	2	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NOISY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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	2	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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		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. GENITALIA	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	2	2	1	1	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	1	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	Control	0	0	0	0	0	0	1	1	1	1	1	1	1	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	1	1	1	2	1	1	1	1	1	1	2
	1000 ppm	0	0	0	0	0	0	1	0	1	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	4000 ppm	0	0	0	0	1	1	1	2	1	1	1	0	0	0
NOISY	Control	0	0	0	0	0	1	1	1	1	1	1	1	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRATION	Control	0	0	0	1	1	1	2	1	1	1	2	2	1	2
	1000 ppm	0	0	0	0	0	0	1	0	1	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	2	0	0	1
	4000 ppm	0	0	0	0	1	1	1	2	1	1	1	0	0	0
TACHYPNEA	Control	0	0	0	0	0	0	0	0	0	0	1	1	0	0
	1000 ppm	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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		98-7	99-7	100-7	101-7	102-7	103-7	104-7
M. GENITALIA	Control	1	1	1	1	1	1	1
	1000 ppm	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0
HEMORRHAGE	Control	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0
TORTICOLLIS	Control	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	1	1
	2000 ppm	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	2	1	1	2	3	2	1
	1000 ppm	0	0	0	0	0	0	1
	2000 ppm	2	1	0	0	0	0	0
	4000 ppm	0	0	0	1	1	1	1
NOISY	Control	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0
ABNORMAL RESPIRATION	Control	2	1	1	2	3	3	1
	1000 ppm	0	0	0	0	0	0	1
	2000 ppm	2	1	0	0	0	0	0
	4000 ppm	0	0	0	1	1	1	1
TACHYPNEA	Control	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 65

Clinical sign	Group Name	Administration Week-day													
		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	14-7
BRADYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRA. SOUND	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OLIGO-STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	3	0	0	0	0	0	0	0	0	0
	2000 ppm	1	0	0	0	7	0	0	0	1	0	0	0	0	0
	4000 ppm	1	0	0	0	1	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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	1000 ppm	50	50	50	50	47	50	50	50	50	50	50	50	50	50
	2000 ppm	49	50	50	50	43	50	50	50	49	50	50	50	50	50
	4000 ppm	49	50	50	50	49	50	50	50	50	50	50	50	50	50

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 66

Clinical sign	Group Name	Administration Week-day													
		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	28-7
BRADYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRA. SOUND	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OLIGO-STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	1	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	1000 ppm	50	50	50	50	50	50	50	49	49	49	49	49	49	49
	2000 ppm	50	50	50	50	50	50	50	49	50	50	50	50	50	50
	4000 ppm	50	50	50	50	50	50	50	50	50	49	50	49	49	49

(HAN190)

BATS 4

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 67

Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7
BRADYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRA. SOUND	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OLIGO-STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	1000 ppm	49	49	49	50	48	49	49	49	50	50	50	50	50	50
	2000 ppm	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	4000 ppm	50	50	50	50	50	50	50	50	49	49	49	49	49	49

(HAN190)

BAIS 4

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 68

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
BRADYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRA. SOUND	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	1	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	1	0	0
OLIGO-STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	1	0	0	0	0	0	0	0	0	0	1	1
	4000 ppm	0	0	1	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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	50	50	50	50	49	49	49	49	48	47	47	47	47	47
	1000 ppm	50	50	49	49	48	48	48	48	47	47	48	48	48	48
	2000 ppm	50	50	49	50	50	50	50	50	50	50	50	50	49	48
	4000 ppm	49	49	48	49	49	49	49	48	48	48	48	47	48	48

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 69

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
BRADYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRA. SOUND	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	1	1	0	0	0
OLIGO-STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	1	0	1	1	0	0	0	0	0	0	1	0	0
	4000 ppm	0	0	0	0	0	0	0	0	1	0	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	47	47	47	47	46	46	45	45	45	45	45	45	45	45
	1000 ppm	47	46	46	46	46	46	46	46	44	44	44	43	43	42
	2000 ppm	48	47	47	47	47	47	47	47	47	47	46	45	46	44
	4000 ppm	48	48	48	49	48	48	47	47	46	44	44	45	45	41

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 70

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
BRADYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRA. SOUND	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	1000 ppm	0	0	0	1	0	0	1	0	1	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	1	0	0	1	1	0	0	0	2	0
OLIGO-STOOL	Control	0	0	0	0	0	0	0	1	1	2	1	0	0	1
	1000 ppm	0	0	0	1	0	0	1	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	1	1	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	44	44	44	43	43	43	43	42	42	41	40	39	39	38
	1000 ppm	42	42	41	39	38	37	37	37	36	36	35	34	35	35
	2000 ppm	45	45	44	41	41	39	39	38	38	37	36	36	34	33
	4000 ppm	42	42	42	40	39	40	40	40	40	39	38	38	36	38

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

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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
BRADYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRA. SOUND	Control	0	0	0	0	0	1	1	1	1	1	1	1	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SMALL STOOL	Control	0	0	0	0	0	1	1	0	0	0	0	0	0	1
	1000 ppm	0	0	0	0	0	0	2	0	1	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	2	0	1	2	1	2	0	3
	4000 ppm	0	0	0	0	1	0	2	2	1	0	0	0	0	1
OLIGO-STOOL	Control	0	0	0	0	0	2	2	1	1	1	1	0	0	1
	1000 ppm	0	0	0	0	0	0	1	0	0	0	1	0	0	0
	2000 ppm	0	0	1	0	1	0	1	0	0	0	2	2	1	2
	4000 ppm	0	0	0	0	0	0	0	1	1	0	0	2	2	2
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	38	38	37	37	37	34	32	31	31	31	31	30	31	30
	1000 ppm	35	35	34	34	34	33	31	30	30	30	28	25	24	24
	2000 ppm	32	32	29	29	29	29	29	29	29	28	23	21	21	19
	4000 ppm	38	38	36	35	34	34	31	31	31	31	31	27	26	25

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 72

Clinical sign	Group Name	Administration Week-day						
		98-7	99-7	100-7	101-7	102-7	103-7	104-7
BRADYPNEA	Control	0	0	0	0	0	1	0
	1000 ppm	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0
ABNORMAL RESPIRA. SOUND	Control	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0
SMALL STOOL	Control	1	0	0	2	1	1	0
	1000 ppm	0	1	0	0	0	0	1
	2000 ppm	2	2	0	1	0	0	0
	4000 ppm	1	1	4	3	2	2	2
OLIGO-STOOL	Control	1	0	1	2	1	2	0
	1000 ppm	0	0	0	0	0	0	2
	2000 ppm	1	1	1	1	1	0	0
	4000 ppm	2	3	3	2	2	2	2
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0
NON REMARKABLE	Control	31	29	25	24	22	21	20
	1000 ppm	24	24	23	22	22	21	20
	2000 ppm	19	18	18	18	16	14	14
	4000 ppm	24	23	20	21	18	18	17

APPENDIX B 1

BODY WEIGHT CHANGES :SUMMARY, MOUSE : MALE
(2-YEAR STUDY)

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 1

Group Name	Administration week-day						
	0-0	1-7	2-7	3-7	4-7	5-7	6-7
Control	22.8± 0.8	23.5± 1.0	24.8± 1.1	25.4± 1.2	25.9± 1.3	26.9± 1.6	27.6± 1.7
500 ppm	22.8± 0.8	23.4± 0.9	24.5± 0.9	25.3± 0.9	26.0± 1.0	26.3± 1.6	27.2± 1.1
1000 ppm	22.8± 0.8	22.9± 0.9**	24.3± 0.9*	24.9± 0.8	25.7± 0.9	26.1± 1.4*	26.7± 1.0*
2000 ppm	22.8± 0.8	22.2± 1.1**	23.5± 1.0**	23.8± 1.7**	24.9± 1.1**	25.1± 1.6**	26.2± 1.0**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : AI 104
 SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 2

Group Name	Administration week-day						
	7-7	8-7	9-7	10-7	11-7	12-7	13-7
Control	28.2± 1.9	29.6± 2.2	29.9± 2.2	30.8± 2.6	31.1± 2.6	32.0± 2.8	32.7± 2.8
500 ppm	27.5± 1.4	28.9± 1.3	29.2± 1.6	29.5± 1.5	29.9± 1.7	30.9± 1.7	31.3± 1.6
1000 ppm	26.7± 1.7**	28.0± 1.3**	27.8± 1.5**	28.8± 1.4**	29.0± 1.6**	29.6± 1.7**	30.1± 1.7**
2000 ppm	26.5± 1.1**	27.3± 1.4**	27.2± 1.3**	28.1± 1.4**	28.0± 1.7**	28.6± 1.9**	28.7± 1.6**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 3

Group Name	Administration		week-day							
	14-7		18-7		22-7		26-7		30-7	
									34-7	
										38-7
Control	33.7± 2.9		36.2± 3.2		38.5± 3.6		40.8± 3.9		42.9± 4.3	
500 ppm	32.3± 1.6		34.0± 1.9*		35.9± 2.2*		37.1± 2.3**		38.3± 2.5**	
1000 ppm	30.8± 1.9**		32.4± 2.3**		33.6± 2.5**		35.1± 2.8**		36.1± 2.9**	
2000 ppm	29.4± 1.8**		30.8± 2.0**		31.8± 2.2**		33.2± 2.5**		33.9± 2.4**	
									34.5± 2.6**	
										35.1± 2.7**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

PAGE : 4

Group Name	Administration week-day							
	42-7	46-7	50-7	54-7	58-7	62-7	66-7	
Control	46.8± 4.5	47.8± 4.2	48.7± 4.3	49.5± 4.0	49.8± 4.0	50.5± 4.0	51.6± 4.2	
500 ppm	41.0± 3.1**	41.9± 3.4**	42.7± 3.6**	43.9± 3.7**	43.4± 3.8**	43.3± 4.1**	45.0± 4.2**	
1000 ppm	38.2± 3.2**	38.9± 3.5**	39.5± 3.4**	40.3± 3.6**	40.1± 3.7**	40.0± 3.9**	41.0± 3.9**	
2000 ppm	35.9± 2.9**	36.4± 2.9**	37.2± 3.0**	37.4± 3.2**	37.0± 3.4**	36.7± 3.8**	38.0± 3.5**	

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 5

Group Name	Administration		week-day									
	70-7		74-7		78-7		82-7		86-7		90-7	
Control	52.1±	4.2	52.0±	5.0	52.1±	5.5	52.6±	5.4	52.4±	6.6	51.6±	7.1
500 ppm	45.1±	4.6**	45.6±	4.8**	45.3±	5.3**	46.0±	4.3**	46.1±	4.7**	44.9±	5.2**
1000 ppm	41.4±	3.9**	41.5±	4.1**	41.7±	4.2**	41.4±	4.3**	41.1±	4.4**	39.4±	4.8**
2000 ppm	38.4±	3.7**	37.6±	3.5**	38.1±	3.5**	37.7±	3.7**	36.5±	4.1**	35.9±	3.9**
Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Dunnett												

(HAN260)

BAIS 4

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 6

Group Name	Administration week-day		
	98-7	102-7	104-7
Control	51.2± 8.1	51.8± 7.4	52.6± 7.0
500 ppm	44.1± 5.4*	43.5± 5.8**	44.4± 5.4**
1000 ppm	38.6± 4.3**	38.5± 4.0**	38.8± 3.9**
2000 ppm	35.2± 2.9**	34.2± 2.8**	34.5± 2.8**
Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Dunnett			

(HAN260)

BAIS 4

APPENDIX B 2

BODY WEIGHT CHANGES : SUMMARY, MOUSE : FEMALE (2-YEAR STUDY)

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 7

Group Name	Administration 0-0	week-day 1-7	2-7	3-7	4-7	5-7	6-7
Control	18.9± 0.7	18.7± 1.1	19.9± 0.7	20.5± 0.8	21.2± 0.8	21.6± 0.9	22.2± 1.1
1000 ppm	18.9± 0.7	18.9± 0.9	19.8± 0.9	20.5± 1.0	20.8± 0.8	20.7± 1.7*	22.3± 0.9
2000 ppm	18.9± 0.7	18.3± 0.8	19.3± 0.7**	19.8± 0.7**	20.0± 0.9**	20.0± 1.6**	21.0± 0.9**
4000 ppm	18.9± 0.7	16.3± 1.3**	18.1± 1.1**	19.1± 1.0**	19.3± 1.0**	19.7± 1.2**	20.2± 0.9**
Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Dunnett							

(HAN260)

BAIS 4

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 8

Group Name	Administration week-day 7-7	8-7	9-7	10-7	11-7	12-7	13-7
Control	22.7± 0.9	23.2± 0.9	23.3± 1.1	23.9± 1.3	24.1± 1.3	24.1± 1.2	24.7± 1.4
1000 ppm	22.2± 0.9*	22.4± 0.8**	23.0± 0.9	23.5± 1.0	23.4± 1.1*	23.5± 1.0**	23.8± 1.1**
2000 ppm	21.5± 1.0**	21.5± 1.0**	22.2± 1.4**	22.5± 1.4**	22.6± 1.0**	22.8± 1.1**	23.3± 1.1**
4000 ppm	20.6± 0.9**	21.1± 0.9**	21.4± 0.9**	21.8± 1.0**	21.8± 1.0**	22.0± 0.9**	22.3± 1.0**

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

Test of Dunnett

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 9

Group Name	Administration		week-day							
	14-7		18-7		22-7		26-7		30-7	
Control	24.9± 1.4		26.0± 1.6		27.3± 2.1		28.6± 2.4		29.7± 2.9	
1000 ppm	24.0± 1.1*		25.1± 1.1		25.8± 1.2*		26.5± 1.2**		27.1± 1.4**	
2000 ppm	23.2± 1.2**		24.2± 1.0**		24.7± 1.3**		25.5± 1.5**		25.5± 1.5**	
4000 ppm	22.4± 0.9**		23.3± 0.9**		23.7± 1.2**		24.4± 1.3**		24.5± 0.9**	

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

Test of Dunnett

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 10

Group Name	Administration		week-day									
	42-7		46-7		50-7		54-7		58-7		62-7	
Control	31.8±	3.5	32.6±	3.5	33.2±	3.5	33.8±	3.7	33.8±	3.8	33.4±	3.5
1000 ppm	28.6±	1.8**	29.6±	2.4*	29.7±	2.2**	30.0±	2.4**	29.7±	2.3**	30.4±	2.5*
2000 ppm	27.1±	2.1**	26.8±	2.0**	27.6±	2.1**	27.4±	1.9**	27.3±	1.9**	27.2±	2.0**
4000 ppm	25.3±	1.4**	25.7±	1.5**	25.9±	1.4**	26.0±	1.5**	25.7±	1.4**	25.6±	1.5**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 11

Group Name	Administration		week-day									
	70-7		74-7		78-7		82-7		86-7		90-7	94-7
Control	35.1± 3.7		35.5± 3.6		35.4± 3.9		35.7± 3.7		35.6± 3.9		34.7± 4.6	34.2± 4.4
1000 ppm	31.8± 2.9*		32.1± 3.1*		32.1± 2.8*		32.5± 3.1*		32.0± 3.3*		31.6± 3.3	31.3± 3.5
2000 ppm	28.3± 2.4**		28.3± 2.5**		28.4± 2.6**		29.1± 3.1**		28.7± 3.7**		28.7± 4.3**	28.6± 4.3**
4000 ppm	25.7± 1.8**		25.5± 1.8**		25.4± 1.8**		24.7± 1.9**		24.0± 2.1**		23.7± 1.7**	23.6± 1.6**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

PAGE : 12

Group Name	Administration week-day		
	98-7	102-7	104-7
Control	34.0± 4.1	33.4± 4.6	35.8± 3.1
1000 ppm	31.3± 3.0	32.0± 4.7	31.5± 4.3*
2000 ppm	28.4± 5.1**	28.5± 5.6**	29.3± 5.9**
4000 ppm	23.5± 1.9**	23.5± 2.2**	23.9± 2.2**

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

Test of Dunnett

(HAN260)

BAIS 4

APPENDIX C 1

WATER CONSUMPTION CHANGES : SUMMARY, MOUSE : MALE
(2-YEAR STUDY)

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

WATER CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 1

Group Name	Administration 1-7(4)	week-day(effective) 2-7(4)	3-7(4)	4-7(4)	5-7(4)	6-7(4)	7-7(4)
Control	4.7± 0.9	4.7± 0.8	4.4± 0.7	4.6± 0.8	4.5± 0.9	4.8± 1.0	4.4± 0.9
500 ppm	4.4± 0.8	4.8± 0.8	4.9± 0.8*	4.5± 0.7	4.0± 1.2	4.6± 0.9	4.1± 1.0
1000 ppm	3.4± 0.5**	3.7± 0.5**	3.8± 0.7**	3.5± 0.6**	3.4± 1.0**	3.8± 0.7**	3.5± 0.9**
2000 ppm	2.3± 0.3**	2.7± 0.6**	2.7± 0.7**	2.8± 0.6**	2.7± 0.8**	3.2± 0.7**	3.0± 0.6**

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

Test of Dunnett

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDf1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

WATER CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 2

Group Name	Administration 8-7(4)	week-day(effective) 9-7(4)	10-7(4)	11-7(4)	12-7(4)	13-7(4)	14-7(4)
Control	4.5± 0.7	4.6± 0.8	4.8± 1.2	4.3± 0.8	4.2± 0.8	4.4± 0.8	4.3± 0.7
500 ppm	4.3± 0.7	4.2± 0.7	4.5± 1.1	4.0± 0.6	4.1± 0.6	4.1± 0.8	4.1± 0.6
1000 ppm	3.6± 0.7**	3.4± 0.7**	3.6± 0.8**	3.5± 0.6**	3.4± 0.5**	3.6± 0.6**	3.3± 0.4**
2000 ppm	3.0± 0.7**	3.2± 0.7**	3.1± 0.7**	2.9± 0.7**	2.9± 0.6**	3.0± 0.6**	3.0± 0.8**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDf1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

WATER CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 3

Group Name	Administration 18-7(4)	week-day(effective) 22-7(4)	26-7(4)	30-7(4)	34-7(4)	38-7(4)	42-7(4)
Control	3.8± 0.6	3.7± 0.5	3.7± 0.4	3.7± 0.5	4.0± 0.4	4.1± 0.4	4.1± 0.5
500 ppm	3.6± 0.4	3.4± 0.4	3.5± 0.6	3.5± 0.4	3.6± 0.4**	3.9± 0.4	3.7± 0.3**
1000 ppm	3.2± 0.5**	3.0± 0.3**	3.1± 0.4**	3.0± 0.4**	3.2± 0.3**	3.3± 0.4**	3.3± 0.4**
2000 ppm	2.8± 0.4**	2.7± 0.4**	2.7± 0.4**	2.8± 0.4**	2.9± 0.4**	3.0± 0.4**	3.1± 0.4**

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

Test of Dunnett

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDf1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

WATER CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 4

Group Name	Administration 46-7(4)	week-day(effective) 50-7(4)	54-7(4)	58-7(4)	62-7(4)	66-7(4)	70-7(4)
Control	4.1± 0.4	3.9± 0.5	4.0± 0.4	4.0± 0.4	4.1± 0.4	4.2± 0.5	4.4± 0.6
500 ppm	3.7± 0.3**	3.7± 0.3*	3.6± 0.3**	3.9± 0.7	3.4± 0.9**	3.7± 0.5**	3.9± 0.5**
1000 ppm	3.4± 0.4**	3.3± 0.4**	3.3± 0.3**	3.5± 0.5**	3.4± 0.7**	3.5± 0.4**	3.6± 0.4**
2000 ppm	3.2± 0.4**	3.0± 0.4**	3.1± 0.4**	3.1± 0.4**	3.1± 0.7**	3.4± 0.4**	3.5± 0.5**

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

Test of Dunnett

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

WATER CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 5

Group Name	Administration 74-7(4)	week-day(effective) 78-7(4)	82-7(4)	86-7(4)	90-7(4)	94-7(4)	98-7(4)
Control	4.4± 0.7	4.5± 0.8	4.6± 0.7	4.4± 0.8	4.5± 0.9	4.2± 1.2	4.7± 0.9
500 ppm	3.8± 0.6**	4.0± 0.5*	4.0± 0.4**	3.9± 0.7**	4.2± 0.4	4.0± 0.4	4.0± 0.4**
1000 ppm	3.6± 0.4**	3.7± 0.5**	3.7± 0.5**	3.6± 0.7**	3.9± 0.7**	3.9± 0.5*	3.9± 0.6**
2000 ppm	3.4± 0.6**	3.4± 0.5**	3.5± 0.6**	3.3± 0.8**	3.6± 0.9**	3.8± 0.4**	3.9± 0.6**

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

Test of Dunnett

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

WATER CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

PAGE : 6

Group Name	Administration week-day(effective)	
	102-7(4)	104-7(4)
Control	4.8± 0.9	4.6± 0.7
500 ppm	4.0± 0.6**	4.0± 0.5**
1000 ppm	4.1± 0.6**	4.0± 0.6**
2000 ppm	4.0± 0.9**	4.1± 1.0**

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

Test of Dunnett

(HAN260)

BAIS 4

APPENDIX C 2

WATER CONSUMPTION CHANGES : SUMMARY, MOUSE : FEMALE (2-YEAR STUDY)

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

WATER CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 7

Group Name	Administration 1-7(4)	week-day(effective) 2-7(4)	3-7(4)	4-7(4)	5-7(4)	6-7(4)	7-7(4)
Control	4.2± 0.7	4.4± 0.5	4.2± 0.4	4.3± 0.4	4.2± 0.4	4.4± 0.5	4.2± 0.4
1000 ppm	3.3± 0.3**	3.3± 0.3**	3.3± 0.3**	3.2± 0.3**	3.1± 0.9**	3.5± 0.5**	3.4± 0.5**
2000 ppm	2.2± 0.3**	2.4± 0.6**	2.3± 0.3**	2.4± 0.4**	2.3± 0.9**	2.7± 0.4**	2.6± 0.4**
4000 ppm	1.6± 0.3**	1.8± 0.2**	1.8± 0.2**	1.9± 0.3**	1.9± 0.3**	2.1± 0.4**	2.0± 0.2**

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

Test of Dunnett

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

WATER CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 8

Group Name	Administration 8-7(4)	week-day(effective) 9-7(4)	10-7(4)	11-7(4)	12-7(4)	13-7(4)	14-7(4)
Control	4.3± 0.4	4.3± 0.4	4.2± 0.4	4.2± 0.4	4.3± 0.4	4.3± 0.5	4.3± 0.5
1000 ppm	3.5± 0.4**	3.6± 0.6**	3.5± 0.6**	3.5± 0.3**	3.5± 0.3**	3.8± 0.7*	3.6± 0.7**
2000 ppm	2.6± 0.4**	2.7± 0.5**	2.7± 0.5**	2.7± 0.3**	2.7± 0.3**	2.9± 0.8**	3.0± 0.7**
4000 ppm	2.0± 0.2**	2.1± 0.3**	2.0± 0.6**	2.2± 0.3**	2.2± 0.2**	2.3± 0.5**	2.2± 0.4**

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

Test of Dunnett

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

WATER CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 9

Group Name	Administration 18-7(4)	week-day(effective) 22-7(4)	26-7(4)	30-7(4)	34-7(4)	38-7(4)	42-7(4)
Control	4.1± 0.7	4.1± 0.4	4.0± 0.5	4.0± 0.5	4.0± 0.5	3.9± 0.5	3.9± 0.6
1000 ppm	3.4± 0.4**	3.3± 0.5**	3.1± 0.5**	3.2± 0.9**	3.2± 0.7**	3.2± 0.7**	3.2± 0.9**
2000 ppm	2.7± 0.3**	2.7± 0.4**	2.6± 0.4**	2.7± 0.5**	2.8± 0.5**	2.6± 0.4**	2.6± 0.4**
4000 ppm	2.2± 0.2**	2.0± 0.2**	2.0± 0.3**	2.2± 0.3**	2.2± 0.2**	2.2± 0.3**	2.2± 0.3**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

WATER CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 10

Group Name	Administration week-day(effective)						
	46-7(4)	50-7(4)	54-7(4)	58-7(4)	62-7(4)	66-7(4)	70-7(4)
Control	4.0± 0.6	4.0± 0.6	3.9± 0.5	3.8± 0.8	3.9± 0.5	3.9± 0.5	3.7± 0.6
1000 ppm	3.1± 0.4**	3.2± 0.6**	3.0± 0.5**	3.1± 0.5**	3.0± 0.4**	3.0± 0.4**	3.0± 0.3**
2000 ppm	2.7± 0.4**	2.7± 0.4**	2.7± 0.3**	2.6± 0.4**	2.6± 0.4**	2.8± 0.6**	2.7± 0.4**
4000 ppm	2.3± 0.3**	2.3± 0.3**	2.2± 0.2**	2.2± 0.3**	2.3± 0.3**	2.4± 0.3**	2.3± 0.4**

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

Test of Dunnett

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

WATER CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 11

Group Name	Administration 74-7(4)	week-day(effective) 78-7(4)	82-7(4)	86-7(4)	90-7(4)	94-7(4)	98-7(4)
Control	3.9± 0.7	3.9± 0.7	4.1± 0.8	3.9± 0.9	4.0± 1.0	4.1± 1.0	4.2± 1.1
1000 ppm	3.0± 0.4**	3.1± 0.5**	3.2± 0.4**	3.1± 0.5**	3.1± 0.6**	3.5± 0.8**	3.3± 0.6**
2000 ppm	2.7± 0.6**	2.8± 0.6**	3.0± 0.6**	2.9± 0.6**	3.1± 0.7**	3.5± 0.8**	3.7± 0.9*
4000 ppm	2.5± 0.4**	2.8± 0.6**	3.1± 0.5**	3.3± 0.5**	3.4± 0.6**	4.0± 0.5	3.7± 0.6

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

Test of Dunnett

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

WATER CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

PAGE : 12

Group Name	Administration week-day(effective)	
	102-7(4)	104-7(4)
Control	4.1± 1.1	4.3± 0.7
1000 ppm	3.5± 0.9	3.3± 0.9**
2000 ppm	3.8± 0.8	4.1± 0.9
4000 ppm	3.8± 0.8	3.8± 0.6

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

Test of Dunnett

APPENDIX D 1

FOOD CONSUMPTION CHANGES : SUMMARY, MOUSE : MALE (2-YEAR STUDY)

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 1

Group Name	Administration week-day(effective)						
	1-7(7)	2-7(7)	3-7(7)	4-7(7)	5-7(7)	6-7(7)	7-7(7)
Control	3.7± 0.3	3.9± 0.4	3.9± 0.3	4.0± 0.4	4.0± 0.4	4.1± 0.4	4.1± 0.4
500 ppm	3.6± 0.3	3.8± 0.3	3.9± 0.3	4.0± 0.3	3.9± 0.4	4.1± 0.3	4.0± 0.4
1000 ppm	3.6± 0.2*	3.8± 0.2	3.9± 0.3	3.9± 0.3	3.9± 0.4	3.9± 0.3	3.9± 0.4*
2000 ppm	3.4± 0.3**	3.7± 0.2	3.7± 0.3**	3.8± 0.4	3.8± 0.3*	4.0± 0.4	4.1± 0.4

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

Test of Dunnett

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 2

Group Name	Administration week-day(effective)						
	8-7(7)	9-7(7)	10-7(7)	11-7(7)	12-7(7)	13-7(7)	14-7(7)
Control	4.2± 0.4	4.2± 0.4	4.3± 0.4	4.2± 0.4	4.3± 0.4	4.2± 0.3	4.4± 0.3
500 ppm	4.1± 0.4	4.0± 0.3	4.1± 0.3*	4.3± 0.5	4.3± 0.3	4.1± 0.3	4.3± 0.2
1000 ppm	4.1± 0.5	3.9± 0.4**	4.1± 0.4*	4.1± 0.4	4.2± 0.4	4.0± 0.4**	4.2± 0.4**
2000 ppm	4.0± 0.5	4.0± 0.4	4.1± 0.4*	4.1± 0.4	4.1± 0.4	4.0± 0.3**	4.1± 0.3**

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

Test of Dunnett

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 3

Group Name	Administration week-day(effective)						
	18-7(7)	22-7(7)	26-7(7)	30-7(7)	34-7(7)	38-7(7)	42-7(7)
Control	4.4± 0.4	4.5± 0.3	4.5± 0.3	4.7± 0.4	4.9± 0.4	5.0± 0.3	4.9± 0.4
500 ppm	4.3± 0.3	4.2± 0.3**	4.3± 0.3**	4.3± 0.3**	4.6± 0.4**	4.7± 0.4**	4.6± 0.3**
1000 ppm	4.2± 0.3**	4.2± 0.4**	4.2± 0.3**	4.2± 0.3**	4.5± 0.4**	4.6± 0.4**	4.6± 0.4**
2000 ppm	4.1± 0.3**	4.1± 0.3**	4.0± 0.3**	3.9± 0.4**	4.3± 0.3**	4.3± 0.3**	4.4± 0.3**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 4

Group Name	Administration week-day(effective)						
	46-7(7)	50-7(7)	54-7(7)	58-7(7)	62-7(7)	66-7(7)	70-7(7)
Control	5.0± 0.3	4.9± 0.5	5.0± 0.3	4.7± 0.3	4.6± 0.4	5.0± 0.3	5.1± 0.4
500 ppm	4.6± 0.3**	4.8± 0.3	4.6± 0.3**	4.3± 0.3**	3.9± 0.5**	4.6± 0.4**	4.8± 0.4**
1000 ppm	4.5± 0.4**	4.5± 0.4**	4.5± 0.4**	4.2± 0.4**	4.2± 0.3**	4.5± 0.5**	4.7± 0.4**
2000 ppm	4.3± 0.3**	4.5± 0.3**	4.3± 0.3**	4.0± 0.3**	4.0± 0.4**	4.4± 0.3**	4.5± 0.4**
Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Dunnett							

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 5

Group Name	Administration week-day(effective)						
	74-7(7)	78-7(7)	82-7(7)	86-7(7)	90-7(7)	94-7(7)	98-7(7)
Control	5.1± 0.3	5.1± 0.4	5.2± 0.4	4.9± 0.8	5.1± 1.0	5.0± 0.8	4.9± 0.6
500 ppm	4.7± 0.6**	4.6± 0.5**	4.8± 0.3**	4.7± 0.3*	4.8± 0.4*	4.6± 0.3**	4.5± 0.4**
1000 ppm	4.8± 0.5**	4.6± 0.5**	4.7± 0.5**	4.5± 0.6**	4.6± 0.5**	4.5± 0.4**	4.4± 0.4**
2000 ppm	4.6± 0.3**	4.3± 0.3**	4.5± 0.4**	4.2± 0.5**	4.3± 0.4**	3.9± 0.4**	4.2± 0.3**

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

Test of Dunnett

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

PAGE : 6

Group Name	Administration week-day(effective)	
	102-7(7)	104-7(7)
Control	5.0± 0.5	4.8± 0.4
500 ppm	4.4± 0.5**	4.4± 0.4**
1000 ppm	4.4± 0.4**	4.4± 0.4**
2000 ppm	4.1± 0.5**	4.1± 0.3**
Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Dunnett		

APPENDIX D 2

FOOD CONSUMPTION CHANGES : SUMMARY, MOUSE : FEMALE
(2-YEAR STUDY)

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 7

Group Name	Administration 1-7 (7)	week-day(effective) 2-7 (7)	3-7 (7)	4-7 (7)	5-7 (7)	6-7 (7)	7-7 (7)
Control	3.0± 0.3	3.4± 0.2	3.4± 0.3	3.5± 0.2	3.4± 0.2	3.5± 0.2	3.7± 0.2
1000 ppm	3.1± 0.3	3.3± 0.2	3.4± 0.2	3.4± 0.2*	3.3± 0.4	3.5± 0.3	3.5± 0.2*
2000 ppm	2.8± 0.3*	3.1± 0.2**	3.2± 0.2**	3.2± 0.3**	3.2± 0.3**	3.4± 0.3**	3.4± 0.3**
4000 ppm	2.2± 0.3**	3.1± 0.3**	3.1± 0.2**	2.9± 0.2**	3.0± 0.2**	3.1± 0.2**	3.2± 0.2**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 8

Group Name	Administration 8-7(7)	week-day(effective) 9-7(7)	10-7(7)	11-7(7)	12-7(7)	13-7(7)	14-7(7)
Control	3.7± 0.3	3.7± 0.3	3.7± 0.3	3.7± 0.3	3.7± 0.3	3.8± 0.3	3.9± 0.3
1000 ppm	3.6± 0.2*	3.7± 0.2	3.7± 0.3	3.7± 0.2	3.7± 0.4	3.8± 0.3	3.8± 0.3
2000 ppm	3.3± 0.3**	3.5± 0.3*	3.5± 0.3**	3.6± 0.3	3.6± 0.3*	3.7± 0.3	3.8± 0.3
4000 ppm	3.2± 0.2**	3.3± 0.3**	3.2± 0.2**	3.3± 0.2**	3.3± 0.2**	3.4± 0.3**	3.5± 0.3**

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

Test of Dunnett

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 9

Group Name	Administration 18-7(7)	week-day(effective) 22-7(7)	26-7(7)	30-7(7)	34-7(7)	38-7(7)	42-7(7)
Control	4.0± 0.3	4.0± 0.4	4.1± 0.4	4.0± 0.4	4.1± 0.4	4.2± 0.5	4.0± 0.4
1000 ppm	3.9± 0.3	3.8± 0.3	4.0± 0.3	3.8± 0.3**	3.9± 0.3*	4.0± 0.3	3.9± 0.4
2000 ppm	3.8± 0.2**	3.7± 0.3**	3.8± 0.3**	3.6± 0.3**	3.8± 0.3**	3.9± 0.3**	3.7± 0.4**
4000 ppm	3.5± 0.3**	3.4± 0.3**	3.6± 0.3**	3.4± 0.3**	3.6± 0.3**	3.6± 0.3**	3.5± 0.3**
Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Dunnett							

(HAN260)

BAIS 4

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 10

Group Name	Administration week-day(effective)						
	46-7(7)	50-7(7)	54-7(7)	58-7(7)	62-7(7)	66-7(7)	70-7(7)
Control	4.0± 0.5	4.1± 0.5	4.1± 0.4	3.8± 0.4	3.8± 0.5	4.1± 0.5	4.2± 0.4
1000 ppm	4.0± 0.5	3.8± 0.4*	3.7± 0.4**	3.4± 0.4**	3.5± 0.5*	3.7± 0.5**	3.9± 0.4**
2000 ppm	3.7± 0.3**	3.6± 0.4**	3.5± 0.3**	3.2± 0.3**	3.3± 0.3**	3.5± 0.3**	3.7± 0.3**
4000 ppm	3.5± 0.3**	3.4± 0.3**	3.3± 0.3**	3.1± 0.4**	3.1± 0.4**	3.4± 0.3**	3.4± 0.4**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 11

Group Name	Administration		week-day(effective)					
	74-7(7)		78-7(7)		82-7(7)		86-7(7)	
Control	4.1± 0.6		4.0± 0.7		4.0± 0.6		4.2± 0.6	
1000 ppm	3.9± 0.5*		3.8± 0.5		3.8± 0.4		3.7± 0.5**	
2000 ppm	3.6± 0.5**		3.5± 0.4**		3.6± 0.4**		3.6± 0.5**	
4000 ppm	3.4± 0.4**		3.3± 0.4**		3.3± 0.5**		3.3± 0.5**	

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

PAGE : 12

Group Name	Administration week-day(effective)	
	102-7(7)	104-7(7)
Control	4.0± 0.7	4.4± 0.6
1000 ppm	3.7± 0.5	3.6± 0.8**
2000 ppm	3.7± 0.5	3.7± 0.6**
4000 ppm	3.2± 0.4**	3.1± 0.4**

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

Test of Dunnett

APPENDIX E 1

CHEMICAL INTAKE CHANGES : SUMMARY, MOUSE : MALE
(2-YEAR STUDY)

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g/kg/day
 REPORT TYPE : A1 104
 SEX : MALE

CHEMICAL INTAKE CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 1

Group Name	Administration (weeks)						
	1	2	3	4	5	6	7
Control	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000
500 ppm	0.093± 0.017	0.097± 0.015	0.096± 0.016	0.087± 0.013	0.076± 0.021	0.085± 0.016	0.075± 0.019
1000 ppm	0.148± 0.020	0.152± 0.023	0.153± 0.029	0.137± 0.022	0.129± 0.035	0.141± 0.025	0.129± 0.031
2000 ppm	0.211± 0.026	0.233± 0.050	0.227± 0.057	0.228± 0.044	0.213± 0.054	0.242± 0.052	0.226± 0.045

(HAN300)

BAIS 4

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g/kg/day
 REPORT TYPE : AI 104
 SEX : MALE

CHEMICAL INTAKE CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 2

Group Name	Administration (weeks)		9	10	11	12	13	14
	8							
Control	0.000± 0.000		0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000
500 ppm	0.074± 0.012		0.073± 0.014	0.076± 0.018	0.067± 0.010	0.066± 0.010	0.065± 0.012	0.063± 0.009
1000 ppm	0.128± 0.025		0.123± 0.025	0.126± 0.026	0.121± 0.021	0.116± 0.018	0.118± 0.019	0.109± 0.015
2000 ppm	0.217± 0.046		0.233± 0.054	0.221± 0.050	0.209± 0.050	0.203± 0.043	0.209± 0.043	0.206± 0.053

(HAN300)

BAIS 4

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g/kg/day
 REPORT TYPE : A1 104
 SEX : MALE

CHEMICAL INTAKE CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 3

Group Name	Administration 18	(weeks) 22	26	30	34	38	42
Control	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000
500 ppm	0.053± 0.007	0.048± 0.006	0.048± 0.009	0.046± 0.006	0.046± 0.005	0.050± 0.010	0.046± 0.005
1000 ppm	0.098± 0.015	0.091± 0.012	0.089± 0.014	0.084± 0.014	0.087± 0.012	0.088± 0.014	0.087± 0.013
2000 ppm	0.185± 0.031	0.169± 0.026	0.166± 0.028	0.164± 0.023	0.172± 0.024	0.170± 0.025	0.172± 0.022

(HAN300)

BAIS 4

CHEMICAL INTAKE CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration		(weeks)		46		50		54		58		62		66		70	
	Control	0.000±	0.000	0.000±	0.000	0.000±	0.000	0.000±	0.000	0.000±	0.000	0.000±	0.000	0.000±	0.000	0.000±	0.000	0.000±
500 ppm	0.044±	0.005	0.044±	0.005	0.042±	0.004	0.045±	0.010	0.039±	0.011	0.041±	0.007	0.043±	0.006	0.043±	0.006	0.043±	0.006
1000 ppm	0.087±	0.012	0.085±	0.014	0.083±	0.010	0.088±	0.015	0.085±	0.018	0.087±	0.012	0.089±	0.014	0.089±	0.014	0.089±	0.014
2000 ppm	0.176±	0.025	0.162±	0.024	0.164±	0.021	0.170±	0.021	0.170±	0.036	0.180±	0.019	0.183±	0.028	0.183±	0.028	0.183±	0.028

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
UNIT : g/kg/day
REPORT TYPE : A1 104
SEX : MALE

CHEMICAL INTAKE CHANGES (SUMMARY)
ALL ANIMALS

PAGE : 5

Group Name	Administration		(weeks)									
	74		78		82		86		90		94	
Control	0.000± 0.000		0.000± 0.000		0.000± 0.000		0.000± 0.000		0.000± 0.000		0.000± 0.000	
500 ppm	0.042± 0.008		0.044± 0.007		0.044± 0.007		0.043± 0.011		0.047± 0.008		0.045± 0.007	
1000 ppm	0.088± 0.014		0.090± 0.017		0.090± 0.017		0.088± 0.020		0.101± 0.029		0.099± 0.017	
2000 ppm	0.184± 0.038		0.178± 0.030		0.190± 0.040		0.184± 0.060		0.206± 0.077		0.213± 0.034	

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
UNIT : g/kg/day
REPORT TYPE : A1 104
SEX : MALE

CHEMICAL INTAKE CHANGES (SUMMARY)
ALL ANIMALS

PAGE : 6

Group Name	Administration (weeks)	
	102	104
Control	0.000± 0.000	0.000± 0.000
500 ppm	0.046± 0.009	0.046± 0.009
1000 ppm	0.108± 0.020	0.104± 0.021
2000 ppm	0.237± 0.058	0.237± 0.055

(HAN300)

BAIS 4

APPENDIX E 2

CHEMICAL INTAKE CHANGES : SUMMARY, MOUSE : FEMALE
(2-YEAR STUDY)

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDP1
UNIT : g/kg/day
REPORT TYPE : A1 104
SEX : FEMALE

CHEMICAL INTAKE CHANGES (SUMMARY)
ALL ANIMALS

PAGE : 7

Group Name	Administration (weeks)		2	3	4	5	6	7
	1							
Control	0.000± 0.000		0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000
1000 ppm	0.175± 0.020		0.166± 0.019	0.160± 0.015	0.156± 0.014	0.149± 0.041	0.157± 0.025	0.155± 0.025
2000 ppm	0.244± 0.037		0.249± 0.061	0.233± 0.033	0.242± 0.036	0.224± 0.082	0.253± 0.036	0.246± 0.034
4000 ppm	0.386± 0.051		0.391± 0.037	0.377± 0.040	0.404± 0.064	0.379± 0.065	0.416± 0.073	0.385± 0.037

(HAN300)

BAIS 4

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g/kg/day
 REPORT TYPE : A1 104
 SEX : FEMALE

CHEMICAL INTAKE CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 8

Group Name	Administration (weeks)		8	9	10	11	12	13	14					
Control	0.000±	0.000	0.000±	0.000	0.000±	0.000	0.000±	0.000	0.000±	0.000	0.000±	0.000		
1000 ppm	0.156±	0.019	0.158±	0.028	0.149±	0.028	0.148±	0.017	0.149±	0.016	0.162±	0.035	0.153±	0.032
2000 ppm	0.240±	0.040	0.243±	0.047	0.242±	0.045	0.240±	0.028	0.238±	0.028	0.250±	0.067	0.259±	0.061
4000 ppm	0.381±	0.039	0.396±	0.062	0.375±	0.107	0.397±	0.059	0.394±	0.043	0.418±	0.089	0.390±	0.066
(HAN300)														
BAIS														

(HAN300)

BAIS 4

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g/kg/day
 REPORT TYPE : A1 104
 SEX : FEMALE

CHEMICAL INTAKE CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 9

Group Name	Administration (weeks)													
	18		22		26		30		34		38		42	
Control	0.000±	0.000	0.000±	0.000	0.000±	0.000	0.000±	0.000	0.000±	0.000	0.000±	0.000	0.000±	0.000
1000 ppm	0.135±	0.021	0.127±	0.018	0.119±	0.023	0.120±	0.035	0.117±	0.027	0.115±	0.027	0.111±	0.029
2000 ppm	0.228±	0.028	0.218±	0.031	0.202±	0.031	0.212±	0.040	0.215±	0.041	0.198±	0.030	0.194±	0.032
4000 ppm	0.381±	0.032	0.347±	0.039	0.328±	0.054	0.352±	0.048	0.353±	0.039	0.345±	0.040	0.345±	0.042

(HAN300)

BAIS 4

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g/kg/day
 REPORT TYPE : A1 104
 SEX : FEMALE

CHEMICAL INTAKE CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 10

Group Name	Administration (weeks)									
	46	50	54	58	62	66	70			
Control	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000		
1000 ppm	0.106± 0.017	0.107± 0.022	0.101± 0.021	0.105± 0.018	0.100± 0.014	0.098± 0.015	0.094± 0.014			
2000 ppm	0.202± 0.032	0.195± 0.029	0.194± 0.027	0.194± 0.030	0.196± 0.035	0.202± 0.046	0.193± 0.037			
4000 ppm	0.351± 0.050	0.352± 0.044	0.337± 0.032	0.347± 0.048	0.358± 0.049	0.366± 0.045	0.352± 0.060			

(HAN300)

BAIS 4

CHEMICAL INTAKE CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration (weeks)													
	74		78		82		86		90		94		98	
Control	0.000±	0.000	0.000±	0.000	0.000±	0.000	0.000±	0.000	0.000±	0.000	0.000±	0.000	0.000±	0.000
1000 ppm	0.096±	0.016	0.098±	0.018	0.098±	0.015	0.096±	0.016	0.098±	0.016	0.113±	0.020	0.105±	0.020
2000 ppm	0.195±	0.045	0.198±	0.046	0.208±	0.053	0.207±	0.054	0.219±	0.061	0.250±	0.075	0.266±	0.087
4000 ppm	0.398±	0.072	0.437±	0.096	0.504±	0.092	0.558±	0.082	0.580±	0.106	0.684±	0.090	0.640±	0.115

BAIS 4

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
UNIT : g/kg/day
REPORT TYPE : A1 104
SEX : FEMALE

CHEMICAL INTAKE CHANGES (SUMMARY)
ALL ANIMALS

PAGE : 12

Group Name	Administration (weeks)	
	102	104
Control	0.000± 0.000	0.000± 0.000
1000 ppm	0.108± 0.023	0.105± 0.028
2000 ppm	0.275± 0.066	0.282± 0.074
4000 ppm	0.652± 0.131	0.638± 0.114

(HAN300)

BAIS 4

APPENDIX F 1

HEMATOLOGY : SUMMARY, MOUSE : MALE

(2-YEAR STUDY)

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 MEASURE. TIME : 1
 SEX : MALE

HEMATOLOGY (SUMMARY)
 ALL ANIMALS (105W)

REPORT TYPE : A1

PAGE : 1

Group Name	NO. of Animals	RED BLOOD CELL 10 ⁶ /μl		HEMOGLOBIN g/dl		HEMATOCRIT %		MCV fl		MCH pg		MCHC g/dl		PLATELET 10 ⁹ /μl	
Control	36	9.60±	0.91	13.8±	1.1	43.8±	3.2	45.8±	1.9	14.4±	0.5	31.5±	0.7	1911±	411
500 ppm	38	9.59±	1.28	13.6±	1.5	43.2±	4.2	45.3±	2.9	14.2±	0.7	31.4±	1.0	1985±	418
1000 ppm	42	9.43±	1.92	13.5±	2.3	43.4±	6.8	46.9±	6.3	14.5±	1.1	31.1±	1.3	2087±	470
2000 ppm	39	9.10±	0.81**	13.3±	1.2**	42.7±	3.9	46.9±	1.2**	14.6±	0.3	31.1±	0.6**	2279±	303**

Significant difference ; * : P ≤ 0.05

** : P ≤ 0.01

Test of Dunnett

(HCL070)

BATS 4

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 MEASURE. TIME : 1
 SEX : MALE

HEMATOLOGY (SUMMARY)
 ALL ANIMALS (105W)

REPORT TYPE : A1

PAGE : 2

Group Name	NO. of Animals	WBC 10 ³ /μl		Differential N-BAND		WBC (%) N-SEG		EOSINO		BASO		MONO		LYMPHO		OTHER	
Control	36	4.47±	8.86	1±	2	30±	17	2±	1	0±	0	5±	3	60±	18	2±	9
500 ppm	38	2.96±	1.61	1±	1	29±	13	2±	3	0±	0	5±	2	61±	16	3±	9
1000 ppm	42	3.05±	2.90	2±	3	36±	14	1±	1	0±	0	4±	2	56±	15	1±	2
2000 ppm	39	2.00±	1.31**	2±	2	42±	17**	1±	3**	0±	0	3±	1**	52±	17	0±	1

Significant difference : * : $P \leq 0.05$

** : $P \leq 0.01$

Test of Dunnett

(HCL070)

BATS 4

APPENDIX F 2

HEMATOLOGY : SUMMARY, MOUSE : FEMALE

(2-YEAR STUDY)

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 MEASURE TIME : 1
 SEX : FEMALE

HEMATOLOGY (SUMMARY)
 ALL ANIMALS (105W)

PAGE : 3

REPORT TYPE : A1

Group Name	NO. of Animals	RED BLOOD CELL 10 ⁶ /μl		HEMOGLOBIN g/dl		HEMATOCRIT %		MCV fl		MCH pg		MCHC g/dl		PLATELET 10 ⁹ /μl	
Control	22	9.82±	1.99	14.1±	2.3	44.5±	7.1	45.7±	2.3	14.4±	0.6	31.6±	1.1	1210±	273
1000 ppm	27	9.30±	1.22	13.6±	1.7	43.2±	4.6	46.7±	2.8	14.7±	0.6	31.5±	1.1	1329±	374
2000 ppm	25	8.94±	1.90	12.9±	2.7	41.6±	8.0	47.4±	5.1	14.6±	0.7	30.9±	1.6*	1399±	453
4000 ppm	28	9.37±	0.85	13.4±	1.2**	43.7±	3.9	46.7±	2.1**	14.4±	0.7	30.7±	0.6**	1641±	454**

Significant difference : * : $P \leq 0.05$

** : $P \leq 0.01$

Test of Dunnett

(HCL070)

BATS 4

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 MEASURE. TIME : 1
 SEX : FEMALE

HEMATOLOGY (SUMMARY)
 ALL ANIMALS (105W)

PAGE : 4

REPORT TYPE : A1

Group Name	NO. of Animals	WBC 10 ³ /μl		Differential N-BAND		WBC (%) N-SEG		EOSINO		BASO		MONO		LYMPHO		OTHER	
Control	22	2.13±	1.63	1±	2	29±	12	3±	4	0±	0	5±	2	58±	15	3±	10
1000 ppm	27	4.50±	11.15	2±	2	30±	12	1±	1	0±	0	5±	3	58±	15	4±	14
2000 ppm	25	4.17±	4.18	2±	2	35±	14	1±	1**	0±	0	4±	2	56±	14	2±	4
4000 ppm	28	1.94±	1.51	2±	1	40±	19	1±	1**	0±	0	4±	2	52±	19	2±	8

Significant difference : * : $P \leq 0.05$

** : $P \leq 0.01$

Test of Dunnett

(HCL070)

BAIS 4

APPENDIX G 1

BIOCHEMISTRY : SUMMARY, MOUSE : MALE

(2-YEAR STUDY)

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 MEASURE. TIME : 1
 SEX : MALE

BIOCHEMISTRY (SUMMARY)
 ALL ANIMALS (105W)

REPORT TYPE : A1

PAGE : 1

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	37	5.1±	0.6	2.9±	0.4	1.3±	0.2	0.13±	0.02	193±	32	113±	36	47±	27
500 ppm	38	5.3±	0.7	3.0±	0.4	1.3±	0.1	0.13±	0.03	198±	35	117±	51	41±	24
1000 ppm	42	5.3±	0.9	3.0±	0.5*	1.3±	0.2	0.15±	0.10	179±	50	127±	68	41±	16
2000 ppm	39	5.6±	0.8**	3.2±	0.3**	1.3±	0.2	0.14±	0.04	185±	43	129±	50	31±	11**

Significant difference : * : $P \leq 0.05$

** : $P \leq 0.01$

Test of Dunnett

(HCL074)

BATS 4

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 MEASURE. TIME : 1
 SEX : MALE

BIOCHEMISTRY (SUMMARY)
 ALL ANIMALS (105W)

PAGE : 2

REPORT TYPE : A1

Group Name	NO. of Animals	PHOSPHOLIPID mg/dl		GOT IU/l		GPT IU/l		LDH IU/l		ALP IU/l		G-GTP IU/l		CPK IU/l	
Control	37	210±	58	88±	167	49±	77	343±	262	124±	28	1±	1	42±	13
500 ppm	38	220±	76	127±	224	135±	355	620±	1341	220±	244**	2±	1	47±	20
1000 ppm	42	243±	117	174±	355	178±	514**	752±	1200	337±	396**	2±	1	120±	337*
2000 ppm	39	241±	80	119±	264	119±	300**	612±	1125	279±	182**	2±	1	84±	129**

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

Test of Dunnett

(HCL074)

BAIS 4

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 MEASURE. TIME : 1
 SEX : MALE

BIOCHEMISTRY (SUMMARY)
 ALL ANIMALS (105W)

PAGE : 3

REPORT TYPE : A1

Group Name	NO. of Animals	UREA NITROGEN mg/dl		SODIUM mEq/l		POTASSIUM mEq/l		CHLORIDE mEq/l		CALCIUM mg/dl		INORGANIC PHOSPHORUS mg/dl	
Control	37	23.4±	9.4	152±	1	4.3±	0.4	122±	3	9.0±	0.5	6.4±	0.8
500 ppm	38	22.8±	3.3	152±	1	4.1±	0.3	122±	3	9.1±	0.5	6.2±	0.6
1000 ppm	42	28.4±	12.1**	152±	3	4.2±	0.4	123±	4	9.1±	0.7	6.3±	0.7
2000 ppm	39	30.9±	11.3**	153±	2**	4.0±	0.4**	123±	3	9.2±	0.5	6.4±	0.9

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

Test of Dunnett

(HCL074)

BATS 4

APPENDIX G 2

BIOCHEMISTRY : SUMMARY, MOUSE : FEMALE

(2-YEAR STUDY)

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:DDF1
 MEASURE. TIME : 1
 SEX : FEMALE

BIOCHEMISTRY (SUMMARY)
 ALL ANIMALS (105W)

REPORT TYPE : A1

PAGE : 4

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	23	5.5±	1.1	2.9±	0.3	1.3±	0.3	0.13±	0.02	131±	24	85±	37	33±	28
1000 ppm	27	5.3±	0.5	3.1±	0.3	1.4±	0.2	0.15±	0.07	147±	35	93±	37	32±	14
2000 ppm	26	5.4±	0.9	3.2±	0.5**	1.5±	0.2	0.16±	0.12	144±	36	133±	81**	44±	47
4000 ppm	31	5.7±	0.7*	3.5±	0.4**	1.6±	0.2**	0.15±	0.04	144±	36	169±	74**	24±	13

Significant difference ; * : $P \leq 0.05$

** : $P \leq 0.01$

Test of Dunnett

(HCL074)

BATS 4

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 MEASURE TIME : 1
 SEX : FEMALE

BIOCHEMISTRY (SUMMARY)
 ALL ANIMALS (105#)

REPORT TYPE : A1

PAGE : 5

Group Name	NO. of Animals	PHOSPHOLIPID mg/dl		GOT IU/l		GPT IU/l		LDH IU/l		ALP IU/l		G-GTP IU/l		CPK IU/l	
Control	23	163±	61	87±	36	40±	23	386±	304	171±	53	2±	1	73±	65
1000 ppm	27	177±	53	130±	203	74±	123	646±	379	254±	88*	2±	1	64±	43
2000 ppm	26	244±	116**	133±	151	120±	189	537±	451	443±	468**	3±	3	117±	184
4000 ppm	31	286±	104**	190±	224	207±	316**	867±	1112	598±	559**	4±	6	112±	88**

Significant difference : * : $P \leq 0.05$

** : $P \leq 0.01$

Test of Dunnett

(HCL074)

BATS 4

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 MEASURE TIME : 1
 SEX : FEMALE

BIOCHEMISTRY (SUMMARY)
 ALL ANIMALS (105W)

REPORT TYPE : A1

PAGE : 6

Group Name	NO. of Animals	UREA NITROGEN mg/dl		SODIUM mEq/l		POTASSIUM mEq/l		CHLORIDE mEq/l		CALCIUM mg/dl		INORGANIC PHOSPHORUS mg/dl	
Control	23	23.6±	24.3	151±	2	4.2±	0.5	123±	3	9.4±	0.6	6.6±	1.3
1000 ppm	27	24.5±	10.6	151±	2	4.0±	0.4	123±	4	9.3±	0.6	6.3±	1.5
2000 ppm	26	27.5±	11.9**	152±	3	3.9±	0.4	124±	5	9.6±	0.5	6.2±	1.4
4000 ppm	31	30.7±	13.9**	155±	4**	3.9±	0.4	126±	4**	9.6±	0.6	6.1±	0.9

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

Test of Dunnett

(HCL074)

BATS 4

APPENDIX H 1

URINALYSIS : SUMMARY, MOUSE : MALE
(2-YEAR STUDY)

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 MEASURE. TIME : 1
 SEX : MALE

URINALYSIS

REPORT TYPE : A1

PAGE : 1

Group Name	NO. of Animals	pH							CHI	Protein					CHI	Glucose					CHI	Ketone body					CHI	Occult blood				CHI			
		5.0	6.0	6.5	7.0	7.5	8.0	8.5		—	±	+	2+	3+		4+	—	±	+	2+		3+	4+	—	±	+		2+	3+	4+	—		±	+	2+
Control	38	0	1	6	16	14	1	0		0	4	24	8	2	0		38	0	0	0	0	0		23	13	2	0	0	0		34	0	0	0	4
500 ppm	38	0	1	19	12	6	0	0	*	0	0	30	7	1	0		38	0	0	0	0	0		17	18	3	0	0	0		37	0	1	0	0
1000 ppm	42	0	7	28	7	0	0	0	**	0	2	29	10	1	0		42	0	0	0	0	0		21	16	5	0	0	0		36	1	1	2	2
2000 ppm	39	0	6	25	8	0	0	0	**	0	4	25	10	0	0		39	0	0	0	0	0		19	11	9	0	0	0		35	0	0	2	2

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

Test of CHI SQUARE

(HCL101)

BAIS 4

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
MEASURE. TIME : 1
SEX : MALE

URINALYSIS

REPORT TYPE : A1

PAGE : 2

Group Name	NO. of Animals	Urobilinogen					CHI
		±	+	2+	3+	4+	
Control	38	38	0	0	0	0	0
500 ppm	38	38	0	0	0	0	0
1000 ppm	42	42	0	0	0	0	0
2000 ppm	39	39	0	0	0	0	0

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

Test of CHI SQUARE

(HCL101)

BAIS 4

APPENDIX H 2

URINALYSIS : SUMMARY, MOUSE : FEMALE
(2-YEAR STUDY)

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
MEASURE. TIME : 1
SEX : FEMALE

URINALYSIS

REPORT TYPE : A1

PAGE : 3

Group Name	NO. of Animals	pH_____							CHI	Protein_____					CHI	Glucose_____					CHI	Ketone body					CHI	Occult blood				CHI			
		5.0	6.0	6.5	7.0	7.5	8.0	8.5		-	±	+	2+	3+		4+	-	±	+	2+		3+	4+	-	±	+		2+	3+	4+	-		±	+	2+
Control	27	0	1	3	6	5	10	2		0	0	9	16	2	0		27	0	0	0	0	0		3	20	4	0	0	0		20	3	0	1	3
1000 ppm	29	0	2	14	8	4	1	0	**	0	2	9	16	2	0		29	0	0	0	0	0		2	18	7	2	0	0		20	4	0	1	4
2000 ppm	28	0	9	16	3	0	0	0	**	0	6	10	11	1	0		28	0	0	0	0	0		3	22	1	2	0	0		24	1	0	1	2
4000 ppm	34	0	25	9	0	0	0	0	**	0	13	16	4	1	0	**	34	0	0	0	0	0		13	20	1	0	0	0	*	25	1	0	0	8

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

Test of CHI SQUARE

(HCL101)

BAIS 4

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
MEASURE TIME : 1
SEX : FEMALE

URINALYSIS

REPORT TYPE : A1

PAGE : 4

Group Name	NO. of Animals	Urobilinogen					CHI
		±	+	2+	3+	4+	
Control	27	27	0	0	0	0	0
1000 ppm	29	29	0	0	0	0	0
2000 ppm	28	28	0	0	0	0	0
4000 ppm	34	34	0	0	0	0	0

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

Test of CHI SQUARE

(HCL101)

BAIS 4

APPENDIX I 1

GROSS FINDINGS : SUMMARY, MOUSE : MALE ALL ANIMALS
(2-YEAR STUDY)

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 1

Organ	Findings	Group Name NO. of Animals	Control	500 ppm	1000 ppm	2000 ppm
			50 (%)	50 (%)	50 (%)	50 (%)
skin/app	ulcer		0 (0)	1 (2)	0 (0)	1 (2)
	thick		0 (0)	0 (0)	0 (0)	1 (2)
	scab		0 (0)	1 (2)	0 (0)	0 (0)
subcutis	mass		1 (2)	0 (0)	1 (2)	1 (2)
lung	red zone		0 (0)	0 (0)	1 (2)	0 (0)
	red patch		0 (0)	1 (2)	1 (2)	0 (0)
	nodule		7 (14)	6 (12)	5 (10)	4 (8)
lymph node	enlarged		4 (8)	6 (12)	6 (12)	7 (14)
spleen	enlarged		2 (4)	4 (8)	3 (6)	1 (2)
	black zone		1 (2)	1 (2)	2 (4)	2 (4)
	nodule		1 (2)	0 (0)	2 (4)	0 (0)
	accentuation of white pulp		0 (0)	2 (4)	1 (2)	3 (6)
heart	white zone		0 (0)	0 (0)	0 (0)	1 (2)
	deformed		0 (0)	1 (2)	0 (0)	0 (0)
	dilated		0 (0)	0 (0)	1 (2)	0 (0)
salivary gl	nodule		0 (0)	0 (0)	1 (2)	0 (0)
gl stomach	nodule		1 (2)	0 (0)	0 (0)	0 (0)
	thick		1 (2)	0 (0)	0 (0)	0 (0)
duodenum	nodule		1 (2)	0 (0)	0 (0)	0 (0)
small intes	nodule		1 (2)	1 (2)	3 (6)	1 (2)
	dilated		0 (0)	0 (0)	0 (0)	1 (2)
liver	enlarged		0 (0)	1 (2)	1 (2)	0 (0)

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 2

Organ_____	Findings_____	Group Name	Control	500 ppm	1000 ppm	2000 ppm
		NO. of Animals	50 (%)	50 (%)	50 (%)	50 (%)
liver	white zone		1 (2)	4 (8)	6 (12)	4 (8)
	red zone		2 (4)	1 (2)	0 (0)	1 (2)
	nodule		21 (42)	25 (50)	33 (66)	31 (62)
	cyst		0 (0)	1 (2)	0 (0)	0 (0)
kidney	red zone		0 (0)	1 (2)	0 (0)	0 (0)
	cyst		1 (2)	0 (0)	1 (2)	0 (0)
	granular		0 (0)	0 (0)	1 (2)	0 (0)
	hydronephrosis		2 (4)	2 (4)	2 (4)	4 (8)
urin bladd	nodule		0 (0)	1 (2)	0 (0)	0 (0)
	urino:marked retention		2 (4)	3 (6)	0 (0)	1 (2)
pituitary	enlarged		0 (0)	0 (0)	1 (2)	1 (2)
testis	enlarged		0 (0)	1 (2)	0 (0)	0 (0)
epididymis	nodule		1 (2)	0 (0)	1 (2)	1 (2)
prep/cli gl	nodule		9 (18)	9 (18)	2 (4)	6 (12)
brain	hemorrhage		0 (0)	1 (2)	0 (0)	0 (0)
	nodule		1 (2)	0 (0)	0 (0)	0 (0)
spinal cord	hemorrhage		0 (0)	1 (2)	0 (0)	0 (0)
periph nerv	nodule		0 (0)	1 (2)	0 (0)	0 (0)
Harder gl	enlarged		1 (2)	2 (4)	1 (2)	0 (0)
	nodule		2 (4)	3 (6)	1 (2)	1 (2)
vertebra	mass		0 (0)	0 (0)	0 (0)	1 (2)
mediastinum	mass		1 (2)	0 (0)	0 (0)	1 (2)

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 3

Organ	Findings	Group Name NO. of Animals	Control	500 ppm		1000 ppm		2000 ppm	
			50 (%)	50 (%)	50 (%)	50 (%)	50 (%)	50 (%)	50 (%)
peritoneum	nodule		1 (2)	0 (0)		0 (0)		0 (0)	
abdominal c	hemorrhage		1 (2)	0 (0)		0 (0)		0 (0)	
	ascites		2 (4)	0 (0)		0 (0)		2 (4)	
thoracic ca	pleural fluid		1 (2)	1 (2)		3 (6)		2 (4)	
whole body	anemic		0 (0)	2 (4)		1 (2)		1 (2)	

(HPT080)

BATS 4

APPENDIX I 2

GROSS FINDINGS : SUMMARY, MOUSE : FEMALE ALL ANIMALS
(2-YEAR STUDY)

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 4

Organ	Findings	Group Name NO. of Animals	Control	1000 ppm	2000 ppm	4000 ppm
			50 (%)	50 (%)	50 (%)	50 (%)
skin/app	nodule		1 (2)	0 (0)	0 (0)	0 (0)
	thick		1 (2)	0 (0)	0 (0)	0 (0)
subcutis	edema		5 (10)	6 (12)	2 (4)	0 (0)
	mass		0 (0)	1 (2)	1 (2)	2 (4)
lung	white		0 (0)	0 (0)	1 (2)	0 (0)
	white zone		0 (0)	0 (0)	1 (2)	0 (0)
	red zone		0 (0)	0 (0)	1 (2)	0 (0)
	nodule		2 (4)	1 (2)	3 (6)	1 (2)
lymph node	enlarged		11 (22)	8 (16)	4 (8)	3 (6)
thymus	enlarged		1 (2)	0 (0)	0 (0)	0 (0)
spleen	enlarged		5 (10)	7 (14)	3 (6)	2 (4)
	nodule		1 (2)	1 (2)	0 (0)	1 (2)
	accentuation of white pulp		0 (0)	1 (2)	4 (8)	1 (2)
forestomach	nodule		0 (0)	1 (2)	2 (4)	0 (0)
	ulcer		1 (2)	0 (0)	0 (0)	0 (0)
gl stomach	ulcer		1 (2)	0 (0)	0 (0)	0 (0)
small intes	nodule		1 (2)	1 (2)	1 (2)	0 (0)
	dilated		0 (0)	1 (2)	0 (0)	0 (0)
cecum	nodule		0 (0)	1 (2)	1 (2)	0 (0)
liver	enlarged		4 (8)	4 (8)	3 (6)	3 (6)
	atrophic		0 (0)	1 (2)	0 (0)	0 (0)
	white zone		6 (12)	9 (18)	6 (12)	5 (10)

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 5

Organ	Findings	Group Name NO. of Animals	Control	1000 ppm	2000 ppm	4000 ppm
			50 (%)	50 (%)	50 (%)	50 (%)
liver	red zone		2 (4)	0 (0)	2 (4)	4 (8)
	brown zone		0 (0)	1 (2)	0 (0)	0 (0)
	nodule		10 (20)	23 (46)	31 (62)	36 (72)
	cyst		0 (0)	1 (2)	0 (0)	1 (2)
	rough		1 (2)	0 (0)	0 (0)	0 (0)
	nodular		1 (2)	0 (0)	0 (0)	0 (0)
kidney	enlarged		0 (0)	2 (4)	2 (4)	0 (0)
	atrophic		0 (0)	1 (2)	0 (0)	0 (0)
	white zone		0 (0)	1 (2)	0 (0)	1 (2)
	nodule		1 (2)	0 (0)	1 (2)	0 (0)
	cyst		0 (0)	0 (0)	0 (0)	1 (2)
	hydronephrosis		2 (4)	7 (14)	12 (24)	7 (14)
ureter	dilated		0 (0)	0 (0)	1 (2)	0 (0)
	thick		0 (0)	0 (0)	1 (2)	0 (0)
urin bladd	urine:marked retention		1 (2)	0 (0)	0 (0)	0 (0)
pituitary	enlarged		3 (6)	2 (4)	0 (0)	1 (2)
	red		1 (2)	0 (0)	0 (0)	0 (0)
	red zone		1 (2)	0 (0)	0 (0)	0 (0)
	black zone		0 (0)	1 (2)	0 (0)	0 (0)
	nodule		2 (4)	0 (0)	1 (2)	0 (0)
ovary	enlarged		5 (10)	9 (18)	5 (10)	2 (4)
	cyst		11 (22)	4 (8)	3 (6)	3 (6)

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 6

Organ	Findings	Group Name NO. of Animals	Control 50 (%)	1000 ppm 50 (%)	2000 ppm 50 (%)	4000 ppm 50 (%)
uterus	nodule		10 (20)	20 (40)	12 (24)	9 (18)
	nodular		1 (2)	0 (0)	0 (0)	0 (0)
	dilated lumen		1 (2)	0 (0)	0 (0)	0 (0)
Harder gl	enlarged		1 (2)	1 (2)	1 (2)	1 (2)
	nodule		0 (0)	0 (0)	1 (2)	2 (4)
Zymbal gl	nodule		1 (2)	0 (0)	0 (0)	0 (0)
bone	nodule		0 (0)	0 (0)	0 (0)	1 (2)
mediastinum	mass		4 (8)	3 (6)	0 (0)	0 (0)
peritoneum	nodule		0 (0)	0 (0)	1 (2)	0 (0)
	thick		3 (6)	1 (2)	0 (0)	0 (0)
abdominal c	hemorrhage		2 (4)	2 (4)	3 (6)	0 (0)
	ascites		10 (20)	6 (12)	5 (10)	2 (4)
thoracic ca	hemorrhage		1 (2)	0 (0)	1 (2)	0 (0)
	mass		1 (2)	0 (0)	0 (0)	0 (0)
	pleural fluid		11 (22)	5 (10)	1 (2)	1 (2)
other	forelimb:nodule		0 (0)	0 (0)	1 (2)	0 (0)
	lower jaw:nodule		0 (0)	0 (0)	0 (0)	1 (2)
	nose:nodule		1 (2)	0 (0)	0 (0)	0 (0)
whole body	anemic		1 (2)	0 (0)	0 (0)	0 (0)

APPENDIX I 3

GROSS FINDINGS : SUMMARY, MOUSE : MALE : SACRIFICED ANIMALS
(2-YEAR STUDY)

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

GROSS FINDINGS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 1

Organ	Findings	Group Name NO. of Animals	Control	500 ppm	1000 ppm	2000 ppm
			38 (%)	38 (%)	42 (%)	39 (%)
skin/app	thick		0 (0)	0 (0)	0 (0)	1 (3)
lung	red zone		0 (0)	0 (0)	1 (2)	0 (0)
	nodule		5 (13)	5 (13)	5 (12)	4 (10)
lymph node	enlarged		2 (5)	4 (11)	5 (12)	6 (15)
spleen	enlarged		1 (3)	2 (5)	3 (7)	1 (3)
	black zone		1 (3)	1 (3)	2 (5)	2 (5)
	nodule		0 (0)	0 (0)	2 (5)	0 (0)
	accentuation of white pulp		0 (0)	2 (5)	1 (2)	3 (8)
gl stomach	nodule		1 (3)	0 (0)	0 (0)	0 (0)
duodenum	nodule		1 (3)	0 (0)	0 (0)	0 (0)
small intes	nodule		0 (0)	1 (3)	3 (7)	0 (0)
liver	enlarged		0 (0)	0 (0)	1 (2)	0 (0)
	white zone		1 (3)	3 (8)	5 (12)	4 (10)
	red zone		2 (5)	1 (3)	0 (0)	1 (3)
	nodule		13 (34)	21 (55)	29 (69)	28 (72)
	cyst		0 (0)	1 (3)	0 (0)	0 (0)
kidney	red zone		0 (0)	1 (3)	0 (0)	0 (0)
	cyst		1 (3)	0 (0)	1 (2)	0 (0)
	hydronephrosis		1 (3)	1 (3)	1 (2)	1 (3)
urin bladd	urine:marked retention		1 (3)	0 (0)	0 (0)	0 (0)
pituitary	enlarged		0 (0)	0 (0)	0 (0)	1 (3)
testis	enlarged		0 (0)	1 (3)	0 (0)	0 (0)

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

GROSS FINDINGS (SUMMARY)
SACRIFICED ANIMALS (105W)

PAGE : 2

Organ	Findings	Group Name	Control		500 ppm		1000 ppm		2000 ppm	
		NO. of Animals	38	(%)	38	(%)	42	(%)	39	(%)
epididymis	nodule		1	(3)	0	(0)	1	(2)	1	(3)
prep/cli gl	nodule		9	(24)	9	(24)	2	(5)	6	(15)
Harder gl	enlarged		1	(3)	2	(5)	1	(2)	0	(0)
	nodule		2	(5)	2	(5)	1	(2)	1	(3)
thoracic ca	pleural fluid		0	(0)	0	(0)	2	(5)	0	(0)

(HPT080)

BAIS-4

APPENDIX I 4

GROSS FINDINGS : SUMMARY, MOUSE : FEMALE : SACRIFICED ANIMALS

(2-YEAR STUDY)

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

GROSS FINDINGS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 3

Organ	Findings	Group Name NO. of Animals	Control 24 (%)	1000 ppm 29 (%)	2000 ppm 28 (%)	4000 ppm 34 (%)
skin/app	nodule		1 (4)	0 (0)	0 (0)	0 (0)
	thick		1 (4)	0 (0)	0 (0)	0 (0)
subcutis	mass		0 (0)	0 (0)	1 (4)	0 (0)
lung	white		0 (0)	0 (0)	1 (4)	0 (0)
	white zone		0 (0)	0 (0)	1 (4)	0 (0)
	nodule		2 (8)	1 (3)	1 (4)	0 (0)
lymph node	enlarged		3 (13)	3 (10)	3 (11)	2 (6)
spleen	enlarged		2 (8)	2 (7)	0 (0)	1 (3)
	nodule		0 (0)	1 (3)	0 (0)	1 (3)
	accentuation of white pulp		0 (0)	1 (3)	4 (14)	1 (3)
forestomach	nodule		0 (0)	1 (3)	2 (7)	0 (0)
gl stomach	ulcer		1 (4)	0 (0)	0 (0)	0 (0)
small intes	nodule		0 (0)	0 (0)	1 (4)	0 (0)
cecum	nodule		0 (0)	0 (0)	1 (4)	0 (0)
liver	atrophic		0 (0)	1 (3)	0 (0)	0 (0)
	white zone		1 (4)	4 (14)	3 (11)	3 (9)
	red zone		0 (0)	0 (0)	2 (7)	2 (6)
	nodule		5 (21)	15 (52)	18 (64)	28 (82)
	cyst		0 (0)	1 (3)	0 (0)	1 (3)
kidney	enlarged		0 (0)	1 (3)	0 (0)	0 (0)
	white zone		0 (0)	1 (3)	0 (0)	1 (3)
	nodule		0 (0)	0 (0)	1 (4)	0 (0)

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

GROSS FINDINGS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 4

Organ	Findings	Group Name NO. of Animals	Control	1000 ppm	2000 ppm	4000 ppm
			24 (%)	29 (%)	23 (%)	34 (%)
kidney	cyst		0 (0)	0 (0)	0 (0)	1 (3)
	hydronephrosis		2 (8)	3 (10)	5 (18)	2 (6)
pituitary	enlarged		1 (4)	1 (3)	0 (0)	0 (0)
	red zone		1 (4)	0 (0)	0 (0)	0 (0)
	black zone		0 (0)	1 (3)	0 (0)	0 (0)
	nodule		2 (8)	0 (0)	1 (4)	0 (0)
ovary	enlarged		0 (0)	3 (10)	1 (4)	1 (3)
	cyst		6 (25)	1 (3)	2 (7)	3 (9)
uterus	nodule		3 (13)	9 (31)	3 (11)	4 (12)
	nodular		1 (4)	0 (0)	0 (0)	0 (0)
harder gl	nodule		0 (0)	0 (0)	0 (0)	1 (3)
bone	nodule		0 (0)	0 (0)	0 (0)	1 (3)
abdominal c	ascites		2 (8)	1 (3)	1 (4)	0 (0)
thoracic ca	pleural fluid		0 (0)	1 (3)	0 (0)	0 (0)
other	nose:nodule		1 (4)	0 (0)	0 (0)	0 (0)

APPENDIX I 5

GROSS FINDINGS : SUMMARY, MOUSE : MALE

DEAD AND MORIBUND ANIMALS

(2-YEAR STUDY)

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 1

Organ	Findings	Group Name NO. of Animals	Control 12 (%)	500 ppm 12 (%)	1000 ppm 8 (%)	2000 ppm 11 (%)
skin/app	ulcer		0 (0)	1 (8)	0 (0)	1 (9)
	scab		0 (0)	1 (8)	0 (0)	0 (0)
subcutis	mass		1 (8)	0 (0)	1 (13)	1 (9)
lung	red patch		0 (0)	1 (8)	1 (13)	0 (0)
	nodule		2 (17)	1 (8)	0 (0)	0 (0)
lymph node	enlarged		2 (17)	2 (17)	1 (13)	1 (9)
spleen	enlarged		1 (8)	2 (17)	0 (0)	0 (0)
	nodule		1 (8)	0 (0)	0 (0)	0 (0)
heart	white zone		0 (0)	0 (0)	0 (0)	1 (9)
	deformed		0 (0)	1 (8)	0 (0)	0 (0)
	dilated		0 (0)	0 (0)	1 (13)	0 (0)
salivary gl	nodule		0 (0)	0 (0)	1 (13)	0 (0)
gl stomach	thick		1 (8)	0 (0)	0 (0)	0 (0)
small intes	nodule		1 (8)	0 (0)	0 (0)	1 (9)
	dilated		0 (0)	0 (0)	0 (0)	1 (9)
liver	enlarged		0 (0)	1 (8)	0 (0)	0 (0)
	white zone		0 (0)	1 (8)	1 (13)	0 (0)
	nodule		8 (67)	4 (33)	4 (50)	3 (27)
kidney	granular		0 (0)	0 (0)	1 (13)	0 (0)
	hydronephrosis		1 (8)	1 (8)	1 (13)	3 (27)
urin bladd	nodule		0 (0)	1 (8)	0 (0)	0 (0)
	urine:marked retention		1 (8)	3 (25)	0 (0)	1 (9)

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 2

Organ	Findings	Group Name NO. of Animals	Control	500 ppm	1000 ppm	2000 ppm
			12 (%)	12 (%)	8 (%)	11 (%)
pituitary	enlarged		0 (0)	0 (0)	1 (13)	0 (0)
brain	hemorrhage		0 (0)	1 (8)	0 (0)	0 (0)
	nodule		1 (8)	0 (0)	0 (0)	0 (0)
spinal cord	hemorrhage		0 (0)	1 (8)	0 (0)	0 (0)
periph nerv	nodule		0 (0)	1 (8)	0 (0)	0 (0)
Harder gl	nodule		0 (0)	1 (8)	0 (0)	0 (0)
vertebra	mass		0 (0)	0 (0)	0 (0)	1 (9)
mediastinum	mass		1 (8)	0 (0)	0 (0)	1 (9)
peritoneum	nodule		1 (8)	0 (0)	0 (0)	0 (0)
abdominal c	hemorrhage		1 (8)	0 (0)	0 (0)	0 (0)
	ascites		2 (17)	0 (0)	0 (0)	2 (18)
thoracic ca	pleural fluid		1 (8)	1 (8)	1 (13)	2 (18)
whole body	anemic		0 (0)	2 (17)	1 (13)	1 (9)

(HPT080)

BAIS 4

APPENDIX I 6

GROSS FINDINGS : SUMMARY, MOUSE : FEMALE

DEAD AND MORIBUND ANIMALS

(2-YEAR STUDY)

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDf1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 3

Organ	Findings	Group Name NO. of Animals	Control	1000 ppm	2000 ppm	4000 ppm
			26 (%)	21 (%)	22 (%)	16 (%)
subcutis	edema		5 (19)	6 (29)	2 (9)	0 (0)
	mass		0 (0)	1 (5)	0 (0)	2 (13)
lung	red zone		0 (0)	0 (0)	1 (5)	0 (0)
	nodule		0 (0)	0 (0)	2 (9)	1 (6)
lymph node	enlarged		8 (31)	5 (24)	1 (5)	1 (6)
thymus	enlarged		1 (4)	0 (0)	0 (0)	0 (0)
spleen	enlarged		3 (12)	5 (24)	3 (14)	1 (6)
	nodule		1 (4)	0 (0)	0 (0)	0 (0)
forestomach	ulcer		1 (4)	0 (0)	0 (0)	0 (0)
small intes	nodule		1 (4)	1 (5)	0 (0)	0 (0)
	dilated		0 (0)	1 (5)	0 (0)	0 (0)
cecum	nodule		0 (0)	1 (5)	0 (0)	0 (0)
liver	enlarged		4 (15)	4 (19)	3 (14)	3 (19)
	white zone		5 (19)	5 (24)	3 (14)	2 (13)
	red zone		2 (8)	0 (0)	0 (0)	2 (13)
	brown zone		0 (0)	1 (5)	0 (0)	0 (0)
	nodule		5 (19)	8 (38)	13 (59)	8 (50)
	rough		1 (4)	0 (0)	0 (0)	0 (0)
	nodular		1 (4)	0 (0)	0 (0)	0 (0)
kidney	enlarged		0 (0)	1 (5)	2 (9)	0 (0)
	atrophic		0 (0)	1 (5)	0 (0)	0 (0)
	nodule		1 (4)	0 (0)	0 (0)	0 (0)

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 4

Organ	Findings	Group Name NO. of Animals	Control 26 (%)	1000 ppm 21 (%)	2000 ppm 22 (%)	4000 ppm 16 (%)
kidney	hydronephrosis		0 (0)	4 (19)	7 (32)	5 (31)
ureter	dilated		0 (0)	0 (0)	1 (5)	0 (0)
	thick		0 (0)	0 (0)	1 (5)	0 (0)
urin bladd	urine:marked retention		1 (4)	0 (0)	0 (0)	0 (0)
pituitary	enlarged		2 (8)	1 (5)	0 (0)	1 (6)
	red		1 (4)	0 (0)	0 (0)	0 (0)
ovary	enlarged		5 (19)	6 (29)	4 (18)	1 (6)
	cyst		5 (19)	3 (14)	1 (5)	0 (0)
uterus	nodule		7 (27)	11 (52)	9 (41)	5 (31)
	dilated lumen		1 (4)	0 (0)	0 (0)	0 (0)
harder gl	enlarged		1 (4)	1 (5)	1 (5)	1 (6)
	nodule		0 (0)	0 (0)	1 (5)	1 (6)
Zymbal gl	nodule		1 (4)	0 (0)	0 (0)	0 (0)
mediastinum	mass		4 (15)	3 (14)	0 (0)	0 (0)
peritoneum	nodule		0 (0)	0 (0)	1 (5)	0 (0)
	thick		3 (12)	1 (5)	0 (0)	0 (0)
abdominal c	hemorrhage		2 (8)	2 (10)	3 (14)	0 (0)
	ascites		8 (31)	5 (24)	4 (18)	2 (13)
thoracic ca	hemorrhage		1 (4)	0 (0)	1 (5)	0 (0)
	mass		1 (4)	0 (0)	0 (0)	0 (0)
	pleural fluid		11 (42)	4 (19)	1 (5)	1 (6)
other	forelimb:nodule		0 (0)	0 (0)	1 (5)	0 (0)

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 5

Organ	Findings	Group Name	Control		1000 ppm		2000 ppm		4000 ppm	
		NO. of Animals	26	(%)	21	(%)	22	(%)	16	(%)
other	lower jaw:nodule		0	(0)	0	(0)	0	(0)	1	(6)
whole body	anemic		1	(4)	0	(0)	0	(0)	0	(0)

(HPT080)

BAIS 4

APPENDIX J 1

ORGAN WEIGHT, ABSOLUTE : SUMMARY, MOUSE : MALE
(2-YEAR STUDY)

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE
 UNIT: g

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

PAGE : 1

Group Name	NO. of Animals	Body Weight	ADRENALS	TESTES	HEART	LUNGS	KIDNEYS
Control	37	48.1± 7.0	0.011± 0.003	0.219± 0.044	0.232± 0.026	0.238± 0.091	0.964± 1.964
500 ppm	38	40.3± 5.3**	0.010± 0.003	0.221± 0.051	0.216± 0.018**	0.222± 0.046	0.757± 0.893
1000 ppm	42	35.1± 4.1**	0.010± 0.003	0.204± 0.033	0.210± 0.019**	0.208± 0.037*	0.675± 0.447*
2000 ppm	39	31.0± 2.6**	0.009± 0.003	0.209± 0.030	0.197± 0.021**	0.195± 0.027**	0.765± 0.918

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

Test of Dunnett

(ICL040)

BAIS 4

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE
UNIT: g

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

PAGE : 2

Group Name	NO. of Animals	SPLEEN		LIVER		BRAIN	
Control	37	0.092±	0.080	1.792±	0.601	0.453±	0.017
500 ppm	38	0.143±	0.210	1.902±	0.633	0.456±	0.017
1000 ppm	42	0.169±	0.271	2.092±	0.964	0.453±	0.020
2000 ppm	39	0.092±	0.112	1.872±	0.504	0.453±	0.018

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

Test of Dunnett

(ICL040)

BAIS 4

APPENDIX J 2

ORGAN WEIGHT, ABSOLUTE : SUMMARY, MOUSE : FEMALE
(2-YEAR STUDY)

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE
 UNIT: g

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

PAGE : 3

Group Name	NO. of Animals	Body Weight	ADRENALS		OVARIES		HEART		LUNGS		KIDNEYS	
Control	24	31.1 ± 3.4	0.013 ±	0.003	0.097 ±	0.113	0.183 ±	0.026	0.249 ±	0.243	0.501 ±	0.273
1000 ppm	29	28.4 ± 4.4	0.013 ±	0.004	0.268 ±	0.866	0.169 ±	0.031	0.197 ±	0.053	1.056 ±	2.744
2000 ppm	28	26.4 ± 5.6**	0.012 ±	0.002	0.052 ±	0.077	0.158 ±	0.032**	0.191 ±	0.028	2.107 ±	6.004
4000 ppm	34	21.5 ± 2.1**	0.010 ±	0.002**	0.041 ±	0.037	0.139 ±	0.025**	0.173 ±	0.024**	0.442 ±	0.338**

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

Test of Dunnett

(HCL040)

BAIS 4

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE
UNIT: g

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

PAGE : 4

Group Name	NO. of Animals	SPLEEN		LIVER		BRAIN	
Control	24	0.169±	0.159	1.490±	0.300	0.471±	0.021
1000 ppm	29	0.298±	0.672	1.580±	0.437	0.466±	0.017
2000 ppm	28	0.168±	0.128	1.993±	1.208	0.455±	0.025*
4000 ppm	34	0.115±	0.178**	2.024±	0.976	0.443±	0.021**

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

Test of Dunnett

(ICL040)

BAIS 4

APPENDIX K 1

ORGAN WEIGHT, RELATIVE : SUMMARY, MOUSE : MALE

(2-YEAR STUDY)

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE
UNIT: %

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

PAGE : 1

Group Name	NO. of Animals	Body Weight (g)	ADRENALS	TESTES	HEART	LUNGS	KIDNEYS
Control	37	48.1± 7.0	0.023± 0.009	0.461± 0.094	0.495± 0.111	0.504± 0.196	2.119± 4.555
500 ppm	38	40.3± 5.3**	0.025± 0.008	0.557± 0.156*	0.547± 0.094*	0.556± 0.114*	1.925± 2.408*
1000 ppm	42	35.1± 4.1**	0.030± 0.009**	0.586± 0.102**	0.602± 0.065**	0.600± 0.127**	1.932± 1.234**
2000 ppm	39	31.0± 2.6**	0.031± 0.011**	0.679± 0.109**	0.639± 0.068**	0.637± 0.128**	2.473± 2.930**

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

Test of Dunnett

(ICL042)

BAIS 4

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE
UNIT: %

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

PAGE : 2

Group Name	NO. of Animals	SPLEEN	LIVER	BRAIN
Control	37	0.199± 0.171	3.919± 2.259	0.967± 0.173
500 ppm	38	0.373± 0.584*	4.945± 2.625**	1.151± 0.157**
1000 ppm	42	0.506± 0.867**	6.162± 3.224**	1.308± 0.156**
2000 ppm	39	0.298± 0.365*	6.115± 1.984**	1.470± 0.127**

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

(HCL042)

BAIS 4

APPENDIX K 2

ORGAN WEIGHT, RELATIVE : SUMMARY, MOUSE : FEMALE
(2-YEAR STUDY)

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE
UNIT: %

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

PAGE : 3

Group Name	NO. of Animals	Body Weight (g)	ADRENALS	OVARIES	HEART	LUNGS	KIDNEYS
Control	24	31.1 ± 3.4	0.040 ± 0.009	0.310 ± 0.383	0.600 ± 0.129	0.831 ± 0.904	1.655 ± 0.992
1000 ppm	29	28.4 ± 4.4	0.045 ± 0.018	0.893 ± 2.780	0.597 ± 0.086	0.700 ± 0.187	3.077 ± 6.025*
2000 ppm	28	26.4 ± 5.6**	0.046 ± 0.009	0.201 ± 0.268	0.612 ± 0.136	0.745 ± 0.157*	5.634 ± 12.482**
4000 ppm	34	21.5 ± 2.1**	0.049 ± 0.015*	0.193 ± 0.198	0.649 ± 0.122	0.810 ± 0.100**	2.070 ± 1.574**
Significant difference ;			* : $P \leq 0.05$	** : $P \leq 0.01$	Test of Dunnett		

(HCL042)

BAIS 4

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE
UNIT: %

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

PAGE : 4

Group Name	NO. of Animals	SPLEEN	LIVER	BRAIN
Control	24	0.576± 0.598	4.891± 1.346	1.533± 0.186
1000 ppm	29	1.048± 2.384	5.611± 1.529	1.674± 0.231
2000 ppm	28	0.642± 0.487	7.834± 5.039**	1.775± 0.254**
4000 ppm	34	0.510± 0.734	9.451± 4.632**	2.081± 0.225**
Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Dunnett				

(HCL042)

BAIS4

APPENDIX L 1

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS : SUMMARY

MOUSE : MALE : ALL ANIMALS

(2-YEAR STUDY)

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 1

		Group Name No. of Animals on Study				Control 50				500 ppm 50				1000 ppm 50				2000 ppm 50			
Organ_____	Findings_____	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)				
{Integumentary system/appandage}																					
skin/app		<50>				<50>				<50>				<50>							
	ulcer	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	2 (4)	0 (0)	0 (0)				
	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)	0 (0)	0 (0)	1 (2)	0 (0)				
{Respiratory system}																					
nasal cavit		<50>				<50>				<50>				<50>							
	eosinophilic change:olfactory epithelium	21 (42)	1 (2)	0 (0)	0 (0)	11 (22)	0 (0)	0 (0)	0 (0)	22 (44)	0 (0)	0 (0)	0 (0)	23 (46)	1 (2)	0 (0)	0 (0)				
	eosinophilic change:respiratory epithelium	31 (62)	0 (0)	1 (2)	0 (0)	25 (50)	1 (2)	1 (2)	0 (0)	25 (50)	3 (6)	0 (0)	0 (0)	36 (72)	6 (12)	3 (6)	0 ** (0)				
	respiratory metaplasia:olfactory epithelium	18 (36)	0 (0)	0 (0)	0 (0)	7 (14)	0 (0)	0 (0)	0 * (0)	12 (24)	1 (2)	0 (0)	0 (0)	11 (22)	0 (0)	0 (0)	0 (0)				
	respiratory metaplasia:gland	28 (56)	3 (6)	0 (0)	0 (0)	22 (44)	3 (6)	0 (0)	0 (0)	22 (44)	3 (6)	0 (0)	0 (0)	34 (68)	0 (0)	0 (0)	0 (0)				
	inflammation:transitional epithelium	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)				

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. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 2

Organ_____	Findings_____	Group Name	Control				500 ppm				1000 ppm				2000 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}																		
nasopharynx			<50>				<50>				<50>				<50>			
	eosinophilic change		2	0	0	0	1	1	0	0	1	0	0	0	4	0	0	0
		(4)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(2)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	
trachea			<50>				<50>				<50>				<50>			
	eosinophilic change		1	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0
		(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	
lung			<50>				<50>				<50>				<50>			
	congestion		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)	(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)	(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	edema		1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	
		(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	
	inflammatory infiltration		2	0	0	0	1	0	0	0	1	0	0	0	3	0	0	
		(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	
	granulation		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)	

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
 < a > a : Number of animals examined at the site
 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. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 3

Organ_____	Findings_____	Group Name	Control				500 ppm				1000 ppm				2000 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)																		
lung			<50>				<50>				<50>				<50>			
	accumulation of foamy cells		2	1	0	0	0	0	0	0	1	0	0	0	1	1	0	0
			(4)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(2)	(0)	(0)
	bronchiolar cell 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)	(2)	(0)	(0)	(0)
	bronchiolar-alveolar cell hyperplasia		12	0	0	0	15	0	0	0	15	0	0	0	15	0	0	0
			(24)	(0)	(0)	(0)	(30)	(0)	(0)	(0)	(30)	(0)	(0)	(0)	(30)	(0)	(0)	(0)
(Hematopoietic system)																		
bone marrow			<50>				<50>				<50>				<50>			
	thrombus		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)
	decreased hematopoiesis		0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	myelofibrosis		1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
			(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	erythropoiesis:increased		1	0	0	0	3	0	0	0	1	0	0	0	1	0	0	0
			(2)	(0)	(0)	(0)	(6)	(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 : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 4

Organ_____	Findings_____	Group Name	Control				500 ppm				1000 ppm				2000 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	
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
{Hematopoietic system}																			
bone marrow		<50>					<50>				<50>				<50>				
	megakaryocyte:increased		2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
			(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
spleen		<50>					<50>				<50>				<50>				
	deposit of hemosiderin		0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)
	deposit of melanin		2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
			(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	plasma cell 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)	(0)	(2)	(0)	(0)	(0)	(0)
extramedullary hematopoiesis		5	1	5	0	5	3	4	0	10	4	2	0	12	2	1	0	0	
		(10)	(2)	(10)	(0)	(10)	(6)	(8)	(0)	(20)	(8)	(4)	(0)	(24)	(4)	(2)	(0)	(0)	
hyperplasia:mast 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)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
follicular hyperplasia		1	0	0	0	2	1	0	0	2	1	0	0	0	0	0	0	0	
		(2)	(0)	(0)	(0)	(4)	(2)	(0)	(0)	(4)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
{Circulatory system}																			
heart		<50>					<50>				<50>				<50>				
	thrombus		0	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)	(0)	(0)	(2)	(0)	

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
 < a > a : Number of animals examined at the site
 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. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 5

Organ_____	Findings_____	Group Name	Control				500 ppm				1000 ppm				2000 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
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
<hr/>																		
{Circulatory system}																		
heart			<50>				<50>				<50>				<50>			
	mineralization		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)	(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)
	arteritis		1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	
			(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	dilatation:right ventricle		2	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
			(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	
<hr/>																		
{Digestive system}																		
tooth			<50>				<50>				<50>				<50>			
	dysplasia		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)	(0)	
tongue			<50>				<50>				<50>				<50>			
	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)	(2)	(0)	(0)		

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
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. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 6

Organ_____	Findings_____	Group Name	Control				500 ppm				1000 ppm				2000 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
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Digestive system)																		
salivary gl	atrophy		<50>				<50>				<50>				<50>			
		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)	
	inflammatory infiltration	0	0	0	0	1	0	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	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	fibrosis:focal	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
stomach	mineralization		<50>				<50>				<50>				<50>			
		3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	inflammatory infiltration	5	0	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)	(0)
		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	erosion:forestomach	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)
	hyperplasia:forestomach	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)
	erosion:glandular stomach	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
		(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(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

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 7

Organ_____	Findings_____	Group Name	Control				500 ppm				1000 ppm				2000 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
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Digestive system)																		
stomach	ulcer:glandular stomach		<50>				<50>				<50>				<50>			
		0	0	0	0	1	0	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)
	hyperplasia:glandular stomach		6	0	1	0	1	0	0	0	0	0	0	0 *	1	0	0	0
		(12)	(0)	(2)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	ectopia:glandular stomach		2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
liver	congestion		<50>				<50>				<50>				<50>			
		0	0	0	0	1	0	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)
	angiectasis		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)	(0)
	necrosis:central		0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(4)	(0)	(0)
	necrosis:focal		1	1	0	0	2	0	0	0	3	0	0	0	3	1	0	0
		(2)	(2)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(6)	(2)	(0)	(0)
	necrosis:single cell		3	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
		(6)	(0)	(0)	(0)	(2)	(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

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 8

Organ_____	Findings_____	Group Name	Control				500 ppm				1000 ppm				2000 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
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Digestive system)																		
liver			<50>				<50>				<50>				<50>			
	fatty change		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)
	fatty change:central		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)
	degeneration:focal		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)
	inflammatory infiltration		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)	1 (2)	0 (0)	0 (0)
	lymphocytic infiltration		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)	1 (2)	0 (0)	0 (0)
	granulation		30 (60)	0 (0)	0 (0)	0 (0)	31 (62)	0 (0)	0 (0)	0 (0)	27 (54)	2 (4)	0 (0)	0 (0)	26 (52)	0 (0)	0 (0)	0 (0)
	extramedullary hematopoiesis		0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	clear cell focus		3 (6)	0 (0)	0 (0)	0 (0)	6 (12)	0 (0)	0 (0)	0 (0)	1 (2)	1 (2)	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 : Number of animals with lesion
(c) c : b / a * 100
Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 9

Organ	Findings	Group Name	Control				500 ppm				1000 ppm				2000 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
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
liver			<50>				<50>				<50>				<50>			
	acidophilic cell focus		1 (2)	1 (2)	0 (0)	0 (0)	9 (18)	1 (2)	0 (0)	0 * (0)	5 (10)	4 (8)	0 (0)	0 (0)	5 (10)	0 (0)	0 (0)	0 (0)
	basophilic cell focus		2 (4)	0 (0)	0 (0)	0 (0)	5 (10)	0 (0)	0 (0)	0 (0)	6 (12)	3 (6)	0 (0)	0 (0)	7 (14)	1 (2)	1 (2)	0 (0)
	mixed cell focus		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)	0 (0)	0 (0)	0 (0)
	bile ductular proliferation		0 (0)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
	biliary cyst		3 (6)	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)
	focal fatty change		2 (4)	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)	
gall bladd	cyst		<46>				<50>				<49>				<47>			
			0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	eosinophilic change		3 (7)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)	3 (6)	1 (2)	0 (0)	0 (0)	0 (0)	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 : * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Chi Square

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 10

Organ	Findings	Group Name No. of Animals on Study Grade	Control 50				500 ppm 50				1000 ppm 50				2000 ppm 50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Digestive system)																		
gall bladd	hyperplasia		<46>				<50>				<49>				<47>			
		0	0	0	0	13	0	0	0 **	8	0	0	0 *	8	0	0	0 *	
		(0)	(0)	(0)	(0)	(26)	(0)	(0)	(0)	(16)	(0)	(0)	(0)	(17)	(0)	(0)	(0)	
pancreas	atrophy		<50>				<50>				<50>				<50>			
		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)	(0)	(0)	(0)	
(Urinary system)																		
kidney	hemorrhage		<50>				<50>				<50>				<50>			
		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)	
	infarct		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)	
	cyst		1	1	0	0	1	1	0	0	1	0	0	0	0	0	0	0
		(2)	(2)	(0)	(0)	(2)	(2)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	hyaline droplet		1	2	0	0	2	0	0	0	2	1	0	0	3	0	0	0
		(2)	(4)	(0)	(0)	(4)	(0)	(0)	(0)	(4)	(2)	(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 : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Chi Square

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 11

Organ_____	Findings_____	Group Name	Control				500 ppm				1000 ppm				2000 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
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Urinary system)																		
kidney	basophilic change		34 (68)	0 (0)	0 (0)	0 (0)	39 (78)	0 (0)	0 (0)	0 (0)	40 (80)	0 (0)	0 (0)	0 (0)	40 (80)	0 (0)	0 (0)	0 (0)
	deposit of hemosiderin		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)	1 (2)	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)
	lymphocytic infiltration		4 (8)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)	8 (16)	0 (0)	0 (0)	0 (0)	4 (8)	1 (2)	0 (0)	0 (0)
	inflammatory polyp		0 (0)	2 (4)	0 (0)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	1 (2)	1 (2)	0 (0)	0 (0)	1 (2)	2 (4)	0 (0)
	hydronephrosis		0 (0)	2 (4)	1 (2)	0 (0)	0 (0)	0 (0)	1 (2)	1 (2)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	3 (6)	1 (2)
	mineralization:polvis		1 (2)	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)
	mineralization:cortex		11 (22)	0 (0)	0 (0)	0 (0)	13 (26)	0 (0)	0 (0)	0 (0)	19 (38)	0 (0)	0 (0)	0 (0)	10 (20)	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																		

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 12

Organ	Findings	Group Name No. of Animals on Study Grade	Control 50				500 ppm 50				1000 ppm 50				2000 ppm 50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Urinary system)																		
kidney	glomerulosclerosis		<50>				<50>				<50>				<50>			
			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)	(0)	(0)
urin bladd	dilatation		<50>				<50>				<50>				<50>			
			0	0	2	0	0	0	3	0	0	0	0	0	0	0	1	0
			(0)	(0)	(4)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)
	inflammation		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)
(Endocrine system)																		
pituitary	cyst		<48>				<50>				<49>				<50>			
			2	0	0	0	2	0	0	0	1	0	0	0	1	0	0	0
			(4)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	hyperplasia		0	0	0	0	0	1	0	0	1	0	0	0	3	0	0	0
			(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(2)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
	Rathke pouch		0	0	0	0	4	0	0	0	3	0	0	0	3	0	0	0
			(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(6)	(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 : Number of animals with lesion
(c) c : b / a * 100
Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 13

REPORT TYPE : A1
SEX : MALE

		Group Name No. of Animals on Study Grade	Control 50				500 ppm 50				1000 ppm 50				2000 ppm 50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Organ	Findings																	
(Endocrine system)																		
thyroid	lymphocytic infiltration		<49>				<50>				<50>				<50>			
			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)
	ultimibranhial body remanet		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)	(0)
	C-cell hyperplasia		3	0	0	0	3	0	0	0	0	0	0	0	1	0	0	0
			(6)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	cystic thyroid follicle		0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
adrenal	cyst		<50>				<50>				<50>				<50>			
			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)
	spindle-cell hyperplasia		21	0	0	0	18	2	0	0	16	1	0	0	12	0	0	0
			(42)	(0)	(0)	(0)	(36)	(4)	(0)	(0)	(32)	(2)	(0)	(0)	(24)	(0)	(0)	(0)
	hyperplasia:cortical cell		7	1	0	0	11	4	0	0	8	0	0	0	5	1	0	0
			(14)	(2)	(0)	(0)	(22)	(8)	(0)	(0)	(16)	(0)	(0)	(0)	(10)	(2)	(0)	(0)
(Reproductive system)																		
testis	atrophy		<50>				<50>				<50>				<50>			
			9	0	0	0	2	0	0	0	12	0	0	0	10	0	0	0
	(18)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(24)	(0)	(0)	(0)	(20)	(0)	(0)	(0)		

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
 < a > a : Number of animals examined at the site
 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. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 14

Organ	Findings	Group Name No. of Animals on Study				Control 50				500 ppm 50				1000 ppm 50				2000 ppm 50			
		Grade																			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Reproductive system)																					
testis	mineralization	<50>				<50>				<50>				<50>				<50>			
		45	0	0	0	43	1	0	0	48	0	0	0	46	0	0	0	46	0	0	0
		(90)	(0)	(0)	(0)	(86)	(2)	(0)	(0)	(96)	(0)	(0)	(0)	(92)	(0)	(0)	(0)	(92)	(0)	(0)	(0)
	interstitial cell hyperplasia	1	0	0	0	0	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)	(0)	(0)	(0)	(0)
	spermatogenic granuloma	1	0	0	0	0	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)	(0)	(0)	(0)	(0)
epididymis	inflammation	<50>				<50>				<50>				<50>				<50>			
		0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0
		(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(4)	(0)	(0)	(0)
	spermatogenic granuloma	4	0	0	0	4	0	0	0	3	0	0	0	3	2	0	0	3	2	0	0
		(8)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(6)	(4)	(0)	(0)	(6)	(4)	(0)	(0)
	xanthogranuloma	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
prep/cli gl	duct ectasia	<50>				<50>				<50>				<50>				<50>			
		9	0	0	0	7	0	0	0	2	0	0	0	5	1	0	0	5	1	0	0
		(18)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(10)	(2)	(0)	(0)	(10)	(2)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
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. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 15

		Group Name	Control				500 ppm				1000 ppm				2000 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
Organ_____	Findings_____		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
<hr/>																		
{Nervous system}																		
brain			<50>				<50>				<50>				<50>			
	mineralization		21 (42)	0 (0)	0 (0)	0 (0)	8 (16)	0 (0)	0 (0)	0 (0)	0 ** (0)	20 (40)	0 (0)	0 (0)	0 (0)	16 (32)	0 (0)	0 (0)
	gliosis		2 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)
{Special sense organs/appendage}																		
eye			<50>				<50>				<50>				<50>			
	degeneration:corneal		1 (2)	0 (0)	0 (0)	0 (0)	1 (2)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
harder gl			<49>				<50>				<50>				<50>			
	hyperplasia		1 (2)	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)
{Body cavities}																		
peritoneum			<50>				<50>				<50>				<50>			
	xanthogranuloma		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)	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 ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Chi Square

APPENDIX L 2

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS : SUMMARY

MOUSE : FEMALE: ALL ANIMALS

(2-YEAR STUDY)

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 16

Organ	Findings	Group Name	Control				1000 ppm				2000 ppm				4000 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
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Integumentary system/appandage}																		
skin/app	inflammation		<50>				<50>				<50>				<50>			
		1	0	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)	(0)
	scar:dermis		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)	(0)	(0)	(0)	(0)	(0)
subcutis	hemorrhage		<50>				<50>				<50>				<50>			
		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)	(0)
{Respiratory system}																		
nasal cavit	exudate		<50>				<50>				<50>				<50>			
		1	0	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)	(0)	
	angiectasis		0	0	0	0	1	0	0	0	0	0	0	0	4	0	0	0
		(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)
	hemorrhage		0	0	0	0	0	0	0	0	1	0	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 : Number of animals with lesion
(c) c : b / a * 100
Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 17

Organ	Findings	Group Name No. of Animals on Study Grade	Control 50				1000 ppm 50				2000 ppm 50				4000 ppm 50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Respiratory system)																		
nasal cavit	eosinophilic change:olfactory epithelium		7 (14)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	11 (22)	0 (0)	0 (0)	0 (0)	18 (36)	0 (0)	0 (0)	0 * (0)
	eosinophilic change:respiratory epithelium		30 (60)	5 (10)	2 (4)	0 (0)	26 (52)	18 (36)	1 (2)	0 ** (0)	15 (30)	32 (64)	1 (2)	0 ** (0)	9 (18)	28 (56)	11 (22)	0 ** (0)
	respiratory metaplasia:olfactory epithelium		2 (4)	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)
	respiratory metaplasia:gland		14 (28)	0 (0)	0 (0)	0 (0)	19 (38)	0 (0)	0 (0)	0 (0)	22 (44)	5 (10)	0 (0)	0 ** (0)	31 (62)	3 (6)	0 (0)	0 ** (0)
nasopharynx	eosinophilic change		2 (4)	1 (2)	0 (0)	0 (0)	5 (10)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)	13 (26)	0 (0)	0 (0)	0 ** (0)
lung	edema		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)
	inflammatory infiltration		3 (6)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	3 (6)	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 : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Chi Square

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 18

Organ	Findings	Group Name No. of Animals on Study Grade	Control 50				1000 ppm 50				2000 ppm 50				4000 ppm 50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Respiratory system)																		
lung			<50>				<50>				<49>				<50>			
	lymphocytic infiltration		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)	(0)
	accumulation of foamy cells		1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)
	bronchiolar-alveolar cell hyperplasia		6	0	0	0	10	0	0	0	7	0	0	0	13	0	0	0
			(12)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(26)	(0)	(0)	(0)
(Hematopoietic system)																		
bone marrow			<50>				<50>				<50>				<50>			
	decreased hematopoiesis		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)
	myelofibrosis		4	0	0	0	4	0	1	0	3	1	0	0	2	0	0	0
			(8)	(0)	(0)	(0)	(8)	(0)	(2)	(0)	(6)	(2)	(0)	(0)	(4)	(0)	(0)	(0)
	megakaryocyte:increased		1	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)
	granulopoiesis:increased		0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(2)	(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 : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 19

Organ	Findings	Group Name No. of Animals on Study Grade	Control 50				1000 ppm 50				2000 ppm 50				4000 ppm 50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Hematopoietic system}																		
lymph node	lymphadenitis		<50>				<50>				<50>				<50>			
			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)
spleen	atrophy		<50>				<50>				<50>				<50>			
			0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(4)	(0)	(0)	(0)
	angiectasis		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)	(0)
	deposit of hemosiderin		2	0	0	0	8	0	0	0	1	0	0	0	3	0	0	0
			(4)	(0)	(0)	(0)	(16)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
	deposit of melanin		2	0	0	0	0	0	0	0	2	0	0	0	5	0	0	0
			(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(10)	(0)	(0)	(0)
	extramedullary hematopoiesis		14	5	1	0	5	1	1	0 *	10	7	2	0	9	2	4	0
			(28)	(10)	(2)	(0)	(10)	(2)	(2)	(0)	(20)	(14)	(4)	(0)	(18)	(4)	(8)	(0)
	follicular hyperplasia		0	0	0	0	4	0	0	0	1	2	0	0	2	1	0	0
			(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(2)	(4)	(0)	(0)	(4)	(2)	(0)	(0)
{Circulatory system}																		
heart	thrombus		<50>				<50>				<50>				<50>			
			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

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 20

		Group Name	Control				1000 ppm				2000 ppm				4000 ppm			
		No. of Animals on Study	50				50				50				50			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Circulatory system}																		
heart			<50>				<50>				<50>				<50>			
	mineralization		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)
	myocardial fibrosis		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)
	arteritis		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)	(0)	(0)	(0)	(0)
	dilatation:right ventricle		2	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0
			(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)
{Digestive system}																		
tooth			<50>				<50>				<50>				<50>			
	inflammation		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)
stomach			<50>				<50>				<50>				<50>			
	inflammatory infiltration		0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(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 : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 21

Organ_____	Findings_____	Group Name	Control				1000 ppm				2000 ppm				4000 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
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Digestive system)																		
stomach			<50>				<50>				<50>				<50>			
	ulcer:forestomach		1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia:forestomach		2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
		(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	
	erosion:glandular stomach		1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	
		(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	ulcer:glandular stomach		2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
small intes			<50>				<50>				<50>				<50>			
	ulcer		0	1	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)	
liver			<50>				<50>				<50>				<50>			
	angiectasis		2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	
		(4)	(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	necrosis:focal		1	1	0	0	1	1	0	0	1	0	0	0	1	0	0	
		(2)	(2)	(0)	(0)	(2)	(2)	(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 : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Chi Square

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 22

Organ	Findings	Group Name No. of Animals on Study Grade	Control 50				1000 ppm 50				2000 ppm 50				4000 ppm 50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
liver	necrosis:single cell		<50>				<50>				<50>				<50>			
			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)
	fatty change		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)
	degeneration:focal		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)
	atrophy:focal		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)
	inflammatory infiltration		2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	lymphocytic infiltration		1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	granulation		9	1	0	0	8	0	0	0	3	0	0	0	13	0	0	0
			(18)	(2)	(0)	(0)	(16)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(26)	(0)	(0)	(0)
	inflammatory cell nest		17	0	0	0	16	0	0	0	20	0	0	0	9	0	0	0
			(34)	(0)	(0)	(0)	(32)	(0)	(0)	(0)	(40)	(0)	(0)	(0)	(18)	(0)	(0)	(0)
Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe < a > a : Number of animals examined at the site 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. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 23

Organ	Findings	Group Name No. of Animals on Study Grade	Control 50				1000 ppm 50				2000 ppm 50				4000 ppm 50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Digestive system)																		
liver	extramedullary hematopoiesis		3 (6)	0 (0)	0 (0)	0 (0)	6 (12)	0 (0)	0 (0)	0 (0)	5 (10)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	clear cell focus		0 (0)	0 (0)	0 (0)	0 (0)	4 (8)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)	6 (12)	0 (0)	2 (4)	0 * (0)
	acidophilic cell focus		1 (2)	0 (0)	0 (0)	1 (2)	3 (6)	1 (2)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)	12 (24)	5 (10)	1 (2)	0 ** (0)
	basophilic cell focus		0 (0)	1 (2)	0 (0)	0 (0)	5 (10)	2 (4)	0 (0)	0 (0)	4 (8)	0 (0)	0 (0)	0 (0)	9 (18)	1 (2)	0 (0)	0 ** (0)
	bile ductular proliferation		2 (4)	0 (0)	0 (0)	0 (0)	4 (8)	0 (0)	0 (0)	0 (0)	8 (16)	0 (0)	0 (0)	0 (0)	4 (8)	0 (0)	0 (0)	0 (0)
	biliary cyst		3 (6)	1 (2)	0 (0)	0 (0)	7 (14)	0 (0)	1 (2)	0 (0)	5 (10)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)
	focal fatty change		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)
gall bladd	dilatation		<47>				<47>				<49>				<45>			
			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)	0 (0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
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. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 24

Organ_____	Findings_____	Group Name	Control				1000 ppm				2000 ppm				4000 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
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
<hr/>																		
(Digestive system)																		
gall bladd			<47>				<47>				<49>				<45>			
	eosinophilic change		2	0	0	0	2	2	0	0	3	0	0	0	0	1	0	0
			(4)	(0)	(0)	(0)	(4)	(4)	(0)	(0)	(6)	(0)	(0)	(0)	(0)	(2)	(0)	(0)
	hyperplasia		0	0	0	0	2	0	0	0	14	0	0	0 **	10	0	0	0 **
			(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(29)	(0)	(0)	(0)	(22)	(0)	(0)	(0)
<hr/>																		
(Urinary system)																		
kidney			<50>				<50>				<50>				<50>			
	infarct		1	1	0	0	1	0	0	0	2	0	0	0	4	2	0	0
			(2)	(2)	(0)	(0)	(2)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(8)	(4)	(0)	(0)
	cyst		0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)
	hyaline droplet		5	5	0	0	5	8	2	0	8	4	0	0	3	5	0	0
			(10)	(10)	(0)	(0)	(10)	(16)	(4)	(0)	(16)	(8)	(0)	(0)	(6)	(10)	(0)	(0)
	basophilic change		11	0	0	0	16	1	0	0	9	1	0	0	18	0	0	0
			(22)	(0)	(0)	(0)	(32)	(2)	(0)	(0)	(18)	(2)	(0)	(0)	(36)	(0)	(0)	(0)
	deposit of hemosiderin		0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(4)	(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 : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 25

Organ	Findings	Group Name No. of Animals on Study Grade	Control 50				1000 ppm 50				2000 ppm 50				4000 ppm 50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																		
kidney	hyaline cast		<50>				<50>				<50>				<50>			
			0	1	0	0	0	2	0	0	0	1	0	0	0	0	0	0
			(0)	(2)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)
	lymphocytic infiltration		2	0	0	0	2	0	0	0	2	1	0	0	1	0	0	0
			(4)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(4)	(2)	(0)	(0)	(2)	(0)	(0)	(0)
	inflammatory polyp		0	2	0	0	2	2	5	0	0	2	8	0 *	1	2	3	0
			(0)	(4)	(0)	(0)	(4)	(4)	(10)	(0)	(0)	(4)	(16)	(0)	(2)	(4)	(6)	(0)
	hydronephrosis		1	0	1	0	4	1	7	0 *	0	2	11	0 **	4	0	7	0 *
			(2)	(0)	(2)	(0)	(8)	(2)	(14)	(0)	(0)	(4)	(22)	(0)	(8)	(0)	(14)	(0)
	papillary necrosis		0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(2)	(0)	(0)
	mineralization:papilla		1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0
			(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	mineralization:pelvis		0	0	0	0	0	0	0	0	2	0	0	0	4	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(8)	(0)	(0)	(0)
	mineralization:cortex		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)	(0)	(0)	(0)	(0)
Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe																		
< a > a : Number of animals examined at the site																		
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. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 26

Organ	Findings	Group Name	Control				1000 ppm				2000 ppm				4000 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
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Urinary system)																		
kidney			<50>				<50>				<50>				<50>			
	dilatation:tubular lumen		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)
	glomerulosclerosis		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)	1 (2)	0 (0)
	desquamation:pelvis		1 (2)	0 (0)	0 (0)	0 (0)	7 (14)	0 (0)	0 (0)	0 (0)	6 (12)	1 (2)	0 (0)	0 (0)	5 (10)	0 (0)	0 (0)	0 (0)
	urothelial hyperplasia:pelvis		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)	0 (0)
urin bladd			<50>				<49>				<50>				<50>			
	dilatation		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)
(Endocrine system)																		
pituitary			<50>				<50>				<50>				<50>			
	angiectasis		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)	0 (0)

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

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 27

Organ_____	Findings_____	Group Name	Control				1000 ppm				2000 ppm				4000 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}																		
pituitary			<50>				<50>				<50>				<50>			
	cyst		5	0	0	0	5	0	0	0	8	0	0	0	9	0	0	0
		(10)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(16)	(0)	(0)	(0)	(18)	(0)	(0)	(0)	
	hyperplasia		5	6	1	0	8	2	0	0	3	1	0	0	4	0	0	0 *
			(10)	(12)	(2)	(0)	(16)	(4)	(0)	(0)	(6)	(2)	(0)	(0)	(8)	(0)	(0)	(0)
thyroid			<50>				<50>				<49>				<49>			
	inflammatory infiltration		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)
	cystic thyroid follicle		2	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
			(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
adrenal			<49>				<49>				<50>				<50>			
	hemorrhage		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)
	extramedullary hematopoiesis		0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	spindle cell hyperplasia		23	24	0	0	18	29	0	0	17	32	1	0	36	11	0	0 *
			(47)	(49)	(0)	(0)	(37)	(59)	(0)	(0)	(34)	(64)	(2)	(0)	(72)	(22)	(0)	(0)

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

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 28

Organ_____	Findings_____	Group Name	Control				1000 ppm				2000 ppm				4000 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		<49>	<49>				<50>				<50>							
	hyperplasia:cortical cell	2	0	0	0	0	2	0	0	1	1	0	0	0	0	0	0	0
		(4)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(2)	(2)	(0)	(0)	(0)	(0)	(0)	(0)
	focal fatty change:cortex	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Reproductive system}																		
ovary		<50>	<50>				<50>				<50>							
	angiectasis	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	thrombus	0	0	0	0	0	1	0	3	0	0	0	1	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(2)	(0)	(6)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)
	cyst	8	3	0	0	0	5	1	0	0	4	2	0	0	3	2	0	0
		(16)	(6)	(0)	(0)	(0)	(10)	(2)	(0)	(0)	(8)	(4)	(0)	(0)	(6)	(4)	(0)	(0)
uterus		<50>	<50>				<50>				<50>							
	thrombus	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
		(2)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(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 : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 29

Organ	Findings	Group Name No. of Animals on Study				Control 50				1000 ppm 50				2000 ppm 50				4000 ppm 50			
		Grade																			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Reproductive system)																					
uterus		<50>				<50>				<50>				<50>				<50>			
	cystic endometrial hyperplasia	28	6	0	0	22	2	0	0	24	5	1	0	32	1	0	0	(56)	(12)	(0)	(0)
		(56)	(12)	(0)	(0)	(44)	(4)	(0)	(0)	(48)	(10)	(2)	(0)	(64)	(2)	(0)	(0)				
		<50>				<50>				<50>				<50>				<50>			
	xanthogranuloma	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	(0)	(0)	(0)	(0)
		(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)				
vagina		<50>				<50>				<50>				<50>				<50>			
	epidermal cyst	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	(0)	(0)	(0)	(0)
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)				
mammary gl		<50>				<50>				<50>				<50>				<50>			
	galactoceles	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	(2)	(0)	(0)	(0)
		(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)				
(Nervous system)																					
brain		<50>				<50>				<50>				<50>				<50>			
	vacuolic 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)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)				
		<50>				<50>				<50>				<50>				<50>			
	mineralization	3	0	0	0	6	0	0	0	3	0	0	0	1	0	0	0	(6)	(0)	(0)	(0)
		(6)	(0)	(0)	(0)	(12)	(0)	(0)	(0)	(6)	(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 : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 30

Organ	Findings	Group Name No. of Animals on Study Grade	Control 50				1000 ppm 50				2000 ppm 50				4000 ppm 50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Nervous system)																		
brain	perivascular inflammation		<50>				<50>				<50>				<50>			
			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)
spinal cord	epidermal cyst		<50>				<50>				<50>				<50>			
			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)
{Special sense organs/appendage}																		
eye	degeneration:cornea		<50>				<50>				<50>				<50>			
			3	0	0	0	4	0	0	0	1	0	0	0	0	0	0	0
			(6)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Harder gl	degeneration		<50>				<50>				<50>				<50>			
			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)
	hyperplasia		0	0	0	0	1	0	0	0	0	1	1	0	2	1	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(2)	(2)	(0)	(4)	(2)	(0)	(0)
{Musculoskeletal system}																		
muscle	mineralization		<50>				<50>				<50>				<50>			
			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)	(0)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
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. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 31

Organ_____	Findings_____	Group Name	Control				1000 ppm				2000 ppm				4000 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
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
<hr/>																		
{Body cavities}																		
pleura	thrombus		<50>				<50>				<50>				<50>			
		1	0	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)	(0)	
peritoneum	thrombus		<50>				<50>				<50>				<50>			
		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)	
thoracic ca	hemorrhage		<50>				<50>				<50>				<50>			
		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)	(0)	(0)	(0)	(0)	
<hr/>																		
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																		

(HPT150)

BATS4

APPENDIX L 3

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS : SUMMARY

MOUSE : MALE : SACRIFICED ANIMALS

(2-YEAR STUDY)

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 1

Organ	Findings	Group Name No. of Animals on Study Grade	Control 38				500 ppm 38				1000 ppm 42				2000 ppm 39			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Integumentary system/appandage}																		
skin/app	ulcer		<38>				<38>				<42>				<39>			
			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)	(5)	(0)	(0)
{Respiratory system}																		
nasal cavit	eosinophilic change:olfactory epithelium		<38>				<38>				<42>				<39>			
			17	0	0	0	10	0	0	0	19	0	0	0	17	0	0	0
			(45)	(0)	(0)	(0)	(26)	(0)	(0)	(0)	(45)	(0)	(0)	(0)	(44)	(0)	(0)	(0)
	eosinophilic change:respiratory epithelium		25	0	0	0	21	0	0	0	22	2	0	0	27	6	2	0 **
			(66)	(0)	(0)	(0)	(55)	(0)	(0)	(0)	(52)	(5)	(0)	(0)	(69)	(15)	(5)	(0)
	respiratory metaplasia:olfactory epithelium		12	0	0	0	7	0	0	0	10	0	0	0	8	0	0	0
			(32)	(0)	(0)	(0)	(18)	(0)	(0)	(0)	(24)	(0)	(0)	(0)	(21)	(0)	(0)	(0)
	respiratory metaplasia:gland		22	2	0	0	19	2	0	0	19	2	0	0	26	0	0	0
			(58)	(5)	(0)	(0)	(50)	(5)	(0)	(0)	(45)	(5)	(0)	(0)	(67)	(0)	(0)	(0)
	inflammation:transitional epithelium		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)	(0)	(0)
nasopharynx	eosinophilic change		<38>				<38>				<42>				<39>			
			1	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0
			(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(5)	(0)	(0)	(0)

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

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 2

		Group Name No. of Animals on Study Grade	Control 38				500 ppm 38				1000 ppm 42				2000 ppm 39			
Organ	Findings		1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Respiratory system}																		
trachea			<38>				<38>				<42>				<39>			
	eosinophilic change		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)	1 (3)	0 (0)	0 (0)
lung			<38>				<38>				<42>				<39>			
	hemorrhage		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)
	inflammatory infiltration		1 (3)	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		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)	0 (0)	0 (0)
	accumulation of foamy cells		1 (3)	1 (3)	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)
	bronchiolar-alveolar cell hyperplasia		12 (32)	0 (0)	0 (0)	0 (0)	15 (39)	0 (0)	0 (0)	0 (0)	15 (36)	0 (0)	0 (0)	0 (0)	14 (36)	0 (0)	0 (0)	0 (0)
{Hematopoietic system}																		
bone marrow			<38>				<38>				<42>				<39>			
	thrombus		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 (3)	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																		

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 3

Organ_____	Findings_____	Group Name	Control				500 ppm				1000 ppm				2000 ppm			
		No. of Animals on Study	38				38				42				39			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{hematopoietic system}																		
bone marrow			<38>				<38>				<42>				<39>			
	decreased hematopoiesis		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)
	myelofibrosis		1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
			(3)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(3)	(0)	(0)
	erythropoiesis:increased		1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	
			(3)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	
	megakaryocyte:increased		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
spleen			<38>				<38>				<42>				<39>			
	deposit of hemosiderin		0	0	0	0	1	0	0	0	0	0	0	2	0	0	0	
			(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	
	deposit of melanin		2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	
			(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	
	extramedullary hematopoiesis		3	1	2	0	5	2	2	0	10	3	2	0	11	2	1	
			(8)	(3)	(5)	(0)	(13)	(5)	(5)	(0)	(24)	(7)	(5)	(0)	(28)	(5)	(3)	
	hyperplasia:mast cell		0	0	0	0	0	0	0	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 : Number of animals with lesion
(c) c : b / a * 100
Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 4

		Group Name No. of Animals on Study Grade	Control 38				500 ppm 38				1000 ppm 42				2000 ppm 39			
Organ	Findings		1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
Hematopoietic system																		
spleen			<38>				<38>				<42>				<39>			
	follicular hyperplasia		1 (3)	0 (0)	0 (0)	0 (0)	2 (5)	1 (3)	0 (0)	0 (0)	2 (5)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Circulatory system																		
heart			<38>				<38>				<42>				<39>			
	granulation		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)
Digestive system																		
tooth			<38>				<38>				<42>				<39>			
	dysplasia		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
tongue			<38>				<38>				<42>				<39>			
	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 (3)	0 (0)	0 (0)	0 (0)
salivary gl			<38>				<38>				<42>				<39>			
	atrophy		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 (3)	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 : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 5

		Group Name	Control				500 ppm				1000 ppm				2000 ppm			
		No. of Animals on Study	38				38				42				39			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Digestive system)																		
salivary gl			<38>				<38>				<42>				<39>			
	inflammatory infiltration		0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	fibrosis:focal		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)	1 (3)	0 (0)	0 (0)
stomach			<38>				<38>				<42>				<39>			
	mineralization		3 (8)	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 infiltration		5 (13)	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)
	hyperplasia:forestomach		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 (3)	0 (0)	0 (0)	0 (0)
	erosion:glandular stomach		2 (5)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (5)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	ulcer:glandular stomach		0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	hyperplasia:glandular stomach		5 (13)	0 (0)	1 (3)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)
Grade	1 : Slight 2 : Moderato 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. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 6

Organ	Findings	Group Name No. of Animals on Study Grade	Control 38				500 ppm 38				1000 ppm 42				2000 ppm 39			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
stomach			<38>				<38>				<42>				<39>			
	ectopia:glandular stomach		2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
liver			<38>				<38>				<42>				<39>			
	angiectasis		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)
	necrosis:central		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)
	necrosis:focal		0	1	0	0	2	0	0	0	2	0	0	0	3	0	0	0
			(0)	(3)	(0)	(0)	(5)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(8)	(0)	(0)	(0)
	necrosis:single cell		3	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
			(8)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	fatty change		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)
	degeneration:focal		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)	(0)	(0)
	inflammatory infiltration		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)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
 < a > a : Number of animals examined at the site
 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. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 7

Organ_____	Findings_____	Group Name	Control				500 ppm				1000 ppm				2000 ppm			
		No. of Animals on Study	38				38				42				39			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
<hr/>																		
(Digestive system)																		
liver			<38>				<38>				<42>				<39>			
	lymphocytic infiltration		0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
	granulation		30	0	0	0	29	0	0	0	27	2	0	0	24	0	0	0
			(79)	(0)	(0)	(0)	(76)	(0)	(0)	(0)	(64)	(5)	(0)	(0)	(62)	(0)	(0)	(0)
	extramedullary hematopoiesis		0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	clear cell focus		3	0	0	0	6	0	0	0	1	1	0	0	0	0	0	0
		(8)	(0)	(0)	(0)	(16)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	
acidophilic cell focus		1	1	0	0	9	1	0	0 *	5	4	0	0	3	0	0	0	
		(3)	(3)	(0)	(0)	(24)	(3)	(0)	(0)	(12)	(10)	(0)	(0)	(8)	(0)	(0)	(0)	
basophilic cell focus		2	0	0	0	4	0	0	0	6	3	0	0	7	1	1	0	
		(5)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(14)	(7)	(0)	(0)	(18)	(3)	(3)	(0)	
mixed cell focus		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)	
bile ductular proliferation		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)	(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

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 8

Organ	Findings	Group Name No. of Animals on Study Grade	Control 38				500 ppm 38				1000 ppm 42				2000 ppm 39			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
liver			<38>				<38>				<42>				<39>			
	biliary cyst		3 (8)	0 (0)	0 (0)	0 (0)	3 (8)	0 (0)	0 (0)	0 (0)	3 (7)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)
	focal fatty change		2 (5)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	
gall bladd			<35>				<38>				<41>				<36>			
	cyst		0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	eosinophilic change		3 (9)	0 (0)	0 (0)	0 (0)	2 (5)	0 (0)	0 (0)	0 (0)	3 (7)	1 (2)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)
	hyperplasia		0 (0)	0 (0)	0 (0)	0 (0)	12 (32)	0 (0)	0 (0)	0 (0)	8 (20)	0 (0)	0 (0)	0 (0)	8 (22)	0 (0)	0 (0)	0 (0)
pancreas			<38>				<38>				<42>				<39>			
	atrophy		0 (0)	1 (3)	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)
{Urinary system}																		
kidney			<38>				<38>				<42>				<39>			
	infarct		0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	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 : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 9

Organ_____	Findings_____	Group Name	Control				500 ppm				1000 ppm				2000 ppm			
		No. of Animals on Study	38				38				42				39			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
<hr/>																		
{Urinary system}																		
kidney			<38>				<38>				<42>				<39>			
	cyst		0	1	0	0	1	1	0	0	1	0	0	0	0	0	0	0
			(0)	(3)	(0)	(0)	(3)	(3)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyaline droplet		1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
			(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
	basophilic change		30	0	0	0	35	0	0	0	39	0	0	0	34	0	0	0
			(79)	(0)	(0)	(0)	(92)	(0)	(0)	(0)	(93)	(0)	(0)	(0)	(87)	(0)	(0)	(0)
	lymphocytic infiltration		3	0	0	0	3	0	0	0	8	0	0	0	4	1	0	0
		(8)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(19)	(0)	(0)	(0)	(10)	(3)	(0)	(0)	
	inflammatory polyp		0	1	0	0	0	0	1	0	1	0	0	0	0	2	0	
			(0)	(3)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(2)	(0)	(0)	(0)	(5)	(0)	
	hydronephrosis		0	1	0	0	0	0	1	0	0	0	1	0	0	0	1	0
			(0)	(3)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(2)	(0)	(0)	(3)	(0)	
	mineralization:pelvis		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:cortex		11	0	0	0	12	0	0	0	16	0	0	0	9	0	0	0
			(29)	(0)	(0)	(0)	(32)	(0)	(0)	(0)	(38)	(0)	(0)	(0)	(23)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
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. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 10

Organ	Findings	Group Name No. of Animals on Study Grade	Control 38				500 ppm 38				1000 ppm 42				2000 ppm 39			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																		
urin bladd	dilatation		<38>				<38>				<42>				<39>			
			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)	(0)	(0)	(0)	(0)
	inflammation		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)
{Endocrine system}																		
pituitary	cyst		<36>				<38>				<42>				<39>			
			2	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
			(6)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
	hyperplasia		0	0	0	0	0	1	0	0	1	0	0	0	3	0	0	0
			(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(2)	(0)	(0)	(0)	(8)	(0)	(0)	(0)
	Rathke pouch		0	0	0	0	3	0	0	0	3	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
thyroid	lymphocytic infiltration		<38>				<38>				<42>				<39>			
			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 : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 11

		Group Name No. of Animals on Study Grade	Control 38				500 ppm 38				1000 ppm 42				2000 ppm 39				
Organ	Findings		1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	
{Endocrine system}																			
thyroid			<38>				<38>				<42>				<39>				
	ultimibranchial body remanet		0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	C-cell hyperplasia		3 (8)	0 (0)	0 (0)	0 (0)	3 (8)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)
	cystic thyroid follicle		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 (3)	0 (0)	0 (0)	0 (0)
adrenal			<38>				<38>				<42>				<39>				
	cyst		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)	0 (0)
	spindle-cell hyperplasia		17 (45)	0 (0)	0 (0)	0 (0)	18 (47)	2 (5)	0 (0)	0 (0)	14 (33)	1 (2)	0 (0)	0 (0)	0 (0)	11 (28)	0 (0)	0 (0)	0 (0)
	hyperplasia:cortical cell		6 (16)	1 (3)	0 (0)	0 (0)	11 (29)	4 (11)	0 (0)	0 (0)	8 (19)	0 (0)	0 (0)	0 (0)	0 (0)	5 (13)	1 (3)	0 (0)	0 (0)
{Reproductive system}																			
testis			<38>				<38>				<42>				<39>				
	atrophy		9 (24)	0 (0)	0 (0)	0 (0)	2 (5)	0 (0)	0 (0)	0 (0)	11 (26)	0 (0)	0 (0)	0 (0)	0 (0)	10 (26)	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 : Number of animals with lesion
(c) c : b / a * 100
Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 12

Organ_____	Findings_____	Group Name	Control				500 ppm				1000 ppm				2000 ppm			
		No. of Animals on Study	38				38				42				39			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Reproductive system}																		
testis			<38>				<38>				<42>				<39>			
	mineralization		36	0	0	0	35	1	0	0	41	0	0	0	38	0	0	0
			(95)	(0)	(0)	(0)	(92)	(3)	(0)	(0)	(98)	(0)	(0)	(0)	(97)	(0)	(0)	(0)
	interstitial cell hyperplasia		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		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)
epididymis			<38>				<38>				<42>				<39>			
	inflammation		0	0	0	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)
	spermatogenic granuloma		4	0	0	0	3	0	0	0	3	0	0	3	2	0	0	0
			(11)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(7)	(0)	(0)	(8)	(5)	(0)	(0)	(0)
	xanthogranuloma		0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
prep/cli gl			<38>				<38>				<42>				<39>			
	duct ectasia		9	0	0	0	7	0	0	0	2	0	0	0 *	5	0	0	0
			(24)	(0)	(0)	(0)	(18)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(13)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
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. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 13

Organ_____	Findings_____	Group Name	Control				500 ppm				1000 ppm				2000 ppm			
		No. of Animals on Study	38				38				42				39			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Nervous system}																		
brain	mineralization		<38>				<38>				<42>				<39>			
		19	0	0	0	8	0	0	0	0 *	17	0	0	0	12	0	0	0
		(50)	(0)	(0)	(0)	(21)	(0)	(0)	(0)	(40)	(0)	(0)	(0)	(31)	(0)	(0)	(0)	
	gliosis		<38>				<38>				<42>				<39>			
		2	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	
		(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	
{Special sense organs/appendage}																		
eye	degeneration:cornea		<38>				<38>				<42>				<39>			
		0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	
		(0)	(0)	(0)	(0)	(3)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	
Harder gl	hyperplasia		<37>				<38>				<42>				<39>			
		1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	
		(3)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
{Body cavities}																		
peritoneum	xanthogranuloma		<38>				<38>				<42>				<39>			
		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)	(2)	(0)	(0)	(0)	(0)		

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

APPENDIX L 4

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS : SUMMARY

MOUSE : FEMALE : SACRIFICED ANIMALS

(2-YEAR STUDY)

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 14

Organ	Findings	Group Name No. of Animals on Study Grade	Control 24				1000 ppm 29				2000 ppm 28				4000 ppm 34			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Integumentary system/appandage}																		
skin/app			<24>				<29>				<28>				<34>			
	inflammation		1 (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)
	scar:dermis		0 (0)	1 (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)
{Respiratory system}																		
nasal cavit			<24>				<29>				<28>				<34>			
	exudate		1 (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)
	angiectasis		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	4 (12)	0 (0)	0 (0)	0 (0)	0 (0)
	eosinophilic change:olfactory epithelium		5 (21)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 * (0)	8 (29)	0 (0)	0 (0)	0 (0)	14 (41)	0 (0)	0 (0)	0 (0)
	eosinophilic change:respiratory epithelium		16 (67)	3 (13)	2 (8)	0 (0)	17 (59)	10 (34)	0 (0)	0 (0)	6 (21)	21 (75)	1 (4)	0 ** (0)	5 (15)	19 (56)	10 (29)	0 ** (0)
	respiratory metaplasia:olfactory epithelium		2 (8)	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 : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference : * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Chi Square

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 15

Organ	Findings	Group Name No. of Animals on Study Grade	Control 24				1000 ppm 29				2000 ppm 28				4000 ppm 34			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
nasal cavit	respiratory metaplasia:gland		<24>				<29>				<28>				<34>			
			10	0	0	0	13	0	0	0	12	5	0	0	23	3	0	0 *
			(42)	(0)	(0)	(0)	(45)	(0)	(0)	(0)	(43)	(18)	(0)	(0)	(68)	(9)	(0)	(0)
nasopharynx	eosinophilic change		<24>				<29>				<28>				<34>			
			1	1	0	0	2	0	0	0	2	0	0	0	9	0	0	0 *
			(4)	(4)	(0)	(0)	(7)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(26)	(0)	(0)	(0)
lung	inflammatory infiltration		<24>				<29>				<28>				<34>			
			2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	accumulation of foamy cells		<24>				<29>				<28>				<34>			
			1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
			(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)
	bronchiolar-alveolar cell hyperplasia		<24>				<29>				<28>				<34>			
			5	0	0	0	10	0	0	0	7	0	0	0	12	0	0	0
			(21)	(0)	(0)	(0)	(34)	(0)	(0)	(0)	(25)	(0)	(0)	(0)	(35)	(0)	(0)	(0)
{Hematopoietic system}																		
bone marrow	myelofibrosis		<24>				<29>				<28>				<34>			
			3	0	0	0	3	0	1	0	1	1	0	0	2	0	0	0
			(13)	(0)	(0)	(0)	(10)	(0)	(3)	(0)	(4)	(4)	(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 : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 16

Organ	Findings	Group Name No. of Animals on Study Grade	Control 24				1000 ppm 29				2000 ppm 28				4000 ppm 34			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
[hematopoietic system]																		
bone marrow			<24>				<29>				<28>				<34>			
	megakaryocyte:increased		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	
	granulopoiesis:increased		0 (0)	1 (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)	
spleen			<24>				<29>				<28>				<34>			
	atrophy		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	
	angiectasis		0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	
	deposit of hemosiderin		1 (4)	0 (0)	0 (0)	0 (0)	8 (28)	0 (0)	0 (0)	0 (0)	1 (4)	0 (0)	0 (0)	2 (6)	0 (0)	0 (0)	0 (0)	
	deposit of melanin		2 (8)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (4)	0 (0)	0 (0)	4 (12)	0 (0)	0 (0)	0 (0)	
	extramedullary hematopoiesis		11 (46)	2 (8)	0 (0)	0 (0)	5 (17)	1 (3)	0 (0)	0 (0)	8 (29)	3 (11)	1 (4)	7 (21)	1 (3)	1 (3)	0 (0)	
	follicular hyperplasia		0 (0)	0 (0)	0 (0)	0 (0)	4 (14)	0 (0)	0 (0)	0 (0)	1 (4)	1 (4)	0 (0)	1 (3)	1 (3)	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																		

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 17

Organ	Findings	Group Name No. of Animals on Study Grade	Control 24				1000 ppm 29				2000 ppm 28				4000 ppm 34			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
tooth	inflammation		<24>				<29>				<28>				<34>			
			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)	(4)	(0)	(0)	(0)	(0)	(0)	(0)
stomach	inflammatory infiltration		<24>				<29>				<28>				<34>			
			0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(4)	(4)	(0)	(0)	(0)	(0)	(0)	(0)
	ulcer:forestomach		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)	(0)
	hyperplasia:forestomach		1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
			(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)
	erosion:glandular stomach		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)	(0)	(0)
	ulcer:glandular stomach		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
small intes	ulcer		<24>				<29>				<28>				<34>			
			0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(4)	(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 : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Chi Square

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 18

Organ_____	Findings_____	Group Name No. of Animals on Study				Control 24				1000 ppm 29				2000 ppm 28				4000 ppm 34					
		Grade				1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
{Digestive system}																							
liver		<24>				<29>				<28>				<34>									
	angiectasis	1 (4)	2 (8)	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)	0 (0)	0 (0)	0 (0)	0 (0)	
	necrosis:focal	1 (4)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	
	necrosis:single cell	1 (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)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	
	degeneration:focal	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 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	
	atrophy:focal	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	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 infiltration	1 (4)	0 (0)	0 (0)	0 (0)	1 (3)	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)	0 (0)	
	lymphocytic infiltration	1 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (7)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	
granulation	8 (33)	0 (0)	0 (0)	0 (0)	8 (28)	0 (0)	0 (0)	0 (0)	0 (0)	3 (11)	0 (0)	0 (0)	0 (0)	0 (0)	11 (32)	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																					

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 19

Organ_____	Findings_____	Group Name	Control				1000 ppm				2000 ppm				4000 ppm			
		No. of Animals on Study	24				29				28				34			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Digestive system)																		
liver			<24>				<29>				<28>				<34>			
	inflammatory cell nest	17 (71)	0 (0)	0 (0)	0 (0)	16 (55)	0 (0)	0 (0)	0 (0)	18 (64)	0 (0)	0 (0)	0 (0)	9 (26)	0 (0)	0 (0)	0 (0)	0 ** (0)
	extramedullary hematopoiesis	3 (13)	0 (0)	0 (0)	0 (0)	6 (21)	0 (0)	0 (0)	0 (0)	5 (18)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	clear cell focus	0 (0)	0 (0)	0 (0)	0 (0)	4 (14)	0 (0)	0 (0)	0 (0)	2 (7)	0 (0)	0 (0)	0 (0)	6 (18)	0 (0)	2 (6)	0 (0)	0 * (0)
	acidophilic cell focus	1 (4)	0 (0)	0 (0)	1 (4)	3 (10)	1 (3)	0 (0)	0 (0)	3 (11)	0 (0)	0 (0)	0 (0)	10 (29)	3 (9)	1 (3)	0 (0)	0 * (0)
	basophilic cell focus	0 (0)	0 (0)	0 (0)	0 (0)	5 (17)	1 (3)	0 (0)	0 (0)	4 (14)	0 (0)	0 (0)	0 (0)	7 (21)	1 (3)	0 (0)	0 (0)	0 * (0)
	bile ductular proliferation	2 (8)	0 (0)	0 (0)	0 (0)	4 (14)	0 (0)	0 (0)	0 (0)	7 (25)	0 (0)	0 (0)	0 (0)	4 (12)	0 (0)	0 (0)	0 (0)	0 (0)
	biliary cyst	2 (8)	1 (4)	0 (0)	0 (0)	7 (24)	0 (0)	1 (3)	0 (0)	3 (11)	0 (0)	0 (0)	0 (0)	2 (6)	0 (0)	0 (0)	0 (0)	0 (0)
focal fatty change	0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	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 : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 20

Organ	Findings	Group Name No. of Animals on Study Grade	Control 24				1000 ppm 29				2000 ppm 28				4000 ppm 34				
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																			
gall bladd			<23>				<29>				<28>				<32>				
	dilatation		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	
	eosinophilic change		2 (9)	0 (0)	0 (0)	0 (0)	2 (7)	2 (7)	0 (0)	0 (0)	3 (11)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)
	hyperplasia		0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	12 (43)	0 (0)	0 (0)	0 (0)	0 ** (0)	9 (28)	0 (0)	0 (0)	0 * (0)
{Urinary system}																			
kidney			<24>				<29>				<28>				<34>				
	infarct		0 (0)	1 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (7)	0 (0)	0 (0)	0 (0)	0 (0)	4 (12)	2 (6)	0 (0)	0 (0)
	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)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)
	hyaline droplet		0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	2 (7)	0 (0)	0 (0)	0 (0)	0 (0)	2 (6)	1 (3)	0 (0)	0 (0)
	basophilic change		7 (29)	0 (0)	0 (0)	0 (0)	12 (41)	1 (3)	0 (0)	0 (0)	5 (18)	1 (4)	0 (0)	0 (0)	0 (0)	13 (38)	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 : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 21

Organ_____	Findings_____	Group Name	Control				1000 ppm				2000 ppm				4000 ppm			
		No. of Animals on Study	24				29				28				34			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
<hr/>																		
{Urinary system}																		
kidney			<24>				<29>				<28>				<34>			
	deposit of hemosiderin		0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyaline cast		0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0
			(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)
	lymphocytic infiltration		2	0	0	0	2	0	0	0	1	1	0	0	1	0	0	0
			(8)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(4)	(4)	(0)	(0)	(3)	(0)	(0)	(0)
	inflammatory polyp		0	2	0	0	0	2	2	0	0	0	5	0 *	1	1	1	0
			(0)	(8)	(0)	(0)	(0)	(7)	(7)	(0)	(0)	(0)	(18)	(0)	(3)	(3)	(3)	(0)
hydronephrosis		1	0	1	0	1	0	4	0	0	0	5	0	2	0	2	0	
		(4)	(0)	(4)	(0)	(3)	(0)	(14)	(0)	(0)	(0)	(18)	(0)	(6)	(0)	(6)	(0)	
papillary necrosis		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)	
mineralization:papilla		1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
		(4)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
mineralization:pelvis		0	0	0	0	0	0	0	0	2	0	0	0	4	0	0	0	
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(12)	(0)	(0)	(0)	

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
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. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 22

		Group Name No. of Animals on Study	Control 24				1000 ppm 29				2000 ppm 28				4000 ppm 34				
Organ_____	Findings_____	Grade	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	
<hr/>																			
(Urinary system)																			
kidney			<24>				<29>				<28>				<34>				
	mineralization:cortex		0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	desquamation:pelvis		1 (4)	0 (0)	0 (0)	0 (0)	5 (17)	0 (0)	0 (0)	0 (0)	4 (14)	0 (0)	0 (0)	0 (0)	3 (9)	0 (0)	0 (0)	0 (0)	0 (0)
	urothelial hyperplasia:pelvis		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	
<hr/>																			
(Endocrine system)																			
pituitary			<24>				<29>				<28>				<34>				
	cyst		3 (13)	0 (0)	0 (0)	0 (0)	4 (14)	0 (0)	0 (0)	0 (0)	6 (21)	0 (0)	0 (0)	0 (0)	6 (18)	0 (0)	0 (0)	0 (0)	0 (0)
	hyperplasia		4 (17)	6 (25)	1 (4)	0 (0)	8 (28)	2 (7)	0 (0)	0 (0)	3 (11)	1 (4)	0 (0)	0 (0)	4 (12)	0 (0)	0 (0)	0 (0)	** (0)
thyroid			<24>				<29>				<28>				<34>				
	cystic thyroid follicle		2 (8)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	1 (4)	0 (0)	0 (0)	0 (0)	1 (3)	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 : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 23

Organ_____	Findings_____	Group Name	Control				1000 ppm				2000 ppm				4000 ppm			
		No. of Animals on Study	24				29				28				34			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																		
adrenal			<24>				<29>				<28>				<34>			
	spindle-cell hyperplasia		6 (25)	18 (75)	0 (0)	0 (0)	6 (21)	23 (79)	0 (0)	0 (0)	7 (25)	20 (71)	1 (4)	0 (0)	24 (71)	9 (26)	0 (0)	0 ** (0)
	hyperplasia:cortical cell		2 (8)	0 (0)	0 (0)	0 (0)	0 (0)	2 (7)	0 (0)	0 (0)	1 (4)	1 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	focal fatty change:cortex		0 (0)	2 (8)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
{Reproductive system}																		
ovary			<24>				<29>				<28>				<34>			
	angiectasis		0 (0)	1 (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)
	thrombus		0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	3 (10)	0 (0)	0 (0)	0 (0)	1 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	cyst		5 (21)	2 (8)	0 (0)	0 (0)	3 (10)	0 (0)	0 (0)	0 (0)	4 (14)	1 (4)	0 (0)	0 (0)	3 (9)	2 (6)	0 (0)	0 (0)
uterus			<24>				<29>				<28>				<34>			
	thrombus		1 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	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 : Number of animals with lesion

(c) c : b / a * 100

Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 24

Organ	Findings	Group Name No. of Animals on Study				Control 24				1000 ppm 29				2000 ppm 28				4000 ppm 34			
		Grade				1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Reproductive system}																					
uterus		<24>				<29>				<28>				<34>							
	cystic endometrial hyperplasia	20	4	0	0	19	2	0	0 *	19	5	1	0	28	1	0	0 *				
		(83)	(17)	(0)	(0)	(66)	(7)	(0)	(0)	(68)	(18)	(4)	(0)	(82)	(3)	(0)	(0)				
	xanthogranuloma	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
vagina		<24>				<29>				<28>				<34>							
	epidermal cyst	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
mammary gl		<24>				<29>				<28>				<34>							
	galactoceles	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Nervous system}																					
brain		<24>				<29>				<28>				<34>							
	vacuolic 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)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	mineralization	2	0	0	0	4	0	0	0	3	0	0	0	1	0	0	0	0	0	0	0
		(8)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(11)	(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 : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 25

		Group Name No. of Animals on Study	Control 24				1000 ppm 29				2000 ppm 28				4000 ppm 34			
Organ_____	Findings_____	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Special sense organs/appendage}																		
eye	degeneration:cornea		<24>				<29>				<28>				<34>			
		1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
		(4)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Harder gl	hyperplasia		<24>				<29>				<28>				<34>			
		0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	
		(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(0)
{Body cavities}																		
peritoneum	thrombus		<24>				<29>				<28>				<34>			
		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)	(0)

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

(HPT150)

BAIS4

APPENDIX L 5

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS : SUMMARY

MOUSE : MALE : DEAD AND MORIBUND ANIMALS

(2-YEAR STUDY)

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 1

Organ	Findings	Group Name No. of Animals on Study Grade	Control 12				500 ppm 12				1000 ppm 8				2000 ppm 11			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Integumentary system/appandage}																		
skin/app	ulcer		<12>				<12>				< 8>				<11>			
			0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(8)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(9)	(0)	(0)	(0)
	inflammation		<12>				<12>				< 8>				<11>			
			0	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)	(9)	(0)
{Respiratory system}																		
nasal cavit	eosinophilic change:olfactory epithelium		<12>				<12>				< 8>				<11>			
			4	1	0	0	1	0	0	0	3	0	0	0	6	1	0	0
			(33)	(8)	(0)	(0)	(8)	(0)	(0)	(0)	(38)	(0)	(0)	(0)	(55)	(9)	(0)	(0)
	eosinophilic change:respiratory epithelium		<12>				<12>				< 8>				<11>			
			6	0	1	0	4	1	1	0	3	1	0	0	9	0	1	0
			(50)	(0)	(8)	(0)	(33)	(8)	(8)	(0)	(38)	(13)	(0)	(0)	(82)	(0)	(9)	(0)
	respiratory metaplasia:olfactory epithelium		<12>				<12>				< 8>				<11>			
			6	0	0	0	0	0	0	0 *	2	1	0	0	3	0	0	0
			(50)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(25)	(13)	(0)	(0)	(27)	(0)	(0)	(0)
	respiratory metaplasia:gland		<12>				<12>				< 8>				<11>			
			6	1	0	0	3	1	0	0	3	1	0	0	8	0	0	0
			(50)	(8)	(0)	(0)	(25)	(8)	(0)	(0)	(38)	(13)	(0)	(0)	(73)	(0)	(0)	(0)
nasopharynx	eosinophilic change		<12>				<12>				< 8>				<11>			
			1	0	0	0	1	1	0	0	0	0	0	0	2	0	0	0
			(8)	(0)	(0)	(0)	(8)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(18)	(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. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 2

Organ	Findings	Group Name No. of Animals on Study Grade	Control 12				500 ppm 12				1000 ppm 8				2000 ppm 11			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
trachea	eosinophilic change		<12>				<12>				< 8>				<11>			
			1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0
			(8)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(9)	(0)	(0)	(0)
lung	congestion		<12>				<12>				< 8>				<11>			
			0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hemorrhage		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(25)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	edema		1	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0
			(8)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(9)	(0)	(0)
	inflammatory infiltration		1	0	0	0	1	0	0	0	0	0	0	0	3	0	0	0
			(8)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(27)	(0)	(0)	(0)
	accumulation of foamy cells		1	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0
			(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(9)	(9)	(0)	(0)
	bronchiolar cell 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)	(9)	(0)	(0)	(0)
	bronchiolar-alveolar cell 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)	(9)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe

< a > a : Number of animals examined at the site

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. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 3

Organ	Findings	Group Name No. of Animals on Study Grade	Control 12				500 ppm 12				1000 ppm 8				2000 ppm 11			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{hematopoietic system}																		
bone marrow			<12>				<12>				< 8>				<11>			
	decreased hematopoiesis		0 (0)	1 (8)	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)
	erythropoiesis:increased		0 (0)	0 (0)	0 (0)	0 (0)	3 (25)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	megakaryocyte:increased		2 (17)	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			<12>				<12>				< 8>				<11>			
	plasma cell 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 (9)	0 (0)	0 (0)	0 (0)
	extramedullary hematopoiesis		2 (17)	0 (0)	3 (25)	0 (0)	0 (0)	1 (8)	2 (17)	0 (0)	0 (0)	1 (13)	0 (0)	0 (0)	1 (9)	0 (0)	0 (0)	0 (0)
{Circulatory system}																		
heart			<12>				<12>				< 8>				<11>			
	thrombus		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)	1 (9)	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. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 4

Organ	Findings	Group Name No. of Animals on Study Grade	Control 12				500 ppm 12				1000 ppm 8				2000 ppm 11			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Circulatory system}																		
heart	mineralization		<12>				<12>				< 8>				<11>			
			0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	arteritis		1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(8)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	dilatation:right ventricle		2	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
			(17)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(9)	(0)	(0)	(0)
{Digestive system}																		
stomach	erosion:forestomach		<12>				<12>				< 8>				<11>			
			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)	(9)	(0)	(0)	(0)
	hyperplasia:forestomach		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)	(9)	(0)	(0)	(0)
	hyperplasia:glandular stomach		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
liver	congestion		<12>				<12>				< 8>				<11>			
			0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(8)	(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 : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 5

Organ	Findings	Group Name No. of Animals on Study Grade	Control 12				500 ppm 12				1000 ppm 8				2000 ppm 11			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Digestive system)																		
liver	necrosis:central		<12>				<12>				< 8>				<11>			
			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)	(18)	(0)	(0)
	necrosis:focal		1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0
			(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(0)	(9)	(0)	(0)
	fatty change:central		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
gall bladd	granulation		0	0	0	0	2	0	0	0	0	0	0	0	2	0	0	0
			(0)	(0)	(0)	(0)	(17)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(18)	(0)	(0)	(0)
	acidophilic cell focus		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)	(18)	(0)	(0)	(0)
	basophilic cell focus		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	bile ductular proliferation		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)	(9)	(0)	(0)	(0)
gall bladd	hyperplasia		<11>				<12>				< 8>				<11>			
			0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(8)	(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

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 6

Organ	Findings	Group Name	Control				500 ppm				1000 ppm				2000 ppm			
		No. of Animals on Study	12				12				8				11			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Urinary system)																		
kidney			<12>				<12>				< 8>				<11>			
	hemorrhage		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	cyst		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyaline droplet		0	2	0	0	2	0	0	0	1	1	0	0	2	0	0	0
			(0)	(17)	(0)	(0)	(17)	(0)	(0)	(0)	(13)	(13)	(0)	(0)	(18)	(0)	(0)	(0)
	basophilic change		4	0	0	0	4	0	0	0	1	0	0	0	6	0	0	0
			(33)	(0)	(0)	(0)	(33)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(55)	(0)	(0)	(0)
	deposit of hemosiderin		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)	(9)	(0)	(0)	(0)	
inflammation		0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
		(0)	(8)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
lymphocytic infiltration		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
inflammatory polyp		0	1	0	0	0	0	1	0	0	0	1	0	0	1	0	0	
		(0)	(8)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(13)	(0)	(0)	(9)	(0)	(0)	

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
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. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 7

Organ_____	Findings_____	Group Name	Control				500 ppm				1000 ppm				2000 ppm			
		No. of Animals on Study	12				12				8				11			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																		
kidney			<12>				<12>				< 8>				<11>			
	hydronephrosis		0	1	1	0	0	0	0	1	0	0	1	0	0	0	2	1
			(0)	(8)	(8)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(13)	(0)	(0)	(0)	(18)	(9)
	mineralization:pelvis		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)	(9)	(0)	(0)	(0)
	mineralization:cortex		0	0	0	0	1	0	0	0	3	0	0	1	0	0	0	
			(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(38)	(0)	(0)	(9)	(0)	(0)	(0)	
	glomerulosclerosis		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)	(13)	(0)	(0)	(0)	(0)	
urin bladd			<12>				<12>				< 8>				<11>			
	dilatation		0	0	1	0	0	0	3	0	0	0	0	0	0	0	1	0
			(0)	(0)	(8)	(0)	(0)	(0)	(25)	(0)	(0)	(0)	(0)	(0)	(0)	(9)	(0)	
{Endocrine system}																		
pituitary			<12>				<12>				< 7>				<11>			
	cyst		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(8)	(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 : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 8

Organ	Findings	Group Name No. of Animals on Study Grade	Control 12				500 ppm 12				1000 ppm 8				2000 ppm 11			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																		
pituitary	Rathke pouch		<12>				<12>				< 7>				<11>			
			0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0
			(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(18)	(0)	(0)	(0)
thyroid	cystic thyroid follicle		<11>				<12>				< 8>				<11>			
			0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
adrenal	spindle-cell hyperplasia		<12>				<12>				< 8>				<11>			
			4	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0
			(33)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(25)	(0)	(0)	(0)	(9)	(0)	(0)	(0)
	hyperplasia:cortical cell		<12>				<12>				< 8>				<11>			
			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Reproductive system}																		
testis	atrophy		<12>				<12>				< 8>				<11>			
			0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	mineralization		<12>				<12>				< 8>				<11>			
			9	0	0	0	8	0	0	0	7	0	0	0	8	0	0	0
			(75)	(0)	(0)	(0)	(67)	(0)	(0)	(0)	(88)	(0)	(0)	(0)	(73)	(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. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 9

Organ_____	Findings_____	Group Name	Control				500 ppm				1000 ppm				2000 ppm			
		No. of Animals on Study	12				12				8				11			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Reproductive system}																		
epididymis			<12>				<12>				< 8>				<11>			
	spermatogenic granuloma		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
prep/cli gl			<12>				<12>				< 8>				<11>			
	duct ectasia		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)	(9)	(0)	(0)
{Nervous system}																		
brain			<12>				<12>				< 8>				<11>			
	mineralization		2	0	0	0	0	0	0	0	3	0	0	0	4	0	0	0
			(17)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(38)	(0)	(0)	(0)	(36)	(0)	(0)	(0)
{Special sense organs/appendage}																		
eye			<12>				<12>				< 8>				<11>			
	degeneration:cornea		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(8)	(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 : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

APPENDIX L 6

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS : SUMMARY

MOUSE : FEMALE : DEAD AND MORIBUND ANIMALS

(2-YEAR STUDY)

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 10

Organ	Findings	Group Name	Control				1000 ppm				2000 ppm				4000 ppm			
		No. of Animals on Study	26				21				22				16			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Integumentary system/appandage}																		
subcutis		<26>					<21>				<22>				<16>			
	hemorrhage	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)	(6)	(0)	(0)	(0)	
{Respiratory system}																		
nasal cavit		<26>					<21>				<22>				<16>			
	angiectasis	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
		(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	hemorrhage	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	eosinophilic change:olfactory epithelium	2	0	0	0	1	0	0	0	3	0	0	0	4	0	0	0	
		(8)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(25)	(0)	(0)	(0)	
	eosinophilic change:respiratory epithelium	14	2	0	0	9	8	1	0 *	9	11	0	0 **	4	9	1	0 **	
		(54)	(8)	(0)	(0)	(43)	(38)	(5)	(0)	(41)	(50)	(0)	(0)	(25)	(56)	(6)	(0)	
	respiratory metaplasia:olfactory epithelium	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
		(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	respiratory metaplasia:gland	4	0	0	0	6	0	0	0	10	0	0	0 *	8	0	0	0 *	
		(15)	(0)	(0)	(0)	(29)	(0)	(0)	(0)	(45)	(0)	(0)	(0)	(50)	(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. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 11

		Group Name No. of Animals on Study Grade	Control 26				1000 ppm 21				2000 ppm 22				4000 ppm 16			
Organ	Findings		1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Respiratory system}																		
nasopharynx			<26>				<21>				<22>				<16>			
	eosinophilic change		1 (4)	0 (0)	0 (0)	0 (0)	3 (14)	0 (0)	0 (0)	0 (0)	1 (5)	0 (0)	0 (0)	0 (0)	4 (25)	0 (0)	0 (0)	0 (0)
lung			<26>				<21>				<21>				<16>			
	edema		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)
	inflammatory infiltration		1 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (10)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	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)
	bronchiolar-alveolar cell hyperplasia		1 (4)	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)
{Hematopoietic system}																		
bone marrow			<26>				<21>				<22>				<16>			
	decreased hematopoiesis		1 (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)
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. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 12

Organ	Findings	Group Name No. of Animals on Study Grade	Control 26				1000 ppm 21				2000 ppm 22				4000 ppm 16			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Hematopoietic system}																		
bone marrow			<26>				<21>				<22>				<16>			
	myelofibrosis		1	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0
			(4)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	megakaryocyte:increased		1	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0
			(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(19)	(0)	(0)	(0)
	granulopoiesis:increased		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
lymph node			<26>				<21>				<22>				<16>			
	lymphadenitis		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
spleen			<26>				<21>				<22>				<16>			
	atrophy		0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
	deposit of hemosiderin		1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
	deposit of melanin		0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(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 : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 13

Organ	Findings	Group Name No. of Animals on Study Grade	Control 26				1000 ppm 21				2000 ppm 22				4000 ppm 16			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Hematopoietic system}																		
spleen	extramedullary hematopoiesis		<26>				<21>				<22>				<16>			
		3	3	1	0	0	0	1	0	2	4	1	0	2	1	3	0	
		(12)	(12)	(4)	(0)	(0)	(0)	(5)	(0)	(9)	(18)	(5)	(0)	(13)	(6)	(19)	(0)	
	follicular hyperplasia		0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(6)	(0)	(0)	(0)	
{Circulatory system}																		
heart	thrombus		<26>				<21>				<22>				<16>			
		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	mineralization		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	myocardial fibrosis		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	arteritis		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
		(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	dilatation:right ventricle		2	0	0	0	1	0	0	0	0	0	0	2	0	0	0	
		(8)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(13)	(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. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 14

Organ	Findings	Group Name No. of Animals on Study Grade	Control 26				1000 ppm 21				2000 ppm 22				4000 ppm 16			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
stomach	ulcer:forestomach		1 (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)
	hyperplasia:forestomach		1 (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)
	erosion:glandular stomach		1 (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)
	ulcer:glandular stomach		1 (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)
liver	angiectasis		1 (4)	1 (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)
	necrosis:focal		0 (0)	1 (4)	0 (0)	0 (0)	0 (0)	1 (5)	0 (0)	0 (0)	1 (5)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	fatty change		1 (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)
	degeneration:focal		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 : Number of animals with lesion
(c) c : b / a * 100
Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 15

Organ	Findings	Group Name No. of Animals on Study Grade	Control 26				1000 ppm 21				2000 ppm 22				4000 ppm 16			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
liver			<26>				<21>				<22>				<16>			
	inflammatory infiltration		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	granulation		1	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0
			(4)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(13)	(0)	(0)	(0)
	inflammatory cell nest		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	clear cell focus		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	acidophilic cell focus		0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0 *
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(13)	(13)	(0)	(0)
	basophilic cell focus		0	1	0	0	0	1	0	0	0	0	0	0	2	0	0	0
			(0)	(4)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(13)	(0)	(0)	(0)
	bile ductular proliferation		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	biliary cyst		1	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0
			(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(9)	(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 : Number of animals with lesion (c) c : b / a * 100 Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square																		

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 16

Organ	Findings	Group Name No. of Animals on Study Grade	Control 26				1000 ppm 21				2000 ppm 22				4000 ppm 16			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
gall bladd	hyperplasia		<24>				<18>				<21>				<13>			
			0	0	0	0	1	0	0	0	2	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(8)	(0)	(0)	(0)
{Urinary system}																		
kidney	infarct		<26>				<21>				<22>				<16>			
			1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(4)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	cyst		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyaline droplet		5	5	0	0	4	8	2	0	6	4	0	0	1	4	0	0
			(19)	(19)	(0)	(0)	(19)	(38)	(10)	(0)	(27)	(18)	(0)	(0)	(6)	(25)	(0)	(0)
	basophilic change		4	0	0	0	4	0	0	0	4	0	0	0	5	0	0	0
			(15)	(0)	(0)	(0)	(19)	(0)	(0)	(0)	(18)	(0)	(0)	(0)	(31)	(0)	(0)	(0)
	hyaline cast		0	0	0	0	0	2	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)
	lymphocytic infiltration		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(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 : Number of animals with lesion
(c) c : b / a * 100
Significant difference : * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Chi Square

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 17

Organ_____	Findings_____	Group Name	Control				1000 ppm				2000 ppm				4000 ppm			
		No. of Animals on Study	26				21				22				16			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																		
kidney			<26>				<21>				<22>				<16>			
	inflammatory polyp		0	0	0	0	2	0	3	0 *	0	2	3	0 *	0	1	2	0
			(0)	(0)	(0)	(0)	(10)	(0)	(14)	(0)	(0)	(9)	(14)	(0)	(0)	(6)	(13)	(0)
	hydronephrosis		0	0	0	0	3	1	3	0 *	0	2	6	0 **	2	0	5	0 **
			(0)	(0)	(0)	(0)	(14)	(5)	(14)	(0)	(0)	(9)	(27)	(0)	(13)	(0)	(31)	(0)
	papillary necrosis		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)	(6)	(0)	(0)
	mineralization:papilla		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)	(6)	(0)	(0)	(0)
mineralization:cortex		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
dilatation:tubular lumen		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
glomerulosclerosis		0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	
		(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(0)	
desquamation:pelvis		0	0	0	0	2	0	0	0	2	1	0	0	2	0	0	0	
		(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(9)	(5)	(0)	(0)	(13)	(0)	(0)	(0)	

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
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. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 18

Organ_____	Findings_____	Group Name	Control				1000 ppm				2000 ppm				4000 ppm			
		No. of Animals on Study	26				21				22				16			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
<hr/>																		
{Urinary system}																		
urin bladd			<26>				<21>				<22>				<16>			
	dilatation		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Endocrine system}																		
pituitary			<26>				<21>				<22>				<16>			
	angiectasis		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
			<26>				<21>				<22>				<16>			
	cyst		2	0	0	0	1	0	0	0	2	0	0	0	3	0	0	0
			(8)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(19)	(0)	(0)	(0)
			<26>				<21>				<22>				<16>			
	hyperplasia		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
thyroid			<26>				<21>				<21>				<15>			
	inflammatory infiltration		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
adrenal			<25>				<20>				<22>				<16>			
	hemorrhage		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(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 : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 19

Organ_____	Findings_____	Group Name	Control				1000 ppm				2000 ppm				4000 ppm			
		No. of Animals on Study	26				21				22				16			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																		
adrenal			<25>				<20>				<22>				<16>			
	extramedullary hematopoiesis		0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	spindle-cell hyperplasia		17	6	0	0	12	6	0	0	10	12	0	0	12	2	0	0
		(68)	(24)	(0)	(0)	(60)	(30)	(0)	(0)	(45)	(55)	(0)	(0)	(75)	(13)	(0)	(0)	
{Reproductive system}																		
ovary			<26>				<21>				<22>				<16>			
	angiectasis		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	cyst		3	1	0	0	2	1	0	0	0	1	0	0	0	0	0	0
		(12)	(4)	(0)	(0)	(10)	(5)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	
uterus			<26>				<21>				<22>				<16>			
	cystic endometrial hyperplasia		8	2	0	0	3	0	0	0	5	0	0	0	4	0	0	0
			(31)	(8)	(0)	(0)	(14)	(0)	(0)	(0)	(23)	(0)	(0)	(0)	(25)	(0)	(0)	(0)
	xanthogranuloma		0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0
		(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(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

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 20

Organ	Findings	Group Name No. of Animals on Study Grade	Control 26				1000 ppm 21				2000 ppm 22				4000 ppm 16			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Reproductive system}																		
mammary gl	galactoceles		<26>				<21>				<22>				<16>			
			1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
{Nervous system}																		
brain	mineralization		<26>				<21>				<22>				<16>			
			1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
			(4)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	perivascular inflammation		<26>				<21>				<22>				<16>			
			0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
spinal cord	epidermal cyst		<26>				<21>				<22>				<16>			
			0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Special sense organs/appendage}																		
eye	degeneration:cornea		<26>				<21>				<22>				<16>			
			2	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0
			(8)	(0)	(0)	(0)	(10)	(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 : Number of animals with lesion																		
(c) c : b / a * 100																		
Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square																		

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 21

Organ	Findings	Group Name	Control				1000 ppm				2000 ppm				4000 ppm			
		No. of Animals on Study	26				21				22				16			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Special sense organs/appendage}																		
Harder gl			<26>				<21>				<22>				<16>			
	degeneration		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
			<26>				<21>				<22>				<16>			
	hyperplasia		0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(5)	(0)	(0)	(6)	(0)	(0)
{Musculoskeletal system}																		
muscle			<26>				<21>				<22>				<16>			
	mineralization		1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(4)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Body cavities}																		
pleura			<26>				<21>				<22>				<16>			
	thrombus		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
thoracic ca			<26>				<21>				<22>				<16>			
	hemorrhage		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(4)	(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 : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

APPENDIX M 1

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

MOUSE : MALE

(2-YEAR STUDY)

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 1

Time-related Weeks	Items	Group Name	Control	500 ppm	1000 ppm	2000 ppm
0 - 52	NO. OF EXAMINED ANIMALS		0	1	0	1
	NO. OF ANIMALS WITH TUMORS		0	0	0	0
	NO. OF ANIMALS WITH SINGLE TUMORS		0	0	0	0
	NO. OF ANIMALS WITH MULTIPLE TUMORS		0	0	0	0
	NO. OF BENIGN TUMORS		0	0	0	0
	NO. OF MALIGNANT TUMORS		0	0	0	0
	NO. OF TOTAL TUMORS		0	0	0	0
53 - 78	NO. OF EXAMINED ANIMALS		0	4	1	1
	NO. OF ANIMALS WITH TUMORS		0	3	1	0
	NO. OF ANIMALS WITH SINGLE TUMORS		0	3	1	0
	NO. OF ANIMALS WITH MULTIPLE TUMORS		0	0	0	0
	NO. OF BENIGN TUMORS		0	1	0	0
	NO. OF MALIGNANT TUMORS		0	2	1	0
	NO. OF TOTAL TUMORS		0	3	1	0
79 - 104	NO. OF EXAMINED ANIMALS		12	7	7	9
	NO. OF ANIMALS WITH TUMORS		10	7	6	9
	NO. OF ANIMALS WITH SINGLE TUMORS		4	4	2	5
	NO. OF ANIMALS WITH MULTIPLE TUMORS		6	3	4	4
	NO. OF BENIGN TUMORS		4	3	5	5
	NO. OF MALIGNANT TUMORS		13	7	5	8
	NO. OF TOTAL TUMORS		17	10	10	13
105 - 105	NO. OF EXAMINED ANIMALS		38	38	42	39
	NO. OF ANIMALS WITH TUMORS		27	34	38	35
	NO. OF ANIMALS WITH SINGLE TUMORS		13	18	12	13
	NO. OF ANIMALS WITH MULTIPLE TUMORS		14	16	26	22
	NO. OF BENIGN TUMORS		28	37	43	40
	NO. OF MALIGNANT TUMORS		15	20	27	24
	NO. OF TOTAL TUMORS		43	57	70	64

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 2

Time-related Weeks	Items	Group Name	Control	500 ppm	1000 ppm	2000 ppm
0 - 105	NO. OF EXAMINED ANIMALS		50	50	50	50
	NO. OF ANIMALS WITH TUMORS		37	44	45	44
	NO. OF ANIMALS WITH SINGLE TUMORS		17	25	15	18
	NO. OF ANIMALS WITH MULTIPLE TUMORS		20	19	30	26
	NO. OF BENIGN TUMORS		32	41	48	45
	NO. OF MALIGNANT TUMORS		28	29	33	32
	NO. OF TOTAL TUMORS		60	70	81	77

(HPT070)

BAIS4

APPENDIX M 2

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

MOUSE : FEMALE

(2-YEAR STUDY)

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 3

Time-related Weeks	Items	Group Name	Control	1000 ppm	2000 ppm	4000 ppm
0 - 52	NO. OF EXAMINED ANIMALS		2	1	0	1
	NO. OF ANIMALS WITH TUMORS		1	1	0	1
	NO. OF ANIMALS WITH SINGLE TUMORS		1	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		1	1	0	1
	NO. OF TOTAL TUMORS		1	1	0	1
53 - 78	NO. OF EXAMINED ANIMALS		1	4	4	3
	NO. OF ANIMALS WITH TUMORS		1	3	4	2
	NO. OF ANIMALS WITH SINGLE TUMORS		0	3	2	0
	NO. OF ANIMALS WITH MULTIPLE TUMORS		1	0	2	2
	NO. OF BENIGN TUMORS		1	0	3	1
	NO. OF MALIGNANT TUMORS		1	3	3	3
	NO. OF TOTAL TUMORS		2	3	6	4
79 - 104	NO. OF EXAMINED ANIMALS		23	16	18	12
	NO. OF ANIMALS WITH TUMORS		23	16	17	11
	NO. OF ANIMALS WITH SINGLE TUMORS		13	8	11	4
	NO. OF ANIMALS WITH MULTIPLE TUMORS		10	8	6	7
	NO. OF BENIGN TUMORS		11	7	8	10
	NO. OF MALIGNANT TUMORS		23	21	15	9
	NO. OF TOTAL TUMORS		34	28	23	19
105 - 105	NO. OF EXAMINED ANIMALS		24	29	28	34
	NO. OF ANIMALS WITH TUMORS		17	24	25	31
	NO. OF ANIMALS WITH SINGLE TUMORS		7	11	11	11
	NO. OF ANIMALS WITH MULTIPLE TUMORS		10	13	14	20
	NO. OF BENIGN TUMORS		16	24	27	38
	NO. OF MALIGNANT TUMORS		15	21	17	22
	NO. OF TOTAL TUMORS		31	45	44	60

(HPT070)

BAIS4

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 4

Time-related Weeks	Items_____	Group Name	Control	1000 ppm	2000 ppm	4000 ppm
0 - 105	NO. OF EXAMINED ANIMALS		50	50	50	50
	NO. OF ANIMALS WITH TUMORS		42	44	46	45
	NO. OF ANIMALS WITH SINGLE TUMORS		21	23	24	16
	NO. OF ANIMALS WITH MULTIPLE TUMORS		21	21	22	29
	NO. OF BENIGN TUMORS		28	31	38	49
	NO. OF MALIGNANT TUMORS		40	46	35	35
	NO. OF TOTAL TUMORS		68	77	73	84

(HPT070)

BAIS4

APPENDIX N 1

HISTOPATHOLOGICAL FINDINGS : NEOPLASTIC LESIONS : SUMMARY,

MOUSE : MALE : ALL ANIMALS

(2-YEAR STUDY)

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 1

Organ_____	Findings_____	Group Name No. of animals on Study	Control 50	500 ppm 50	1000 ppm 50	2000 ppm 50
{Integumentary system/appandage}						
subcutis	hemangioma		<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)	<50> 0 (0%)
	histiocytic sarcoma		0 (0%)	1 (2%)	1 (2%)	1 (2%)
{Respiratory system}						
lung	bronchiolar-alveolar adenoma		<50> 5 (10%)	<50> 1 (8%)	<50> 5 (10%)	<50> 2 (4%)
	bronchiolar-alveolar carcinoma		9 (18%)	4 (8%)	5 (10%)	5 (10%)
{Hematopoietic system}						
lymph node	malignant lymphoma		<50> 7 (14%)	<50> 7 (14%)	<50> 8 (16%)	<50> 9 (18%)
spleen	hemangioma		<50> 0 (0%)	<50> 0 (0%)	<50> 2 (4%)	<50> 0 (0%)
	histiocytic sarcoma		0 (0%)	1 (2%)	0 (0%)	0 (0%)
	malignant lymphoma		0 (0%)	1 (2%)	0 (0%)	1 (2%)
	mastcytoma:malignant		1 (2%)	0 (0%)	0 (0%)	0 (0%)
	hemangiosarcoma		1 (2%)	0 (0%)	1 (2%)	0 (0%)
{Digestive system}						
salivary gl	histiocytic sarcoma		<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)
<div> <div>< a ></div> <div>a : Number of animals examined at the site</div> </div> <div> <div>b (c)</div> <div>b : Number of animals with neoplasm</div> </div> <div>c : b / a * 100</div>						
(HPT085)						BATS4

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 2

Organ	Findings	Group Name No. of animals on Study	Control 50	500 ppm 50	1000 ppm 50	2000 ppm 50
(Digestive system)						
stomach			<50>	<50>	<50>	<50>
	carcinoid tumor		1 (2%)	0 (0%)	0 (0%)	0 (0%)
small intes			<50>	<50>	<50>	<50>
	adenoma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
	histiocytic sarcoma		0 (0%)	1 (2%)	0 (0%)	1 (2%)
liver			<50>	<50>	<50>	<50>
	hemangioma		6 (12%)	4 (8%)	1 (2%)	0 (0%)
	hepatocellular adenoma		12 (24%)	25 (50%)	34 (68%)	35 (70%)
	histiocytic sarcoma		1 (2%)	1 (2%)	2 (4%)	1 (2%)
	hepatocellular carcinoma		6 (12%)	9 (18%)	12 (24%)	10 (20%)
	hepatoblastoma		1 (2%)	1 (2%)	0 (0%)	1 (2%)
gall bladd			<46>	<50>	<49>	<47>
	papillary adenoma		0 (0%)	2 (4%)	4 (8%)	5 (11%)
pancreas			<50>	<50>	<50>	<50>
	islet cell adenoma		0 (0%)	0 (0%)	1 (2%)	0 (0%)
	acinar cell adenocarcinoma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
(Urinary system)						
urin bladd			<50>	<50>	<50>	<50>
	hemangioma		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

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 3

Organ	Findings	Group Name No. of animals on Study	Control 50	500 ppm 50	1000 ppm 50	2000 ppm 50
{Endocrine system}						
pituitary	adenoma		<48> 1 (2%)	<50> 0 (0%)	<49> 0 (0%)	<50> 0 (0%)
thyroid	C-cell adenoma		<49> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)	<50> 0 (0%)
adrenal	pheochromocytoma		<50> 0 (0%)	<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)
{Reproductive system}						
testis	hemangioma		<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)
	hemangiosarcoma		<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)
epididymis	histiocytic sarcoma		<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)	<50> 1 (2%)
prep/cli gl	xanthoma		<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)
{Nervous system}						
spinal cord	histiocytic sarcoma		<50> 0 (0%)	<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)
periph nerv	histiocytic sarcoma		<50> 0 (0%)	<50> 1 (2%)	<50> 1 (2%)	<50> 1 (2%)
{Special sense organs/appendage}						
Harder gl	adenoma		<49> 3 (6%)	<50> 4 (8%)	<50> 1 (2%)	<50> 1 (2%)

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

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 4

Organ	Findings	Group Name No. of animals on Study	Control 50	500 ppm 50	1000 ppm 50	2000 ppm 50
{Special sense organs/appendage}						
Harder gl	adenocarcinoma		<49> 0 (0%)	<50> 1 (2%)	<50> 1 (2%)	<50> 0 (0%)
{Musculoskeletal system}						
bone	osteosarcoma		<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)	<50> 0 (0%)
{Body cavities}						
peritoneum	hemangioma		<50> 0 (0%)	<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)
<hr/>						
< a >	a : Number of animals examined at the site					
b (c)	b : Number of animals with neoplasm c : b / a * 100					

(IPT085)

BAIS4

APPENDIX N 2

HISTOPATHOLOGICAL FINDINGS : NEOPLASTIC LESIONS : SUMMARY,

MOUSE : FEMALE : ALL ANIMALS

(2-YEAR STUDY)

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 5

Organ	Findings	Group Name No. of animals on Study	Control 50	1000 ppm 50	2000 ppm 50	4000 ppm 50
{Integumentary system/appandage}						
skin/app			<50>	<50>	<50>	<50>
	squamous cell papilloma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
subcutis			<50>	<50>	<50>	<50>
	hemangioma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
	carcinoma:NOS		0 (0%)	0 (0%)	1 (2%)	0 (0%)
{Respiratory system}						
nasal cavit			<50>	<50>	<50>	<50>
	chondroma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
	hemangioma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
lung			<50>	<50>	<49>	<50>
	bronchiolar-alveolar adenoma		1 (2%)	1 (2%)	2 (4%)	1 (2%)
	bronchiolar alveolar carcinoma		1 (2%)	1 (2%)	1 (2%)	1 (2%)
{Hematopoietic system}						
bone marrow			<50>	<50>	<50>	<50>
	hemangioma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
	hemangiosarcoma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
lymph node			<50>	<50>	<50>	<50>
	malignant lymphoma		22 (44%)	16 (32%)	6 (12%)	3 (6%)
spleen			<50>	<50>	<50>	<50>
	hemangioma		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

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 6

Organ	Findings	Group Name No. of animals on Study	Control 50	1000 ppm 50	2000 ppm 50	4000 ppm 50
{Hematopoietic system}						
spleen			<50>	<50>	<50>	<50>
	histiocytic sarcoma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
	malignant lymphoma		1 (2%)	1 (2%)	1 (2%)	1 (2%)
	hemangiosarcoma		0 (0%)	2 (4%)	0 (0%)	0 (0%)
{Digestive system}						
stomach			<50>	<50>	<50>	<50>
	squamous cell papilloma		0 (0%)	0 (0%)	1 (2%)	0 (0%)
large intes			<50>	<50>	<50>	<50>
	histiocytic sarcoma		0 (0%)	1 (2%)	1 (2%)	0 (0%)
liver			<50>	<50>	<50>	<50>
	hemangioma		3 (6%)	2 (4%)	0 (0%)	2 (4%)
	hepatocellular adenoma		6 (12%)	22 (44%)	23 (46%)	34 (68%)
	cholangiocellular adenoma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
	hepatocholangiocellular adenoma		0 (0%)	0 (0%)	2 (4%)	0 (0%)
	histiocytic sarcoma		1 (2%)	1 (2%)	2 (4%)	0 (0%)
	hepatocellular carcinoma		1 (2%)	4 (8%)	11 (22%)	17 (34%)
	hepatoblastoma		0 (0%)	1 (2%)	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

(HPT085)

BAIS4

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 7

Organ	Findings	Group Name No. of animals on Study	Control 50	1000 ppm 50	2000 ppm 50	4000 ppm 50
{Digestive system}						
liver			<50>	<50>	<50>	<50>
	hepatocholangiocellular carcinoma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
gall bladd			<47>	<47>	<49>	<45>
	papillary adenoma		0 (0%)	1 (2%)	5 (10%)	3 (7%)
{Endocrine system}						
pituitary			<50>	<50>	<50>	<50>
	adenoma		6 (12%)	3 (6%)	1 (2%)	1 (2%)
	adenocarcinoma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
{Reproductive system}						
ovary			<50>	<50>	<50>	<50>
	cystadenoma		1 (2%)	0 (0%)	0 (0%)	1 (2%)
	histiocytic sarcoma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
uterus			<50>	<50>	<50>	<50>
	xanthoma		0 (0%)	1 (2%)	0 (0%)	2 (4%)
	hemangioma		0 (0%)	1 (2%)	0 (0%)	1 (2%)
	endometrial stromal polyp		3 (6%)	0 (0%)	0 (0%)	0 (0%)
	histiocytic sarcoma		9 (18%)	18 (36%)	10 (20%)	10 (20%)
	endometrial stromal 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

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 8

Organ	Findings	Group Name No. of animals on Study	Control 50	1000 ppm 50	2000 ppm 50	4000 ppm 50
{Reproductive system}						
mammary gl			<50>	<50>	<50>	<50>
	adenocarcinoma		0 (0%)	0 (0%)	1 (2%)	1 (2%)
prep/cli gl			<50>	<50>	<50>	<50>
	adenocarcinoma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
{Nervous system}						
periph nerv			<50>	<50>	<50>	<50>
	histiocytic sarcoma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
{Special sense organs/appendage}						
Harder gl			<50>	<50>	<50>	<50>
	adenoma		2 (4%)	0 (0%)	3 (6%)	2 (4%)
{Musculoskeletal system}						
bone			<50>	<50>	<50>	<50>
	osteoma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
{Body cavities}						
peritoneum			<50>	<50>	<50>	<50>
	hemangioma		0 (0%)	0 (0%)	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						

(HPT085)

BAIS4

APPENDIX O 1

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS,

MOUSE : MALE

(2-YEAR STUDY)

STUDY No. : 0372
ANIMAL : MOUSE Crj:BDF1
SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 1

Group Name	Control	500 ppm	1000 ppm	2000 ppm
SITE : lung TUMOR : bronchiolar-alveolar adenoma				
Tumor rate				
Overall rates(a)	5/50(10.0)	4/50(8.0)	5/50(10.0)	2/50(4.0)
Adjusted rates(b)	10.53	10.53	10.64	5.13
Terminal rates(c)	4/38(10.5)	4/38(10.5)	3/42(7.1)	2/39(5.1)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.8542			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.2903			
Fisher Exact test(e)		P = 0.5000	P = 0.6297	P = 0.2180
SITE : lung TUMOR : bronchiolar-alveolar carcinoma				
Tumor rate				
Overall rates(a)	9/50(18.0)	4/50(8.0)	5/50(10.0)	5/50(10.0)
Adjusted rates(b)	22.50	10.53	11.90	12.82
Terminal rates(c)	8/38(21.1)	4/38(10.5)	5/42(11.9)	5/39(12.8)
Statistical analysis				
Peto test				
Standard method(d)	P =			
Prevalence method(d)	P = 0.8352			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.3489			
Fisher Exact test(e)		P = 0.1168	P = 0.1940	P = 0.1940
SITE : lung TUMOR : bronchiolar-alveolar adenoma, bronchiolar-alveolar carcinoma				
Tumor rate				
Overall rates(a)	14/50(28.0)	8/50(16.0)	10/50(20.0)	7/50(14.0)
Adjusted rates(b)	32.50	21.05	21.28	17.95
Terminal rates(c)	12/38(31.6)	8/38(21.1)	8/42(19.0)	7/39(17.9)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.9331			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.1394			
Fisher Exact test(e)		P = 0.1135	P = 0.2415	P = 0.0698

STUDY No. : 0372
ANIMAL : MOUSE Crj:BDFl
SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 2

Group Name	Control	500 ppm	1000 ppm	2000 ppm
SITE : lymph node TUMOR : malignant lymphoma				
Tumor rate				
Overall rates(a)	7/50(14.0)	7/50(14.0)	8/50(16.0)	9/50(18.0)
Adjusted rates(b)	10.53	10.53	16.67	15.38
Terminal rates(c)	4/38(10.5)	4/38(10.5)	7/42(16.7)	6/39(15.4)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.5231			
Prevalence method(d)	P = 0.2215			
Combined analysis(d)	P = 0.2837			
Cochran-Armitage test(e)	P = 0.5303			
Fisher Exact test(e)		P = 0.6129	P = 0.5000	P = 0.3929
SITE : spleen TUMOR : hemangioma, hemangiosarcoma				
Tumor rate				
Overall rates(a)	1/50(2.0)	0/50(0.0)	3/50(6.0)	0/50(0.0)
Adjusted rates(b)	0.0	0.0	6.67	0.0
Terminal rates(c)	0/38(0.0)	0/38(0.0)	2/42(4.8)	0/39(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.9070 ?			
Prevalence method(d)	P = 0.3765			
Combined analysis(d)	P = 0.6154			
Cochran-Armitage test(e)	P = 0.7327			
Fisher Exact test(e)		P = 0.5000	P = 0.3087	P = 0.5000
SITE : liver TUMOR : hemangioma				
Tumor rate				
Overall rates(a)	6/50(12.0)	4/50(8.0)	1/50(2.0)	0/50(0.0)
Adjusted rates(b)	12.50	7.89	2.38	0.0
Terminal rates(c)	4/38(10.5)	3/38(7.9)	1/42(2.4)	0/39(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.5895			
Prevalence method(d)	P = 0.9986			
Combined analysis(d)	P = 0.9987			
Cochran-Armitage test(e)	P = 0.0055**			
Fisher Exact test(e)		P = 0.3703	P = 0.0559	P = 0.0133*

STUDY No. : 0372
ANIMAL : MOUSE Crj:BDF1
SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 3

Group Name	Control	500 ppm	1000 ppm	2000 ppm
SITE : liver TUMOR : hepatocellular adenoma				
Tumor rate				
Overall rates(a)	12/50(24.0)	25/50(50.0)	34/50(68.0)	35/50(70.0)
Adjusted rates(b)	31.58	60.53	76.74	80.00
Terminal rates(c)	12/38(31.6)	23/38(60.5)	32/42(76.2)	31/39(79.5)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P < 0.0001**			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P < 0.0001**			
Fisher Exact test(e)		P = 0.0062**	P < 0.0001**	P < 0.0001**
SITE : liver TUMOR : hepatocellular carcinoma				
Tumor rate				
Overall rates(a)	6/50(12.0)	9/50(18.0)	12/50(24.0)	10/50(20.0)
Adjusted rates(b)	7.89	18.60	26.19	20.93
Terminal rates(c)	3/38(7.9)	7/38(18.4)	11/42(26.2)	8/39(20.5)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.8251			
Prevalence method(d)	P = 0.0668			
Combined analysis(d)	P = 0.1722			
Cochran-Armitage test(e)	P = 0.3097			
Fisher Exact test(e)		P = 0.2883	P = 0.0961	P = 0.2070
SITE : liver TUMOR : hepatocellular adenoma, hepatocellular carcinoma				
Tumor rate				
Overall rates(a)	18/50(36.0)	29/50(58.0)	39/50(78.0)	38/50(76.0)
Adjusted rates(b)	39.47	65.79	86.05	85.00
Terminal rates(c)	15/38(39.5)	25/38(65.8)	36/42(85.7)	33/39(84.6)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.8251			
Prevalence method(d)	P < 0.0001**			
Combined analysis(d)	P < 0.0001**			
Cochran-Armitage test(e)	P < 0.0001**			
Fisher Exact test(e)		P = 0.0223*	P < 0.0001**	P = 0.0001**

STUDY No. : 0372
ANIMAL : MOUSE Crj:BDF1
SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 4

Group Name	Control	500 ppm	1000 ppm	2000 ppm
SITE : gall bladder TUMOR : papillary adenoma				
Tumor rate				
Overall rates(a)	0/46(0.0)	2/50(4.0)	4/49(8.2)	5/47(10.6)
Adjusted rates(b)	0.0	5.26	9.76	13.89
Terminal rates(c)	0/35(0.0)	2/38(5.3)	4/41(9.8)	5/36(13.9)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.0125*			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.0223*			
Fisher Exact test(e)		P = 0.2686	P = 0.0666	P = 0.0295*
SITE : Harderian gland TUMOR : adenoma				
Tumor rate				
Overall rates(a)	3/49(6.1)	4/50(8.0)	1/50(2.0)	1/50(2.0)
Adjusted rates(b)	8.11	9.52	2.38	2.56
Terminal rates(c)	3/37(8.1)	3/38(7.9)	1/42(2.4)	1/39(2.6)
Statistical analysis				
Peto test				
Standard method(d)	P =			
Prevalence method(d)	P = 0.9045			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.1783			
Fisher Exact test(e)		P = 0.5114	P = 0.3010	P = 0.3010

(HPT360A)

BAIS4

STUDY No. : 0372
ANIMAL : MOUSE Crj:BDF1
SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 5

Group Name	Control	500 ppm	1000 ppm	2000 ppm
SITE : Harderian gland				
TUMOR : adenoma, adenocarcinoma				
Tumor rate				
Overall rates(a)	3/49(6.1)	5/50(10.0)	2/50(4.0)	1/50(2.0)
Adjusted rates(b)	8.11	11.90	4.76	2.56
Terminal rates(c)	3/37(8.1)	4/38(10.5)	2/42(4.8)	1/39(2.6)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.9048			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.1827			
Fisher Exact test(e)		P = 0.3689	P = 0.4903	P = 0.3010

(IPT360A)

BAIS4

- (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 probabilities 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 : * : $P \leq 0.05$ ** : $P \leq 0.01$
N.C.:Statistical value cannot be calculated and was not significant.

STUDY No. : 0372
 ANIMAL : MOUSE Crj:BDF1
 SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 1

Group Name	Control	500 ppm	1000 ppm	2000 ppm
SITE : ALL SITE TUMOR : hemangioma				
Tumor rate				
Overall rates(a)	7/50(14.0)	5/50(10.0)	3/50(6.0)	1/50(2.0)
Adjusted rates(b)	14.58	10.53	6.67	2.27
Terminal rates(c)	4/38(10.5)	4/38(10.5)	2/42(4.8)	0/39(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.5895			
Prevalence method(d)	P = 0.9894			
Combined analysis(d)	P = 0.9910			
Cochran-Armitage test(e)	P = 0.0220*			
Fisher Exact test(e)		P = 0.3798	P = 0.1589	P = 0.0297*
SITE : ALL SITE TUMOR : histiocytic sarcoma				
Tumor rate				
Overall rates(a)	1/50(2.0)	5/50(10.0)	6/50(12.0)	6/50(12.0)
Adjusted rates(b)	2.50	5.26	4.76	7.69
Terminal rates(c)	0/38(0.0)	2/38(5.3)	2/42(4.8)	3/39(7.7)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.1241			
Prevalence method(d)	P = 0.1601			
Combined analysis(d)	P = 0.0639			
Cochran-Armitage test(e)	P = 0.1125			
Fisher Exact test(e)		P = 0.1022	P = 0.0559	P = 0.0559

(HPT360A)

BAIS4

STUDY No. : 0372
 ANIMAL : MOUSE Crj:BDF1
 SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 2

Group Name	Control	500 ppm	1000 ppm	2000 ppm
SITE : ALL SITE				
TUMOR : malignant lymphoma				
Tumor rate				
Overall rates(a)	7/50(14.0)	8/50(16.0)	8/50(16.0)	10/50(20.0)
Adjusted rates(b)	10.53	10.53	16.67	17.95
Terminal rates(c)	4/38(10.5)	4/38(10.5)	7/42(16.7)	7/39(17.9)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.5836			
Prevalence method(d)	P = 0.1371			
Combined analysis(d)	P = 0.2313			
Cochran-Armitage test(e)	P = 0.4208			
Fisher Exact test(e)		P = 0.5000	P = 0.5000	P = 0.2977

(IPT360A)

BA1S4

(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 probabilities 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 : * : $P \leq 0.05$ ** : $P \leq 0.01$

N.C.:Statistical value cannot be calculated and was not significant.

APPENDIX O 2

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS,

MOUSE : FEMALE

(2-YEAR STUDY)

STUDY No. : 0372
ANIMAL : MOUSE Crj:BDF1
SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 6

Group Name	Control	1000 ppm	2000 ppm	4000 ppm
SITE : lung TUMOR : bronchiolar-alveolar adenoma, bronchiolar-alveolar carcinoma				
Tumor rate				
Overall rates(a)	2/50(4.0)	2/50(4.0)	3/49(6.1)	2/50(4.0)
Adjusted rates(b)	8.33	4.76	4.26	5.88
Terminal rates(c)	2/24(8.3)	0/29(0.0)	1/28(3.6)	2/34(5.9)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.4318			
Prevalence method(d)	P = 0.4969			
Combined analysis(d)	P = 0.4839			
Cochran-Armitage test(e)	P = 0.9521			
Fisher Exact test(e)		P = 0.6913	P = 0.4903	P = 0.6913
SITE : lymph node TUMOR : malignant lymphoma				
Tumor rate				
Overall rates(a)	22/50(44.0)	16/50(32.0)	6/50(12.0)	3/50(6.0)
Adjusted rates(b)	37.50	27.59	17.86	5.88
Terminal rates(c)	9/24(37.5)	8/29(27.6)	5/28(17.9)	2/34(5.9)
Statistical analysis				
Peto test				
Standard method(d)	P = 1.0000			
Prevalence method(d)	P = 0.9992			
Combined analysis(d)	P = 1.0000			
Cochran-Armitage test(e)	P < 0.0001**			
Fisher Exact test(e)		P = 0.1515	P = 0.0003**	P < 0.0001**
SITE : liver TUMOR : hemangioma				
Tumor rate				
Overall rates(a)	3/50(6.0)	2/50(4.0)	0/50(0.0)	2/50(4.0)
Adjusted rates(b)	4.35	6.90	0.0	5.88
Terminal rates(c)	0/24(0.0)	2/29(6.9)	0/28(0.0)	2/34(5.9)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.9190 ?			
Prevalence method(d)	P = 0.5992			
Combined analysis(d)	P = 0.7575			
Cochran-Armitage test(e)	P = 0.5583			
Fisher Exact test(e)		P = 0.5000	P = 0.1212	P = 0.5000

STUDY No. : 0372
ANIMAL : MOUSE Crj:BDF1
SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 7

Group Name	Control	1000 ppm	2000 ppm	4000 ppm
SITE : liver TUMOR : hepatocellular adenoma				
Tumor rate				
Overall rates(a)	6/50(12.0)	22/50(44.0)	23/50(46.0)	34/50(68.0)
Adjusted rates(b)	21.43	60.00	62.07	78.38
Terminal rates(c)	5/24(20.8)	17/29(58.6)	17/28(60.7)	26/34(76.5)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P < 0.0001**			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P < 0.0001**			
Fisher Exact test(e)		P = 0.0003**	P = 0.0002**	P < 0.0001**
SITE : liver TUMOR : hepatocellular carcinoma				
Tumor rate				
Overall rates(a)	1/50(2.0)	4/50(8.0)	11/50(22.0)	17/50(34.0)
Adjusted rates(b)	4.17	11.11	23.53	38.24
Terminal rates(c)	1/24(4.2)	3/29(10.3)	6/28(21.4)	13/34(38.2)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.0687			
Prevalence method(d)	P < 0.0001**			
Combined analysis(d)	P < 0.0001**			
Cochran-Armitage test(e)	P < 0.0001**			
Fisher Exact test(e)		P = 0.1811	P = 0.0019**	P < 0.0001**
SITE : liver TUMOR : hepatocellular adenoma, hepatocellular carcinoma				
Tumor rate				
Overall rates(a)	6/50(12.0)	23/50(46.0)	31/50(62.0)	41/50(82.0)
Adjusted rates(b)	21.43	60.00	72.41	89.47
Terminal rates(c)	5/24(20.8)	17/29(58.6)	20/28(71.4)	30/34(88.2)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.0687			
Prevalence method(d)	P < 0.0001**?			
Combined analysis(d)	P < 0.0001**			
Cochran-Armitage test(e)	P < 0.0001**			
Fisher Exact test(e)		P = 0.0002**	P < 0.0001**	P < 0.0001**

STUDY No. : 0372
ANIMAL : MOUSE Crj:BDF1
SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 8

Group Name	Control	1000 ppm	2000 ppm	4000 ppm
SITE : gall bladder TUMOR : papillary adenoma				
Tumor rate				
Overall rates(a)	0/47(0.0)	1/47(2.1)	5/49(10.2)	3/45(6.7)
Adjusted rates(b)	0.0	2.78	14.71	9.38
Terminal rates(c)	0/23(0.0)	0/29(0.0)	4/28(14.3)	3/32(9.4)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.0600			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.0818			
Fisher Exact test(e)		P = 0.5000	P = 0.0312*	P = 0.1130
SITE : pituitary gland TUMOR : adenoma				
Tumor rate				
Overall rates(a)	6/50(12.0)	3/50(6.0)	1/50(2.0)	1/50(2.0)
Adjusted rates(b)	12.50	10.34	3.57	0.0
Terminal rates(c)	3/24(12.5)	3/29(10.3)	1/28(3.6)	0/34(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.4259			
Prevalence method(d)	P = 0.9978			
Combined analysis(d)	P = 0.9920			
Cochran-Armitage test(e)	P = 0.0316*			
Fisher Exact test(e)		P = 0.2435	P = 0.0559	P = 0.0559
SITE : pituitary gland TUMOR : adenoma, adenocarcinoma				
Tumor rate				
Overall rates(a)	7/50(14.0)	3/50(6.0)	1/50(2.0)	1/50(2.0)
Adjusted rates(b)	16.67	10.34	3.57	0.0
Terminal rates(c)	4/24(16.7)	3/29(10.3)	1/28(3.6)	0/34(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.4259			
Prevalence method(d)	P = 0.9993			
Combined analysis(d)	P = 0.9970			
Cochran-Armitage test(e)	P = 0.0157*			
Fisher Exact test(e)		P = 0.1589	P = 0.0297*	P = 0.0297*

(HPT360A)

BATS4

STUDY No. : 0372
ANIMAL : MOUSE Crj:BDF1
SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 9

Group Name	Control	1000 ppm	2000 ppm	4000 ppm
SITE : uterus TUMOR : endometrial stromal polyp				
Tumor rate				
Overall rates(a)	3/50(6.0)	0/50(0.0)	0/50(0.0)	0/50(0.0)
Adjusted rates(b)	8.33	0.0	0.0	0.0
Terminal rates(c)	2/24(8.3)	0/29(0.0)	0/28(0.0)	0/34(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.9939 ?			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.0389*			
Fisher Exact test(e)		P = 0.1212	P = 0.1212	P = 0.1212
SITE : uterus TUMOR : histiocytic sarcoma				
Tumor rate				
Overall rates(a)	9/50(18.0)	18/50(36.0)	10/50(20.0)	10/50(20.0)
Adjusted rates(b)	7.14	25.71	3.57	11.76
Terminal rates(c)	1/24(4.2)	6/29(20.7)	1/28(3.6)	4/34(11.8)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.5960			
Prevalence method(d)	P = 0.7381			
Combined analysis(d)	P = 0.7212			
Cochran-Armitage test(e)	P = 0.6318			
Fisher Exact test(e)		P = 0.0352*	P = 0.5000	P = 0.5000

(HPT360A)

BAIS4

STUDY No. : 0372
 ANIMAL : MOUSE Crj:BDF1
 SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 10

Group Name	Control	1000 ppm	2000 ppm	4000 ppm
SITE : Harderian gland				
TUMOR : adenoma				
Tumor rate				
Overall rates(a)	2/50(4.0)	0/50(0.0)	3/50(6.0)	2/50(4.0)
Adjusted rates(b)	8.33	0.0	6.00	5.41
Terminal rates(c)	2/24(8.3)	0/29(0.0)	1/28(3.6)	1/34(2.9)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.3394			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.6489			
Fisher Exact test(e)		P = 0.2475	P = 0.5000	P = 0.6913

(IPT360A)

BAIS4

- (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 probabilities 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 ; * : $P \leq 0.05$ ** : $P \leq 0.01$
 N.C. : Statistical value cannot be calculated and was not significant.

STUDY No. : 0372
ANIMAL : MOUSE Crj:BDF1
SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 3

Group Name	Control	1000 ppm	2000 ppm	4000 ppm
SITE : ALL SITE TUMOR : hemangioma				
Tumor rate				
Overall rates(a)	6/50(12.0)	3/50(6.0)	1/50(2.0)	3/50(6.0)
Adjusted rates(b)	10.87	10.34	0.0	8.82
Terminal rates(c)	1/24(4.2)	3/29(10.3)	0/28(0.0)	3/34(8.8)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.7385			
Prevalence method(d)	P = 0.8348			
Combined analysis(d)	P = 0.8852			
Cochran-Armitage test(e)	P = 0.2648			
Fisher Exact test(e)		P = 0.2435	P = 0.0559	P = 0.2435
SITE : ALL SITE TUMOR : histiocytic sarcoma				
Tumor rate				
Overall rates(a)	12/50(24.0)	20/50(40.0)	13/50(26.0)	11/50(22.0)
Adjusted rates(b)	7.50	25.71	10.71	11.76
Terminal rates(c)	1/24(4.2)	6/29(20.7)	3/28(10.7)	4/34(11.8)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.7657			
Prevalence method(d)	P = 0.7216			
Combined analysis(d)	P = 0.8267			
Cochran-Armitage test(e)	P = 0.3943			
Fisher Exact test(e)		P = 0.0664	P = 0.5000	P = 0.5000

(HPT360A)

BAIS4

STUDY No. : 0372
ANIMAL : MOUSE Crj:BDF1
SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 4

Group Name	Control	1000 ppm	2000 ppm	4000 ppm
SITE : ALL SITE				
TUMOR : malignant lymphoma				
Tumor rate				
Overall rates(a)	23/50(46.0)	17/50(34.0)	7/50(14.0)	4/50(8.0)
Adjusted rates(b)	37.50	31.03	21.43	8.82
Terminal rates(c)	9/24(37.5)	9/29(31.0)	6/28(21.4)	3/34(8.8)
Statistical analysis				
Peto test				
Standard method(d)	P = 1.0000			
Prevalence method(d)	P = 0.9976			
Combined analysis(d)	P = 1.0000			
Cochran-Armitage test(e)	P < 0.0001**			
Fisher Exact test(e)		P = 0.1537	P = 0.0004**	P < 0.0001**

(HPT360A)

BA1S4

(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 probabilities 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 : * : $P \leq 0.05$ ** : $P \leq 0.01$
N.C.:Statistical value cannot be calculated and was not significant.

APPENDIX P 1

HISTOPATHOLOGICAL FINDINGS : METASTASIS OF TUMOR : SUMMARY,

MOUSE : MALE : ALL ANIMALS

(2-YEAR STUDY)

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 1

Organ	Findings	Group Name No. of Animals on Study	Control 50	500 ppm 50	1000 ppm 50	2000 ppm 50
(Respiratory system)						
nasal cavit	leukemic cell infiltration		<50> 1	<50> 1	<50> 0	<50> 1
	metastasis:liver tumor		1	0	0	0
	metastasis:subcutis tumor		0	0	1	0
	metastasis:periphoral norve tumor		0	0	1	0
	metastasis:epididymis tumor		0	0	0	1
lung	leukemic cell infiltration		<50> 2	<50> 4	<50> 2	<50> 3
	metastasis:liver tumor		4	3	3	2
	metastasis:pancreas tumor		1	0	0	0
	metastasis:subcutis tumor		0	0	1	1
(Hematopoietic system)						
bone marrow	leukemic cell infiltration		<50> 4	<50> 4	<50> 1	<50> 0
	metastasis:spleen tumor		0	1	0	0
	metastasis:small intestine tumor		0	0	0	1
lymph node	leukemic cell infiltration		<50> 0	<50> 1	<50> 0	<50> 0
spleen	leukemic cell infiltration		<50> 4	<50> 7	<50> 4	<50> 7

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

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 2

Organ	Findings	Group Name No. of Animals on Study	Control 50	500 ppm 50	1000 ppm 50	2000 ppm 50
{Hematopoietic system}						
spleen	metastasis:liver tumor		<50> 0	<50> 1	<50> 0	<50> 0
	metastasis:small intestine tumor		0	0	0	1
{Circulatory system}						
heart	leukemic cell infiltration		<50> 1	<50> 2	<50> 0	<50> 2
	metastasis:liver tumor		0	1	0	0
{Digestive system}						
tongue	leukemic cell infiltration		<50> 0	<50> 1	<50> 0	<50> 0
salivary gl	leukemic cell infiltration		<50> 1	<50> 2	<50> 0	<50> 0
stomach	leukemic cell infiltration		<50> 1	<50> 1	<50> 0	<50> 0
small intes	leukemic cell infiltration		<50> 0	<50> 2	<50> 2	<50> 3
	metastasis:pancreas tumor		1	0	0	0
large intes	leukemic cell infiltration		<50> 1	<50> 0	<50> 0	<50> 1
liver	leukemic cell infiltration		<50> 3	<50> 4	<50> 2	<50> 1
< a > a : Number of animals examined at the site b b : Number of animals with lesion						

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 3

Organ	Group Name No. of Animals on Study	Control 50	500 ppm 50	1000 ppm 50	2000 ppm 50
{Digestive system}					
liver	metastasis:subcutis tumor	<50> 0	<50> 0	<50> 1	<50> 0
	metastasis:spleen tumor	1	0	0	0
	metastasis:salivary gland tumor	0	0	1	0
pancreas	leukemic cell infiltration	<50> 0	<50> 0	<50> 0	<50> 1
	metastasis:spleen tumor	0	1	0	0
{Urinary system}					
kidney	leukemic cell infiltration	<50> 2	<50> 3	<50> 1	<50> 1
	metastasis:liver tumor	0	1	0	0
urin bladd	leukemic cell infiltration	<50> 1	<50> 1	<50> 0	<50> 0
	metastasis:liver tumor	0	1	0	0
{Endocrine system}					
pituitary	metastasis:peripheral nerve tumor	<50> 0	<50> 0	<50> 0	<50> 1
	leukemic cell infiltration	<50> 0	<50> 2	<50> 0	<50> 0
{Reproductive system}					
testis	metastasis:subcutis tumor	<50> 0	<50> 0	<50> 1	<50> 0
< a >	a : Number of animals examined at the site				
b	b : Number of animals with lesion				

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 4

Organ	Findings	Group Name No. of Animals on Study	Control 50	500 ppm 50	1000 ppm 50	2000 ppm 50
{Reproductive system}						
epididymis	leukemic cell infiltration		<50> 1	<50> 1	<50> 0	<50> 0
	metastasis:subcutis tumor		0	0	1	0
	metastasis:peripheral nerve tumor		0	0	1	0
semin ves	leukemic cell infiltration		<50> 0	<50> 2	<50> 0	<50> 0
prostate	leukemic cell infiltration		<50> 0	<50> 2	<50> 0	<50> 0
	metastasis:spinal cord tumor		0	0	0	1
mammary gl	leukemic cell infiltration		<50> 0	<50> 1	<50> 0	<50> 0
{Nervous system}						
brain	leukemic cell infiltration		<50> 2	<50> 1	<50> 0	<50> 0
	metastasis:peripheral nerve tumor		0	1	1	0
spinal cord	leukemic cell infiltration		<50> 0	<50> 1	<50> 0	<50> 0
{Special sense organs/appendage}						
Harder gl	leukemic cell infiltration		<50> 2	<50> 1	<50> 0	<50> 0
{Musculoskeletal system}						
muscle	leukemic cell infiltration		<50> 0	<50> 1	<50> 0	<50> 0

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

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 5

		Group Name	Control	500 ppm	1000 ppm	2000 ppm
		No. of Animals on Study	50	50	50	50
Organ_____	Findings_____					
{Body cavities}						
peritoneum			<50>	<50>	<50>	<50>
	metastasis:pancreas tumor		1	0	0	0
< a >	a : Number of animals examined at the site					
b	b : Number of animals with lesion					
(JPT150)						
BALB/c						

APPENDIX P 2

HISTOPATHOLOGICAL FINDINGS : METASTASIS OF TUMOR : SUMMARY,

MOUSE : FEMALE : ALL ANIMALS

(2-YEAR STUDY)

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 6

Organ	Findings	Group Name No. of Animals on Study	Control 50	1000 ppm 50	2000 ppm 50	4000 ppm 50
{Integumentary system/appandage}						
subcutis	metastasis:uterus tumor		<50> 1	<50> 0	<50> 0	<50> 1
{Respiratory system}						
nasal cavit	leukemic cell infiltration		<50> 0	<50> 1	<50> 0	<50> 0
	metastasis:uterus tumor		0	1	0	0
	metastasis:peripheral nerve tumor		1	0	0	0
lung	leukemic cell infiltration		<50> 16	<50> 12	<50> 2	<50> 2
	metastasis:liver tumor		2	3	5	2
	metastasis:uterus tumor		4	5	7	3
	metastasis:preputial/clitoral gland tumor		1	0	0	0
{Hematopoietic system}						
bone marrow	leukemic cell infiltration		<50> 5	<50> 9	<50> 3	<50> 0
	metastasis:liver tumor		0	1	0	0
	metastasis:uterus tumor		3	3	1	2
lymph node	leukemic cell infiltration		<50> 0	<50> 1	<50> 0	<50> 0
	metastasis:liver tumor		1	0	0	0
< a > b : Number of animals with lesion						

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 7

Group Name No. of Animals on Study		Control 50	1000 ppm 50	2000 ppm 50	4000 ppm 50
Organ	Findings				
{Hematopoietic system}					
lymph node		<50>	<50>	<50>	<50>
	metastasis:uterus tumor	0	2	0	0
	metastasis:large intestine tumor	0	1	0	0
thymus		<50>	<50>	<50>	<50>
	metastasis:uterus tumor	1	0	0	0
spleen		<50>	<50>	<50>	<50>
	leukemic cell infiltration	15	13	6	2
	metastasis:liver tumor	0	1	0	0
	metastasis:uterus tumor	5	6	5	2
	metastasis:large intestine tumor	0	1	0	0
{Circulatory system}					
heart		<50>	<50>	<50>	<50>
	leukemic cell infiltration	5	5	1	1
	metastasis:uterus tumor	3	0	1	0
{Digestive system}					
tongue		<50>	<50>	<50>	<50>
	leukemic cell infiltration	1	0	0	0
salivary gl		<50>	<50>	<50>	<50>
	leukemic cell infiltration	3	5	2	0
	metastasis:uterus tumor	0	0	0	1

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

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 8

Organ	Findings	Group Name No. of Animals on Study	Control 50	1000 ppm 50	2000 ppm 50	4000 ppm 50
{Digestive system}						
stomach			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	2	1	0
small intes			<50>	<50>	<50>	<50>
	leukemic cell infiltration		1	0	1	1
	metastasis:large intestine tumor		0	1	0	0
large intes			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	1	0	0
liver			<50>	<50>	<50>	<50>
	leukemic cell infiltration		9	9	4	2
	metastasis:uterus tumor		7	10	8	5
pancreas			<50>	<50>	<50>	<50>
	leukemic cell infiltration		6	3	2	1
	metastasis:uterus tumor		1	1	2	1
{Urinary system}						
kidney			<50>	<50>	<50>	<50>
	leukemic cell infiltration		8	6	3	1
	metastasis:liver tumor		1	0	0	0
	metastasis:uterus tumor		1	5	4	1
urin bladd			<50>	<50>	<50>	<50>
	leukemic cell infiltration		3	2	0	0
{Endocrine system}						
pituitary			<50>	<50>	<50>	<50>
	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. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 9

Organ	Findings	Group Name No. of Animals on Study	Control 50	1000 ppm 50	2000 ppm 50	4000 ppm 50
(Endocrine system)						
pituitary			<50>	<50>	<50>	<50>
	metastasis:uterus tumor		0	0	0	1
thyroid			<50>	<50>	<50>	<50>
	leukemic cell infiltration		1	1	0	0
adrenal			<50>	<50>	<50>	<50>
	leukemic cell infiltration		2	3	0	1
	metastasis:uterus tumor		1	0	0	0
(Reproductive system)						
ovary			<50>	<50>	<50>	<50>
	leukemic cell infiltration		11	9	1	1
	metastasis:liver tumor		1	1	0	0
	metastasis:uterus tumor		5	6	6	5
uterus	metastasis:large intestine tumor		0	1	0	0
			<50>	<50>	<50>	<50>
	leukemic cell infiltration		4	2	0	0
	metastasis:liver tumor		0	1	0	0
	metastasis:spleen tumor		1	0	0	0
vagina			<50>	<50>	<50>	<50>
	leukemic cell infiltration		1	1	0	0
mammary gl			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	0	1	0

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

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 10

Group Name No. of Animals on Study		Control 50	1000 ppm 50	2000 ppm 50	4000 ppm 50
Organ	Findings				
{Nervous system}					
brain	leukemic cell infiltration	<50> 1	<50> 4	<50> 0	<50> 0
	metastasis:uterus tumor	1	1	0	0
spinal cord	leukemic cell infiltration	<50> 0	<50> 1	<50> 0	<50> 0
	leukemic cell infiltration	<50> 1	<50> 0	<50> 0	<50> 0
{Special sense organs/appendage}					
eye	metastasis:peripheral nerve tumor	<50> 1	<50> 0	<50> 0	<50> 0
	leukemic cell infiltration	<50> 2	<50> 3	<50> 1	<50> 0
Harder gl	metastasis:peripheral nerve tumor	1	0	0	0
	leukemic cell infiltration	<50> 1	<50> 0	<50> 0	<50> 0
{Musculoskeletal system}					
muscle	leukemic cell infiltration	<50> 1	<50> 0	<50> 0	<50> 0
	leukemic cell infiltration	<50> 3	<50> 1	<50> 0	<50> 0
{Body cavities}					
peritoneum	leukemic cell infiltration	<50> 3	<50> 1	<50> 0	<50> 0
	leukemic cell infiltration	<50> 3	<50> 1	<50> 0	<50> 0

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

APPENDIX P 3

HISTOPATHOLOGICAL FINDINGS : METASTASIS OF TUMOR : SUMMARY,

MOUSE : MALE : SACRIFICED ANIMALS

(2-YEAR STUDY)

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 1

Organ	Findings	Group Name No. of Animals on Study	Control 38	500 ppm 38	1000 ppm 42	2000 ppm 39
{Respiratory system}						
nasal cavit	leukemic cell infiltration		<38> 1	<38> 0	<42> 0	<39> 1
	metastasis:epididymis tumor		0	0	0	1
lung	leukemic cell infiltration		<38> 2	<38> 1	<42> 2	<39> 1
	metastasis:liver tumor		2	1	3	1
	metastasis:subcutis tumor		0	0	0	1
{Hematopoietic system}						
bone marrow	leukemic cell infiltration		<38> 2	<38> 2	<42> 1	<39> 0
spleen	leukemic cell infiltration		<38> 3	<38> 4	<42> 4	<39> 4
{Circulatory system}						
heart	leukemic cell infiltration		<38> 0	<38> 1	<42> 0	<39> 0
{Digestive system}						
tongue	leukemic cell infiltration		<38> 0	<38> 1	<42> 0	<39> 0
salivary gl	leukemic cell infiltration		<38> 1	<38> 1	<42> 0	<39> 0
< a > a : Number of animals examined at the site b b : Number of animals with lesion						

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 2

Organ	Findings	Group Name No. of Animals on Study	Control 38	500 ppm 38	1000 ppm 42	2000 ppm 39
{Digestive system}						
stomach	leukemic cell infiltration		<38> 1	<38> 0	<42> 0	<39> 0
small intes	leukemic cell infiltration		<38> 0	<38> 1	<42> 2	<39> 2
large intes	leukemic cell infiltration		<38> 1	<38> 0	<42> 0	<39> 0
liver	leukemic cell infiltration		<38> 2	<38> 1	<42> 2	<39> 1
{Urinary system}						
kidney	leukemic cell infiltration		<38> 1	<38> 1	<42> 1	<39> 1
urin bladd	leukemic cell infiltration		<38> 1	<38> 0	<42> 0	<39> 0
{Endocrine system}						
pituitary	metastasis:peripheral nerve tumor		<38> 0	<38> 0	<42> 0	<39> 1
{Reproductive system}						
epididymis	leukemic cell infiltration		<38> 1	<38> 0	<42> 0	<39> 0
semin ves	leukemic cell infiltration		<38> 0	<38> 1	<42> 0	<39> 0
< a > a : Number of animals examined at the site b b : Number of animals with lesion						

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 3

Organ_____ Findings_____		Group Name No. of Animals on Study	Control 38	500 ppm 38	1000 ppm 42	2000 ppm 39
{Reproductive system}						
prostate	leukemic cell infiltration		<38> 0	<38> 1	<42> 0	<39> 0
{Special sense organs/appendage}						
Harder gl	leukemic cell infiltration		<38> 1	<38> 1	<42> 0	<39> 0
{Musculoskeletal system}						
muscle	leukemic cell infiltration		<38> 0	<38> 1	<42> 0	<39> 0
< a >	a : Number of animals examined at the site					
b	b : Number of animals with lesion					

(JPT150)

BA154

APPENDIX P 4

HISTOPATHOLOGICAL FINDINGS : METASTASIS OF TUMOR : SUMMARY,

MOUSE : FEMALE : SACRIFICED ANIMALS

(2-YEAR STUDY)

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 4

Organ	Findings	Group Name No. of Animals on Study	Control 24	1000 ppm 29	2000 ppm 28	4000 ppm 34
{Respiratory system}						
lung	leukemic cell infiltration		<24> 4	<29> 5	<28> 1	<34> 1
	metastasis:liver tumor		1	2	0	1
	metastasis:uterus tumor		0	0	0	1
	metastasis:preputial/clitoral gland tumor		1	0	0	0
{Hematopoietic system}						
bone marrow	leukemic cell infiltration		<24> 0	<29> 2	<28> 3	<34> 0
lymph node	leukemic cell infiltration		<24> 0	<29> 1	<28> 0	<34> 0
spleen	leukemic cell infiltration		<24> 5	<29> 6	<28> 5	<34> 1
	metastasis:uterus tumor		0	0	0	2
{Circulatory system}						
heart	leukemic cell infiltration		<24> 2	<29> 2	<28> 0	<34> 1
{Digestive system}						
salivary gl	leukemic cell infiltration		<24> 2	<29> 3	<28> 1	<34> 0
	metastasis:uterus tumor		0	0	0	1
< a > a : Number of animals examined at the site b b : Number of animals with lesion						

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 5

Organ	Findings	Group Name No. of Animals on Study	Control 24	1000 ppm 29	2000 ppm 28	4000 ppm 34
(Digestive system)						
small intes			<24>	<29>	<28>	<34>
	leukemic cell infiltration		0	0	1	0
large intes			<24>	<29>	<28>	<34>
	leukemic cell infiltration		0	1	0	0
liver			<24>	<29>	<28>	<34>
	leukemic cell infiltration		2	4	3	1
	metastasis:uterus tumor		0	0	1	0
pancreas			<24>	<29>	<28>	<34>
	leukemic cell infiltration		3	1	1	0
	metastasis:uterus tumor		0	0	0	1
(Urinary system)						
kidney			<24>	<29>	<28>	<34>
	leukemic cell infiltration		1	2	2	1
	metastasis:uterus tumor		0	0	0	1
urin bladd			<24>	<29>	<28>	<34>
	leukemic cell infiltration		1	0	0	0
(Endocrine system)						
thyroid			<24>	<29>	<28>	<34>
	leukemic cell infiltration		0	1	0	0
adrenal			<24>	<29>	<28>	<34>
	leukemic cell infiltration		0	1	0	0
< a > a : Number of animals examined at the site b b : Number of animals with lesion						

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 6

		Group Name No. of Animals on Study	Control 24	1000 ppm 29	2000 ppm 28	4000 ppm 34
Organ	Findings					
{Reproductive system}						
ovary	leukemic cell infiltration		<24> 1	<29> 2	<28> 0	<34> 0
	metastasis:uterus tumor		0	0	1	2
uterus	leukemic cell infiltration		<24> 2	<29> 0	<28> 0	<34> 0
mammary gl	leukemic cell infiltration		<24> 0	<29> 0	<28> 1	<34> 0
{Nervous system}						
brain	leukemic cell infiltration		<24> 0	<29> 3	<28> 0	<34> 0
	metastasis:uterus tumor		0	1	0	0
{Special sense organs/appendage}						
Harder gl	leukemic cell infiltration		<24> 0	<29> 1	<28> 0	<34> 0
< a >	a : Number of animals examined at the site					
b	b : Number of animals with lesion					
(JPT150)						BAIS4

APPENDIX P 5

HISTOPATHOLOGICAL FINDINGS : METASTASIS OF TUMOR : SUMMARY,

MOUSE : MALE : DEAD AND MORIBUND ANIMALS

(2-YEAR STUDY)

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 1

Group Name No. of Animals on Study		Control 12	500 ppm 12	1000 ppm 8	2000 ppm 11
Organ	Findings				
{Respiratory system}					
nasal cavit	leukemic cell infiltration	<12> 0	<12> 1	< 8> 0	<11> 0
	metastasis:liver tumor	1	0	0	0
	metastasis:subcutis tumor	0	0	1	0
	metastasis:peripheral nerve tumor	0	0	1	0
lung	leukemic cell infiltration	<12> 0	<12> 3	< 8> 0	<11> 2
	metastasis:liver tumor	2	2	0	1
	metastasis:pancreas tumor	1	0	0	0
	metastasis:subcutis tumor	0	0	1	0
{Hematopoietic system}					
bone marrow	leukemic cell infiltration	<12> 2	<12> 2	< 8> 0	<11> 0
	metastasis:spleen tumor	0	1	0	0
	metastasis:small intestine tumor	0	0	0	1
lymph node	leukemic cell infiltration	<12> 0	<12> 1	< 8> 0	<11> 0
spleen	leukemic cell infiltration	<12> 1	<12> 3	< 8> 0	<11> 3
	metastasis:liver tumor	0	1	0	0
< a >	a : Number of animals examined at the site				
b	b : Number of animals with lesion				

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 2

Organ	Findings	Group Name No. of Animals on Study	Control 12	500 ppm 12	1000 ppm 8	2000 ppm 11
{Hematopoietic system}						
spleen	metastasis:small intestine tumor		<12> 0	<12> 0	< 8> 0	<11> 1
{Circulatory system}						
heart	leukemic cell infiltration		<12> 1	<12> 1	< 8> 0	<11> 2
	metastasis:liver tumor		0	1	0	0
{Digestive system}						
salivary gl	leukemic cell infiltration		<12> 0	<12> 1	< 8> 0	<11> 0
stomach	leukemic cell infiltration		<12> 0	<12> 1	< 8> 0	<11> 0
small intes	leukemic cell infiltration		<12> 0	<12> 1	< 8> 0	<11> 1
	metastasis:pancreas tumor		1	0	0	0
large intes	leukemic cell infiltration		<12> 0	<12> 0	< 8> 0	<11> 1
liver	leukemic cell infiltration		<12> 1	<12> 3	< 8> 0	<11> 0
	metastasis:subcutis tumor		0	0	1	0
	metastasis:spleen tumor		1	0	0	0
	metastasis:salivary gland tumor		0	0	1	0

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

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 3

Organ	Group Name No. of Animals on Study	Control 12	500 ppm 12	1000 ppm 8	2000 ppm 11
{Digestive system}					
pancreas		<12>	<12>	< 8>	<11>
	leukemic cell infiltration	0	0	0	1
	metastasis:spleen tumor	0	1	0	0
{Urinary system}					
kidney		<12>	<12>	< 8>	<11>
	leukemic cell infiltration	1	2	0	0
urin bladd		<12>	<12>	< 8>	<11>
	leukemic cell infiltration	0	1	0	0
	metastasis:liver tumor	0	1	0	0
{Endocrine system}					
adrenal		<12>	<12>	< 8>	<11>
	leukemic cell infiltration	0	2	0	0
{Reproductive system}					
testis		<12>	<12>	< 8>	<11>
	metastasis:subcutis tumor	0	0	1	0
epididymis		<12>	<12>	< 8>	<11>
	leukemic cell infiltration	0	1	0	0
	metastasis:subcutis tumor	0	0	1	0
	metastasis:peripheral nerve tumor	0	0	1	0
semin ves		<12>	<12>	< 8>	<11>
	leukemic cell infiltration	0	1	0	0
< a >	a : Number of animals examined at the site				
b	b : Number of animals with lesion				

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 1

		Group Name No. of Animals on Study	Control 12	500 ppm 12	1000 ppm 8	2000 ppm 11
Organ	Findings					
{Reproductive system}						
prostate	leukemic cell infiltration		<12> 0	<12> 1	< 8> 0	<11> 0
	metastasis:spinal code tumor		0	0	0	1
mammary gl	leukemic cell infiltration		<12> 0	<12> 1	< 8> 0	<11> 0
{Nervous system}						
brain	leukemic cell infiltration		<12> 2	<12> 1	< 8> 0	<11> 0
	metastasis:peripheral nerve tumor		0	1	1	0
spinal cord	leukemic cell infiltration		<12> 0	<12> 1	< 8> 0	<11> 0
{Special sense organs/appendage}						
Harder gl	leukemic cell infiltration		<12> 1	<12> 0	< 8> 0	<11> 0
{Body cavities}						
peritoneum	metastasis:pancreas tumor		<12> 1	<12> 0	< 8> 0	<11> 0
< a > a : Number of animals examined at the site b b : Number of animals with lesion						

APPENDIX P 6

HISTOPATHOLOGICAL FINDINGS : METASTASIS OF TUMOR : SUMMARY,

MOUSE : FEMALE : DEAD AND MORIBUND ANIMALS

(2-YEAR STUDY)

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 5

Organ	Group Name No. of Animals on Study	Control 26	1000 ppm 21	2000 ppm 22	4000 ppm 16
{Integumentary system/appandage}					
subcutis		<26>	<21>	<22>	<16>
metastasis:uterus tumor		1	0	0	1
{Respiratory system}					
nasal cavit		<26>	<21>	<22>	<16>
leukemic cell infiltration		0	1	0	0
metastasis:uterus tumor		0	1	0	0
metastasis:peripheral nerve tumor		1	0	0	0
lung		<26>	<21>	<22>	<16>
leukemic cell infiltration		12	7	1	1
metastasis:liver tumor		1	1	5	1
metastasis:uterus tumor		4	5	7	2
{Hematopoietic system}					
bone marrow		<26>	<21>	<22>	<16>
leukemic cell infiltration		5	7	0	0
metastasis:liver tumor		0	1	0	0
metastasis:uterus tumor		3	3	1	2
lymph node		<26>	<21>	<22>	<16>
metastasis:liver tumor		1	0	0	0
metastasis:uterus tumor		0	2	0	0
metastasis:large intestine tumor		0	1	0	0
< a > a : Number of animals examined at the site b b : Number of animals with lesion					

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 6

Organ	Findings	Group Name No. of Animals on Study	Control 26	1000 ppm 21	2000 ppm 22	4000 ppm 16
{Hematopoietic system}						
thymus			<26>	<21>	<22>	<16>
	metastasis:uterus tumor		1	0	0	0
spleen			<26>	<21>	<22>	<16>
	leukemic cell infiltration		10	7	1	1
	metastasis:liver tumor		0	1	0	0
	metastasis:uterus tumor		5	6	5	0
	metastasis:large intestine tumor		0	1	0	0
{Circulatory system}						
heart			<26>	<21>	<22>	<16>
	leukemic cell infiltration		3	3	1	0
	metastasis:uterus tumor		3	0	1	0
{Digestive system}						
tongue			<26>	<21>	<22>	<16>
	leukemic cell infiltration		1	0	0	0
salivary gl			<26>	<21>	<22>	<16>
	leukemic cell infiltration		1	2	1	0
stomach			<26>	<21>	<22>	<16>
	leukemic cell infiltration		0	2	1	0
small intes			<26>	<21>	<22>	<16>
	leukemic cell infiltration		1	0	0	1
	metastasis:large intestine tumor		0	1	0	0

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

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 7

Organ	Findings	Group Name No. of Animals on Study	Control 26	1000 ppm 21	2000 ppm 22	4000 ppm 16
{Digestive system}						
liver	leukemic cell infiltration		<26> 7	<21> 5	<22> 1	<16> 1
	metastasis:uterus tumor		7	10	7	5
pancreas	leukemic cell infiltration		<26> 3	<21> 2	<22> 1	<16> 1
	metastasis:uterus tumor		1	1	2	0
{Urinary system}						
kidney	leukemic cell infiltration		<26> 7	<21> 4	<22> 1	<16> 0
	metastasis:liver tumor		1	0	0	0
	metastasis:uterus tumor		1	5	4	0
urin bladd	leukemic cell infiltration		<26> 2	<21> 2	<22> 0	<16> 0
{Endocrine system}						
pituitary	leukemic cell infiltration		<26> 1	<21> 0	<22> 0	<16> 0
	metastasis:uterus tumor		0	0	0	1
thyroid	leukemic cell infiltration		<26> 1	<21> 0	<22> 0	<16> 0
adrenal	leukemic cell infiltration		<26> 2	<21> 2	<22> 0	<16> 1

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

STUDY NO. : 0372
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 8

Organ	Findings	Group Name No. of Animals on Study	Control 26	1000 ppm 21	2000 ppm 22	4000 ppm 16
{Endocrine system}						
adrenal	metastasis:uterus tumor		<26> 1	<21> 0	<22> 0	<16> 0
{Reproductive system}						
ovary	leukemic cell infiltration		<26> 10	<21> 7	<22> 1	<16> 1
	metastasis:liver tumor		1	1	0	0
	metastasis:uterus tumor		5	6	5	3
	metastasis:large intestine tumor		0	1	0	0
uterus	leukemic cell infiltration		<26> 2	<21> 2	<22> 0	<16> 0
	metastasis:liver tumor		0	1	0	0
	metastasis:spleen tumor		1	0	0	0
vagina	leukemic cell infiltration		<26> 1	<21> 1	<22> 0	<16> 0
{Nervous system}						
brain	leukemic cell infiltration		<26> 1	<21> 1	<22> 0	<16> 0
	metastasis:uterus tumor		1	0	0	0
spinal cord	leukemic cell infiltration		<26> 0	<21> 1	<22> 0	<16> 0
< a >	a : Number of animals examined at the site					
b	b : Number of animals with lesion					

STUDY NO. : 0372
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 9

Organ_____	Findings_____	Group Name No. of Animals on Study	Control 26	1000 ppm 21	2000 ppm 22	4000 ppm 16
{Nervous system}						
periph nerv			<26>	<21>	<22>	<16>
	leukemic cell infiltration		1	0	0	0
{Special sense organs/appendage}						
cyc			<26>	<21>	<22>	<16>
	metastasis:peripheral nerve tumor		1	0	0	0
Harder gl			<26>	<21>	<22>	<16>
	leukemic cell infiltration		2	2	1	0
	metastasis:peripheral nerve tumor		1	0	0	0
{Musculoskeletal system}						
muscle			<26>	<21>	<22>	<16>
	leukemic cell infiltration		1	0	0	0
{Body cavities}						
peritoneum			<26>	<21>	<22>	<16>
	leukemic cell infiltration		3	1	0	0
< a >	a : Number of animals examined at the site					
b	b : Number of animals with lesion					
(JPT150)						

BAIS4

APPENDIX Q 1

IDENTITY OF *o*-PHENYLENEDIAMINE DIHYDROCHLORIDE
IN THE 2-YEAR DRINKING WATER STUDY

IDENTITY OF *o*-PHENYLENEDIAMINE DIHYDROCHLORIDE IN THE 2-YEAR DRINKING WATER STUDY

Test Substance : *o*-Phenylenediamine Dihydrochloride (Wako Pure Chemical Industries, Ltd.)

Lot No. : PAG0825

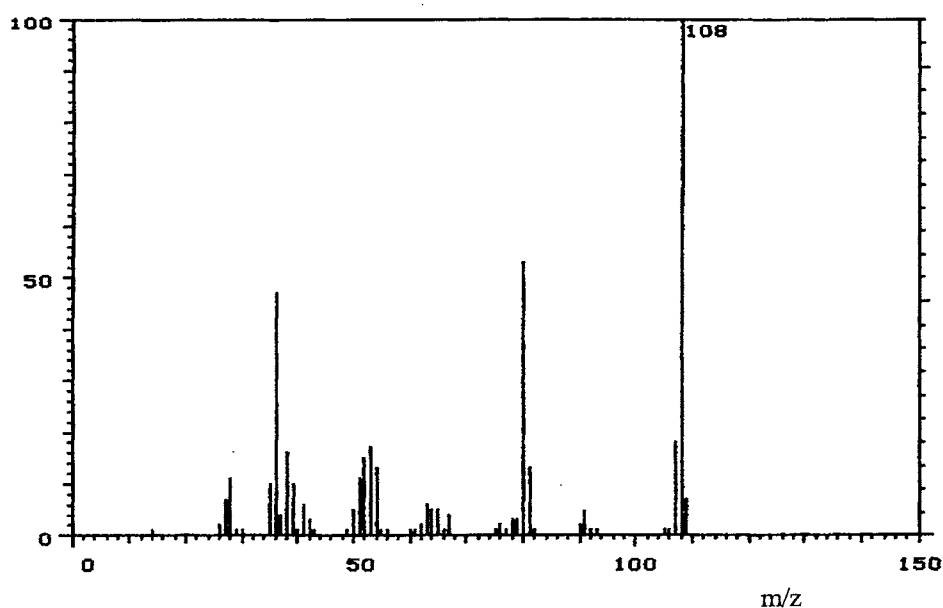
1. Spectral Data

Mass Spectrometry

Instrument : Hitachi M-80B Mass Spectrometer

Ionization : EI (Electron Ionization)

Ionization Voltage : 70eV



Mass Spectrum of Test Substance

Determined Value

Quasi-molecular ion Peak (m/z)

108

Calculated Value

Quasi-molecular ion Peak (m/z)

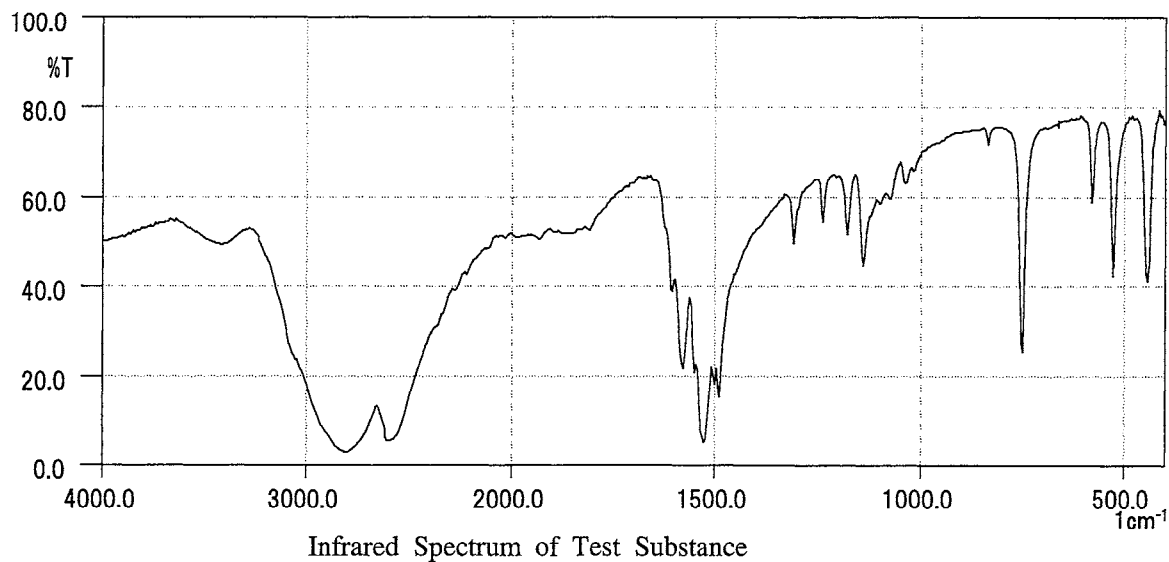
108 ($\text{NH}_2\text{C}_6\text{H}_4\text{NH}_2 \cdot 2\text{HCl}$) - (2HCl)

Result: The mass spectrum was consistent with calculated spectrum.

Infrared Spectrometry

Instrument : Shimadzu FTIR-8200PC Infrared Spectrometer

Cell : KBr

Resolution : 2 cm⁻¹

<u>Determined Values</u>	<u>Literature Values</u> [*]
Wave Number (cm ⁻¹)	Wave Number (cm ⁻¹)
410~ 480	410~ 480
480~ 550	480~ 550
550~ 600	550~ 600
680~ 800	680~ 800
820~ 850	820~ 850
1010~1050	1010~1050
1050~1160	1050~1160
1160~1200	1160~1200
1250~1280	1250~1280
1280~1330	1280~1330
1330~1640	1330~1640
2100~3200	2100~3200

Result: The infrared spectrum was consistent with literature spectrum.

(*Performed by Wako Pure Chemical Industries, Ltd.)

2. Conclusion: The test substance was identified as *o*-phenylenediamine dihydrochloride by mass spectrum and infrared spectrum.

APPENDIX Q 2

STABILITY OF *o*-PHENYLENEDIAMINE DIHYDROCHLORIDE IN THE 2-YEAR DRINKING WATER STUDY

STABILITY OF *o*-PHENYLENEDIAMINE DIHYDROCHLORIDE IN THE 2-YEAR DRINKING WATER STUDY

Test Substance : *o*-Phenylenediamine Dihydrochloride (Wako Pure Chemical Industries, Ltd.)

Lot No. : PAG0825

1. Sample : This lot was used from 1998.12.7 to 2000.12.11. Test substance was stored in cold storage in a dark place.

2. High Performance Liquid Chromatography

Instrument : Hewlett Packard 1090 High Performance Liquid Chromatograph

Column : TSK GEL ODS-80TM (4.6 m ϕ \times 15 cm)

Column Temperature : Room Temperature

Flow Rate : 1 mL/min

Mobile Phase : Distilled Water (10mM Potassium Dihydrogenphosphate, 5mM 1-Hexanesulfonic Acid Sodium Salt) : Acetonitrile = 80 : 20

Detector : UV (290 nm)

Injection Volume : 20 μ L

Date (date analyzed)	Peak No.	Retention Time (min)	Area (%)
1998.10.30	1	3.743	100
2000.12.18	1	3.743	100

Result: High performance liquid chromatography indicated one major peak (peak No.1) analyzed on 1998.10.30 and one major peak (peak No.1) analyzed on 2000.12.18. No new trace impurity peak in the test substance analyzed on 2000.12.18 was detected.

3. Conclusion: The test substance was stable for about 26 months in cold storage in a dark place.

APPENDIX Q 3

CONCENTRATION OF *o*-PHENYLENEDIAMINE DIHYDROCHLORIDE
IN FORMULATED WATER IN THE 2-YEAR DRINKING WATER STUDY

CONCENTRATION OF *o*-PHENYLENEDIAMINE DIHYDROCHLORIDE IN FORMULATED WATER IN THE 2-YEAR DRINKING WATER STUDY

Date Analyzed	Target Concentration			
	Male 500 ^a	Male and Female 1000	Male and Female 2000	Female 4000
1998.12.07	507 (101) ^b	1010 (101)	1990 (99.5)	4050 (101)
1999.01.25	515 (103)	964 (96.4)	1920 (96.0)	3880 (97.0)
1999.04.19	515 (103)	1020 (102)	2040 (102)	4080 (102)
1999.07.12	507 (101)	997 (99.7)	1980 (99.0)	4000 (100)
1999.10.04	506 (101)	984 (98.4)	1980 (99.0)	3980 (99.5)
1999.12.27	510 (102)	988 (98.8)	2000 (100)	4100 (103)
2000.03.13	498 (99.6)	992 (99.2)	2010 (101)	3920 (98.0)
2000.06.05	476 (95.2)	956 (95.6)	1900 (95.0)	3860 (96.5)
2000.08.28	481 (96.2)	947 (94.7)	1870 (93.5)	3820 (95.5)
2000.10.20	513 (103)	1010 (101)	2040 (102)	4090 (102)

^a ppm

^b %

Analytical method : The samples were analyzed by high performance liquid chromatography.

Instrument : Hewlett Packard 1090 High Performance Liquid Chromatograph

Column : TSK GEL ODS-80TM (4.6 mm ϕ \times 15 cm)

Column Temperature : Room Temperature

Flow Rate : 1 mL/min

Mobile Phase : Distilled Water (10mM Potassium Dihydrogenphosphate, 5mM 1-Hexanesulfonic Acid Sodium Salt) :
Acetonitrile = 80 : 20

Detector : UV (290 nm)

Injection Volume : 20 μ L

APPENDIX Q 4

STABILITY OF *o*-PHENYLENEDIAMINE DIHYDROCHLORIDE IN FORMULATED WATER
IN THE 2-YEAR DRINKING WATER STUDY

STABILITY OF *o*-PHENYLENEDIAMINE DIHYDROCHLORIDE IN FORMULATED WATER IN
THE 2-YEAR DRINKING WATER STUDY

Date Prepared	Date Analyzed	Target Concentration	
		500 ^a	5000
1998.02.09	1998.02.09	503 (100) ^b	4900 (100)
	1998.02.17 ^c	480 (95.4)	4910 (100)

^a ppm

^b % (Percentage was based on the concentration on date of preparation.)

^c Animal room samples

Analytical method : The samples were analyzed by high performance liquid chromatography.

Instrument : Hewlett Packard 1090 High Performance Liquid Chromatograph

Column : TSK GEL ODS-80TM (4.6 mm ϕ \times 15 cm)

Column Temperature : Room Temperature

Flow Rate : 1 mL/min

Mobile Phase : Distilled Water (10mM Potassium Dihydrogenphosphate, 5mM 1-Hexanesulfonic Acid Sodium Salt) : Acetonitrile = 80 : 20

Detector : UV (290 nm)

Injection Volume : 20 μ L

APPENDIX R 1

METHODS FOR HEMATOLOGY, BIOCHEMISTRY AND URINALYSIS IN THE 2-YEAR
DRINKING WATER STUDY OF *o*-PHENYLENEDIAMINE DIHYDROCHLORIDE

METHODS FOR HEMATOLOGY,BIOCHEMISTRY AND URINALYSIS IN THE 2-YEAR
DRINKING WATER STUDY OF *o*-PHENYLENEDIAMINE DIHYDROCHLORIDE

Item	Method
Hematology	
Red blood cell (RBC)	Light scattering method ¹⁾
Hemoglobin (Hgb)	Cyanmethemoglobin method ¹⁾
Hematocrit (Hct)	Calculated as $RBC \times MCV / 10$ ¹⁾
Mean corpuscular volume (MCV)	Light scattering method ¹⁾
Mean corpuscular hemoglobin (MCH)	Calculated as $Hgb / RBC \times 10$ ¹⁾
Mean corpuscular hemoglobin concentration (MCHC)	Calculated as $Hgb / Hct \times 100$ ¹⁾
Platelet	Light scattering method ¹⁾
White blood cell (WBC)	Light scattering method ¹⁾
Differential WBC	Pattern recognition method ²⁾ (Wright 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	GlcK · G-6-PDH method ³⁾
T-cholesterol	CE · COD · POD method ³⁾
Triglyceride	LPL · GK · GPO · POD method ³⁾
Phospholipid	PLD · ChOD · POD method ³⁾
Glutamic oxaloacetic transaminase (GOT)	JSCC method ³⁾
Glutamic pyruvic transaminase (GPT)	JSCC method ³⁾
Lactate dehydrogenase (LDH)	SFBC method ³⁾
Alkaline phosphatase (ALP)	GSCC method ³⁾
γ -Glutamyl transpeptidase (γ -GTP)	L- γ -Glutamyl-p-nitroanilide method ³⁾
Creatine phosphokinase (CPK)	JSCC method ³⁾
Urea nitrogen	Urease · GLDH method 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	PNP · XOD · POD method ³⁾
Urinalysis	
pH,Protein,Glucose,Ketone body,Occult blood, Urobilinogen	Urinalysis reagent paper method ⁴⁾

1) Automatic blood cell analyzer (Technicon H·1 : Bayer Corporation)

2) Automatic blood cell differential analyzer (MICROX HEG-120NA : OMRON Corporation)

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

4) Ames reagent strips for urinalysis (Uro-Labstix : Bayer Corporation)

APPENDIX R 2

UNITS AND DECIMAL PLACE FOR HEMATOLOGY, AND
BIOCHEMISTRY IN THE 2-YEAR DRINKING WATER STUDY
OF *o*-PHENYLENEDIAMINE DIHYDROCHLORIDE

UNITS AND DECIMAL PLACE FOR HEMATOLOGY AND BIOCHEMISTRY IN THE 2-YEAR
DRINKING WATER STUDY OF *o*-PHENYLENEDIAMINE DIHYDROCHLORIDE

Item	Unit	Decimal Place
Hematology		
Red blood cell (RBC)	$\times 10^6 / \mu\text{L}$	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	$\times 10^3 / \mu\text{L}$	0
White blood cell (WBC)	$\times 10^3 / \mu\text{L}$	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
Phospholipid	mg/dL	0
Glutamic oxaloacetic transaminase (GOT)	IU/L	0
Glutamic pyruvic transaminase (GPT)	IU/L	0
Lactate dehydrogenase (LDH)	IU/L	0
Alkaline phosphatase (ALP)	IU/L	0
γ -Glutamyl transpeptidase (γ -GTP)	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