p-ニトロアニソールのマウスを用いた
経口投与によるがん原性試験(混餌試験)報告書

試験番号：０４０２

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CLINICAL OBSERVATION : SUMMARY, MOUSE : MALE

(2-YEAR STUDY)

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LATERAL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	1	1	1	1	0	0	0	0	0	0
	5000 ppm	0	0	0	0	1	1	1	1	1	1	1	1	1	1
	10000 ppm	0	0	0	0	0	1	1	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LATERAL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	20000 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
	5000 ppm	1	1	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	1	1	2	2	2	2	2	3	3	3	3	3	4	4
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LATERAL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

Clinical sign	Group Name	Administration Week-day 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	56-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	10000 ppm	5	5	5	5	5	5	5	5	5	5	5	6	6	6
	20000 ppm	1	1	1	2	3	3	3	3	3	3	3	3	3	3
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LATERAL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	1	2	1	1	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 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	70-7
DEATH	Control	1	1	2	2	2	3	3	3	4	4	4	4	4	4
	5000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	2
	10000 ppm	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	20000 ppm	3	3	3	3	3	3	3	5	5	6	6	7	7	9
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LATERAL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	1	1	1	1	1	1	1	0	0	0
	20000 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
	5000 ppm	0	0	0	0	1	1	1	1	1	1	1	1	1	0
	10000 ppm	0	0	0	0	1	1	1	1	1	1	1	1	1	1
	20000 ppm	0	0	0	0	0	0	1	0	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	81-7	82-7	83-7
DEATH	Control	4	4	4	4	4	4	4	4	4	4	4	4	6	6
	5000 ppm	2	2	2	2	2	3	3	3	3	3	3	3	4	4
	10000 ppm	6	6	6	6	6	7	8	8	8	9	9	9	10	11
	20000 ppm	9	9	9	9	9	9	9	10	10	10	10	10	11	12
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	1	1	2	2	2	2	2	2
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	1	0	1	0	0	0	0	0
LATERAL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	1	0	0	0	0	0	0	0
HUNCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	1	0	0	0	0	0	1	1	1	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	1	1	1	1	1	1	1	1	1	1	0	1	1	1

Clinical sign	Group Name	Administration Week-day 84-7	85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7
DEATH	Control	6	6	7	7	7	8	8	9	9	9	9	10	10	10
	5000 ppm	4	4	4	4	5	5	5	6	8	8	8	9	9	9
	10000 ppm	11	11	11	12	12	12	12	13	13	13	13	14	16	17
	20000 ppm	13	13	13	14	15	15	15	16	17	17	17	17	17	18
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	1	1	1	1	1	1	1	1	1
	20000 ppm	2	3	4	4	4	4	4	4	4	4	5	5	6	6
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	1	0	0	0	0	0	0	0	0	0	0	0	0
LATERAL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	1	1	1	1	1	1	1	1	1	1
	10000 ppm	0	0	1	1	2	2	1	1	2	2	1	0	0	0
	20000 ppm	0	0	1	0	1	0	0	1	5	5	5	7	5	3
FROG BELLY	Control	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	1	1	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	20000 ppm	0	0	0	0	0	0	0	1	1	1	1	1	1	0
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	1	1	1	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 98-7	99-7	100-7	101-7	102-7	103-7	104-7
DEATH	Control	10	10	11	11	13	14	14
	5000 ppm	10	11	11	13	13	15	15
	10000 ppm	17	17	18	18	18	20	21
	20000 ppm	20	22	24	27	27	27	27
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0
	10000 ppm	1	1	2	2	2	2	2
	20000 ppm	6	6	7	7	7	7	7
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0
LATERAL	Control	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0
HUNCHBACK POSITION	Control	1	1	1	1	0	0	0
	5000 ppm	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0
PILOERECTION	Control	1	1	1	2	1	1	1
	5000 ppm	1	1	1	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0
	20000 ppm	2	3	1	0	0	0	1
FROG BELLY	Control	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0	0
	5000 ppm	0	1	1	1	1	1	1
	10000 ppm	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0

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
GUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEFECT OF TEETH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	Control	0	0	1	1	1	1	1	1	0	0	0	0	0	0
	5000 ppm	0	0	1	1	2	2	2	1	1	1	1	1	1	1
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	20000 ppm	0	0	0	0	0	0	0	0	0	1	1	1	1	2
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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
GUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEFECT OF TEETH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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	1	1	1	1	1
	5000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	10000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	2	2
	20000 ppm	1	1	1	1	1	1	1	1	1	1	1	0	0	0
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
GUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEFECT OF TEETH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	Control	1	2	1	1	1	1	1	1	1	1	1	1	1	1
	5000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	2	2
	10000 ppm	2	2	1	1	1	1	1	1	1	1	1	1	1	1
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 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	56-7
GUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEFECT OF TEETH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	1	1	1	1	1	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	1	1	1	1	1	1	1	1	1	1	1
INTERNAL MASS	Control	1	1	1	1	1	1	1	1	1	1	2	2	2	2
	5000 ppm	2	2	2	3	3	3	3	3	3	3	3	3	3	3
	10000 ppm	1	1	1	1	1	1	1	1	2	2	2	2	2	2
	20000 ppm	1	1	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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	1	1	1	1	1	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	1	1	1	1	1	1	1	1	1	1	1
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 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	70-7
GUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEFECT OF TEETH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
INTERNAL MASS	Control	2	2	1	1	2	1	1	1	1	1	1	1	1	1
	5000 ppm	3	3	3	3	3	3	3	3	3	3	3	3	3	2
	10000 ppm	2	2	2	2	2	2	2	2	2	2	2	3	3	3
	20000 ppm	1	1	1	1	1	1	2	2	2	2	5	4	4	4
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	81-7	82-7	83-7
GUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEFECT OF TEETH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	1	1	1	1	1	1	1	1	1	1	0	1	1	1
INTERNAL MASS	Control	2	2	3	3	3	1	1	2	3	3	0	3	2	2
	5000 ppm	2	2	2	2	2	2	2	2	2	1	0	2	3	3
	10000 ppm	3	3	3	3	3	3	3	4	4	4	0	4	2	1
	20000 ppm	5	5	8	9	9	12	12	15	15	14	0	16	16	15
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	1	1	1	1	1	1	1	1	1	1	0	1	1	1
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 84-7	85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7
GUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	1	1	1	1	1	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEFECT OF TEETH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	20000 ppm	0	1	1	1	1	1	1	1	1	1	1	1	1	1
EXTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	1	1	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	20000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
INTERNAL MASS	Control	2	2	2	1	3	2	2	2	3	3	3	6	6	6
	5000 ppm	4	4	6	5	5	6	6	7	5	6	6	6	6	6
	10000 ppm	1	3	4	4	5	5	4	4	4	5	5	5	5	4
	20000 ppm	15	18	18	18	17	20	20	21	23	25	24	24	24	23
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	1	1	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 98-7	99-7	100-7	101-7	102-7	103-7	104-7
GUM	Control	0	0	0	0	0	0	1
	5000 ppm	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	1
DEFECT OF TEETH	Control	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0
	10000 ppm	1	1	1	1	1	1	1
	20000 ppm	1	1	1	1	1	1	1
EXTERNAL MASS	Control	0	0	0	0	0	0	2
	5000 ppm	0	0	1	0	1	0	0
	10000 ppm	1	2	2	2	2	1	1
	20000 ppm	1	0	0	0	0	0	0
INTERNAL MASS	Control	6	7	7	8	8	9	11
	5000 ppm	8	9	9	7	10	9	10
	10000 ppm	7	7	6	6	8	7	6
	20000 ppm	21	19	16	13	15	15	15
M. NOSE	Control	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0
	10000 ppm	0	1	1	1	1	1	1
	20000 ppm	0	0	0	0	0	0	0
M. PERI MOUTH	Control	0	0	0	0	0	0	1
	5000 ppm	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0
	20000 ppm	1	0	0	0	0	0	0
M. NECK	Control	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	1	0	0
	10000 ppm	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0

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. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESPTRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

Clinical sign	Group Name	Administration Week-day 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	56-7
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	1	1	1	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	1	1	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 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	70-7
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	1	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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	1	1	1
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	1	1	1	1	1	1	1	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	81-7	82-7	83-7
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	1	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	Control	1	1	1	1	1	1	2	2	2	2	0	2	2	2
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	1	1	1	1	1	0	1	1	0
	20000 ppm	0	0	0	0	0	0	1	0	1	0	0	1	1	0
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 84-7	85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	1	0	0	0	1	1	1	1
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	Control	2	2	2	2	2	2	2	2	2	2	2	1	1	1
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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	1	1	1
	5000 ppm	0	0	1	1	1	1	1	1	1	1	1	1	1	1
	10000 ppm	0	0	1	1	1	1	0	0	0	0	1	0	1	0
	20000 ppm	0	1	1	0	0	0	0	1	1	1	1	3	3	3
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 98-7	99-7	100-7	101-7	102-7	103-7	104-7
M. ABDOMEN	Control	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0
	10000 ppm	1	1	1	1	1	0	0
	20000 ppm	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	1
	5000 ppm	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0
M. GENITALIA	Control	0	0	0	0	0	0	0
	5000 ppm	0	0	1	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0
	5000 ppm	1	1	1	1	1	1	1
	10000 ppm	1	1	1	1	1	1	1
	20000 ppm	0	0	0	0	0	0	0
TORTICOLLIS	Control	1	1	1	1	1	1	2
	5000 ppm	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	1	2	2	3	2	2	2
	5000 ppm	2	2	2	1	0	0	0
	10000 ppm	0	1	1	1	1	1	1
	20000 ppm	2	2	0	0	0	0	0
RESPIRATORY SOUND ABNOR	Control	0	0	1	1	0	0	0
	5000 ppm	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0

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
ABNORMAL RESPIRATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMATURIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	47	49	50	50	50	50	50	50	50	50	50	50	50
	10000 ppm	50	50	50	50	50	50	50	50	50	50	50	50	49	49
	20000 ppm	50	50	50	50	50	50	50	50	50	50	50	50	50	50
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	1	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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
ABNORMAL RESPIRATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMATURIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	10000 ppm	50	50	50	50	50	50	50	50	50	50	49	49	49	49
	20000 ppm	50	50	50	50	50	50	49	49	49	49	49	49	49	49
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	20000 ppm	0	0	0	0	0	1	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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	20000 ppm	0	0	0	0	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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
ABNORMAL RESPIRATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMATURIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	10000 ppm	49	49	48	48	48	48	48	47	47	47	47	47	46	46
	20000 ppm	49	49	49	49	49	49	49	49	49	49	49	49	49	49
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	20000 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	1
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 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	56-7
ABNORMAL RESPIRATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	1	1	1	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	1	1	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMATURIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	50	50	50	50	50	50	50	50	50	50	50	49	49	49
	10000 ppm	45	45	45	45	45	45	45	45	45	45	45	44	44	44
	20000 ppm	49	49	49	48	47	47	47	47	47	47	47	47	47	47
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	1	1	1	0	0	1
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OLIGO STOOL	Control	0	0	0	1	0	0	0	0	0	0	0	0	1	1
	5000 ppm	0	0	0	0	0	0	0	0	1	1	2	1	1	2
	10000 ppm	0	0	0	0	0	0	0	0	0	0	2	1	2	2
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 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	70-7
ABNORMAL RESPIRATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	1	1	1	1	1	1	1	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMATURIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	49	49	49	49	49	49	49	49	49	49	49	49	49	48
	10000 ppm	44	44	44	44	44	44	44	44	44	44	44	44	44	44
	20000 ppm	47	47	47	47	47	47	47	45	45	44	44	43	43	41
SMALL STOOL	Control	0	1	0	0	0	0	0	0	0	0	1	1	1	1
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	20000 ppm	0	0	0	0	0	0	1	0	0	1	1	0	1	0
OLIGO STOOL	Control	1	1	0	0	0	0	0	0	0	0	1	0	0	0
	5000 ppm	1	2	2	1	1	0	1	0	0	0	0	0	0	0
	10000 ppm	1	2	1	1	1	1	1	1	1	1	1	1	1	1
	20000 ppm	0	0	0	0	0	0	1	0	0	1	1	0	1	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	81-7	82-7	83-7
ABNORMAL RESPIRATION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	1	1	2	2	2	2	2	2	1	0	1	1	0
	20000 ppm	0	0	0	0	0	0	1	0	1	0	0	1	1	0
TACHYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	1	1	2	2	1	1	1	1	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMATURIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	48	48	48	48	48	47	47	47	47	47	0	47	46	46
	10000 ppm	44	44	44	44	44	43	42	42	42	41	0	41	40	39
	20000 ppm	41	41	41	41	41	41	41	39	39	38	0	38	37	36
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	5000 ppm	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	10000 ppm	0	1	0	0	0	0	0	0	1	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	1	0	0	0	0	1
OLIGO STOOL	Control	0	0	0	0	0	0	2	1	0	1	0	1	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	2	0	1	2	2	2	2	2	2	1	0	1	1	0
	20000 ppm	0	0	0	0	1	0	1	0	1	0	0	1	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	1	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 84-7	85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7
ABNORMAL RESPIRATION	Control	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	5000 ppm	0	0	1	1	1	1	1	1	1	1	1	1	1	1
	10000 ppm	0	0	1	1	1	1	0	0	0	0	1	0	1	0
	20000 ppm	0	1	1	0	0	0	0	1	1	1	1	3	3	3
TACHYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMATURIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	46	46	45	46	45	45	45	44	42	42	42	41	40	41
	10000 ppm	39	39	39	38	38	38	37	36	36	36	36	35	33	32
	20000 ppm	35	35	34	32	31	31	31	30	29	29	28	28	27	26
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	1	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	1	0	0	0	0	0	0	0	0	0	0	0	1
OLIGO STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	2	2
	5000 ppm	0	0	0	0	0	0	0	0	0	0	2	0	0	1
	10000 ppm	1	2	1	1	1	2	0	0	0	0	0	0	0	0
	20000 ppm	0	3	2	0	0	0	0	2	2	0	0	0	0	1
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	1	0	0	0	0	0	0	0	0
	20000 ppm	0	1	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 98-7	99-7	100-7	101-7	102-7	103-7	104-7
ABNORMAL RESPIRATION	Control	1	2	2	3	2	2	2
	5000 ppm	2	2	2	1	0	0	0
	10000 ppm	0	1	1	1	1	1	1
	20000 ppm	2	2	0	0	0	0	0
TACHYPNEA	Control	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0
ABNORMAL RESPIRA. SOUND	Control	0	0	1	1	0	0	0
	5000 ppm	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0
HEMATURIA	Control	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0
YELLOW URINE	Control	0	0	0	0	0	0	0
	5000 ppm	40	39	39	37	37	35	35
	10000 ppm	32	32	30	30	30	28	27
	20000 ppm	24	22	19	16	16	16	16
SMALL STOOL	Control	1	3	1	2	0	1	1
	5000 ppm	1	1	0	1	1	1	1
	10000 ppm	0	2	1	1	1	1	1
	20000 ppm	0	1	2	0	0	0	1
OLIGO STOOL	Control	1	3	1	2	0	0	1
	5000 ppm	1	1	0	0	0	1	1
	10000 ppm	0	1	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

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
NON REMARKABLE	Control	50	50	49	49	49	49	49	49	50	50	50	50	50	50
	5000 ppm	50	3	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

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
NON REMARKABLE	Control	50	50	50	50	50	50	50	50	50	49	49	49	49	49
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

Clinical sign	Group Name	Administration Week-day 29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
NON REMARKABLE	Control	49	48	49	49	49	49	49	49	49	49	49	49	49	48
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

Clinical sign	Group Name	Administration Week-day 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	56-7
NON REMARKABLE	Control	49	49	49	48	49	49	49	49	49	49	48	47	47	47
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

Clinical sign	Group Name	Administration Week-day 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	70-7
NON REMARKABLE	Control	47	46	47	47	46	46	46	46	45	45	43	44	44	44
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

Clinical sign	Group Name	Administration Week-day 71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	81-7	82-7	83-7
NON REMARKABLE	Control	43	43	42	42	42	44	43	42	41	41	46	41	40	40
	5000 ppm	0	0	0	0	0	0	0	0	0	0	47	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	41	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	38	0	0	0

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

Clinical sign	Group Name	Administration Week-day 84-7	85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7
NON REMARKABLE	Control	40	40	39	40	39	39	39	38	37	37	36	31	32	32
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 98-7	99-7	100-7	101-7	102-7	103-7	104-7
NON REMARKABLE	Control	32	30	30	29	28	26	22
	5000 ppm	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0

APPENDIX A 2

CLINICAL OBSERVATION : SUMMARY, MOUSE : FEMALE

(2-YEAR STUDY)

Clinical sign	Group Name	Administration Week-day 1-7	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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROTATING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROTATING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROTATING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 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	56-7
DEATH	Control	0	0	0	0	0	0	0	0	1	1	1	1	1	1
	5000 ppm	0	0	0	0	0	0	0	0	0	1	1	1	2	2
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROTATING	Control	0	0	0	0	0	0	1	1	1	1	2	2	2	2
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	1	0	1	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

Clinical sign	Group Name	Administration Week-day 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	70-7
DEATH	Control	1	1	1	1	1	1	1	2	3	4	5	6	6	6
	5000 ppm	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	1	1	1	1	1	1	2	2	2	2	2	2	3	3
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROTATING	Control	0	0	0	1	1	1	1	1	1	1	1	2	1	1
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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	1	1	1	1
	5000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	10000 ppm	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	20000 ppm	0	0	0	0	0	0	0	1	1	1	1	1	1	1

Clinical sign	Group Name	Administration Week-day 71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	81-7	82-7	83-7
DEATH	Control	6	6	6	6	7	9	9	9	9	9	10	10	10	14
	5000 ppm	2	4	4	4	4	4	4	4	4	4	6	6	6	6
	10000 ppm	1	1	1	1	1	1	1	1	2	4	4	5	5	5
	20000 ppm	3	4	6	7	8	9	10	11	12	12	12	12	12	12
MORIBUND SACRIFICE	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	20000 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	1	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
ROTATING	Control	1	1	1	1	1	1	1	1	1	1	0	1	1	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	1	1	1	1	1	1	1	1	1	0	1	3	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	1	1	1	1	1	2	1	2	1	0	0	0	2	0
	20000 ppm	2	1	1	0	0	0	0	0	0	0	0	0	1	1
FROG BELLY	Control	0	0	0	0	1	0	0	0	0	0	0	0	1	1
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	1	2	2	2	2	2	2	2	2	2	0	2	2	2
	5000 ppm	1	1	1	1	1	1	1	1	1	1	0	1	1	1
	10000 ppm	1	1	1	1	1	1	1	1	1	1	0	1	1	1
	20000 ppm	1	1	1	1	1	1	1	1	1	1	0	1	1	1

Clinical sign	Group Name	Administration Week-day 84-7	85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7
DEATH	Control	15	15	15	16	17	19	19	20	20	20	21	22	22	23
	5000 ppm	6	8	8	8	8	8	8	10	10	11	11	12	12	12
	10000 ppm	5	6	7	8	9	10	13	14	14	15	15	15	15	15
	20000 ppm	12	12	12	15	16	19	19	20	21	22	22	25	26	27
MORIBUND SACRIFICE	Control	1	1	1	2	2	2	2	2	2	2	2	2	2	2
	5000 ppm	0	0	0	0	0	0	0	1	1	1	1	2	2	2
	10000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROTATING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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	1	1	1	0
	5000 ppm	0	0	0	0	0	0	0	1	1	1	1	1	3	3
	10000 ppm	0	0	0	1	0	0	0	0	0	0	0	0	1	1
	20000 ppm	0	0	0	2	1	0	0	0	3	3	4	3	3	2
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	2	2	2	2	2	2	2	2	2	2	2	2	2	1
	5000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	10000 ppm	1	1	1	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	2

Clinical sign	Group Name	Administration Week-day 98-7	99-7	100-7	101-7	102-7	103-7	104-7
DEATH	Control	23	23	23	23	23	24	24
	5000 ppm	12	14	15	17	18	19	21
	10000 ppm	16	17	17	17	19	19	19
	20000 ppm	29	31	32	33	35	36	36
MORIBUND SACRIFICE	Control	2	2	3	3	3	3	3
	5000 ppm	2	2	2	2	2	2	2
	10000 ppm	1	1	1	1	1	1	1
	20000 ppm	1	1	1	1	1	1	1
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0
HUNCHBACK POSITION	Control	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0
ROTATING	Control	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0	0
	5000 ppm	3	2	3	1	2	2	2
	10000 ppm	0	0	0	2	1	1	1
	20000 ppm	2	2	2	2	1	1	1
FROG BELLY	Control	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	1	1	1	1	1	1	1
	5000 ppm	1	1	1	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0
	20000 ppm	1	1	1	1	1	1	1

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
EYE OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEFECT OF TEETH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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
EYE OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEFECT OF TEETH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
M. EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
EYE OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEFECT OF TEETH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 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	56-7
EYE OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEFECT OF TEETH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	1	2	2	2	2	2	1	1	2	0	0
	10000 ppm	0	0	0	0	1	1	1	1	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 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	70-7
EYE OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEFECT OF TEETH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	0	0	0	1	1	1	1	1	1	1	2	2	1	1
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	Control	1	1	1	2	1	2	3	3	2	1	1	0	0	1
	5000 ppm	0	0	1	2	2	2	1	1	1	1	1	1	3	4
	10000 ppm	0	0	0	1	1	1	1	1	1	1	1	1	1	5
	20000 ppm	0	1	1	1	2	2	1	2	2	2	2	2	5	10
M. EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI MOUTH	Control	0	0	0	1	1	1	1	1	1	1	1	1	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	81-7	82-7	83-7
EYE OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	1	1	1	1	1	1	1	1	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	1	1	1	1	0	1	1	1
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	1	1	1	1	1	1	1	1	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	1	1	1	1	0	1	1	1
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEFECT OF TEETH	Control	0	0	1	1	1	1	1	1	1	1	0	1	1	0
	5000 ppm	0	1	1	1	1	1	1	2	2	2	0	2	2	2
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	1	1	1	0	1	1	1
EXTERNAL MASS	Control	1	2	2	2	2	2	2	2	2	3	0	3	3	1
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	Control	1	1	1	1	2	1	1	1	2	2	0	2	3	2
	5000 ppm	4	2	2	2	2	2	2	3	6	6	0	5	5	5
	10000 ppm	3	5	4	5	5	7	9	10	11	10	0	9	9	9
	20000 ppm	9	9	10	9	10	10	9	9	11	15	0	16	16	18
M. EYE	Control	0	1	1	1	1	1	1	1	1	1	0	1	1	1
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 84-7	85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7
EYE OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	1	1	1	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	1	1	1	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEFECT OF TEETH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	0
EXTERNAL MASS	Control	1	1	1	2	2	2	2	2	2	3	3	3	4	3
	5000 ppm	0	0	0	1	1	1	1	2	2	2	2	2	1	1
	10000 ppm	0	2	2	2	2	2	2	2	2	1	1	1	3	3
	20000 ppm	0	0	0	0	0	0	0	1	1	1	1	1	1	1
INTERNAL MASS	Control	4	4	4	2	1	2	2	4	4	5	4	3	3	2
	5000 ppm	6	4	4	4	8	8	9	7	9	11	11	10	10	11
	10000 ppm	8	7	6	6	5	5	2	1	3	4	4	4	8	11
	20000 ppm	19	20	21	19	22	19	21	20	24	27	27	25	24	22
M. EYE	Control	1	1	1	1	1	1	1	1	1	1	1	1	2	1
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI MOUTH	Control	0	0	0	0	0	0	0	0	0	1	1	1	1	1
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	1	1	1	1	1	1	1	1	1	0	0
	10000 ppm	0	1	1	1	0	0	0	0	0	0	0	0	1	1
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 98-7	99-7	100-7	101-7	102-7	103-7	104-7
EYE OPACITY	Control	0	1	1	1	1	1	1
	5000 ppm	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0
CORNEAL OPACITY	Control	0	1	1	1	1	1	1
	5000 ppm	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0
DEFECT OF TEETH	Control	0	0	0	0	0	0	0
	5000 ppm	2	2	2	2	2	2	2
	10000 ppm	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0
EXTERNAL MASS	Control	3	3	3	3	3	3	3
	5000 ppm	1	2	2	3	4	3	2
	10000 ppm	2	1	1	1	1	1	1
	20000 ppm	0	0	0	0	0	0	0
INTERNAL MASS	Control	2	2	2	2	3	2	2
	5000 ppm	11	10	11	9	8	5	6
	10000 ppm	11	15	15	16	14	16	18
	20000 ppm	20	18	17	16	14	13	13
M. EYE	Control	1	1	1	1	1	1	1
	5000 ppm	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0
M. PERI MOUTH	Control	1	1	1	1	1	1	1
	5000 ppm	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0
M. NECK	Control	0	0	0	0	0	0	0
	5000 ppm	0	0	2	2	3	2	2
	10000 ppm	1	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0

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. FORLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. INTERSCAPULUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. TAIL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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. FORLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. INTERSCAPULUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. TAIL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
M. FORLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. INTERSCAPULUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. TAIL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 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	56-7
M. FORLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. INTERSCAPULUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. TAIL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 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	70-7
M. FORLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. INTERSCAPULUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. TAIL	Control	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1

Clinical sign	Group Name	Administration Week-day 71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	81-7	82-7	83-7
M. FORLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. INTERSCAPULUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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	1	0	1	1	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. TAIL	Control	1	1	1	1	1	1	1	1	1	1	0	1	1	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	1	1	1	2	0	0	0	0	0	0	0	0	0	1

Clinical sign	Group Name	Administration Week-day 84-7	85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7
M. FORLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	1	1	1	1	1	1	1
M. BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	Control	0	0	0	1	1	1	1	1	1	1	1	1	1	1
	5000 ppm	0	0	0	0	1	1	1	2	2	2	2	2	1	1
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. INTERSCAPULUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	1	1	1	1	1	1	1	1	1	1
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	1	1	1	1	1	1	1	1	1	1	1	1	1
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. TAIL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	1	1	1	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 98-7	99-7	100-7	101-7	102-7	103-7	104-7
M. FORLIMB	Control	0	0	0	0	0	0	0
	5000 ppm	0	0	0	1	1	1	1
	10000 ppm	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0
M. BREAST	Control	0	0	0	0	0	0	0
	5000 ppm	0	0	0	1	1	1	0
	10000 ppm	1	1	1	1	1	1	1
	20000 ppm	0	0	0	0	0	0	0
M. ABDOMEN	Control	0	0	0	0	0	0	0
	5000 ppm	0	1	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	Control	1	1	1	1	1	1	1
	5000 ppm	1	1	1	1	1	1	1
	10000 ppm	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0
M. INTERSCAPULUM	Control	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0
M. HINDLIMB	Control	0	0	0	0	0	0	0
	5000 ppm	0	0	1	1	1	1	1
	10000 ppm	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0
M. TAIL	Control	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0

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
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	10	2	1	1	1	1	1	1	2	50	50	50
	10000 ppm	41	49	50	50	50	50	50	50	50	50	50	50	50	50
	20000 ppm	50	50	50	50	50	50	50	50	50	50	50	50	50	50
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	10000 ppm	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	20000 ppm	50	50	50	50	50	50	50	50	50	50	50	50	50	50
SMALL STOOL	Control	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	10000 ppm	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	20000 ppm	50	50	50	50	50	50	50	50	50	50	50	50	50	50
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 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	56-7
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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	2	2	2	2	2	2
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	1	1	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRATION	Control	0	0	0	0	0	0	1	1	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	50	50	50	50	50	50	50	50	50	49	49	49	48	48
	10000 ppm	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	20000 ppm	49	49	49	49	49	49	49	49	49	49	49	49	49	49
SMALL STOOL	Control	0	0	1	1	0	0	1	1	0	0	0	0	0	0
	5000 ppm	1	0	0	0	0	0	0	0	0	0	0	2	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OLIGO STOOL	Control	0	0	0	0	1	3	1	2	1	1	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 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	70-7
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	Control	2	2	2	2	2	2	3	2	2	2	3	3	3	3
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	20000 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
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	20000 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
	5000 ppm	48	48	48	48	48	48	48	48	48	48	48	48	48	48
	10000 ppm	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	20000 ppm	49	49	49	49	49	49	48	48	48	48	48	48	47	47
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	1	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OLIGO STOOL	Control	0	0	0	0	0	1	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	1	2	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	81-7	82-7	83-7
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	Control	3	3	3	3	3	3	3	3	3	3	0	3	3	1
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	1	0	0	0	0	0	0	0	2	1
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	1	1	1	1	1	2	1	1	1	0	0	0	2	1
	20000 ppm	0	2	1	1	0	0	0	0	0	0	0	0	1	3
ABNORMAL RESPIRATION	Control	0	0	0	0	1	0	0	0	0	0	0	0	2	1
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	1	1	1	1	1	2	1	1	1	0	0	0	2	1
	20000 ppm	0	2	1	1	0	0	0	0	0	0	0	0	1	3
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	48	46	46	46	46	46	46	46	46	46	0	44	44	44
	10000 ppm	49	49	49	49	49	49	49	49	48	46	0	45	45	44
	20000 ppm	47	46	44	43	42	41	40	39	38	38	0	38	38	38
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	1	2	1
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	1	0	1	0	0	0	0	0	0	0	1	2	2
OLIGO STOOL	Control	0	0	0	0	0	1	2	1	1	1	0	1	2	0
	5000 ppm	0	0	0	0	0	0	0	0	0	2	0	1	1	0
	10000 ppm	0	0	0	0	0	0	2	2	1	0	0	0	0	0
	20000 ppm	0	1	2	4	0	0	0	0	0	0	0	2	2	3
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 84-7	85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	1	2	3	1	1	0	0	0	0	0	1	1	1	0
	5000 ppm	1	0	0	0	0	0	0	2	1	1	2	2	2	3
	10000 ppm	1	1	1	2	1	0	0	0	0	0	0	1	1	1
	20000 ppm	4	4	4	3	2	1	0	1	2	4	4	3	4	4
ABNORMAL RESPIRATION	Control	1	2	3	1	1	0	0	0	0	0	1	1	1	0
	5000 ppm	1	0	0	0	0	0	0	2	1	1	2	2	2	3
	10000 ppm	1	1	1	2	1	0	0	0	0	0	0	1	1	1
	20000 ppm	4	4	4	3	2	1	0	1	2	4	4	3	4	4
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	44	42	42	42	42	42	42	39	39	38	38	37	36	36
	10000 ppm	44	43	42	41	40	39	36	35	35	34	34	34	34	34
	20000 ppm	38	38	38	35	34	31	31	30	29	28	28	25	24	22
SMALL STOOL	Control	1	1	2	1	1	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	2	0	1	1	1	1	2	2
	10000 ppm	0	0	0	1	0	0	0	0	1	0	0	0	0	0
	20000 ppm	0	0	0	2	2	0	0	0	1	0	1	2	1	1
OLIGO STOOL	Control	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	5000 ppm	0	0	0	0	0	0	2	0	1	1	2	0	1	1
	10000 ppm	0	0	0	1	1	2	0	0	1	0	0	0	1	0
	20000 ppm	0	1	1	1	2	1	0	1	1	0	1	2	1	1
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 98-7	99-7	100-7	101-7	102-7	103-7	104-7
CRUSTA	Control	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	1	1	1
	10000 ppm	0	0	1	1	1	1	1
	20000 ppm	0	0	0	0	0	0	0
TORTICOLLIS	Control	1	1	1	1	1	1	1
	5000 ppm	0	0	0	0	0	0	0
	10000 ppm	1	1	1	1	1	1	1
	20000 ppm	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0
	5000 ppm	3	2	4	2	3	4	3
	10000 ppm	0	0	0	0	1	1	1
	20000 ppm	3	2	3	2	1	1	1
ABNORMAL RESPIRATION	Control	0	0	0	0	0	0	0
	5000 ppm	3	2	4	2	3	4	3
	10000 ppm	0	0	0	0	1	1	1
	20000 ppm	3	2	3	2	1	1	1
YELLOW URINE	Control	0	0	0	0	0	0	0
	5000 ppm	36	34	33	31	30	29	27
	10000 ppm	33	32	32	32	30	30	30
	20000 ppm	20	18	17	16	14	13	13
SMALL STOOL	Control	0	0	0	0	0	0	0
	5000 ppm	3	1	1	0	0	0	0
	10000 ppm	2	0	0	2	2	1	1
	20000 ppm	1	2	0	1	0	0	0
OLIGO STOOL	Control	1	1	0	0	0	0	0
	5000 ppm	4	1	2	1	0	0	0
	10000 ppm	2	0	0	1	0	0	0
	20000 ppm	2	1	0	0	0	1	1
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0
	5000 ppm	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

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
NON REMARKABLE	Control	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	5000 ppm	50	50	40	48	49	49	49	49	49	49	48	0	0	0
	10000 ppm	9	1	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

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
NON REMARKABLE	Control	49	50	50	50	50	50	50	50	50	50	50	50	50	50
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

Clinical sign	Group Name	Administration Week-day 29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
NON REMARKABLE	Control	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 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	56-7
NON REMARKABLE	Control	50	50	49	49	49	47	48	48	47	47	47	47	47	47
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

Clinical sign	Group Name	Administration Week-day 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	70-7
NON REMARKABLE	Control	46	46	46	44	45	44	43	42	42	41	38	38	39	38
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	81-7	82-7	83-7
NON REMARKABLE	Control	38	37	37	37	35	33	33	34	34	33	39	31	30	29
	5000 ppm	0	0	0	0	0	0	0	0	0	0	44	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	46	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	38	0	0	0

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

Clinical sign	Group Name	Administration Week-day 84-7	85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7
NON REMARKABLE	Control	28	27	27	26	26	24	24	21	21	19	19	19	19	19
	5000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 98-7	99-7	100-7	101-7	102-7	103-7	104-7
NON REMARKABLE	Control	19	19	18	18	17	17	17
	5000 ppm	0	0	0	0	0	0	0
	10000 ppm	0	0	0	0	0	0	0
	20000 ppm	0	0	0	0	0	0	0

APPENDIX B 1

BODY WEIGHT CHANGES : SUMMARY, MOUSE : MALE

(2-YEAR STUDY)

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day 0-0	1-7	2-7	3-7	4-7	5-7	6-7
Control	23.3± 0.9	23.8± 0.9	24.7± 1.1	25.5± 1.3	26.6± 1.4	27.1± 1.5	27.7± 1.8
5000 ppm	23.2± 0.9	23.5± 0.9	24.5± 1.1	25.5± 1.3	26.3± 1.3	26.8± 1.4	27.4± 1.5
10000 ppm	23.3± 0.9	22.9± 1.3**	24.2± 1.1	25.1± 1.0	25.9± 1.2*	26.2± 1.1**	27.0± 1.2
20000 ppm	23.3± 0.9	21.2± 1.1**	23.2± 1.2**	24.6± 1.4**	25.7± 1.2**	26.0± 1.2**	26.6± 1.2**

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

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : Ai 104
SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day 7-7	8-7	9-7	10-7	11-7	12-7	13-7
Control	28.8± 1.9	29.1± 2.1	29.8± 2.2	30.9± 2.3	31.7± 2.3	32.0± 2.5	32.7± 2.5
5000 ppm	28.3± 1.6	28.8± 1.8	29.0± 2.2	29.9± 2.2	30.5± 2.3	30.8± 2.3	31.4± 2.4
10000 ppm	27.0± 1.2**	27.7± 1.4**	28.0± 1.6**	28.7± 1.7**	28.7± 1.7**	28.8± 1.7**	29.4± 1.9**
20000 ppm	26.7± 1.2**	27.3± 1.3**	27.6± 1.2**	27.7± 1.3**	27.8± 1.2**	27.8± 1.3**	28.5± 1.3**

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

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day 14-7	18-7	22-7	26-7	30-7	34-7	38-7
Control	33.6± 2.8	36.2± 3.1	38.7± 3.9	41.1± 4.2	43.5± 4.4	44.7± 4.6	47.0± 4.7
5000 ppm	32.1± 2.3	34.4± 2.7	36.4± 3.1	37.8± 3.4*	40.2± 3.9	41.2± 4.1	43.4± 4.4
10000 ppm	29.9± 1.9**	31.3± 2.1**	32.6± 2.5**	33.4± 2.6**	34.9± 3.0**	35.0± 3.6**	36.5± 3.8**
20000 ppm	28.8± 1.4**	29.7± 1.3**	30.2± 1.4**	30.7± 1.6**	31.1± 1.7**	31.2± 1.6**	31.2± 2.0**

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

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day 42-7	46-7	50-7	54-7	58-7	62-7	66-7
Control	48.2± 4.5	49.9± 4.4	50.6± 4.2	51.4± 4.8	51.6± 4.8	53.0± 4.0	53.9± 4.5
5000 ppm	44.9± 4.5	46.0± 4.4*	47.4± 4.8	48.2± 5.1	48.7± 5.9	49.8± 5.5	50.6± 5.9
10000 ppm	37.4± 4.0**	38.2± 4.4**	38.7± 4.6**	39.2± 5.2**	39.5± 5.4**	40.0± 5.9**	41.0± 5.9**
20000 ppm	31.9± 1.9**	32.1± 2.0**	32.1± 1.9**	32.4± 2.0**	32.3± 2.1**	32.3± 1.8**	32.3± 2.3**

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

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day 70-7	74-7	78-7	82-7	86-7	90-7	94-7
Control	53.7± 5.4	54.4± 5.6	54.9± 6.1	55.4± 6.3	55.2± 6.4	55.4± 6.8	54.1± 7.7
5000 ppm	51.4± 4.9	51.6± 5.7	52.6± 5.4	52.7± 5.7	52.1± 6.0	52.2± 6.1	51.3± 6.5
10000 ppm	40.4± 6.1**	40.2± 6.1**	40.2± 5.7**	40.7± 5.0**	40.3± 4.8**	40.0± 4.7**	40.0± 6.0**
20000 ppm	32.0± 1.8**	31.3± 2.0**	31.4± 2.0**	30.7± 1.9**	30.5± 1.9**	30.0± 2.3**	30.0± 2.7**

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

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day 98-7	102-7	104-7
Control	52.2± 9.0	50.8± 8.3	49.6± 7.8
5000 ppm	49.2± 7.7	48.7± 7.1	47.9± 7.4
10000 ppm	37.7± 5.1**	37.1± 5.6**	37.4± 4.9**
20000 ppm	30.4± 3.0**	29.8± 3.0**	29.6± 3.0**

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

APPENDIX B 2

BODY WEIGHT CHANGES : SUMMARY, MOUSE : FEMALE

(2-YEAR STUDY)

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day 0-0	1-7	2-7	3-7	4-7	5-7	6-7
Control	19.1± 0.8	19.5± 0.9	19.8± 0.9	20.2± 0.9	20.7± 0.9	21.3± 1.2	21.7± 1.2
5000 ppm	19.1± 0.8	18.8± 1.1*	19.6± 1.0	19.8± 1.0	20.6± 1.0	21.2± 1.0	21.5± 1.1
10000 ppm	19.1± 0.8	19.0± 0.8	19.5± 0.8	20.2± 0.9	20.6± 0.9	21.3± 1.0	21.4± 1.2
20000 ppm	19.1± 0.8	17.4± 0.8**	19.6± 1.1	20.4± 1.0	20.9± 1.0	21.3± 0.9	21.5± 1.0

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

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day 7-7	8-7	9-7	10-7	11-7	12-7	13-7
Control	22.3± 1.2	22.6± 1.5	22.9± 1.4	23.4± 1.6	23.7± 1.6	23.7± 1.8	24.3± 2.0
5000 ppm	22.0± 1.2	22.5± 1.4	22.7± 1.4	23.1± 1.4	23.3± 1.6	23.3± 1.8	24.3± 1.8
10000 ppm	22.0± 1.2	22.3± 1.2	22.8± 1.2	23.1± 1.3	23.3± 1.3	23.3± 1.3	23.6± 1.4
20000 ppm	22.0± 0.9	22.1± 1.1	22.4± 1.1	22.8± 1.0	23.2± 1.1	23.1± 1.1	23.3± 1.2*

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

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day 14-7	18-7	22-7	26-7	30-7	34-7	38-7
Control	24.7± 2.1	26.2± 2.3	27.7± 3.1	29.7± 3.8	31.3± 3.8	32.6± 4.0	33.9± 4.2
5000 ppm	24.2± 2.1	24.9± 2.3**	26.8± 2.7	27.9± 3.0	29.2± 3.2*	30.1± 3.8*	31.9± 4.1
10000 ppm	23.6± 1.4*	24.6± 1.4**	25.9± 1.7*	26.7± 1.7**	27.2± 1.8**	27.8± 2.0**	28.7± 2.5**
20000 ppm	23.5± 1.2*	24.3± 1.2**	25.1± 1.0**	25.5± 1.2**	26.1± 1.5**	26.8± 1.4**	26.8± 1.7**

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

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day 42-7	46-7	50-7	54-7	58-7	62-7	66-7
Control	34.5± 4.9	35.7± 5.3	35.8± 5.8	36.3± 5.5	37.1± 6.0	38.0± 6.6	38.6± 7.0
5000 ppm	32.4± 4.4	33.3± 4.1	33.6± 4.5	34.2± 4.7	34.8± 5.1	35.2± 4.9	35.7± 4.8
10000 ppm	29.8± 2.6**	30.2± 2.7**	30.4± 3.1**	30.9± 3.2**	31.2± 3.4**	31.1± 3.4**	31.8± 3.7**
20000 ppm	27.9± 1.9**	28.3± 2.3**	28.0± 1.9**	28.4± 2.1**	28.6± 2.3**	28.2± 2.3**	28.1± 1.7**

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

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day 70-7	74-7	78-7	82-7	86-7	90-7	94-7
Control	38.2± 7.2	38.7± 7.7	38.8± 8.0	37.8± 7.9	39.7± 7.5	40.4± 6.3	40.8± 6.5
5000 ppm	36.1± 4.9	36.3± 4.7	36.2± 4.6	36.6± 4.9	36.2± 4.7	35.6± 4.9	35.5± 5.6
10000 ppm	31.6± 3.6**	31.5± 3.5**	31.1± 3.6**	31.2± 3.3**	31.0± 3.2**	30.6± 3.5**	30.6± 3.3**
20000 ppm	28.0± 1.8**	27.4± 1.9**	27.3± 1.8**	26.9± 2.1**	27.2± 2.1**	26.7± 1.9**	27.0± 2.3**

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

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day 98-7	102-7	104-7
Control	40.4± 6.6	39.5± 5.8	38.8± 5.7
5000 ppm	35.3± 5.7	34.7± 5.3**	34.9± 5.3*
10000 ppm	29.7± 3.1**	29.6± 3.7**	29.7± 5.2**
20000 ppm	27.1± 3.1**	27.4± 3.6**	27.1± 4.1**

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

APPENDIX C 1

FOOD CONSUMPTION CHANGES : SUMMARY, MOUSE : MALE

(2-YEAR STUDY)

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

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	4.0± 0.2	3.9± 0.4	4.0± 0.5	4.1± 0.4	4.0± 0.3	3.9± 0.3	4.1± 0.3
5000 ppm	3.8± 0.4**	4.0± 0.5	4.2± 0.6	4.2± 0.5	4.1± 0.5	4.1± 0.4	4.1± 0.5
10000 ppm	3.7± 0.5**	4.1± 0.6	4.1± 0.5	4.0± 0.5	4.1± 0.5	4.1± 0.5	4.0± 0.4
20000 ppm	3.5± 0.9**	4.3± 0.9	4.2± 0.8	4.1± 0.8	4.2± 0.8	4.1± 0.7	4.1± 0.6

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

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

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	4.0± 0.3	4.0± 0.3	4.1± 0.3	4.0± 0.3	4.0± 0.3	3.9± 0.3	4.1± 0.3
5000 ppm	4.2± 0.5	4.0± 0.4	4.2± 0.3	4.0± 0.4	4.0± 0.3	3.9± 0.3	4.1± 0.4
10000 ppm	4.1± 0.4	3.9± 0.4	4.0± 0.4	3.9± 0.4	3.9± 0.4	3.9± 0.4	4.0± 0.4
20000 ppm	4.3± 0.7	4.0± 0.6	4.0± 0.7	4.1± 0.6	4.2± 0.6	4.0± 0.7	4.1± 0.6

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

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

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	4.2± 0.3	4.2± 0.3	4.5± 0.4	4.3± 0.3	4.4± 0.4	4.6± 0.4	4.5± 0.5
5000 ppm	4.2± 0.4	4.2± 0.4	4.3± 0.4	4.5± 0.4*	4.6± 0.7	4.6± 0.5	4.7± 0.5
10000 ppm	4.1± 0.4	4.2± 0.4	4.3± 0.5	4.3± 0.4	4.5± 0.7	4.5± 0.5	4.5± 0.6
20000 ppm	4.3± 0.6	4.5± 0.8	4.6± 0.6	4.5± 0.6	5.0± 0.8**	5.0± 0.8*	4.6± 0.7

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

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

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	4.6± 0.4	4.5± 0.3	4.6± 0.4	4.8± 0.5	4.7± 0.4	4.9± 0.5	4.9± 0.7
5000 ppm	4.6± 0.5	4.7± 0.4	4.8± 0.5	4.9± 0.5	4.9± 0.6	5.0± 0.6	5.0± 0.6
10000 ppm	4.6± 0.7	4.4± 0.7	4.4± 0.7	4.9± 0.7	4.8± 0.8	4.9± 0.7	4.8± 0.6
20000 ppm	4.8± 0.9	4.6± 0.9	4.9± 0.8	5.0± 1.0	5.0± 1.0	5.0± 1.0	5.4± 0.7**

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

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

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	4.9± 0.5	5.0± 0.6	4.8± 0.6	4.9± 0.6	4.9± 0.8	4.8± 0.8	4.7± 1.0
5000 ppm	5.0± 0.6	5.4± 0.5	5.0± 0.7	5.2± 0.7	5.2± 0.7	5.1± 0.9	5.2± 0.9*
10000 ppm	4.8± 0.7	5.0± 0.8	4.8± 0.8	4.9± 0.8	4.8± 0.8	4.9± 0.8	4.9± 0.9
20000 ppm	5.2± 0.6	5.5± 0.8*	5.7± 0.8**	6.0± 0.9**	5.3± 1.0	6.1± 0.8**	6.5± 0.3**

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

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day(effective) 102-7(7)	104-7(7)
Control	4.8± 0.9	4.6± 1.0
5000 ppm	5.0± 1.0	4.8± 0.8
10000 ppm	4.6± 0.8	4.8± 1.0
20000 ppm	6.5± 0.8**	6.5± 0.1 ?

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

? : Significant test is not applied, because No. of data in this group is less than 3.

APPENDIX C 2

FOOD CONSUMPTION CHANGES : SUMMARY, MOUSE : FEMALE

(2-YEAR STUDY)

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

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	3.6± 0.4	3.5± 0.4	3.5± 0.4	3.8± 0.3	3.8± 0.4	3.6± 0.3	3.8± 0.4
5000 ppm	3.3± 0.4**	3.4± 0.3	3.4± 0.2	3.6± 0.2	3.7± 0.3	3.6± 0.3	3.7± 0.3
10000 ppm	3.5± 0.5	3.5± 0.4	3.4± 0.4	3.6± 0.4**	3.7± 0.4	3.5± 0.4	3.6± 0.4*
20000 ppm	2.8± 0.5**	3.6± 0.6	3.4± 0.5	3.4± 0.5**	3.3± 0.4**	3.2± 0.4**	3.6± 0.5**

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

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

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	3.7± 0.4	3.8± 0.5	3.8± 0.4	3.8± 0.4	3.8± 0.4	3.9± 0.5	4.0± 0.5
5000 ppm	3.8± 0.3	3.6± 0.3	3.6± 0.3	3.7± 0.3	3.7± 0.4	3.7± 0.4	3.7± 0.4*
10000 ppm	3.7± 0.3	3.7± 0.3	3.6± 0.3	3.7± 0.4	3.6± 0.3	3.7± 0.5	3.7± 0.4*
20000 ppm	3.5± 0.4*	3.5± 0.5**	3.5± 0.5**	3.8± 0.5	3.6± 0.4	3.8± 0.5	3.8± 0.5

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

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

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	3.8± 0.6	4.0± 0.5	4.3± 0.7	4.2± 0.7	4.5± 0.7	4.4± 0.6	4.6± 0.8
5000 ppm	3.7± 0.4	3.9± 0.4	4.1± 0.5	4.0± 0.5	4.3± 0.6	4.4± 0.7	4.7± 0.8
10000 ppm	4.0± 0.5	4.2± 0.7	4.4± 0.7	4.1± 0.6	4.4± 0.7	4.5± 0.7	4.8± 0.7
20000 ppm	3.8± 0.5	4.0± 0.5	4.1± 0.7	4.1± 0.7	4.3± 0.7	4.3± 0.8	4.7± 1.0

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

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

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	4.7± 0.8	4.5± 1.0	4.6± 0.9	4.8± 0.8	4.9± 0.8	4.7± 0.8	4.7± 0.8
5000 ppm	4.6± 0.7	4.3± 0.7	4.3± 0.7	4.8± 0.8	4.8± 0.6	4.6± 0.7	4.9± 0.8
10000 ppm	4.9± 0.7	4.6± 0.7	4.6± 0.7	5.2± 0.8*	5.0± 0.8	5.0± 0.9	5.0± 0.8
20000 ppm	4.9± 0.9	4.5± 0.9	4.8± 1.0	5.2± 1.0	4.9± 0.9	5.2± 1.1*	5.1± 0.9

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

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

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	4.4± 0.7	4.7± 0.8	4.6± 1.1	4.9± 0.9	5.1± 1.1	5.1± 1.1	4.9± 0.8
5000 ppm	4.6± 0.8	4.9± 0.9	4.9± 0.8	5.0± 1.0	4.7± 1.2	4.9± 0.9	5.0± 1.4
10000 ppm	5.0± 0.7**	5.0± 0.7	5.2± 0.9*	5.5± 0.8*	5.4± 0.9	5.6± 0.8	5.6± 1.0*
20000 ppm	4.7± 1.0	5.1± 0.9	5.2± 1.2*	5.6± 1.0	5.4± 0.9	5.9± 1.2*	6.5± 0.8**

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

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day(effective) 102-7(7)	104-7(7)
Control	4.9± 1.0	4.9± 1.1
5000 ppm	4.8± 1.1	5.2± 1.2
10000 ppm	5.7± 1.2*	5.7± 1.2
20000 ppm	5.7± 1.0	6.2± 0.8

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

APPENDIX D 1

CHEMICAL INTAKE CHANGES : SUMMARY, MOUSE : MALE

(2-YEAR STUDY)

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
UNIT : g／kg／d a y
REPORT TYPE : A1 104
SEX : MALE

CHEMICAL INTAKE CHANGES (SUMMARY)
ALL ANIMALS

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
5000 ppm	0.810± 0.085	0.816± 0.089	0.836± 0.136	0.792± 0.079	0.769± 0.087	0.745± 0.063	0.730± 0.073
10000 ppm	1.615± 0.201	1.680± 0.241	1.647± 0.212	1.561± 0.226	1.546± 0.180	1.502± 0.145	1.477± 0.150
20000 ppm	3.295± 0.789	3.711± 0.726	3.432± 0.607	3.206± 0.579	3.197± 0.552	3.086± 0.476	3.078± 0.402

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
UNIT : g／kg／d a y
REPORT TYPE : A1 104
SEX : MALE

CHEMICAL INTAKE CHANGES (SUMMARY)
ALL ANIMALS

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	0.000± 0.000
5000 ppm	0.728± 0.064	0.681± 0.055	0.697± 0.057	0.664± 0.057	0.648± 0.052	0.622± 0.053	0.641± 0.059
10000 ppm	1.481± 0.131	1.382± 0.134	1.378± 0.124	1.361± 0.141	1.368± 0.137	1.327± 0.117	1.346± 0.130
20000 ppm	3.145± 0.433	2.917± 0.382	2.906± 0.400	2.964± 0.373	2.984± 0.412	2.827± 0.425	2.876± 0.380

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
UNIT : g／kg／d a y
REPORT TYPE : A1 104
SEX : MALE

CHEMICAL INTAKE CHANGES (SUMMARY)
ALL ANIMALS

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
5000 ppm	0.613± 0.055	0.584± 0.057	0.577± 0.055	0.562± 0.056	0.560± 0.084	0.528± 0.071	0.527± 0.067
10000 ppm	1.316± 0.118	1.304± 0.129	1.285± 0.160	1.229± 0.129	1.299± 0.194	1.239± 0.175	1.205± 0.213
20000 ppm	2.872± 0.352	2.961± 0.479	3.031± 0.415	2.893± 0.394	3.226± 0.479	3.201± 0.529	2.917± 0.460

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
UNIT : g／kg／d a y
REPORT TYPE : A1 104
SEX : MALE

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
5000 ppm	0.510± 0.064	0.501± 0.072	0.495± 0.065	0.497± 0.050	0.500± 0.087	0.498± 0.068	0.490± 0.063
10000 ppm	1.200± 0.188	1.151± 0.185	1.143± 0.189	1.254± 0.255	1.223± 0.261	1.223± 0.273	1.206± 0.166
20000 ppm	3.040± 0.569	2.888± 0.540	3.016± 0.546	3.098± 0.660	3.105± 0.600	3.098± 0.562	3.370± 0.477

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
UNIT : g／kg／d a y
REPORT TYPE : A1 104
SEX : MALE

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
5000 ppm	0.485± 0.053	0.517± 0.077	0.484± 0.079	0.503± 0.094	0.500± 0.088	0.500± 0.116	0.540± 0.135
10000 ppm	1.214± 0.178	1.256± 0.222	1.203± 0.253	1.228± 0.232	1.201± 0.254	1.242± 0.227	1.308± 0.275
20000 ppm	3.269± 0.354	3.485± 0.506	3.708± 0.570	3.961± 0.701	3.563± 0.691	4.178± 0.554	4.652± 0.354

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
UNIT : g／kg／d a y
REPORT TYPE : A1 104
SEX : MALE

CHEMICAL INTAKE CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration (weeks) 102	104
Control	0.000± 0.000	0.000± 0.000
5000 ppm	0.522± 0.125	0.507± 0.099
10000 ppm	1.233± 0.224	1.296± 0.347
20000 ppm	4.830± 0.799	4.693± 0.030

APPENDIX D 2

CHEMICAL INTAKE CHANGES : SUMMARY, MOUSE : FEMALE

(2-YEAR STUDY)

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
UNIT : g／kg／d a y
REPORT TYPE : A1 104
SEX : FEMALE

CHEMICAL INTAKE CHANGES (SUMMARY)
ALL ANIMALS

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
5000 ppm	0.873± 0.105	0.866± 0.086	0.857± 0.054	0.877± 0.047	0.868± 0.058	0.842± 0.066	0.845± 0.063
10000 ppm	1.860± 0.249	1.821± 0.227	1.702± 0.176	1.732± 0.163	1.722± 0.150	1.640± 0.140	1.648± 0.121
20000 ppm	3.170± 0.562	3.711± 0.596	3.321± 0.456	3.248± 0.501	3.103± 0.367	2.979± 0.386	3.243± 0.479

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
UNIT : g／kg／d a y
REPORT TYPE : A1 104
SEX : FEMALE

CHEMICAL INTAKE CHANGES (SUMMARY)
ALL ANIMALS

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	0.000± 0.000
5000 ppm	0.839± 0.066	0.791± 0.066	0.779± 0.053	0.792± 0.057	0.787± 0.057	0.761± 0.068	0.772± 0.059
10000 ppm	1.663± 0.128	1.610± 0.155	1.565± 0.145	1.574± 0.146	1.567± 0.137	1.572± 0.190	1.579± 0.157
20000 ppm	3.215± 0.395	3.148± 0.526	3.086± 0.419	3.255± 0.488	3.106± 0.400	3.232± 0.397	3.234± 0.433

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
UNIT : g／kg／d a y
REPORT TYPE : A1 104
SEX : FEMALE

CHEMICAL INTAKE CHANGES (SUMMARY)
ALL ANIMALS

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
5000 ppm	0.752± 0.071	0.732± 0.062	0.739± 0.075	0.690± 0.089	0.713± 0.090	0.696± 0.104	0.733± 0.127
10000 ppm	1.616± 0.180	1.637± 0.223	1.645± 0.208	1.500± 0.196	1.575± 0.211	1.584± 0.191	1.607± 0.209
20000 ppm	3.131± 0.441	3.229± 0.364	3.243± 0.518	3.114± 0.514	3.235± 0.480	3.190± 0.504	3.411± 0.630

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
UNIT : g／kg／d a y
REPORT TYPE : A1 104
SEX : FEMALE

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
5000 ppm	0.704± 0.129	0.654± 0.115	0.638± 0.105	0.701± 0.128	0.688± 0.110	0.645± 0.109	0.685± 0.117
10000 ppm	1.611± 0.205	1.502± 0.190	1.492± 0.225	1.684± 0.256	1.618± 0.247	1.584± 0.266	1.599± 0.255
20000 ppm	3.432± 0.592	3.186± 0.569	3.377± 0.663	3.609± 0.630	3.516± 0.615	3.699± 0.842	3.670± 0.569

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
UNIT : g／kg／d a y
REPORT TYPE : A1 104
SEX : FEMALE

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
5000 ppm	0.645± 0.125	0.678± 0.128	0.680± 0.112	0.701± 0.145	0.656± 0.155	0.696± 0.117	0.710± 0.181
10000 ppm	1.588± 0.207	1.604± 0.236	1.684± 0.268	1.777± 0.276	1.769± 0.248	1.846± 0.268	1.908± 0.322
20000 ppm	3.516± 0.739	3.741± 0.571	3.902± 0.756	4.161± 0.745	4.046± 0.695	4.402± 0.858	4.746± 0.532

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
UNIT : g／kg／d a y
REPORT TYPE : A1 104
SEX : FEMALE

CHEMICAL INTAKE CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration (weeks) 102	104
Control	0.000± 0.000	0.000± 0.000
5000 ppm	0.705± 0.164	0.766± 0.182
10000 ppm	1.912± 0.342	1.940± 0.422
20000 ppm	4.195± 0.823	4.557± 1.170

APPENDIX E 1

HEMATOLOGY : SUMMARY, MOUSE : MALE

(2-YEAR STUDY)

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
MEASURE. TIME : 1
SEX : MALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
ALL ANIMALS (105W)

Group Name	NO. of Animals	RED BLOOD CELL $10^6/\mu\ell$	HEMOGLOBIN g/dℓ	HEMATOCRIT %	MCV f ℓ	MCH p g	MCHC g/dℓ	PLATELET $10^3/\mu\ell$
Control	32	9.06± 2.12	12.4± 2.7	40.4± 8.1	45.2± 4.2	13.8± 1.0	30.6± 1.8	1868± 470
5000 ppm	33	9.27± 1.28	13.0± 1.7	42.2± 4.9	45.7± 1.9	14.0± 0.6	30.7± 1.0	1926± 426
10000 ppm	26	8.77± 1.80	12.6± 2.4	40.8± 6.3	47.6± 6.3**	14.4± 0.6**	30.6± 2.5	2025± 477
20000 ppm	16	7.94± 2.48*	10.4± 3.2*	36.0± 9.1*	47.2± 7.6	13.3± 0.9	28.5± 2.5**	2054± 738

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

(HCL070)

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
MEASURE. TIME : 1
SEX : MALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
ALL ANIMALS (105W)

Group Name	NO. of Animals	WBC $10^3/\mu\ell$		Differential WBC (%) N-BAND		N-SEG		EOSINO		BASO		MONO		LYMPHO		OTHER	
Control	32	3.49±	4.86	2±	3	30±	12	1±	1	0±	0	4±	2	62±	13	0±	1
5000 ppm	33	2.44±	1.18	2±	2	28±	12	2±	1	0±	0	4±	2	64±	14	0±	1
10000 ppm	26	2.48±	1.72	2±	3	32±	16	2±	1	0±	0	4±	2	61±	17	0±	0
20000 ppm	16	2.37±	1.06	3±	2	37±	14	0±	0**	0±	0	3±	2	55±	15	1±	2

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

(HCL070)

APPENDIX E 2

HEMATOLOGY : SUMMARY, MOUSE : FEMALE

(2-YEAR STUDY)

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
MEASURE. TIME : 1
SEX : FEMALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
ALL ANIMALS (105W)

Group Name	NO. of Animals	RED BLOOD CELL $10^6/\mu\ell$	HEMOGLOBIN g/dℓ	HEMATOCRIT %	MCV f ℓ	MCH p g	MCHC g/dℓ	PLATELET $10^3/\mu\ell$
Control	23	9.08± 1.01	13.1± 1.5	41.8± 3.8	46.1± 1.5	14.4± 0.3	31.3± 1.0	1073± 375
5000 ppm	24	9.46± 0.69	13.6± 0.8	43.4± 2.4	46.0± 2.2	14.4± 0.6	31.3± 0.8	1275± 344
10000 ppm	29	9.50± 1.47	13.2± 1.8	43.0± 5.5	45.6± 2.9	14.0± 0.7	30.7± 1.3	1321± 349
20000 ppm	13	8.27± 3.49	11.1± 4.4	37.7± 12.1	49.6± 12.2	13.8± 1.4**	28.5± 3.5**	1517± 695*

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

(HCL070)

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
MEASURE. TIME : 1
SEX : FEMALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
ALL ANIMALS (105W)

Group Name	NO. of Animals	WBC $10^3/\mu\ell$	Differential WBC (%) N-BAND	N-SEG	EOSINO	BASO	MONO	LYMPHO	OTHER
Control	23	4.83± 11.61	1± 1	23± 13	2± 1	0± 0	4± 2	64± 18	6± 19
5000 ppm	24	2.58± 1.73	1± 2	22± 12	2± 1	0± 0	4± 2	70± 12	0± 1
10000 ppm	29	7.96± 25.99	1± 2	26± 15	2± 3	0± 0	3± 2	66± 16	1± 2
20000 ppm	13	3.93± 6.44	4± 5**	37± 19*	1± 0	0± 0	3± 2	54± 21	2± 3

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

APPENDIX F 1

BIOCHEMISTRY : SUMMARY, MOUSE : MALE

(2-YEAR STUDY)

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
MEASURE. TIME : 1
SEX : MALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
ALL ANIMALS (105W)

Group Name	NO. of Animals	TOTAL PROTEIN g/dl		ALBUMIN g/dl		A/G RATIO		T-BILIRUBIN mg/dl		GLUCOSE mg/dl		T-CHOLESTEROL mg/dl		TRIGLYCERIDE mg/dl	
Control	34	5.4±	0.9	2.9±	0.5	1.2±	0.2	0.17±	0.10	169±	56	120±	64	37±	33
5000 ppm	34	5.3±	0.8	3.0±	0.4	1.3±	0.2	0.17±	0.08	199±	50	128±	47	46±	24
10000 ppm	27	5.1±	0.5	2.9±	0.3	1.3±	0.1	0.18±	0.16	212±	62**	124±	32	33±	15
20000 ppm	16	6.0±	0.7**	3.2±	0.3**	1.2±	0.2	0.38±	0.37**	177±	32	250±	59**	28±	21

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

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
MEASURE. TIME : 1
SEX : MALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
ALL ANIMALS (105W)

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	34	215± 99	208± 302	110± 134	1056± 2228	163± 111	3± 4	64± 66
5000 ppm	34	235± 73	114± 145	95± 143	754± 1044	160± 99	4± 5	51± 24
10000 ppm	27	225± 63	162± 263	134± 181	2087± 5779	296± 312*	2± 1	76± 85
20000 ppm	16	450± 119**	1250± 1590**	1157± 1198**	9029± 7690**	923± 691**	14± 15**	133± 46**

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

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
MEASURE. TIME : 1
SEX : MALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
ALL ANIMALS (105W)

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	34	24.0± 13.9	153± 2	4.1± 0.5	122± 4	9.3± 0.7	6.4± 0.8
5000 ppm	34	25.6± 5.6*	152± 2	4.0± 0.4	123± 4	9.3± 0.6	6.7± 0.9
10000 ppm	27	28.0± 8.6**	153± 2	4.1± 0.4	125± 4*	9.1± 0.5	6.8± 1.0
20000 ppm	16	27.6± 3.6**	152± 2	4.3± 0.4	121± 3	9.9± 0.5**	6.0± 0.9

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

APPENDIX F 2

BIOCHEMISTRY : SUMMARY, MOUSE : FEMALE

(2-YEAR STUDY)

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
MEASURE. TIME : 1
SEX : FEMALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
ALL ANIMALS (105W)

Group Name	NO. of Animals	TOTAL PROTEIN g/dℓ	ALBUMIN g/dℓ	A/G RATIO	T-BILIRUBIN mg/dℓ	GLUCOSE mg/dℓ	T-CHOLESTEROL mg/dℓ	TRIGLYCERIDE mg/dℓ
Control	23	5.0± 0.4	2.9± 0.2	1.4± 0.2	0.15± 0.03	168± 32	69± 22	28± 14
5000 ppm	25	5.0± 0.8	2.8± 0.2	1.3± 0.2	0.15± 0.05	163± 44	86± 19	27± 12
10000 ppm	29	5.2± 0.8	2.9± 0.3	1.4± 0.2	0.16± 0.03	160± 40	127± 38**	23± 12
20000 ppm	13	5.9± 0.5**	3.4± 0.3**	1.4± 0.1	0.48± 0.59**	154± 62	225± 43**	24± 17

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

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
MEASURE. TIME : 1
SEX : FEMALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
ALL ANIMALS (105W)

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	138± 35	112± 84	37± 23	685± 950	176± 70	2± 1	95± 85
5000 ppm	25	165± 38	85± 37	47± 31	442± 573	227± 114	3± 4	110± 144
10000 ppm	29	245± 68**	294± 366**	324± 386**	1387± 1359*	495± 313**	5± 5**	108± 87
20000 ppm	13	398± 77**	1213± 1411**	1007± 1037**	9917± 11178**	943± 469**	14± 8**	222± 200**

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

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	19.0± 5.1	151± 1	4.0± 0.5	123± 3	9.1± 0.5	6.2± 0.9
5000 ppm	25	21.8± 14.2	152± 3	4.1± 1.0	124± 2	9.0± 0.4	6.7± 1.7
10000 ppm	29	31.8± 30.1**	152± 4	4.1± 0.9	123± 4	9.6± 0.5**	7.0± 3.1
20000 ppm	13	33.5± 18.0**	153± 5	4.6± 0.9	120± 4*	10.1± 0.3**	6.8± 1.5

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

APPENDIX G 1

URINALYSIS : SUMMARY, MOUSE : MALE

(2-YEAR STUDY)

STUDY NO. : 0402 URINALYSIS
ANIMAL : MOUSE Crj:BDF1
MEASURE. TIME : 1
SEX : MALE REPORT TYPE : A1

Group Name	NO. of Animals	pH 5.0	6.0	6.5	7.0	7.5	8.0	8.5	CHI	Protein −	±	+	2+	3+	4+	CHI	Glucose −	±	+	2+	3+	4+	CHI	Ketone body −	±	+	2+	3+	4+	CHI	Occult blood −	±	+	2+	3+	CHI
Control	36	0	6	15	7	6	2	0		0	4	23	8	1	0		36	0	0	0	0	0		20	12	4	0	0	0		28	3	0	1	4	
5000 ppm	35	0	3	10	11	9	2	0		0	6	24	5	0	0		35	0	0	0	0	0		17	15	3	0	0	0		34	1	0	0	0	
10000 ppm	29	0	3	11	4	9	2	0		0	9	19	1	0	0	*	29	0	0	0	0	0		19	10	0	0	0	0		29	0	0	0	0	
20000 ppm	16	0	10	4	1	1	0	0	*	0	10	6	0	0	0	**	16	0	0	0	0	0		14	2	0	0	0	0		16	0	0	0	0	

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

STUDY NO. : 0402 URINALYSIS
ANIMAL : MOUSE Crj:BDF1
MEASURE. TIME : 1
SEX : MALE REPORT TYPE : A1

Group Name	NO. of Animals	Urobilinogen ±	+	2+	3+	4+	CHI
Control	36	36	0	0	0	0	
5000 ppm	35	35	0	0	0	0	
10000 ppm	29	29	0	0	0	0	
20000 ppm	16	16	0	0	0	0	

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

APPENDIX G 2

URINALYSIS : SUMMARY, MOUSE : FEMALE

(2-YEAR STUDY)

STUDY NO. : 0402 URINALYSIS
ANIMAL : MOUSE Crj:BDF1
MEASURE. TIME : 1
SEX : FEMALE REPORT TYPE : A1

Group Name	NO. of Animals	pH 5.0	6.0	6.5	7.0	7.5	8.0	8.5	CHI	Protein −	±	+	2+	3+	4+	CHI	Glucose −	±	+	2+	3+	4+	CHI	Ketone body −	±	+	2+	3+	4+	CHI	Occult blood −	±	+	2+	3+	CHI
Control	24	0	1	4	8	8	2	1		0	4	16	3	1	0		24	0	0	0	0	0		2	11	5	6	0	0		20	3	0	1	0	
5000 ppm	30	0	1	6	7	10	6	0		0	5	18	7	0	0		30	0	0	0	0	0		4	18	6	2	0	0		27	1	0	0	2	
10000 ppm	30	0	2	8	12	5	3	0		0	15	12	3	0	0		30	0	0	0	0	0		2	22	4	2	0	0		29	0	0	1	0	
20000 ppm	13	0	7	6	0	0	0	0	**	0	5	8	0	0	0		13	0	0	0	0	0		2	7	3	1	0	0		11	1	0	0	1	

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

STUDY NO. : 0402 URINALYSIS
ANIMAL : MOUSE Crj:BDF1
MEASURE. TIME : 1
SEX : FEMALE REPORT TYPE : A1

Group Name	NO. of Animals	Urobilinogen ±	+	2+	3+	4+	CHI
Control	24	24	0	0	0	0	
5000 ppm	30	30	0	0	0	0	
10000 ppm	30	30	0	0	0	0	
20000 ppm	13	13	0	0	0	0	

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

APPENDIX H 1

GROSS FINDINGS : SUMMARY, MOUSE : MALE ALL ANIMALS

(2-YEAR STUDY)

Organ	Findings	Group Name / NO. of Animals	Control 50 (%)	5000 ppm 50 (%)	10000 ppm 50 (%)	20000 ppm 50 (%)
skin/app	nodule		1 (2)	0 (0)	0 (0)	0 (0)
	scab		0 (0)	1 (2)	1 (2)	0 (0)
subcutis	edema		3 (6)	5 (10)	5 (10)	1 (2)
	mass		2 (4)	2 (4)	4 (8)	0 (0)
lung	red		1 (2)	0 (0)	1 (2)	0 (0)
	white zone		0 (0)	0 (0)	1 (2)	0 (0)
	nodule		1 (2)	2 (4)	3 (6)	4 (8)
lymph node	enlarged		7 (14)	7 (14)	6 (12)	1 (2)
thymus	enlarged		1 (2)	0 (0)	0 (0)	0 (0)
spleen	enlarged		6 (12)	9 (18)	7 (14)	6 (12)
	white zone		1 (2)	1 (2)	0 (0)	0 (0)
	nodule		3 (6)	1 (2)	2 (4)	2 (4)
	accentuation of white pulp		0 (0)	0 (0)	0 (0)	1 (2)
tooth	absence		1 (2)	0 (0)	0 (0)	0 (0)
forestomach	nodule		1 (2)	2 (4)	0 (0)	0 (0)
	thick		1 (2)	0 (0)	0 (0)	0 (0)
small intes	dilated		0 (0)	0 (0)	1 (2)	0 (0)
large intes	dilated		1 (2)	0 (0)	0 (0)	0 (0)
liver	enlarged		6 (12)	4 (8)	6 (12)	4 (8)
	atrophic		0 (0)	0 (0)	0 (0)	1 (2)
	white zone		5 (10)	7 (14)	2 (4)	3 (6)
	red zone		1 (2)	0 (0)	0 (0)	0 (0)

Organ	Findings	Group Name / NO. of Animals	Control 50 (%)	5000 ppm 50 (%)	10000 ppm 50 (%)	20000 ppm 50 (%)
liver	brown zone		0 (0)	1 (2)	2 (4)	0 (0)
	nodule		12 (24)	26 (52)	42 (84)	48 (96)
	deformed		0 (0)	1 (2)	0 (0)	0 (0)
	rough		1 (2)	0 (0)	0 (0)	0 (0)
	nodular		0 (0)	0 (0)	0 (0)	2 (4)
	adhesion		0 (0)	0 (0)	0 (0)	1 (2)
pancreas	nodule		1 (2)	0 (0)	0 (0)	3 (6)
kidney	enlarged		2 (4)	0 (0)	2 (4)	0 (0)
	white zone		0 (0)	0 (0)	1 (2)	1 (2)
	nodule		1 (2)	1 (2)	0 (0)	1 (2)
	hydronephrosis		1 (2)	5 (10)	5 (10)	0 (0)
urin bladd	urine:marked retention		0 (0)	0 (0)	1 (2)	0 (0)
pituitary	enlarged		2 (4)	2 (4)	1 (2)	0 (0)
	red zone		1 (2)	1 (2)	1 (2)	0 (0)
	black zone		0 (0)	0 (0)	1 (2)	0 (0)
	nodule		0 (0)	1 (2)	1 (2)	0 (0)
	cyst		1 (2)	0 (0)	0 (0)	0 (0)
ovary	enlarged		3 (6)	8 (16)	5 (10)	5 (10)
	cyst		9 (18)	9 (18)	2 (4)	0 (0)
	absence		0 (0)	0 (0)	0 (0)	1 (2)
uterus	enlarged		0 (0)	0 (0)	1 (2)	0 (0)
	nodule		14 (28)	14 (28)	13 (26)	10 (20)

Organ	Findings	Group Name / NO. of Animals	Control 50 (%)	5000 ppm 50 (%)	10000 ppm 50 (%)	20000 ppm 50 (%)
uterus	dilated lumen		0 (0)	0 (0)	1 (2)	0 (0)
brain	red zone		0 (0)	1 (2)	1 (2)	0 (0)
Harder gl	enlarged		1 (2)	1 (2)	0 (0)	1 (2)
	nodule		0 (0)	0 (0)	1 (2)	1 (2)
mediastinum	nodule		0 (0)	0 (0)	0 (0)	2 (4)
	mass		2 (4)	4 (8)	0 (0)	0 (0)
peritoneum	nodule		0 (0)	0 (0)	0 (0)	1 (2)
	mass		1 (2)	0 (0)	0 (0)	0 (0)
	thick		0 (0)	1 (2)	0 (0)	0 (0)
retroperit	nodule		1 (2)	0 (0)	0 (0)	0 (0)
abdominal c	hemorrhage		0 (0)	0 (0)	2 (4)	9 (18)
	ascites		6 (12)	6 (12)	4 (8)	5 (10)
thoracic ca	pleural fluid		4 (8)	10 (20)	5 (10)	3 (6)
other	hindlimb:nodule		1 (2)	0 (0)	0 (0)	1 (2)
	lower jaw:nodule		0 (0)	0 (0)	1 (2)	0 (0)

APPENDIX H 2

GROSS FINDINGS : SUMMARY, MOUSE : FEMALE ALL ANIMALS

(2-YEAR STUDY)

Organ	Findings	Group Name / NO. of Animals	Control 50 (%)	5000 ppm 50 (%)	10000 ppm 50 (%)	20000 ppm 50 (%)
skin/app	nodule		0 (0)	0 (0)	0 (0)	1 (2)
	scab		0 (0)	1 (2)	1 (2)	0 (0)
subcutis	edema		0 (0)	0 (0)	1 (2)	0 (0)
	mass		1 (2)	4 (8)	1 (2)	1 (2)
lung	white zone		0 (0)	1 (2)	0 (0)	0 (0)
	red zone		0 (0)	0 (0)	1 (2)	0 (0)
	nodule		7 (14)	5 (10)	3 (6)	2 (4)
lymph node	enlarged		4 (8)	11 (22)	3 (6)	0 (0)
thymus	enlarged		0 (0)	0 (0)	1 (2)	0 (0)
spleen	enlarged		2 (4)	0 (0)	0 (0)	1 (2)
	white zone		1 (2)	0 (0)	0 (0)	0 (0)
	black zone		1 (2)	0 (0)	0 (0)	0 (0)
	nodule		2 (4)	4 (8)	1 (2)	1 (2)
tooth	deformed		0 (0)	0 (0)	1 (2)	0 (0)
	absence		0 (0)	0 (0)	0 (0)	1 (2)
salivary gl	nodule		2 (4)	0 (0)	1 (2)	0 (0)
forestomach	nodule		0 (0)	0 (0)	2 (4)	1 (2)
gl stomach	nodule		0 (0)	0 (0)	0 (0)	1 (2)
	thick		2 (4)	4 (8)	1 (2)	0 (0)
stomach	nodule		0 (0)	0 (0)	1 (2)	0 (0)
small intes	nodule		0 (0)	2 (4)	0 (0)	0 (0)
liver	enlarged		1 (2)	0 (0)	0 (0)	2 (4)

Organ	Findings	Group Name / NO. of Animals	Control 50 (%)	5000 ppm 50 (%)	10000 ppm 50 (%)	20000 ppm 50 (%)
liver	white zone		3 (6)	2 (4)	1 (2)	3 (6)
	red zone		3 (6)	4 (8)	1 (2)	0 (0)
	brown zone		0 (0)	1 (2)	1 (2)	1 (2)
	nodule		34 (68)	33 (66)	35 (70)	43 (86)
	deformed		1 (2)	0 (0)	1 (2)	0 (0)
pancreas	nodule		1 (2)	0 (0)	1 (2)	2 (4)
kidney	enlarged		0 (0)	1 (2)	0 (0)	0 (0)
	atrophic		1 (2)	0 (0)	0 (0)	0 (0)
	white		1 (2)	0 (0)	0 (0)	0 (0)
	nodule		1 (2)	0 (0)	1 (2)	0 (0)
	deformed		2 (4)	1 (2)	1 (2)	0 (0)
	hydronephrosis		2 (4)	3 (6)	3 (6)	2 (4)
urin bladd	nodule		0 (0)	1 (2)	0 (0)	0 (0)
	urine:marked retention		4 (8)	1 (2)	1 (2)	2 (4)
urethra	dilated		0 (0)	0 (0)	1 (2)	0 (0)
pituitary	black zone		0 (0)	0 (0)	1 (2)	0 (0)
testis	nodule		0 (0)	0 (0)	1 (2)	0 (0)
epididymis	nodule		2 (4)	0 (0)	1 (2)	1 (2)
	adhesion		0 (0)	1 (2)	0 (0)	0 (0)
semin ves	adhesion		2 (4)	0 (0)	0 (0)	0 (0)
prep/cli gl	nodule		6 (12)	0 (0)	0 (0)	0 (0)
brain	nodule		0 (0)	0 (0)	2 (4)	0 (0)

Organ	Findings	Group Name / NO. of Animals	Control 50 (%)	5000 ppm 50 (%)	10000 ppm 50 (%)	20000 ppm 50 (%)
brain	hypertrophy		0 (0)	0 (0)	0 (0)	1 (2)
Harder gl	enlarged		1 (2)	0 (0)	1 (2)	0 (0)
	nodule		1 (2)	1 (2)	1 (2)	1 (2)
peritoneum	nodule		0 (0)	0 (0)	0 (0)	1 (2)
retroperit	mass		1 (2)	0 (0)	0 (0)	0 (0)
abdominal c	hemorrhage		1 (2)	1 (2)	4 (8)	7 (14)
	mass		1 (2)	0 (0)	0 (0)	0 (0)
	ascites		2 (4)	2 (4)	4 (8)	2 (4)
mesenterium	nodule		1 (2)	1 (2)	0 (0)	0 (0)
adipose	nodule		1 (2)	0 (0)	0 (0)	0 (0)
thoracic ca	hemorrhage		0 (0)	1 (2)	1 (2)	0 (0)
	pleural fluid		1 (2)	4 (8)	2 (4)	0 (0)
other	nose:nodule		0 (0)	0 (0)	1 (2)	0 (0)
whole body	anemic		0 (0)	1 (2)	0 (0)	0 (0)

APPENDIX H 3

GROSS FINDINGS : SUMMARY, MOUSE : MALE : SACRIFICED ANIMALS

(2-YEAR STUDY)

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

GROSS FINDINGS (SUMMARY)
SACRIFICED ANIMALS (105W)

Organ	Findings	Group Name / NO. of Animals	Control 36 (%)	5000 ppm 35 (%)	10000 ppm 27 (%)	20000 ppm 16 (%)
skin/app	scab		0 (0)	1 (3)	1 (4)	0 (0)
subcutis	mass		1 (3)	0 (0)	0 (0)	0 (0)
lung	white zone		0 (0)	1 (3)	0 (0)	0 (0)
	red zone		0 (0)	0 (0)	1 (4)	0 (0)
	nodule		6 (17)	5 (14)	1 (4)	1 (6)
lymph node	enlarged		2 (6)	8 (23)	2 (7)	0 (0)
spleen	enlarged		1 (3)	0 (0)	0 (0)	0 (0)
	white zone		1 (3)	0 (0)	0 (0)	0 (0)
	black zone		1 (3)	0 (0)	0 (0)	0 (0)
	nodule		1 (3)	4 (11)	1 (4)	0 (0)
tooth	absence		0 (0)	0 (0)	0 (0)	1 (6)
salivary gl	nodule		2 (6)	0 (0)	1 (4)	0 (0)
forestomach	nodule		0 (0)	0 (0)	2 (7)	0 (0)
gl stomach	nodule		0 (0)	0 (0)	0 (0)	1 (6)
	thick		2 (6)	4 (11)	1 (4)	0 (0)
liver	white zone		1 (3)	2 (6)	0 (0)	1 (6)
	red zone		2 (6)	3 (9)	1 (4)	0 (0)
	nodule		27 (75)	24 (69)	21 (78)	16 (100)
	deformed		1 (3)	0 (0)	0 (0)	0 (0)
pancreas	nodule		1 (3)	0 (0)	0 (0)	1 (6)
kidney	enlarged		0 (0)	1 (3)	0 (0)	0 (0)
	atrophic		1 (3)	0 (0)	0 (0)	0 (0)

Organ	Findings	Group Name / NO. of Animals	Control 36 (%)	5000 ppm 35 (%)	10000 ppm 27 (%)	20000 ppm 16 (%)
kidney	nodule		1 (3)	0 (0)	1 (4)	0 (0)
	deformed		2 (6)	1 (3)	1 (4)	0 (0)
	hydronephrosis		1 (3)	0 (0)	0 (0)	1 (6)
urin bladd	urine:marked retention		1 (3)	0 (0)	0 (0)	0 (0)
epididymis	nodule		2 (6)	0 (0)	0 (0)	0 (0)
semin ves	adhesion		2 (6)	0 (0)	0 (0)	0 (0)
prep/cli gl	nodule		6 (17)	0 (0)	0 (0)	0 (0)
Harder gl	enlarged		1 (3)	0 (0)	0 (0)	0 (0)
	nodule		1 (3)	1 (3)	1 (4)	0 (0)
abdominal c	ascites		1 (3)	1 (3)	0 (0)	0 (0)
adipose	nodule		1 (3)	0 (0)	0 (0)	0 (0)
thoracic ca	pleural fluid		0 (0)	1 (3)	0 (0)	0 (0)
other	nose:nodule		0 (0)	0 (0)	1 (4)	0 (0)

APPENDIX H 4

GROSS FINDINGS : SUMMARY, MOUSE : FEMALE : SACRIFICED ANIMALS

(2-YEAR STUDY)

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

GROSS FINDINGS (SUMMARY)
SACRIFICED ANIMALS (105W)

Organ	Findings	Group Name / NO. of Animals	Control 23 (%)	5000 ppm 27 (%)	10000 ppm 30 (%)	20000 ppm 13 (%)
skin/app	nodule		1 (4)	0 (0)	0 (0)	0 (0)
	scab		0 (0)	1 (4)	1 (3)	0 (0)
subcutis	mass		1 (4)	1 (4)	1 (3)	0 (0)
lung	nodule		1 (4)	2 (7)	3 (10)	1 (8)
lymph node	enlarged		3 (13)	3 (11)	3 (10)	0 (0)
spleen	enlarged		3 (13)	0 (0)	3 (10)	2 (15)
	white zone		1 (4)	0 (0)	0 (0)	0 (0)
	nodule		2 (9)	1 (4)	2 (7)	0 (0)
	accentuation of white pulp		0 (0)	0 (0)	0 (0)	1 (8)
forestomach	nodule		1 (4)	0 (0)	0 (0)	0 (0)
liver	atrophic		0 (0)	0 (0)	0 (0)	1 (8)
	white zone		0 (0)	1 (4)	0 (0)	1 (8)
	red zone		1 (4)	0 (0)	0 (0)	0 (0)
	brown zone		0 (0)	1 (4)	1 (3)	0 (0)
	nodule		8 (35)	18 (67)	30 (100)	13 (100)
	deformed		0 (0)	1 (4)	0 (0)	0 (0)
	rough		1 (4)	0 (0)	0 (0)	0 (0)
pancreas	nodule		1 (4)	0 (0)	0 (0)	1 (8)
kidney	enlarged		0 (0)	0 (0)	1 (3)	0 (0)
	white zone		0 (0)	0 (0)	0 (0)	1 (8)
	nodule		1 (4)	1 (4)	0 (0)	0 (0)
	hydronephrosis		1 (4)	3 (11)	2 (7)	0 (0)

Organ	Findings	Group Name / NO. of Animals	Control 23 (%)	5000 ppm 27 (%)	10000 ppm 30 (%)	20000 ppm 13 (%)
pituitary	enlarged		2 (9)	1 (4)	1 (3)	0 (0)
	red zone		1 (4)	1 (4)	1 (3)	0 (0)
	black zone		0 (0)	0 (0)	1 (3)	0 (0)
	nodule		0 (0)	1 (4)	1 (3)	0 (0)
ovary	enlarged		0 (0)	1 (4)	0 (0)	1 (8)
	cyst		6 (26)	7 (26)	2 (7)	0 (0)
	absence		0 (0)	0 (0)	0 (0)	1 (8)
uterus	nodule		4 (17)	3 (11)	6 (20)	3 (23)
	dilated lumen		0 (0)	0 (0)	1 (3)	0 (0)
Harder gl	enlarged		0 (0)	0 (0)	0 (0)	1 (8)
mediastinum	nodule		0 (0)	0 (0)	0 (0)	2 (15)
abdominal c	hemorrhage		0 (0)	0 (0)	0 (0)	1 (8)
	ascites		1 (4)	1 (4)	0 (0)	1 (8)
thoracic ca	pleural fluid		0 (0)	1 (4)	0 (0)	0 (0)
other	lower jaw:nodule		0 (0)	0 (0)	1 (3)	0 (0)

APPENDIX H 5

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

(2-YEAR STUDY)

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

Organ	Findings	Group Name / NO. of Animals	Control 14 (%)	5000 ppm 15 (%)	10000 ppm 23 (%)	20000 ppm 34 (%)
skin/app	nodule		0 (0)	0 (0)	0 (0)	1 (3)
subcutis	edema		0 (0)	0 (0)	1 (4)	0 (0)
	mass		0 (0)	4 (27)	1 (4)	1 (3)
lung	nodule		1 (7)	0 (0)	2 (9)	1 (3)
lymph node	enlarged		2 (14)	3 (20)	1 (4)	0 (0)
thymus	enlarged		0 (0)	0 (0)	1 (4)	0 (0)
spleen	enlarged		1 (7)	0 (0)	0 (0)	1 (3)
	nodule		1 (7)	0 (0)	0 (0)	1 (3)
tooth	deformed		0 (0)	0 (0)	1 (4)	0 (0)
forestomach	nodule		0 (0)	0 (0)	0 (0)	1 (3)
stomach	nodule		0 (0)	0 (0)	1 (4)	0 (0)
small intes	nodule		0 (0)	2 (13)	0 (0)	0 (0)
liver	enlarged		1 (7)	0 (0)	0 (0)	2 (6)
	white zone		2 (14)	0 (0)	1 (4)	2 (6)
	red zone		1 (7)	1 (7)	0 (0)	0 (0)
	brown zone		0 (0)	1 (7)	1 (4)	1 (3)
	nodule		7 (50)	9 (60)	14 (61)	27 (79)
	deformed		0 (0)	0 (0)	1 (4)	0 (0)
pancreas	nodule		0 (0)	0 (0)	1 (4)	1 (3)
kidney	white		1 (7)	0 (0)	0 (0)	0 (0)
	hydronephrosis		1 (7)	3 (20)	3 (13)	1 (3)
urin bladd	nodule		0 (0)	1 (7)	0 (0)	0 (0)

Organ	Findings	Group Name / NO. of Animals	Control 14 (%)	5000 ppm 15 (%)	10000 ppm 23 (%)	20000 ppm 34 (%)
urin bladd	urine:marked retention		3 (21)	1 (7)	1 (4)	2 (6)
urethra	dilated		0 (0)	0 (0)	1 (4)	0 (0)
pituitary	black zone		0 (0)	0 (0)	1 (4)	0 (0)
testis	nodule		0 (0)	0 (0)	1 (4)	0 (0)
epididymis	nodule		0 (0)	0 (0)	1 (4)	1 (3)
	adhesion		0 (0)	1 (7)	0 (0)	0 (0)
brain	nodule		0 (0)	0 (0)	2 (9)	0 (0)
	hypertrophy		0 (0)	0 (0)	0 (0)	1 (3)
Harder gl	enlarged		0 (0)	0 (0)	1 (4)	0 (0)
	nodule		0 (0)	0 (0)	0 (0)	1 (3)
peritoneum	nodule		0 (0)	0 (0)	0 (0)	1 (3)
retroperit	mass		1 (7)	0 (0)	0 (0)	0 (0)
abdominal c	hemorrhage		1 (7)	1 (7)	4 (17)	7 (21)
	mass		1 (7)	0 (0)	0 (0)	0 (0)
	ascites		1 (7)	1 (7)	4 (17)	2 (6)
mesenterium	nodule		1 (7)	1 (7)	0 (0)	0 (0)
thoracic ca	hemorrhage		0 (0)	1 (7)	1 (4)	0 (0)
	pleural fluid		1 (7)	3 (20)	2 (9)	0 (0)
whole body	anemic		0 (0)	1 (7)	0 (0)	0 (0)

APPENDIX H 6

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

(2-YEAR STUDY)

Organ	Findings	Group Name / NO. of Animals	Control 27 (%)	5000 ppm 23 (%)	10000 ppm 20 (%)	20000 ppm 37 (%)
subcutis	edema		3 (11)	5 (22)	5 (25)	1 (3)
	mass		1 (4)	1 (4)	3 (15)	0 (0)
lung	red		1 (4)	0 (0)	1 (5)	0 (0)
	white zone		0 (0)	0 (0)	1 (5)	0 (0)
	nodule		0 (0)	0 (0)	0 (0)	3 (8)
lymph node	enlarged		4 (15)	4 (17)	3 (15)	1 (3)
thymus	enlarged		1 (4)	0 (0)	0 (0)	0 (0)
spleen	enlarged		3 (11)	9 (39)	4 (20)	4 (11)
	white zone		0 (0)	1 (4)	0 (0)	0 (0)
	nodule		1 (4)	0 (0)	0 (0)	2 (5)
tooth	absence		1 (4)	0 (0)	0 (0)	0 (0)
forestomach	nodule		0 (0)	2 (9)	0 (0)	0 (0)
	thick		1 (4)	0 (0)	0 (0)	0 (0)
small intes	dilated		0 (0)	0 (0)	1 (5)	0 (0)
large intes	dilated		1 (4)	0 (0)	0 (0)	0 (0)
liver	enlarged		6 (22)	4 (17)	6 (30)	4 (11)
	white zone		5 (19)	6 (26)	2 (10)	2 (5)
	brown zone		0 (0)	0 (0)	1 (5)	0 (0)
	nodule		4 (15)	8 (35)	12 (60)	35 (95)
	nodular		0 (0)	0 (0)	0 (0)	2 (5)
	adhesion		0 (0)	0 (0)	0 (0)	1 (3)
pancreas	nodule		0 (0)	0 (0)	0 (0)	2 (5)

Organ	Findings	Group Name NO. of Animals	Control 27 (%)	5000 ppm 23 (%)	10000 ppm 20 (%)	20000 ppm 37 (%)
kidney	enlarged		2 (7)	0 (0)	1 (5)	0 (0)
	white zone		0 (0)	0 (0)	1 (5)	0 (0)
	nodule		0 (0)	0 (0)	0 (0)	1 (3)
	hydronephrosis		0 (0)	2 (9)	3 (15)	0 (0)
urin bladd	urine:marked retention		0 (0)	0 (0)	1 (5)	0 (0)
pituitary	enlarged		0 (0)	1 (4)	0 (0)	0 (0)
	cyst		1 (4)	0 (0)	0 (0)	0 (0)
ovary	enlarged		3 (11)	7 (30)	5 (25)	4 (11)
	cyst		3 (11)	2 (9)	0 (0)	0 (0)
uterus	enlarged		0 (0)	0 (0)	1 (5)	0 (0)
	nodule		10 (37)	11 (48)	7 (35)	7 (19)
brain	red zone		0 (0)	1 (4)	1 (5)	0 (0)
Harder gl	enlarged		1 (4)	1 (4)	0 (0)	0 (0)
	nodule		0 (0)	0 (0)	1 (5)	1 (3)
mediastinum	mass		2 (7)	4 (17)	0 (0)	0 (0)
peritoneum	nodule		0 (0)	0 (0)	0 (0)	1 (3)
	mass		1 (4)	0 (0)	0 (0)	0 (0)
	thick		0 (0)	1 (4)	0 (0)	0 (0)
retroperit	nodule		1 (4)	0 (0)	0 (0)	0 (0)
abdominal c	hemorrhage		0 (0)	0 (0)	2 (10)	8 (22)
	ascites		5 (19)	5 (22)	4 (20)	4 (11)
thoracic ca	pleural fluid		4 (15)	9 (39)	5 (25)	3 (8)

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

Organ	Findings	Group Name / NO. of Animals	Control 27	(%)	5000 ppm 23	(%)	10000 ppm 20	(%)	20000 ppm 37	(%)
other	hindlimb:nodule		1	(4)	0	(0)	0	(0)	1	(3)

APPENDIX I 1

ORGAN WEIGHT, ABSOLUTE : SUMMARY, MOUSE : MALE

(2-YEAR STUDY)

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE
UNIT: g

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

Group Name	NO. of Animals	Body Weight	ADRENALS	TESTES	HEART	LUNGS	KIDNEYS
Control	36	45.8± 8.0	0.012± 0.003	0.218± 0.026	0.232± 0.042	0.257± 0.104	0.649± 0.360
5000 ppm	35	45.2± 7.5	0.010± 0.002*	0.219± 0.028	0.225± 0.025	0.265± 0.087	0.605± 0.163
10000 ppm	27	34.7± 4.7**	0.010± 0.002**	0.203± 0.041	0.196± 0.020**	0.252± 0.047	0.542± 0.044**
20000 ppm	16	27.3± 2.8**	0.009± 0.002*	0.202± 0.027	0.167± 0.013**	0.227± 0.025	0.457± 0.068**

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

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE
UNIT: g

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

Group Name	NO. of Animals	SPLEEN		LIVER		BRAIN	
Control	36	0.161±	0.399	2.001±	0.931	0.446±	0.016
5000 ppm	35	0.243±	0.489	2.248±	0.653*	0.450±	0.016
10000 ppm	27	0.103±	0.127	2.607±	2.501	0.451±	0.020
20000 ppm	16	0.142±	0.118	5.750±	2.701**	0.435±	0.015

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

APPENDIX I 2

ORGAN WEIGHT, ABSOLUTE : SUMMARY, MOUSE : FEMALE

(2-YEAR STUDY)

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE
UNIT: g

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

Group Name	NO. of Animals	Body Weight	ADRENALS	OVARIES	HEART	LUNGS	KIDNEYS
Control	23	35.8± 6.2	0.013± 0.002	0.060± 0.069	0.173± 0.031	0.218± 0.070	0.410± 0.043
5000 ppm	27	32.6± 5.1	0.012± 0.002	0.266± 1.027	0.174± 0.033	0.230± 0.028*	0.617± 1.011
10000 ppm	30	27.3± 5.3**	0.011± 0.002**	0.043± 0.040	0.152± 0.016*	0.253± 0.151	0.490± 0.524
20000 ppm	13	25.2± 4.1**	0.010± 0.002**	0.088± 0.216	0.145± 0.025**	0.210± 0.043	0.373± 0.082**

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

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE
UNIT: g

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

Group Name	NO. of Animals	SPLEEN		LIVER		BRAIN	
Control	23	0.202±	0.196	1.499±	0.341	0.463±	0.014
5000 ppm	27	0.197±	0.244	1.567±	0.413	0.466±	0.018
10000 ppm	30	0.283±	0.631	2.645±	0.954**	0.458±	0.020
20000 ppm	13	0.214±	0.221	6.056±	4.245**	0.436±	0.021**

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

APPENDIX J 1

ORGAN WEIGHT, RELATIVE : SUMMARY, MOUSE : MALE

(2-YEAR STUDY)

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE
UNIT: %

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

Group Name	NO. of Animals	Body Weight (g)	ADRENALS	TESTES	HEART	LUNGS	KIDNEYS
Control	36	45.8± 8.0	0.026± 0.009	0.492± 0.111	0.532± 0.207	0.590± 0.299	1.463± 0.874
5000 ppm	35	45.2± 7.5	0.023± 0.006	0.498± 0.099	0.513± 0.112	0.597± 0.177	1.385± 0.524
10000 ppm	27	34.7± 4.7**	0.029± 0.008	0.590± 0.126**	0.573± 0.081*	0.742± 0.188**	1.580± 0.168**
20000 ppm	16	27.3± 2.8**	0.035± 0.007**	0.743± 0.101**	0.617± 0.063**	0.839± 0.120**	1.676± 0.187**

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

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE
UNIT: %

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

Group Name	NO. of Animals	SPLEEN	LIVER	BRAIN
Control	36	0.375± 0.933	4.529± 2.425	1.010± 0.224
5000 ppm	35	0.575± 1.141	5.251± 2.298	1.024± 0.178
10000 ppm	27	0.301± 0.357	7.575± 7.066**	1.324± 0.176**
20000 ppm	16	0.525± 0.454**	20.673± 7.440**	1.607± 0.126**

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

APPENDIX J 2

ORGAN WEIGHT, RELATIVE : SUMMARY, MOUSE : FEMALE

(2-YEAR STUDY)

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE
UNIT: %

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

Group Name	NO. of Animals	Body Weight (g)	ADRENALS	OVARIES	HEART	LUNGS	KIDNEYS
Control	23	35.8± 6.2	0.036± 0.007	0.167± 0.188	0.493± 0.102	0.642± 0.314	1.170± 0.190
5000 ppm	27	32.6± 5.1	0.039± 0.010	0.956± 3.824	0.541± 0.094	0.718± 0.103*	1.875± 2.845*
10000 ppm	30	27.3± 5.3**	0.041± 0.007	0.160± 0.146	0.570± 0.086**	0.963± 0.702**	1.885± 2.336**
20000 ppm	13	25.2± 4.1**	0.039± 0.009	0.373± 0.925	0.580± 0.061*	0.850± 0.206**	1.478± 0.160**

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

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE
UNIT: %

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

Group Name	NO. of Animals	SPLEEN	LIVER	BRAIN
Control	23	0.600± 0.683	4.268± 1.135	1.330± 0.237
5000 ppm	27	0.607± 0.732	4.867± 1.219	1.467± 0.245
10000 ppm	30	1.017± 2.225	9.909± 3.902**	1.713± 0.204**
20000 ppm	13	0.792± 0.720	22.727±10.532**	1.775± 0.283**

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

APPENDIX K 1

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS : SUMMARY

MOUSE : MALE : ALL ANIMALS

(2-YEAR STUDY)

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

Organ	Findings	Group Name	Control				5000 ppm				10000 ppm				20000 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			<50>				<50>				<50>				<50>			
	inflammation		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia:epidermis		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)
subcutis			<50>				<50>				<50>				<50>			
	inflammation		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	xanthogranuloma		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
{Respiratory system}																		
nasal cavit			<50>				<50>				<50>				<50>			
	mineralization		3	0	0	0	6	0	0	0	5	0	0	0	1	0	0	0
			(6)	(0)	(0)	(0)	(12)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	eosinophilic change:olfactory epithelium		10	1	0	0	15	1	1	0	14	2	0	0	17	0	0	0
			(20)	(2)	(0)	(0)	(30)	(2)	(2)	(0)	(28)	(4)	(0)	(0)	(34)	(0)	(0)	(0)

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

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 50 1 (%)	Control 50 2 (%)	Control 50 3 (%)	Control 50 4 (%)	5000 ppm 50 1 (%)	5000 ppm 50 2 (%)	5000 ppm 50 3 (%)	5000 ppm 50 4 (%)	10000 ppm 50 1 (%)	10000 ppm 50 2 (%)	10000 ppm 50 3 (%)	10000 ppm 50 4 (%)	20000 ppm 50 1 (%)	20000 ppm 50 2 (%)	20000 ppm 50 3 (%)	20000 ppm 50 4 (%)
{Respiratory system}																		
nasal cavit			<50>				<50>				<50>				<50>			
	eosinophilic change:respiratory epithelium		12 (24)	1 (2)	0 (0)	0 (0)	20 (40)	4 (8)	0 (0)	0 (0)	19 (38)	7 (14)	0 (0)	0 * (0)	29 (58)	10 (20)	0 (0)	0 ** (0)
	inflammation:foreign body		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
	respiratory metaplasia:olfactory epithelium		6 (12)	0 (0)	0 (0)	0 (0)	10 (20)	0 (0)	0 (0)	0 (0)	4 (8)	0 (0)	0 (0)	0 (0)	4 (8)	0 (0)	0 (0)	0 (0)
	respiratory metaplasia:gland		9 (18)	0 (0)	0 (0)	0 (0)	6 (12)	1 (2)	0 (0)	0 (0)	8 (16)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)
	atrophy:olfactory epithelium		0 (0)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)	3 (6)	3 (6)	0 (0)	0 * (0)	1 (2)	0 (0)	0 (0)	0 (0)
	necrosis:olfactory 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)
lung			<50>				<50>				<50>				<50>			
	hemorrhage		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)	0 (0)	0 (0)	0 (0)
	interstitial pneumonia		1 (2)	1 (2)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

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

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 50 1 (%)	Control 50 2 (%)	Control 50 3 (%)	Control 50 4 (%)	5000 ppm 50 1 (%)	5000 ppm 50 2 (%)	5000 ppm 50 3 (%)	5000 ppm 50 4 (%)	10000 ppm 50 1 (%)	10000 ppm 50 2 (%)	10000 ppm 50 3 (%)	10000 ppm 50 4 (%)	20000 ppm 50 1 (%)	20000 ppm 50 2 (%)	20000 ppm 50 3 (%)	20000 ppm 50 4 (%)
{Respiratory system}																		
lung		<50>																
	bronchopneumonia		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)	0 (0)	0 (0)	0 (0)
	bronchiolar-alveolar cell hyperplasia		3 (6)	0 (0)	0 (0)	0 (0)	44 (88)	3 (6)	0 (0)	0 ** (0)	40 (80)	2 (4)	0 (0)	0 ** (0)	36 (72)	5 (10)	0 (0)	0 ** (0)
{Hematopoietic system}																		
bone marrow		<50>																
	erythropoiesis:increased		0 (0)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)	6 (12)	0 (0)	0 (0)	0 * (0)	14 (28)	0 (0)	0 (0)	0 ** (0)
	granulopoiesis:increased		3 (6)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
lymph node		<50>																
	follicular hyperplasia		1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
spleen		<50>																
	atrophy		2 (4)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	5 (10)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)

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

Organ	Findings	Group Name	Control				5000 ppm				10000 ppm				20000 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}																		
spleen			<50>				<50>				<50>				<50>			
	deposit of hemosiderin		0	0	0	0	0	0	0	0	8	0	0	0 **	13	1	0	0 **
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(16)	(0)	(0)	(0)	(26)	(2)	(0)	(0)
	deposit of melanin		1	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(0)	(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)	(0)
	extramedullary hematopoiesis		9	4	3	0	4	6	6	0	4	4	5	0	5	6	19	2 **
			(18)	(8)	(6)	(0)	(8)	(12)	(12)	(0)	(8)	(8)	(10)	(0)	(10)	(12)	(38)	(4)
	follicular hyperplasia		3	0	0	0	4	1	0	0	1	0	0	0	0	0	0	0
			(6)	(0)	(0)	(0)	(8)	(2)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Circulatory system}																		
heart			<50>				<50>				<50>				<50>			
	thrombus		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)	(0)	(0)	(0)
	necrosis:focal		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)

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

Organ	Findings	Group Name	Control				5000 ppm				10000 ppm				20000 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
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Circulatory system}																		
heart			<50>				<50>				<50>				<50>			
	mineralization		4	0	0	0	5	0	0	0	5	0	0	0	7	1	0	0
			(8)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(14)	(2)	(0)	(0)
	inflammatory cell nest		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)
	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		2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Digestive system}																		
tooth			<50>				<50>				<50>				<50>			
	dysplasia		8	10	8	0	26	11	2	0 **	18	13	6	0	23	5	1	0 **
			(16)	(20)	(16)	(0)	(52)	(22)	(4)	(0)	(36)	(26)	(12)	(0)	(46)	(10)	(2)	(0)
	odontogenic cyst		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)
tongue			<50>				<50>				<50>				<50>			
	arteritis		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)

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

Organ	Findings	Group Name	Control				5000 ppm				10000 ppm				20000 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>			
	hyperplasia:forestomach		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)
	erosion:glandular stomach		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)	(0)
	hyperplasia:glandular stomach		35	4	0	0	39	5	0	0	33	4	0	0	32	7	0	0
			(70)	(8)	(0)	(0)	(78)	(10)	(0)	(0)	(66)	(8)	(0)	(0)	(64)	(14)	(0)	(0)
liver			<50>				<50>				<50>				<50>			
	angiectasis		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)
	thrombus		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)
	necrosis:central		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)	(8)	(0)	(0)
	necrosis:focal		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)
	necrosis:single cell		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)

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

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 50 1 (%)	Control 50 2 (%)	Control 50 3 (%)	Control 50 4 (%)	5000 ppm 50 1 (%)	5000 ppm 50 2 (%)	5000 ppm 50 3 (%)	5000 ppm 50 4 (%)	10000 ppm 50 1 (%)	10000 ppm 50 2 (%)	10000 ppm 50 3 (%)	10000 ppm 50 4 (%)	20000 ppm 50 1 (%)	20000 pm 50 2 (%)	20000 ppm 50 3 (%)	20000 ppm 50 4 (%)
{Digestive system}																		
liver			<50>				<50>				<50>				<50>			
	fatty change		1 (2)	2 (4)	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)
	fatty change:central		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)
	granulation		13 (26)	0 (0)	0 (0)	0 (0)	15 (30)	0 (0)	0 (0)	0 (0)	6 (12)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0) **
	extramedullary hematopoiesis		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	5 (10)	0 (0)	0 (0)	0 (0)
	clear cell focus		0 (0)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	acidophilic cell focus		5 (10)	2 (4)	0 (0)	0 (0)	5 (10)	2 (4)	1 (2)	0 (0)	3 (6)	3 (6)	0 (0)	0 (0)	9 (18)	4 (8)	0 (0)	0 (0)
	basophilic cell focus		1 (2)	1 (2)	0 (0)	0 (0)	4 (8)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	vacuolated cell focus		1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

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

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 50				5000 ppm 50				10000 ppm 50				20000 ppm 50			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Digestive system}																		
liver	hepatocellular hypertrophy:central		<50>				<50>				<50>				<50>			
			0	0	0	0	0	15	0	0 **	0	34	1	0 **	0	35	0	0 **
			(0)	(0)	(0)	(0)	(0)	(30)	(0)	(0)	(0)	(68)	(2)	(0)	(0)	(70)	(0)	(0)
	nuclear atypia:central		0	0	0	0	0	0	0	0	11	2	0	0 **	17	21	0	0 **
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(22)	(4)	(0)	(0)	(34)	(42)	(0)	(0)
gall bladd	hyperplasia		<49>				<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)
pancreas	islet cell hyperplasia		<50>				<50>				<50>				<50>			
			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)
{Urinary system}																		
kidney	cyst		<50>				<50>				<50>				<50>			
			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)
	hyaline droplet		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)

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

Organ	Findings	Group Name	Control				5000 ppm				10000 ppm				20000 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>			
	basophilic change		16	1	0	0	20	0	0	0	14	0	0	0	1	0	0	0 **
			(32)	(2)	(0)	(0)	(40)	(0)	(0)	(0)	(28)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	deposit of hemosiderin		0	0	0	0	1	2	1	0	0	2	7	0 **	2	4	17	2 **
			(0)	(0)	(0)	(0)	(2)	(4)	(2)	(0)	(0)	(4)	(14)	(0)	(4)	(8)	(34)	(4)
	lymphocytic infiltration		5	0	1	0	7	0	0	0	3	0	0	0	2	0	0	0
			(10)	(0)	(2)	(0)	(14)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(4)	(0)	(0)	(0)
	inflammatory polyp		0	1	1	0	1	0	1	0	0	1	0	0	0	0	0	0
			(0)	(2)	(2)	(0)	(2)	(0)	(2)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)
	hydronephrosis		0	0	3	1	1	0	3	0	0	1	0	2	0	0	2	0
			(0)	(0)	(6)	(2)	(2)	(0)	(6)	(0)	(0)	(2)	(0)	(4)	(0)	(0)	(4)	(0)
	mineralization:papilla		0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
urin bladd			<49>				<50>				<50>				<50>			
	inflammation		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)
	lymphocytic infiltration		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

Organ	Findings	Group Name	Control				5000 ppm				10000 ppm				20000 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}																		
urethra			<50>				<50>				<50>				<50>			
	inflammation		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)	(2)	(0)
{Endocrine system}																		
pituitary			<50>				<50>				<50>				<49>			
	angiectasis		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)
	cyst		6	0	0	0	3	0	0	0	3	0	0	0	4	0	0	0
			(12)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(8)	(0)	(0)	(0)
	hyperplasia		3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0
			(6)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	Rathke pouch		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)
thyroid			<50>				<49>				<50>				<50>			
	focal follicular cell hyperplasia		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)

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

Organ	Findings	Group Name	Control				5000 ppm				10000 ppm				20000 ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
{Endocrine system}																		
adrenal			<50>				<49>				<50>				<50>			
	spindle-cell hyperplasia		24	7	0	0	29	8	0	0	25	8	0	0	27	1	0	0
			(48)	(14)	(0)	(0)	(59)	(16)	(0)	(0)	(50)	(16)	(0)	(0)	(54)	(2)	(0)	(0)
	hyperplasia:cortical cell		2	0	0	0	3	0	0	0	2	0	0	0	1	0	0	0
			(4)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	focal hypertrophy:cortex		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)
{Reproductive system}																		
testis			<50>				<50>				<50>				<50>			
	mineralization		27	18	2	0	32	9	4	0	23	3	0	0 **	5	0	0	0 **
			(54)	(36)	(4)	(0)	(64)	(18)	(8)	(0)	(46)	(6)	(0)	(0)	(10)	(0)	(0)	(0)
epididymis			<50>				<50>				<49>				<50>			
	spermatogenic granuloma		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)	(0)
	xanthogranuloma		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)

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

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 50				5000 ppm 50				10000 ppm 50				20000 ppm 50			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Reproductive system}																		
semin ves	hemorrhage		<50>				<50>				<50>				<50>			
			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)	0 (0)	0 (0)
	inflammation		0 (0)	0 (0)	1 (2)	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)
prostate	inflammation		<50>				<50>				<50>				<50>			
			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)
prep/cli gl	duct ectasia		<49>				<50>				<50>				<50>			
			0 (0)	4 (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)
{Nervous system}																		
brain	mineralization		<50>				<50>				<50>				<50>			
			24 (48)	0 (0)	0 (0)	0 (0)	20 (40)	0 (0)	0 (0)	0 (0)	21 (42)	0 (0)	0 (0)	0 (0)	25 (50)	0 (0)	0 (0)	0 (0)
{Special sense organs/appendage}																		
Harder gl	lymphocytic infiltration		<50>				<50>				<50>				<50>			
			0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)

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

Organ	Findings	Group Name	Control				5000 ppm				10000 ppm				20000 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
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Special sense organs/appendage}																		
Harder gl			<50>				<50>				<50>				<50>			
	hyperplasia		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)	(0)
{Musculoskeletal system}																		
muscle			<50>				<50>				<50>				<50>			
	mineralization		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(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

APPENDIX K 2

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS : SUMMARY

MOUSE : FEMALE : ALL ANIMALS

(2-YEAR STUDY)

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 50 1 (%)	Control 50 2 (%)	Control 50 3 (%)	Control 50 4 (%)	5000 ppm 50 1 (%)	5000 ppm 50 2 (%)	5000 ppm 50 3 (%)	5000 ppm 50 4 (%)	10000 ppm 50 1 (%)	10000 ppm 50 2 (%)	10000 ppm 50 3 (%)	10000 ppm 50 4 (%)	20000 ppm 50 1 (%)	20000 ppm 50 2 (%)	20000 ppm 50 3 (%)	20000 ppm 50 4 (%)
{Integumentary system/appandage}																		
skin/app		<50>																
	inflammation		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)
	scab		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)
subcutis		<50>																
	inflammation		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)
{Respiratory system}																		
nasal cavit		<50>																
	mineralization		0 (0)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
	eosinophilic change:olfactory epithelium		4 (8)	0 (0)	0 (0)	0 (0)	7 (14)	3 (6)	0 (0)	0 (0)	15 (30)	2 (4)	0 (0)	0 ** (0)	26 (52)	2 (4)	0 (0)	0 ** (0)
	eosinophilic change:respiratory epithelium		26 (52)	6 (12)	0 (0)	0 (0)	30 (60)	13 (26)	1 (2)	1 * (2)	29 (58)	13 (26)	0 (0)	0 * (0)	20 (40)	24 (48)	1 (2)	0 ** (0)

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

Organ	Findings	Group Name	Control				5000 ppm				10000 ppm				20000 ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
nasal cavit			<50>				<50>				<50>				<50>			
	respiratory metaplasia:olfactory epithelium		3	0	0	0	3	0	0	0	4	0	0	0	1	0	0	0
			(6)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	respiratory metaplasia:gland		6	0	0	0	4	0	0	0	6	0	0	0	15	0	0	0 *
			(12)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(12)	(0)	(0)	(0)	(30)	(0)	(0)	(0)
	atrophy:olfactory epithelium		0	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)
nasopharynx			<50>				<50>				<50>				<50>			
	eosinophilic change:respiratory epithelium		3	0	0	0	5	0	3	1	7	3	1	0	11	0	0	0 *
			(6)	(0)	(0)	(0)	(10)	(0)	(6)	(2)	(14)	(6)	(2)	(0)	(22)	(0)	(0)	(0)
lung			<50>				<50>				<50>				<50>			
	hemorrhage		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)
	inflammatory infiltration		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)
	interstitial pneumonia		0	0	0	0	3	0	0	0	3	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(6)	(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 b : Number of animals with lesion
(c) c : b / a * 100
Significant difference : * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name	Control				5000 ppm				10000 ppm				20000 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>			
	bronchiolar-alveolar cell hyperplasia		0	0	0	0	40	2	0	0 **	40	0	0	0 **	41	2	0	0 **
			(0)	(0)	(0)	(0)	(80)	(4)	(0)	(0)	(80)	(0)	(0)	(0)	(82)	(4)	(0)	(0)
{Hematopoietic system}																		
bone marrow			<50>				<50>				<50>				<50>			
	myelofibrosis		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)
	erythropoiesis:increased		2	0	0	0	0	0	0	0	2	0	0	0	17	0	0	0 **
			(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(34)	(0)	(0)	(0)
	granulopoiesis:increased		1	0	0	0	3	0	0	0	2	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
spleen			<50>				<50>				<50>				<50>			
	deposit of hemosiderin		3	0	0	0	13	0	0	0 *	22	0	0	0 **	13	0	0	0 *
			(6)	(0)	(0)	(0)	(26)	(0)	(0)	(0)	(44)	(0)	(0)	(0)	(26)	(0)	(0)	(0)
	extramedullary hematopoiesis		5	6	9	0	8	1	4	0	11	5	3	1	9	3	29	0 **
			(10)	(12)	(18)	(0)	(16)	(2)	(8)	(0)	(22)	(10)	(6)	(2)	(18)	(6)	(58)	(0)

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

Organ	Findings	Group Name	Control				5000 ppm				10000 ppm				20000 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}																		
spleen			<50>				<50>				<50>				<50>			
	follicular hyperplasia		0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0
			(0)	(2)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Circulatory system}																		
heart			<50>				<50>				<50>				<50>			
	thrombus		0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(2)	(0)	(0)	(0)	(0)	(0)
	mineralization		4	0	0	0	3	0	0	0	6	1	0	0	13	1	0	0 *
			(8)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(12)	(2)	(0)	(0)	(26)	(2)	(0)	(0)
	arteritis		1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Digestive system}																		
tooth			<50>				<50>				<50>				<50>			
	inflammation		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)

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

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 50				5000 ppm 50				10000 ppm 50				20000 ppm 50			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Digestive system}																		
tooth			<50>				<50>				<50>				<50>			
	dysplasia		20 (40)	2 (4)	1 (2)	1 (2)	27 (54)	3 (6)	1 (2)	1 (2)	22 (44)	6 (12)	2 (4)	0 (0)	21 (42)	6 (12)	2 (4)	0 (0)
	odontogenic cyst		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)
tongue			<50>				<50>				<50>				<50>			
	arteritis		1 (2)	1 (2)	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)
stomach			<50>				<50>				<50>				<50>			
	erosion:glandular stomach		1 (2)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	hyperplasia:glandular stomach		44 (88)	1 (2)	0 (0)	0 (0)	37 (74)	2 (4)	0 (0)	0 (0)	39 (78)	1 (2)	0 (0)	0 (0)	40 (80)	0 (0)	0 (0)	0 (0)
liver			<50>				<50>				<50>				<50>			
	angiectasis		1 (2)	2 (4)	0 (0)	0 (0)	1 (2)	1 (2)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	necrosis:focal		1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

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

Organ	Findings	Group Name	Control				5000 ppm				10000 ppm				20000 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:central		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		1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(0)	(0)	(0)	(0)
	granulation		10	2	1	0	15	0	0	0	10	0	0	0	4	0	0	0
			(20)	(4)	(2)	(0)	(30)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(8)	(0)	(0)	(0)
	extramedullary hematopoiesis		0	0	0	0	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)
	clear cell focus		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)
	acidophilic cell focus		2	0	0	0	4	0	0	0	9	0	0	0	7	0	0	0
			(4)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(18)	(0)	(0)	(0)	(14)	(0)	(0)	(0)
	basophilic cell focus		1	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	vacuolated cell focus		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)

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

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 50				5000 ppm 50				10000 ppm 50				20000 ppm 50			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Digestive system}																		
liver			<50>				<50>				<50>				<50>			
	hepatocellular hypertrophy:central		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)	9 (18)	0 (0)	0 ** (0)
	nuclear atypia: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)	1 (2)	0 (0)	0 (0)	0 (0)
gall bladd			<50>				<50>				<50>				<50>			
	hyperplasia		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)
{Urinary system}																		
kidney			<50>				<50>				<50>				<50>			
	cyst		0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	hyaline droplet		1 (2)	0 (0)	6 (12)	3 (6)	1 (2)	1 (2)	6 (12)	3 (6)	1 (2)	1 (2)	5 (10)	2 (4)	0 (0)	0 (0)	5 (10)	1 (2)
	basophilic 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)	1 (2)	0 (0)	0 (0)	0 (0)

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

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 50 1 (%)	Control 50 2 (%)	Control 50 3 (%)	Control 50 4 (%)	5000 ppm 50 1 (%)	5000 ppm 50 2 (%)	5000 ppm 50 3 (%)	5000 ppm 50 4 (%)	10000 ppm 50 1 (%)	10000 ppm 50 2 (%)	10000 ppm 50 3 (%)	10000 ppm 50 4 (%)	20000 ppm 50 1 (%)	20000 ppm 50 2 (%)	20000 ppm 50 3 (%)	20000 ppm 50 4 (%)
{Urinary system}																		
kidney			<50>				<50>				<50>				<50>			
	deposit of hemosiderin		0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	1 (2)	1 (2)	2 (4)	0 (0)	0 (0)	5 (10)	24 (48)	5 ** (10)
	lymphocytic 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)
	inflammatory polyp		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	1 (2)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	extramedullary hematopoiesis		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)
	hydronephrosis		0 (0)	0 (0)	1 (2)	1 (2)	0 (0)	2 (4)	3 (6)	1 (2)	0 (0)	2 (4)	2 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	mineralization:papilla		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
urin bladd			<49>				<50>				<50>				<50>			
	lymphocytic infiltration		1 (2)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
{Endocrine system}																		
pituitary			<49>				<50>				<50>				<50>			
	angiectasis		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)

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

Organ	Findings	Group Name	Control				5000 ppm				10000 ppm				20000 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			<49>				<50>				<50>				<50>			
	hemorrhage		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)
	cyst		3	0	0	0	5	0	0	0	4	0	0	0	2	0	0	0
			(6)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(4)	(0)	(0)	(0)
	hyperplasia		4	2	0	0	3	1	0	0	4	0	0	0	2	1	0	0
			(8)	(4)	(0)	(0)	(6)	(2)	(0)	(0)	(8)	(0)	(0)	(0)	(4)	(2)	(0)	(0)
	Rathke pouch		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)
thyroid			<50>				<50>				<50>				<50>			
	focal follicular cell hyperplasia		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)
adrenal			<50>				<50>				<50>				<50>			
	spindle-cell hyperplasia		5	43	2	0	4	40	6	0	1	41	4	0	21	28	0	0 **
			(10)	(86)	(4)	(0)	(8)	(80)	(12)	(0)	(2)	(82)	(8)	(0)	(42)	(56)	(0)	(0)
	hyperplasia:cortical cell		2	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
			(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 50				5000 ppm 50				10000 ppm 50				20000 ppm 50			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Endocrine system}																		
adrenal			<50>				<50>				<50>				<50>			
	focal fatty change:cortex		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)	0 (0)	0 (0)	0 (0)
{Reproductive system}																		
ovary			<50>				<50>				<50>				<50>			
	thrombus		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)	3 (6)	0 (0)
	cyst		2 (4)	0 (0)	3 (6)	2 (4)	2 (4)	2 (4)	7 (14)	0 (0)	0 (0)	1 (2)	2 (4)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)
uterus			<50>				<50>				<50>				<50>			
	cystic endometrial hyperplasia		10 (20)	10 (20)	1 (2)	0 (0)	8 (16)	12 (24)	4 (8)	0 (0)	11 (22)	10 (20)	7 (14)	0 (0)	8 (16)	5 (10)	2 (4)	0 (0)
{Nervous system}																		
brain			<50>				<50>				<50>				<50>			
	mineralization		18 (36)	0 (0)	0 (0)	0 (0)	18 (36)	0 (0)	0 (0)	0 (0)	18 (36)	0 (0)	0 (0)	0 (0)	15 (30)	0 (0)	0 (0)	0 (0)

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

Organ	Findings	Group Name	Control				5000 ppm				10000 ppm				20000 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
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Nervous system}																		
brain			<50>				<50>				<50>				<50>			
	epidermal cyst		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)
{Special sense organs/appendage}																		
Harder gl			<50>				<50>				<50>				<50>			
	hyperplasia		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)	(0)
{Musculoskeletal system}																		
muscle			<50>				<50>				<50>				<50>			
	mineralization		0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(2)	(0)	(0)	(0)

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

APPENDIX K 3

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS : SUMMARY

MOUSE : MALE : SACRIFICED ANIMALS

(2-YEAR STUDY)

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 36				5000 ppm 35				10000 ppm 27				20000 ppm 16			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Integumentary system/appandage}																		
skin/app			<36>				<35>				<27>				<16>			
	inflammation		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)
	hyperplasia:epidermis		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)
{Respiratory system}																		
nasal cavit			<36>				<35>				<27>				<16>			
	mineralization		3 (8)	0 (0)	0 (0)	0 (0)	4 (11)	0 (0)	0 (0)	0 (0)	3 (11)	0 (0)	0 (0)	0 (0)	1 (6)	0 (0)	0 (0)	0 (0)
	eosinophilic change:olfactory epithelium		8 (22)	1 (3)	0 (0)	0 (0)	15 (43)	0 (0)	0 (0)	0 (0)	7 (26)	2 (7)	0 (0)	0 (0)	5 (31)	0 (0)	0 (0)	0 (0)
	eosinophilic change:respiratory epithelium		8 (22)	1 (3)	0 (0)	0 (0)	15 (43)	2 (6)	0 (0)	0 (0)	10 (37)	4 (15)	0 (0)	0 (0)	11 (69)	5 (31)	0 (0)	0 (0) **
	inflammation:foreign body		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (6)	0 (0)	0 (0)	0 (0)
	respiratory metaplasia:olfactory epithelium		4 (11)	0 (0)	0 (0)	0 (0)	8 (23)	0 (0)	0 (0)	0 (0)	2 (7)	0 (0)	0 (0)	0 (0)	2 (13)	0 (0)	0 (0)	0 (0)

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

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 36 1 (%)	Control 36 2 (%)	Control 36 3 (%)	Control 36 4 (%)	5000 ppm 35 1 (%)	5000 ppm 35 2 (%)	5000 ppm 35 3 (%)	5000 ppm 35 4 (%)	10000 ppm 27 1 (%)	10000 ppm 27 2 (%)	10000 ppm 27 3 (%)	10000 ppm 27 4 (%)	20000 ppm 16 1 (%)	20000 ppm 16 2 (%)	20000 ppm 16 3 (%)	20000 ppm 16 4 (%)
{Respiratory system}																		
nasal cavit			<36>				<35>				<27>				<16>			
	respiratory metaplasia:gland		6 (17)	0 (0)	0 (0)	0 (0)	3 (9)	1 (3)	0 (0)	0 (0)	3 (11)	0 (0)	0 (0)	0 (0)	2 (13)	0 (0)	0 (0)	0 (0)
	atrophy:olfactory epithelium		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (4)	2 (7)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	necrosis:olfactory epithelium		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)
lung			<36>				<35>				<27>				<16>			
	hemorrhage		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)
	interstitial pneumonia		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)
	bronchiolar-alveolar cell hyperplasia		3 (8)	0 (0)	0 (0)	0 (0)	32 (91)	3 (9)	0 (0)	0 (0) **	26 (96)	1 (4)	0 (0)	0 (0) **	13 (81)	2 (13)	0 (0)	0 (0) **
{Hematopoietic system}																		
bone marrow			<36>				<35>				<27>				<16>			
	erythropoiesis:increased		0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	3 (11)	0 (0)	0 (0)	0 (0)	4 (25)	0 (0)	0 (0)	0 (0) *

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

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 36				5000 ppm 35				10000 ppm 27				20000 ppm 16			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
(Hematopoietic system)																		
bone marrow		<a>	<36>				<35>				<27>				<16>			
	granulopoiesis:increased	b	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(c)	(6)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
lymph node		<a>	<36>				<35>				<27>				<16>			
	follicular hyperplasia	b	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(c)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
spleen		<a>	<36>				<35>				<27>				<16>			
	atrophy	b	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		(c)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	deposit of hemosiderin	b	0	0	0	0	0	0	0	0	7	0	0	0 **	5	0	0	0 **
		(c)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(26)	(0)	(0)	(0)	(31)	(0)	(0)	(0)
	deposit of melanin	b	1	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0
		(c)	(3)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(4)	(4)	(0)	(0)	(0)	(0)	(0)	(0)
	granulation	b	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
		(c)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)
	extramedullary hematopoiesis	b	7	1	1	0	2	3	0	0	1	1	1	0	5	1	3	0
		(c)	(19)	(3)	(3)	(0)	(6)	(9)	(0)	(0)	(4)	(4)	(4)	(0)	(31)	(6)	(19)	(0)

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

Organ	Findings	Group Name	Control				5000 ppm				10000 ppm				20000 ppm			
		No. of Animals on Study	36				35				27				16			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Hematopoietic system}																		
spleen			<36>				<35>				<27>				<16>			
	follicular hyperplasia		3	0	0	0	4	1	0	0	1	0	0	0	0	0	0	0
			(8)	(0)	(0)	(0)	(11)	(3)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Circulatory system}																		
heart			<36>				<35>				<27>				<16>			
	thrombus		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)	(0)
	necrosis:focal		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	mineralization		1	0	0	0	2	0	0	0	1	0	0	0	1	0	0	0
			(3)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
	arteritis		2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Digestive system}																		
tooth			<36>				<35>				<27>				<16>			
	dysplasia		6	8	6	0	20	10	1	0 **	11	11	2	0 **	11	0	1	0 **
			(17)	(22)	(17)	(0)	(57)	(29)	(3)	(0)	(41)	(41)	(7)	(0)	(69)	(0)	(6)	(0)

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

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 36				5000 ppm 35				10000 ppm 27				20000 ppm 16			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Digestive system}																		
tooth			<36>				<35>				<27>				<16>			
	odontogenic cyst		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)
tongue			<36>				<35>				<27>				<16>			
	arteritis		2 (6)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
stomach			<36>				<35>				<27>				<16>			
	hyperplasia:forestomach		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)
	erosion:glandular stomach		0 (0)	0 (0)	0 (0)	0 (0)	2 (6)	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		29 (81)	4 (11)	0 (0)	0 (0)	27 (77)	5 (14)	0 (0)	0 (0)	20 (74)	3 (11)	0 (0)	0 (0)	11 (69)	3 (19)	0 (0)	0 (0)
liver			<36>				<35>				<27>				<16>			
	angiectasis		2 (6)	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)
	thrombus		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)

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

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 36 1 (%)	Control 36 2 (%)	Control 36 3 (%)	Control 36 4 (%)	5000 ppm 35 1 (%)	5000 ppm 35 2 (%)	5000 ppm 35 3 (%)	5000 ppm 35 4 (%)	10000 ppm 27 1 (%)	10000 ppm 27 2 (%)	10000 ppm 27 3 (%)	10000 ppm 27 4 (%)	20000 ppm 16 1 (%)	20000 ppm 16 2 (%)	20000 ppm 16 3 (%)	20000 ppm 16 4 (%)
{Digestive system}																		
liver			<36>				<35>				<27>				<16>			
	necrosis:central		0 (0)	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)
	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)
	fatty change:central		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)
	granulation		13 (36)	0 (0)	0 (0)	0 (0)	15 (43)	0 (0)	0 (0)	0 (0)	6 (22)	1 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 * (0)
	extramedullary hematopoiesis		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (4)	0 (0)	0 (0)	0 (0)	2 (13)	0 (0)	0 (0)	0 (0)
	clear cell focus		0 (0)	0 (0)	0 (0)	0 (0)	2 (6)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	acidophilic cell focus		5 (14)	2 (6)	0 (0)	0 (0)	5 (14)	1 (3)	0 (0)	0 (0)	2 (7)	2 (7)	0 (0)	0 (0)	5 (31)	2 (13)	0 (0)	0 (0)
	basophilic cell focus		1 (3)	1 (3)	0 (0)	0 (0)	3 (9)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

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

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 36 1 (%)	Control 36 2 (%)	Control 36 3 (%)	Control 36 4 (%)	5000 ppm 35 1 (%)	5000 ppm 35 2 (%)	5000 ppm 35 3 (%)	5000 ppm 35 4 (%)	10000 ppm 27 1 (%)	10000 ppm 27 2 (%)	10000 ppm 27 3 (%)	10000 ppm 27 4 (%)	20000 ppm 16 1 (%)	20000 ppm 16 2 (%)	20000 ppm 16 3 (%)	20000 ppm 16 4 (%)
{Digestive system}																		
liver			<36>				<35>				<27>				<16>			
	vacuolated cell focus		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)
	hepatocellular hypertrophy:central		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	14 (40)	0 (0)	0 (0) **	0 (0)	22 (81)	0 (0)	0 (0) **	0 (0)	13 (81)	0 (0)	0 (0) **
	nuclear atypia:central		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	8 (30)	0 (0)	0 (0)	0 (0) **	8 (50)	6 (38)	0 (0)	0 (0) **
gall bladd			<36>				<35>				<27>				<16>			
	hyperplasia		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)
pancreas			<36>				<35>				<27>				<16>			
	islet cell hyperplasia		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)
{Urinary system}																		
kidney			<36>				<35>				<27>				<16>			
	basophilic change		16 (44)	1 (3)	0 (0)	0 (0)	20 (57)	0 (0)	0 (0)	0 (0)	12 (44)	0 (0)	0 (0)	0 (0)	1 (6)	0 (0)	0 (0)	0 (0) *

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

Organ	Findings	Group Name	Control				5000 ppm				10000 ppm				20000 ppm			
		No. of Animals on Study	36				35				27				16			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																		
kidney			<36>				<35>				<27>				<16>			
	deposit of hemosiderin		0	0	0	0	1	0	1	0	0	0	2	0	0	1	4	1 **
			(0)	(0)	(0)	(0)	(3)	(0)	(3)	(0)	(0)	(0)	(7)	(0)	(0)	(6)	(25)	(6)
	lymphocytic infiltration		5	0	1	0	6	0	0	0	3	0	0	0	2	0	0	0
			(14)	(0)	(3)	(0)	(17)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(13)	(0)	(0)	(0)
	inflammatory polyp		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)
	hydronephrosis		0	0	2	0	0	0	1	0	0	0	0	0	0	0	1	0
			(0)	(0)	(6)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(0)
	mineralization:papilla		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)	(6)	(0)	(0)	(0)
urin bladd			<36>				<35>				<27>				<16>			
	inflammation		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)	(0)
	lymphocytic infiltration		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Endocrine system}																		
pituitary			<36>				<35>				<27>				<16>			
	cyst		5	0	0	0	3	0	0	0	1	0	0	0	1	0	0	0
			(14)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(6)	(0)	(0)	(0)

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

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 36				5000 ppm 35				10000 ppm 27				20000 ppm 16			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Endocrine system}																		
pituitary			<36>				<35>				<27>				<16>			
	hyperplasia		2 (6)	0 (0)	0 (0)	0 (0)	2 (6)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	Rathke pouch		2 (6)	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)
thyroid			<36>				<35>				<27>				<16>			
	focal follicular cell hyperplasia		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)
adrenal			<36>				<34>				<27>				<16>			
	spindle-cell hyperplasia		18 (50)	7 (19)	0 (0)	0 (0)	19 (56)	8 (24)	0 (0)	0 (0)	14 (52)	7 (26)	0 (0)	0 (0)	11 (69)	1 (6)	0 (0)	0 (0)
	hyperplasia:cortical cell		2 (6)	0 (0)	0 (0)	0 (0)	2 (6)	0 (0)	0 (0)	0 (0)	2 (7)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	focal hypertrophy: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)
{Reproductive system}																		
testis			<36>				<35>				<27>				<16>			
	mineralization		18 (50)	16 (44)	1 (3)	0 (0)	22 (63)	6 (17)	4 (11)	0 (0)	15 (56)	2 (7)	0 (0)	0 (0) **	1 (6)	0 (0)	0 (0)	0 (0) **

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

Organ	Findings	Group Name	Control				5000 ppm				10000 ppm				20000 ppm			
		No. of Animals on Study	36				35				27				16			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Reproductive system}																		
epididymis			<36>				<35>				<27>				<16>			
	spermatogenic granuloma		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)
	xanthogranuloma		1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
			(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
semin ves			<36>				<35>				<27>				<16>			
	hemorrhage		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		0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(3)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
prep/cli gl			<35>				<35>				<27>				<16>			
	duct ectasia		0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(11)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Nervous system}																		
brain			<36>				<35>				<27>				<16>			
	mineralization		17	0	0	0	14	0	0	0	13	0	0	0	7	0	0	0
			(47)	(0)	(0)	(0)	(40)	(0)	(0)	(0)	(48)	(0)	(0)	(0)	(44)	(0)	(0)	(0)

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

Organ	Findings	Group Name	Control				5000 ppm				10000 ppm				20000 ppm			
		No. of Animals on Study	36				35				27				16			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Special sense organs/appendage}																		
Harder gl			<36>				<35>				<27>				<16>			
	lymphocytic infiltration		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)
	hyperplasia		1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
			(3)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

APPENDIX K 4

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS : SUMMARY

MOUSE : FEMALE : SACRIFICED ANIMALS

(2-YEAR STUDY)

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 23				5000 ppm 27				10000 ppm 30				20000 ppm 13			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Integumentary system/appandage}																		
skin/app		<a>	<23>				<27>				<30>				<13>			
	inflammation		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
		b	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
		(c)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	scab		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Respiratory system}																		
nasal cavit			<23>				<27>				<30>				<13>			
	mineralization		0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	eosinophilic change:olfactory epithelium		2	0	0	0	6	0	0	0	10	1	0	0	7	1	0	0 **
			(9)	(0)	(0)	(0)	(22)	(0)	(0)	(0)	(33)	(3)	(0)	(0)	(54)	(8)	(0)	(0)
	eosinophilic change:respiratory epithelium		12	2	0	0	17	7	1	0 *	18	11	0	0 **	4	9	0	0 **
			(52)	(9)	(0)	(0)	(63)	(26)	(4)	(0)	(60)	(37)	(0)	(0)	(31)	(69)	(0)	(0)
	respiratory metaplasia:olfactory epithelium		1	0	0	0	2	0	0	0	4	0	0	0	0	0	0	0
			(4)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	respiratory metaplasia:gland		4	0	0	0	2	0	0	0	3	0	0	0	5	0	0	0
			(17)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(38)	(0)	(0)	(0)

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

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 23				5000 ppm 27				10000 ppm 30				20000 ppm 13			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Respiratory system}																		
nasal cavit			<23>				<27>				<30>				<13>			
	atrophy:olfactory epithelium		0	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(4)	(4)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)
nasopharynx			<23>				<27>				<30>				<13>			
	eosinophilic change:respiratory epithelium		1	0	0	0	2	0	2	0	3	1	1	0	4	0	0	0
			(4)	(0)	(0)	(0)	(7)	(0)	(7)	(0)	(10)	(3)	(3)	(0)	(31)	(0)	(0)	(0)
lung			<23>				<27>				<30>				<13>			
	inflammatory infiltration		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)	(0)	(0)
	interstitial pneumonia		0	0	0	0	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)
	bronchiolar-alveolar cell hyperplasia		0	0	0	0	25	2	0	0 **	28	0	0	0 **	12	0	0	0 **
			(0)	(0)	(0)	(0)	(93)	(7)	(0)	(0)	(93)	(0)	(0)	(0)	(92)	(0)	(0)	(0)
{Hematopoietic system}																		
bone marrow			<23>				<27>				<30>				<13>			
	myelofibrosis		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 23				5000 ppm 27				10000 ppm 30				20000 ppm 13			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Hematopoietic system}																		
bone marrow			<23>				<27>				<30>				<13>			
	erythropoiesis:increased		1 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	3 (23)	0 (0)	0 (0)	0 (0)
	granulopoiesis:increased		0 (0)	0 (0)	0 (0)	0 (0)	2 (7)	0 (0)	0 (0)	0 (0)	2 (7)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
spleen			<23>				<27>				<30>				<13>			
	deposit of hemosiderin		3 (13)	0 (0)	0 (0)	0 (0)	12 (44)	0 (0)	0 (0)	0 * (0)	20 (67)	0 (0)	0 (0)	0 ** (0)	9 (69)	0 (0)	0 (0)	0 ** (0)
	extramedullary hematopoiesis		5 (22)	1 (4)	0 (0)	0 (0)	5 (19)	1 (4)	1 (4)	0 (0)	9 (30)	2 (7)	0 (0)	0 (0)	6 (46)	1 (8)	3 (23)	0 * (0)
	follicular hyperplasia		0 (0)	1 (4)	0 (0)	0 (0)	2 (7)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
{Circulatory system}																		
heart			<23>				<27>				<30>				<13>			
	mineralization		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	3 (23)	0 (0)	0 (0)	0 (0)

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

Organ	Findings	Group Name	Control				5000 ppm				10000 ppm				20000 ppm			
		No. of Animals on Study	23				27				30				13			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Circulatory system}																		
heart			<23>				<27>				<30>				<13>			
	arteritis		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Digestive system}																		
tooth			<23>				<27>				<30>				<13>			
	inflammation		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)	(0)	(0)	(0)	(0)	(0)
	dysplasia		12	1	0	0	16	3	0	1	14	6	2	0	6	2	0	0
			(52)	(4)	(0)	(0)	(59)	(11)	(0)	(4)	(47)	(20)	(7)	(0)	(46)	(15)	(0)	(0)
	odontogenic cyst		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)	(0)
tongue			<23>				<27>				<30>				<13>			
	arteritis		1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
stomach			<23>				<27>				<30>				<13>			
	erosion:glandular stomach		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)	(0)	(0)	(0)	(0)	(0)

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

Organ	Findings	Group Name	Control				5000 ppm				10000 ppm				20000 ppm			
		No. of Animals on Study	23				27				30				13			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
stomach			<23>				<27>				<30>				<13>			
	hyperplasia:glandular stomach		22	1	0	0	23	2	0	0	27	1	0	0	13	0	0	0
			(96)	(4)	(0)	(0)	(85)	(7)	(0)	(0)	(90)	(3)	(0)	(0)	(100)	(0)	(0)	(0)
liver			<23>				<27>				<30>				<13>			
	angiectasis		1	2	0	0	1	0	0	0	0	1	0	0	0	0	0	0
			(4)	(9)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)
	inflammatory infiltration		0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(3)	(0)	(0)	(0)	(0)	(0)	(0)
	granulation		10	2	1	0	15	0	0	0	10	0	0	0	4	0	0	0
			(43)	(9)	(4)	(0)	(56)	(0)	(0)	(0)	(33)	(0)	(0)	(0)	(31)	(0)	(0)	(0)
	acidophilic cell focus		1	0	0	0	4	0	0	0	8	0	0	0	3	0	0	0
			(4)	(0)	(0)	(0)	(15)	(0)	(0)	(0)	(27)	(0)	(0)	(0)	(23)	(0)	(0)	(0)
	basophilic cell focus		1	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0
			(4)	(0)	(0)	(0)	(4)	(4)	(0)	(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hepatocellular hypertrophy:central		0	0	0	0	0	0	0	0	0	1	0	0	0	5	0	0 **
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(38)	(0)	(0)
gall bladd			<23>				<27>				<30>				<13>			
	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)

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

Organ	Findings	Group Name	Control				5000 ppm				10000 ppm				20000 ppm			
		No. of Animals on Study	23				27				30				13			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Urinary system)																		
kidney			<23>				<27>				<30>				<13>			
	cyst		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)	(0)	(0)	(0)	(0)	(0)
	hyaline droplet		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)	(0)	(0)
	deposit of hemosiderin		0	0	0	0	0	0	0	0	0	1	1	0	0	2	2	1 *
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(3)	(0)	(0)	(15)	(15)	(8)
	lymphocytic infiltration		3	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0
			(13)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	inflammatory polyp		0	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)
	hydronephrosis		0	0	1	0	0	0	2	1	0	1	0	0	0	0	0	0
			(0)	(0)	(4)	(0)	(0)	(0)	(7)	(4)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)
	mineralization:papilla		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
urin bladd			<23>				<27>				<30>				<13>			
	lymphocytic infiltration		1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(4)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 23				5000 ppm 27				10000 ppm 30				20000 ppm 13			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Endocrine system}																		
pituitary			<23>				<27>				<30>				<13>			
	angiectasis		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)	0 (0)	0 (0)
	cyst		3 (13)	0 (0)	0 (0)	0 (0)	4 (15)	0 (0)	0 (0)	0 (0)	3 (10)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	hyperplasia		3 (13)	1 (4)	0 (0)	0 (0)	1 (4)	1 (4)	0 (0)	0 (0)	3 (10)	0 (0)	0 (0)	0 (0)	1 (8)	1 (8)	0 (0)	0 (0)
	Rathke pouch		0 (0)	0 (0)	0 (0)	0 (0)	1 (4)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
thyroid			<23>				<27>				<30>				<13>			
	focal follicular 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)	0 (0)	0 (0)	0 (0)	0 (0)
adrenal			<23>				<27>				<30>				<13>			
	spindle-cell hyperplasia		0 (0)	21 (91)	2 (9)	0 (0)	1 (4)	21 (78)	5 (19)	0 (0)	1 (3)	23 (77)	4 (13)	0 (0)	4 (31)	9 (69)	0 (0)	0 * (0)
	hyperplasia:cortical cell		2 (9)	0 (0)	0 (0)	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)

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

Organ	Findings	Group Name	Control				5000 ppm				10000 ppm				20000 ppm			
		No. of Animals on Study	23				27				30				13			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																		
adrenal			<23>				<27>				<30>				<13>			
	focal fatty change:cortex		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)
{Reproductive system}																		
ovary			<23>				<27>				<30>				<13>			
	cyst		1	0	1	2	2	2	5	0	0	1	2	1	0	0	0	0
			(4)	(0)	(4)	(9)	(7)	(7)	(19)	(0)	(0)	(3)	(7)	(3)	(0)	(0)	(0)	(0)
uterus			<23>				<27>				<30>				<13>			
	cystic endometrial hyperplasia		5	9	1	0	7	9	4	0	9	9	5	0	6	1	1	0
			(22)	(39)	(4)	(0)	(26)	(33)	(15)	(0)	(30)	(30)	(17)	(0)	(46)	(8)	(8)	(0)
{Nervous system}																		
brain			<23>				<27>				<30>				<13>			
	mineralization		10	0	0	0	11	0	0	0	14	0	0	0	4	0	0	0
			(43)	(0)	(0)	(0)	(41)	(0)	(0)	(0)	(47)	(0)	(0)	(0)	(31)	(0)	(0)	(0)
	epidermal cyst		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)	(0)	(0)

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

Organ	Findings	Group Name	Control				5000 ppm				10000 ppm				20000 ppm			
		No. of Animals on Study	23				27				30				13			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Special sense organs/appendage}																		
Harder gl			<23>				<27>				<30>				<13>			
	hyperplasia		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)	(0)

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

APPENDIX K 5

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS : SUMMARY

MOUSE : MALE : DEAD AND MORIBUND ANIMALS

(2-YEAR STUDY)

Organ	Findings	Group Name	Control				5000 ppm				10000 ppm				20000 ppm			
		No. of Animals on Study	14				15				23				34			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Integumentary system/appandage}																		
subcutis			<14>				<15>				<23>				<34>			
	inflammation		0	0	0	0	0	1	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)
	xanthogranuloma		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
{Respiratory system}																		
nasal cavit			<14>				<15>				<23>				<34>			
	mineralization		0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	eosinophilic change:olfactory epithelium		2	0	0	0	0	1	1	0	7	0	0	0	12	0	0	0
			(14)	(0)	(0)	(0)	(0)	(7)	(7)	(0)	(30)	(0)	(0)	(0)	(35)	(0)	(0)	(0)
	eosinophilic change:respiratory epithelium		4	0	0	0	5	2	0	0	9	3	0	0	18	5	0	0 *
			(29)	(0)	(0)	(0)	(33)	(13)	(0)	(0)	(39)	(13)	(0)	(0)	(53)	(15)	(0)	(0)
	respiratory metaplasia:olfactory epithelium		2	0	0	0	2	0	0	0	2	0	0	0	2	0	0	0
			(14)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
	respiratory metaplasia:gland		3	0	0	0	3	0	0	0	5	0	0	0	1	0	0	0
			(21)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(22)	(0)	(0)	(0)	(3)	(0)	(0)	(0)

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

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 14				5000 ppm 15				10000 ppm 23				20000 ppm 34			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Respiratory system}																		
nasal cavit			<14>				<15>				<23>				<34>			
	atrophy:olfactory epithelium		0	0	0	0	2	0	0	0	2	1	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(9)	(4)	(0)	(0)	(3)	(0)	(0)	(0)
lung			<14>				<15>				<23>				<34>			
	hemorrhage		0	1	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)	(0)	(0)	(0)
	interstitial pneumonia		0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
			(0)	(7)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	bronchopneumonia		0	1	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)	(0)	(0)	(0)
	bronchiolar-alveolar cell hyperplasia		0	0	0	0	12	0	0	0 **	14	1	0	0 **	23	3	0	0 **
			(0)	(0)	(0)	(0)	(80)	(0)	(0)	(0)	(61)	(4)	(0)	(0)	(68)	(9)	(0)	(0)
{Hematopoietic system}																		
bone marrow			<14>				<15>				<23>				<34>			
	erythropoiesis:increased		0	0	0	0	2	0	0	0	3	0	0	0	10	0	0	0
			(0)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(29)	(0)	(0)	(0)

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

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 14				5000 ppm 15				10000 ppm 23				20000 ppm 34			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Hematopoietic system}																		
bone marrow			<14>				<15>				<23>				<34>			
	granulopoiesis:increased		1 (7)	0 (0)	0 (0)	0 (0)	1 (7)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
spleen			<14>				<15>				<23>				<34>			
	atrophy		2 (14)	0 (0)	0 (0)	0 (0)	1 (7)	0 (0)	0 (0)	0 (0)	4 (17)	0 (0)	0 (0)	0 (0)	3 (9)	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)	1 (4)	0 (0)	0 (0)	0 (0)	8 (24)	1 (3)	0 (0)	0 (0)
	extramedullary hematopoiesis		2 (14)	3 (21)	2 (14)	0 (0)	2 (13)	3 (20)	6 (40)	0 (0)	3 (13)	3 (13)	4 (17)	0 (0)	0 (0)	5 (15)	16 (47)	2 * (6)
{Circulatory system}																		
heart			<14>				<15>				<23>				<34>			
	thrombus		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (7)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	mineralization		3 (21)	0 (0)	0 (0)	0 (0)	3 (20)	0 (0)	0 (0)	0 (0)	4 (17)	0 (0)	0 (0)	0 (0)	6 (18)	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

Organ	Findings	Group Name	Control				5000 ppm				10000 ppm				20000 ppm			
		No. of Animals on Study	14				15				23				34			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Circulatory system}																		
heart			<14>				<15>				<23>				<34>			
	inflammatory cell nest		0	0	0	0	1	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)
	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)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Digestive system}																		
tooth			<14>				<15>				<23>				<34>			
	dysplasia		2	2	2	0	6	1	1	0	7	2	4	0	12	5	0	0
			(14)	(14)	(14)	(0)	(40)	(7)	(7)	(0)	(30)	(9)	(17)	(0)	(35)	(15)	(0)	(0)
stomach			<14>				<15>				<23>				<34>			
	hyperplasia:glandular stomach		6	0	0	0	12	0	0	0	13	1	0	0	21	4	0	0
			(43)	(0)	(0)	(0)	(80)	(0)	(0)	(0)	(57)	(4)	(0)	(0)	(62)	(12)	(0)	(0)
liver			<14>				<15>				<23>				<34>			
	necrosis:central		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)	(9)	(0)	(0)
	necrosis:focal		1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(7)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 14				5000 ppm 15				10000 ppm 23				20000 ppm 34			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Digestive system}																		
liver			<14>				<15>				<23>				<34>			
	necrosis:single cell		0 (0)	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)
	fatty change		1 (7)	2 (14)	0 (0)	0 (0)	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)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)
	extramedullary hematopoiesis		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	3 (9)	0 (0)	0 (0)	0 (0)
	acidophilic cell focus		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (7)	1 (7)	0 (0)	1 (4)	1 (4)	0 (0)	0 (0)	4 (12)	2 (6)	0 (0)	0 (0)
	basophilic cell focus		0 (0)	0 (0)	0 (0)	0 (0)	1 (7)	1 (7)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	hepatocellular hypertrophy:central		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (7)	0 (0)	0 (0)	0 (0)	12 (52)	1 (4)	0 ** (0)	0 (0)	22 (65)	0 (0)	0 ** (0)
	nuclear atypia:central		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	3 (13)	2 (9)	0 (0)	0 (0)	9 (26)	15 (44)	0 (0)	0 ** (0)

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

Organ	Findings	Group Name	Control				5000 ppm				10000 ppm				20000 ppm			
		No. of Animals on Study	14				15				23				34			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
pancreas			<14>				<15>				<23>				<34>			
	islet cell hyperplasia		1	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)	(0)	(0)	(0)	(0)
{Urinary system}																		
kidney			<14>				<15>				<23>				<34>			
	cyst		0	0	0	0	1	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)
	hyaline droplet		1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
			(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)
	basophilic change		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)
	deposit of hemosiderin		0	0	0	0	0	2	0	0	0	2	5	0	2	3	13	1 *
			(0)	(0)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(9)	(22)	(0)	(6)	(9)	(38)	(3)
	lymphocytic infiltration		0	0	0	0	1	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)
	inflammatory polyp		0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0
			(0)	(7)	(0)	(0)	(7)	(0)	(7)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)

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

Organ	Findings	Group Name	Control				5000 ppm				10000 ppm				20000 ppm			
		No. of Animals on Study	14				15				23				34			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																		
kidney			<14>				<15>				<23>				<34>			
	hydronephrosis		0	0	1	1	1	0	2	0	0	1	0	2	0	0	1	0
			(0)	(0)	(7)	(7)	(7)	(0)	(13)	(0)	(0)	(4)	(0)	(9)	(0)	(0)	(3)	(0)
urethra			<14>				<15>				<23>				<34>			
	inflammation		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)	(3)	(0)
{Endocrine system}																		
pituitary			<14>				<15>				<23>				<33>			
	angiectasis		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)	(0)
	cyst		1	0	0	0	0	0	0	0	2	0	0	0	3	0	0	0
			(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(9)	(0)	(0)	(0)
	hyperplasia		1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(7)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
adrenal			<14>				<15>				<23>				<34>			
	spindle-cell hyperplasia		6	0	0	0	10	0	0	0	11	1	0	0	16	0	0	0
			(43)	(0)	(0)	(0)	(67)	(0)	(0)	(0)	(48)	(4)	(0)	(0)	(47)	(0)	(0)	(0)

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

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 14				5000 ppm 15				10000 ppm 23				20000 ppm 34			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Endocrine system}																		
adrenal		<a>	<14>				<15>				<23>				<34>			
	hyperplasia:cortical cell		0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0
		(c)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
	focal hypertrophy:cortex		0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
		(c)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Reproductive system}																		
testis		<a>	<14>				<15>				<23>				<34>			
	mineralization		9	2	1	0	10	3	0	0	8	1	0	0 *	4	0	0	0 **
		(c)	(64)	(14)	(7)	(0)	(67)	(20)	(0)	(0)	(35)	(4)	(0)	(0)	(12)	(0)	(0)	(0)
epididymis		<a>	<14>				<15>				<22>				<34>			
	spermatogenic granuloma		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(c)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
prostate		<a>	<14>				<15>				<23>				<34>			
	inflammation		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		(c)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
{Nervous system}																		
brain		<a>	<14>				<15>				<23>				<34>			
	mineralization		7	0	0	0	6	0	0	0	8	0	0	0	18	0	0	0
		(c)	(50)	(0)	(0)	(0)	(40)	(0)	(0)	(0)	(35)	(0)	(0)	(0)	(53)	(0)	(0)	(0)

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

Organ	Findings	Group Name	Control				5000 ppm				10000 ppm				20000 ppm			
		No. of Animals on Study	14				15				23				34			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Special sense organs/appendage}																		
Harder gl			<14>				<15>				<23>				<34>			
	hyperplasia		0	0	0	0	1	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)
{Musculoskeletal system}																		
muscle			<14>				<15>				<23>				<34>			
	mineralization		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

APPENDIX K 6

HISTOPATHOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS : SUMMARY

MOUSE : FEMALE : DEAD AND MORIBUND ANIMALS

(2-YEAR STUDY)

Organ	Findings	Group Name	Control				5000 ppm				10000 ppm				20000 ppm			
		No. of Animals on Study	27				23				20				37			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Integumentary system/appandage}																		
subcutis			<27>				<23>				<20>				<37>			
	inflammation		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)
{Respiratory system}																		
nasal cavit			<27>				<23>				<20>				<37>			
	mineralization		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)	(3)	(0)	(0)	(0)
	eosinophilic change:olfactory epithelium		2	0	0	0	1	3	0	0	5	1	0	0	19	1	0	0 **
			(7)	(0)	(0)	(0)	(4)	(13)	(0)	(0)	(25)	(5)	(0)	(0)	(51)	(3)	(0)	(0)
	eosinophilic change:respiratory epithelium		14	4	0	0	13	6	0	1	11	2	0	0	16	15	1	0
			(52)	(15)	(0)	(0)	(57)	(26)	(0)	(4)	(55)	(10)	(0)	(0)	(43)	(41)	(3)	(0)
	respiratory metaplasia:olfactory epithelium		2	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0
			(7)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
	respiratory metaplasia:gland		2	0	0	0	2	0	0	0	3	0	0	0	10	0	0	0
			(7)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(15)	(0)	(0)	(0)	(27)	(0)	(0)	(0)
nasopharynx			<27>				<23>				<20>				<37>			
	eosinophilic change:respiratory epithelium		2	0	0	0	3	0	1	1	4	2	0	0	7	0	0	0
			(7)	(0)	(0)	(0)	(13)	(0)	(4)	(4)	(20)	(10)	(0)	(0)	(19)	(0)	(0)	(0)

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

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 27				5000 ppm 23				10000 ppm 20				20000 ppm 37			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Respiratory system}																		
lung			<27>				<23>				<20>				<37>			
	hemorrhage		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (5)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	interstitial pneumonia		0 (0)	0 (0)	0 (0)	0 (0)	2 (9)	0 (0)	0 (0)	0 (0)	2 (10)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)
	bronchiolar-alveolar cell hyperplasia		0 (0)	0 (0)	0 (0)	0 (0)	15 (65)	0 (0)	0 (0)	0 ** (0)	12 (60)	0 (0)	0 (0)	0 ** (0)	29 (78)	2 (5)	0 (0)	0 ** (0)
{Hematopoietic system}																		
bone marrow			<27>				<23>				<20>				<37>			
	erythropoiesis:increased		1 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (10)	0 (0)	0 (0)	0 (0)	14 (38)	0 (0)	0 (0)	0 ** (0)
	granulopoiesis:increased		1 (4)	0 (0)	0 (0)	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)
spleen			<27>				<23>				<20>				<37>			
	deposit of hemosiderin		0 (0)	0 (0)	0 (0)	0 (0)	1 (4)	0 (0)	0 (0)	0 (0)	2 (10)	0 (0)	0 (0)	0 (0)	4 (11)	0 (0)	0 (0)	0 (0)

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

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 27				5000 ppm 23				10000 ppm 20				20000 ppm 37			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Hematopoietic system}																		
spleen			<27>				<23>				<20>				<37>			
	extramedullary hematopoiesis		0	5	9	0	3	0	3	0 *	2	3	3	1	3	2	26	0 **
			(0)	(19)	(33)	(0)	(13)	(0)	(13)	(0)	(10)	(15)	(15)	(5)	(8)	(5)	(70)	(0)
{Circulatory system}																		
heart			<27>				<23>				<20>				<37>			
	thrombus		0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(5)	(0)	(0)	(0)	(0)	(0)
	mineralization		4	0	0	0	3	0	0	0	5	1	0	0	10	1	0	0
			(15)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(25)	(5)	(0)	(0)	(27)	(3)	(0)	(0)
	arteritis		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)
{Digestive system}																		
tooth			<27>				<23>				<20>				<37>			
	dysplasia		8	1	1	1	11	0	1	0	8	0	0	0	15	4	2	0
			(30)	(4)	(4)	(4)	(48)	(0)	(4)	(0)	(40)	(0)	(0)	(0)	(41)	(11)	(5)	(0)

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

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 27				5000 ppm 23				10000 ppm 20				20000 ppm 37			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Digestive system}																		
tongue			<27>				<23>				<20>				<37>			
	arteritis		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)
stomach			<27>				<23>				<20>				<37>			
	erosion: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)
	hyperplasia:glandular stomach		22	0	0	0	14	0	0	0	12	0	0	0	27	0	0	0
			(81)	(0)	(0)	(0)	(61)	(0)	(0)	(0)	(60)	(0)	(0)	(0)	(73)	(0)	(0)	(0)
liver			<27>				<23>				<20>				<37>			
	angiectasis		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)	(0)	(0)	(0)	(0)
	necrosis:focal		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)
	fatty change:central		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)
	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)

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

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 27				5000 ppm 23				10000 ppm 20				20000 ppm 37			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Digestive system}																		
liver			<27>				<23>				<20>				<37>			
	extramedullary hematopoiesis		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (5)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)
	clear cell focus		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)	0 (0)	0 (0)	0 (0)
	acidophilic cell focus		1 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (5)	0 (0)	0 (0)	0 (0)	4 (11)	0 (0)	0 (0)	0 (0)
	vacuolated cell focus		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)
	hepatocellular hypertrophy:central		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	4 (11)	0 (0)	0 (0)
	nuclear atypia:central		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (5)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)
{Urinary system}																		
kidney			<27>				<23>				<20>				<37>			
	hyaline droplet		1 (4)	0 (0)	6 (22)	3 (11)	1 (4)	1 (4)	6 (26)	3 (13)	1 (5)	0 (0)	5 (25)	2 (10)	0 (0)	0 (0)	5 (14)	1 (3)

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

Organ	Findings	Group Name	Control				5000 ppm				10000 ppm				20000 ppm			
		No. of Animals on Study	27				23				20				37			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																		
kidney			<27>				<23>				<20>				<37>			
	basophilic change		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)
	deposit of hemosiderin		0	0	0	0	1	0	0	0	1	0	1	0	0	3	22	4 **
			(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(5)	(0)	(5)	(0)	(0)	(8)	(59)	(11)
	inflammatory polyp		0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	extramedullary hematopoiesis		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)	(5)	(0)	(0)	(0)	(0)	(0)	(0)
	hydronephrosis		0	0	0	1	0	2	1	0	0	1	2	0	0	0	0	0
			(0)	(0)	(0)	(4)	(0)	(9)	(4)	(0)	(0)	(5)	(10)	(0)	(0)	(0)	(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)	(3)	(0)	(0)	(0)
urin bladd			<26>				<23>				<20>				<37>			
	lymphocytic infiltration		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)
{Endocrine system}																		
pituitary			<26>				<23>				<20>				<37>			
	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 b : Number of animals with lesion
(c) c : b / a * 100
Significant difference : * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 27				5000 ppm 23				10000 ppm 20				20000 ppm 37			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Endocrine system}																		
pituitary			<26>				<23>				<20>				<37>			
	cyst		0 (0)	0 (0)	0 (0)	0 (0)	1 (4)	0 (0)	0 (0)	0 (0)	1 (5)	0 (0)	0 (0)	0 (0)	2 (5)	0 (0)	0 (0)	0 (0)
	hyperplasia		1 (4)	1 (4)	0 (0)	0 (0)	2 (9)	0 (0)	0 (0)	0 (0)	1 (5)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)
	Rathke pouch		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)	0 (0)	0 (0)	0 (0)
adrenal			<27>				<23>				<20>				<37>			
	spindle-cell hyperplasia		5 (19)	22 (81)	0 (0)	0 (0)	3 (13)	19 (83)	1 (4)	0 (0)	0 (0)	18 (90)	0 (0)	0 * (0)	17 (46)	19 (51)	0 (0)	0 * (0)
	hyperplasia:cortical cell		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (5)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
{Reproductive system}																		
ovary			<27>				<23>				<20>				<37>			
	thrombus		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)	3 (8)	0 (0)

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

Organ	Findings	Group Name	Control				5000 ppm				10000 ppm				20000 ppm			
		No. of Animals on Study	27				23				20				37			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Reproductive system}																		
ovary			<27>				<23>				<20>				<37>			
	cyst		1	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0
			(4)	(0)	(7)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
uterus			<27>				<23>				<20>				<37>			
	cystic endometrial hyperplasia		5	1	0	0	1	3	0	0	2	1	2	0	2	4	1	0
			(19)	(4)	(0)	(0)	(4)	(13)	(0)	(0)	(10)	(5)	(10)	(0)	(5)	(11)	(3)	(0)
{Nervous system}																		
brain			<27>				<23>				<20>				<37>			
	mineralization		8	0	0	0	7	0	0	0	4	0	0	0	11	0	0	0
			(30)	(0)	(0)	(0)	(30)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(30)	(0)	(0)	(0)
{Musculoskeletal system}																		
muscle			<27>				<23>				<20>				<37>			
	mineralization		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)	(3)	(0)	(0)	(0)

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

APPENDIX L 1

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

MOUSE : MALE

(2-YEAR STUDY)

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

Time related Weeks	Items	Group Name	Control	5000 ppm	10000 ppm	20000 ppm
0 - 52	NO. OF EXAMINED ANIMALS		0	0	5	3
	NO. OF ANIMALS WITH TUMORS		0	0	1	0
	NO. OF ANIMALS WITH SINGLE TUMORS		0	0	1	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	1	0
	NO. OF TOTAL TUMORS		0	0	1	0
53 - 78	NO. OF EXAMINED ANIMALS		4	3	3	8
	NO. OF ANIMALS WITH TUMORS		1	2	3	7
	NO. OF ANIMALS WITH SINGLE TUMORS		0	2	1	2
	NO. OF ANIMALS WITH MULTIPLE TUMORS		1	0	2	5
	NO. OF BENIGN TUMORS		1	0	1	1
	NO. OF MALIGNANT TUMORS		1	2	4	12
	NO. OF TOTAL TUMORS		2	2	5	13
79 - 104	NO. OF EXAMINED ANIMALS		10	12	15	23
	NO. OF ANIMALS WITH TUMORS		9	11	13	23
	NO. OF ANIMALS WITH SINGLE TUMORS		6	4	4	3
	NO. OF ANIMALS WITH MULTIPLE TUMORS		3	7	9	20
	NO. OF BENIGN TUMORS		4	6	7	3
	NO. OF MALIGNANT TUMORS		9	16	18	44
	NO. OF TOTAL TUMORS		13	22	25	47
105 - 105	NO. OF EXAMINED ANIMALS		36	35	27	16
	NO. OF ANIMALS WITH TUMORS		30	27	25	16
	NO. OF ANIMALS WITH SINGLE TUMORS		11	11	9	2
	NO. OF ANIMALS WITH MULTIPLE TUMORS		19	16	16	14
	NO. OF BENIGN TUMORS		30	19	17	5
	NO. OF MALIGNANT TUMORS		29	27	31	32
	NO. OF TOTAL TUMORS		59	46	48	37

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

Time-related Weeks	Items	Group Name	Control	5000 ppm	10000 ppm	20000 ppm
0 - 105	NO. OF EXAMINED ANIMALS		50	50	50	50
	NO. OF ANIMALS WITH TUMORS		40	40	42	46
	NO. OF ANIMALS WITH SINGLE TUMORS		17	17	15	7
	NO. OF ANIMALS WITH MULTIPLE TUMORS		23	23	27	39
	NO. OF BENIGN TUMORS		35	25	25	9
	NO. OF MALIGNANT TUMORS		39	45	54	88
	NO. OF TOTAL TUMORS		74	70	79	97

APPENDIX L 2

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

MOUSE : FEMALE

(2-YEAR STUDY)

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

Time-related Weeks	Items	Group Name	Control	5000 ppm	10000 ppm	20000 ppm
0 - 52	NO. OF EXAMINED ANIMALS		1	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		9	3	1	10
	NO. OF ANIMALS WITH TUMORS		9	3	1	10
	NO. OF ANIMALS WITH SINGLE TUMORS		7	3	1	0
	NO. OF ANIMALS WITH MULTIPLE TUMORS		2	0	0	10
	NO. OF BENIGN TUMORS		2	0	0	3
	NO. OF MALIGNANT TUMORS		9	3	1	19
	NO. OF TOTAL TUMORS		11	3	1	22
79 - 104	NO. OF EXAMINED ANIMALS		17	19	19	26
	NO. OF ANIMALS WITH TUMORS		15	19	18	26
	NO. OF ANIMALS WITH SINGLE TUMORS		11	11	3	2
	NO. OF ANIMALS WITH MULTIPLE TUMORS		4	8	15	24
	NO. OF BENIGN TUMORS		3	8	8	2
	NO. OF MALIGNANT TUMORS		16	23	30	57
	NO. OF TOTAL TUMORS		19	31	38	59
105 - 105	NO. OF EXAMINED ANIMALS		23	27	30	13
	NO. OF ANIMALS WITH TUMORS		22	24	30	13
	NO. OF ANIMALS WITH SINGLE TUMORS		9	7	6	0
	NO. OF ANIMALS WITH MULTIPLE TUMORS		13	17	24	13
	NO. OF BENIGN TUMORS		23	26	17	5
	NO. OF MALIGNANT TUMORS		20	27	56	27
	NO. OF TOTAL TUMORS		43	53	73	32

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

Time-related Weeks	Items	Group Name	Control	5000 ppm	10000 ppm	20000 ppm
0 - 105	NO. OF EXAMINED ANIMALS		50	50	50	50
	NO. OF ANIMALS WITH TUMORS		47	47	49	50
	NO. OF ANIMALS WITH SINGLE TUMORS		28	22	10	3
	NO. OF ANIMALS WITH MULTIPLE TUMORS		19	25	39	47
	NO. OF BENIGN TUMORS		28	34	25	10
	NO. OF MALIGNANT TUMORS		46	54	87	104
	NO. OF TOTAL TUMORS		74	88	112	114

APPENDIX M 1

HISTOPATHOLOGICAL FINDINGS : NEOPLASTIC LESIONS : SUMMARY

MOUSE : MALE

(2-YEAR STUDY)

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

Organ	Findings	Group Name / No. of animals on Study	Control 50	5000 ppm 50	10000 ppm 50	20000 ppm 50
{Integumentary system/appandage}						
subcutis			<50>	<50>	<50>	<50>
	lipoma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
	leiomyosarcoma		0 (0%)	1 (2%)	0 (0%)	0 (0%)
	histiocytic sarcoma		0 (0%)	0 (0%)	1 (2%)	1 (2%)
	hemangiosarcoma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
{Respiratory system}						
lung			<50>	<50>	<50>	<50>
	bronchiolar-alveolar adenoma		6 (12%)	2 (4%)	1 (2%)	1 (2%)
	bronchiolar-alveolar carcinoma		3 (6%)	1 (2%)	2 (4%)	1 (2%)
{Hematopoietic system}						
bone marrow			<50>	<50>	<50>	<50>
	hemangioma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
lymph node			<50>	<50>	<50>	<50>
	malignant lymphoma		8 (16%)	13 (26%)	6 (12%)	3 (6%)
spleen			<50>	<50>	<50>	<50>
	hemangioma		4 (8%)	1 (2%)	0 (0%)	0 (0%)
	malignant lymphoma		0 (0%)	2 (4%)	0 (0%)	2 (4%)
	mastcytoma:malignant		0 (0%)	0 (0%)	6 (12%)	0 (0%)

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

Organ	Findings	Group Name / No. of animals on Study	Control 50	5000 ppm 50	10000 ppm 50	20000 ppm 50
{Hematopoietic system}						
spleen	hemangiosarcoma	<50>	0 (0%)	1 (2%)	0 (0%)	0 (0%)
{Digestive system}						
salivary gl	histiocytic sarcoma	<50>	2 (4%)	0 (0%)	2 (4%)	0 (0%)
stomach	squamous cell papilloma	<50>	0 (0%)	0 (0%)	1 (2%)	1 (2%)
liver	hemangioma	<50>	7 (14%)	2 (4%)	1 (2%)	0 (0%)
	hepatocellular adenoma		12 (24%)	17 (34%)	18 (36%)	3 (6%)
	histiocytic sarcoma		2 (4%)	0 (0%)	0 (0%)	1 (2%)
	mastcytoma:malignant		0 (0%)	1 (2%)	0 (0%)	0 (0%)
	hemangiosarcoma		1 (2%)	1 (2%)	0 (0%)	0 (0%)
	hepatocellular carcinoma		16 (32%)	11 (22%)	14 (28%)	39 (78%)
	hepatoblastoma		1 (2%)	12 (24%)	18 (36%)	38 (76%)
pancreas	islet cell adenoma	<50>	1 (2%)	1 (2%)	0 (0%)	0 (0%)
{Urinary system}						
kidney	renal cell carcinoma	<50>	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

Organ	Findings	Group Name / No. of animals on Study	Control 50	5000 ppm 50	10000 ppm 50	20000 ppm 50
{Urinary system}						
urin bladd			<49>	<50>	<50>	<50>
	histiocytic sarcoma		0 (0%)	1 (2%)	1 (2%)	0 (0%)
{Endocrine system}						
adrenal			<50>	<49>	<50>	<50>
	cortical adenoma		0 (0%)	0 (0%)	1 (2%)	0 (0%)
{Reproductive system}						
epididymis			<50>	<50>	<49>	<50>
	histiocytic sarcoma		3 (6%)	1 (2%)	1 (2%)	1 (2%)
prep/cli gl			<49>	<50>	<50>	<50>
	histiocytic sarcoma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
{Nervous system}						
brain			<50>	<50>	<50>	<50>
	meningioma:malignant		0 (0%)	0 (0%)	0 (0%)	1 (2%)
periph nerv			<50>	<50>	<50>	<50>
	histiocytic sarcoma		0 (0%)	0 (0%)	2 (4%)	0 (0%)
{Special sense organs/appendage}						
Harder gl			<50>	<50>	<50>	<50>
	adenoma		3 (6%)	2 (4%)	3 (6%)	2 (4%)
{Musculoskeletal system}						
muscle			<50>	<50>	<50>	<50>
	histiocytic sarcoma		1 (2%)	0 (0%)	0 (0%)	0 (0%)

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

Organ	Findings	Group Name / No. of animals on Study	Control 50	5000 ppm 50	10000 ppm 50	20000 ppm 50
{Musculoskeletal system}						
bone			<50>	<50>	<50>	<50>
	hemangioma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
{Body cavities}						
peritoneum			<50>	<50>	<50>	<50>
	hemangiosarcoma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
adipose			<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

APPENDIX M 2

HISTOPATHOLOGICAL FINDINGS : NEOPLASTIC LESIONS : SUMMARY

MOUSE : FEMALE

(2-YEAR STUDY)

Organ	Findings	Group Name / No. of animals on Study	Control 50	5000 ppm 50	10000 ppm 50	20000 ppm 50
{Integumentary system/appandage}						
skin/app			<50>	<50>	<50>	<50>
	squamous cell papilloma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
	squamous cell carcinoma		0 (0%)	0 (0%)	1 (2%)	0 (0%)
subcutis			<50>	<50>	<50>	<50>
	lipoma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
	hemangioma		0 (0%)	1 (2%)	0 (0%)	0 (0%)
	fibrosarcoma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
	schwannoma:malignant		0 (0%)	0 (0%)	0 (0%)	1 (2%)
	hemangiosarcoma		0 (0%)	0 (0%)	1 (2%)	0 (0%)
{Respiratory system}						
lung			<50>	<50>	<50>	<50>
	bronchiolar-alveolar adenoma		2 (4%)	2 (4%)	3 (6%)	1 (2%)
	bronchiolar-alveolar carcinoma		0 (0%)	0 (0%)	2 (4%)	0 (0%)
{Hematopoietic system}						
bone marrow			<50>	<50>	<50>	<50>
	hemangioma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
lymph node			<50>	<50>	<50>	<50>
	malignant lymphoma		16 (32%)	16 (32%)	14 (28%)	3 (6%)

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

Organ	Findings	Group Name / No. of animals on Study	Control 50	5000 ppm 50	10000 ppm 50	20000 ppm 50
{Hematopoietic system}						
spleen			<50>	<50>	<50>	<50>
	hemangioma		1 (2%)	1 (2%)	1 (2%)	0 (0%)
	malignant lymphoma		7 (14%)	7 (14%)	4 (8%)	1 (2%)
	hemangiosarcoma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
{Digestive system}						
stomach			<50>	<50>	<50>	<50>
	squamous cell papilloma		0 (0%)	1 (2%)	0 (0%)	0 (0%)
liver			<50>	<50>	<50>	<50>
	hemangioma		3 (6%)	1 (2%)	0 (0%)	0 (0%)
	hepatocellular adenoma		5 (10%)	18 (36%)	13 (26%)	4 (8%)
	histiocytic sarcoma		1 (2%)	0 (0%)	0 (0%)	3 (6%)
	hepatocellular carcinoma		2 (4%)	12 (24%)	41 (82%)	46 (92%)
	hepatoblastoma		0 (0%)	0 (0%)	8 (16%)	38 (76%)
{Endocrine system}						
pituitary			<49>	<50>	<50>	<50>
	adenoma		3 (6%)	7 (14%)	5 (10%)	0 (0%)
{Reproductive system}						
ovary			<50>	<50>	<50>	<50>
	cystadenoma		2 (4%)	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

Organ	Findings	Group Name / No. of animals on Study	Control 50	5000 ppm 50	10000 ppm 50	20000 ppm 50
{Reproductive system}						
ovary			<50>	<50>	<50>	<50>
	hemangioma		0 (0%)	0 (0%)	0 (0%)	2 (4%)
	granulosa-theca cell tumor		1 (2%)	0 (0%)	0 (0%)	0 (0%)
	histiocytic sarcoma		1 (2%)	1 (2%)	0 (0%)	0 (0%)
uterus			<50>	<50>	<50>	<50>
	endometrial stromal polyp		5 (10%)	1 (2%)	0 (0%)	0 (0%)
	histiocytic sarcoma		15 (30%)	16 (32%)	15 (30%)	12 (24%)
mammary gl			<50>	<50>	<50>	<50>
	adenocarcinoma		0 (0%)	1 (2%)	0 (0%)	0 (0%)
{Special sense organs/appendage}						
Harder gl			<50>	<50>	<50>	<50>
	adenoma		3 (6%)	1 (2%)	2 (4%)	3 (6%)
{Musculoskeletal system}						
muscle			<50>	<50>	<50>	<50>
	hemangioma		0 (0%)	0 (0%)	1 (2%)	0 (0%)
	leiomyosarcoma		0 (0%)	0 (0%)	1 (2%)	0 (0%)
	hemangiosarcoma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
bone			<50>	<50>	<50>	<50>
	osteosarcoma		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

Organ	Findings	Group Name / No. of animals on Study	Control 50	5000 ppm 50	10000 ppm 50	20000 ppm 50
{Body cavities}						
peritoneum			<50>	<50>	<50>	<50>
	histiocytic sarcoma		1 (2%)	0 (0%)	0 (0%)	0 (0%)

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

APPENDIX N 1

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS,

MOUSE : MALE

(2-YEAR STUDY)

Group Name	Control	5000 ppm	10000 ppm	20000 ppm
	SITE : ALL SITE TUMOR : hemangioma			
Tumor rate				
Overall rates(a)	9/50(18.0)	2/50(4.0)	1/50(2.0)	1/50(2.0)
Adjusted rates(b)	19.44	2.86	0.0	6.25
Terminal rates(c)	7/36(19.4)	1/35(2.9)	0/27(0.0)	1/16(6.3)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.8595			
Prevalence method(d)	P = 0.9795			
Combined analysis(d)	P = 0.9905			
Cochran-Armitage test(e)	P = 0.0042**			
Fisher Exact test(e)		P = 0.0256*	P = 0.0078**	P = 0.0078**
	SITE : ALL SITE TUMOR : histiocytic sarcoma			
Tumor rate				
Overall rates(a)	9/50(18.0)	2/50(4.0)	7/50(14.0)	3/50(6.0)
Adjusted rates(b)	16.67	4.35	14.29	5.26
Terminal rates(c)	5/36(13.9)	0/35(0.0)	3/27(11.1)	0/16(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.2352			
Prevalence method(d)	P = 0.9285			
Combined analysis(d)	P = 0.8117			
Cochran-Armitage test(e)	P = 0.1724			
Fisher Exact test(e)		P = 0.0256*	P = 0.3929	P = 0.0606
	SITE : ALL SITE TUMOR : malignant lymphoma			
Tumor rate				
Overall rates(a)	8/50(16.0)	15/50(30.0)	6/50(12.0)	5/50(10.0)
Adjusted rates(b)	11.11	25.71	14.81	12.50
Terminal rates(c)	4/36(11.1)	9/35(25.7)	4/27(14.8)	2/16(12.5)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.8806			
Prevalence method(d)	P = 0.4234			
Combined analysis(d)	P = 0.7276			
Cochran-Armitage test(e)	P = 0.1116			
Fisher Exact test(e)		P = 0.0765	P = 0.3871	P = 0.2768

Group Name	Control	5000 ppm	10000 ppm	20000 ppm
	SITE : ALL SITE			
	TUMOR : mastcytoma:malignant			
Tumor rate				
Overall rates(a)	0/50(0.0)	1/50(2.0)	6/50(12.0)	0/50(0.0)
Adjusted rates(b)	0.0	0.0	11.11	0.0
Terminal rates(c)	0/36(0.0)	0/35(0.0)	3/27(11.1)	0/16(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.4336			
Prevalence method(d)	P = 0.2543			
Combined analysis(d)	P = 0.2844			
Cochran-Armitage test(e)	P = 0.8453			
Fisher Exact test(e)		P = 0.5000	P = 0.0133*	P = N.C.

(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 ≦ 0.05 ** : P ≦ 0.01
N.C. :Statistical value cannot be calculated and was not significant.

Group Name	Control	5000 ppm	10000 ppm	20000 ppm
	SITE : lung TUMOR : bronchiolar-alveolar adenoma			
Tumor rate				
Overall rates(a)	6/50(12.0)	2/50(4.0)	1/50(2.0)	1/50(2.0)
Adjusted rates(b)	13.89	5.71	3.70	6.25
Terminal rates(c)	5/36(13.9)	2/35(5.7)	1/27(3.7)	1/16(6.3)
Statistical analysis				
Peto test				
Standard method(d)	P = ------			
Prevalence method(d)	P = 0.9483			
Combined analysis(d)	P = ------			
Cochran-Armitage test(e)	P = 0.0372*			
Fisher Exact test(e)		P = 0.1343	P = 0.0559	P = 0.0559
	SITE : lung TUMOR : bronchiolar-alveolar carcinoma			
Tumor rate				
Overall rates(a)	3/50(6.0)	1/50(2.0)	2/50(4.0)	1/50(2.0)
Adjusted rates(b)	8.33	2.86	0.0	6.25
Terminal rates(c)	3/36(8.3)	1/35(2.9)	0/27(0.0)	1/16(6.3)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.2900			
Prevalence method(d)	P = 0.7036			
Combined analysis(d)	P = 0.5578			
Cochran-Armitage test(e)	P = 0.3979			
Fisher Exact test(e)		P = 0.3087	P = 0.5000	P = 0.3087
	SITE : lung TUMOR : bronchiolar-alveolar adenoma,bronchiolar-alveolar carcinoma			
Tumor rate				
Overall rates(a)	9/50(18.0)	3/50(6.0)	3/50(6.0)	2/50(4.0)
Adjusted rates(b)	22.22	8.57	3.70	12.50
Terminal rates(c)	8/36(22.2)	3/35(8.6)	1/27(3.7)	2/16(12.5)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.2900			
Prevalence method(d)	P = 0.9583			
Combined analysis(d)	P = 0.9164			
Cochran-Armitage test(e)	P = 0.0288*			
Fisher Exact test(e)		P = 0.0606	P = 0.0606	P = 0.0256*

Group Name	Control	5000 ppm	10000 ppm	20000 ppm
	SITE : lymph node TUMOR : malignant lymphoma			
Tumor rate				
Overall rates(a)	8/50(16.0)	13/50(26.0)	6/50(12.0)	3/50(6.0)
Adjusted rates(b)	11.11	20.51	14.81	6.25
Terminal rates(c)	4/36(11.1)	7/35(20.0)	4/27(14.8)	1/16(6.3)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.8806			
Prevalence method(d)	P = 0.6689			
Combined analysis(d)	P = 0.8716			
Cochran-Armitage test(e)	P = 0.0380*			
Fisher Exact test(e)		P = 0.1631	P = 0.3871	P = 0.0999
	SITE : spleen TUMOR : hemangioma			
Tumor rate				
Overall rates(a)	4/50(8.0)	1/50(2.0)	0/50(0.0)	0/50(0.0)
Adjusted rates(b)	8.11	2.13	0.0	0.0
Terminal rates(c)	2/36(5.6)	0/35(0.0)	0/27(0.0)	0/16(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.9081 ?			
Prevalence method(d)	P = 0.9884			
Combined analysis(d)	P = 0.9961			
Cochran-Armitage test(e)	P = 0.0176*			
Fisher Exact test(e)		P = 0.1811	P = 0.0587	P = 0.0587
	SITE : spleen TUMOR : mastcytoma:malignant			
Tumor rate				
Overall rates(a)	0/50(0.0)	0/50(0.0)	6/50(12.0)	0/50(0.0)
Adjusted rates(b)	0.0	0.0	11.11	0.0
Terminal rates(c)	0/36(0.0)	0/35(0.0)	3/27(11.1)	0/16(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.3699			
Prevalence method(d)	P = 0.2507			
Combined analysis(d)	P = 0.2390			
Cochran-Armitage test(e)	P = 0.6742			
Fisher Exact test(e)		P = N.C.	P = 0.0133*	P = N.C.

Group Name	Control	5000 ppm	10000 ppm	20000 ppm
	SITE : spleen			
	TUMOR : hemangioma, hemangiosarcoma			
Tumor rate				
Overall rates(a)	4/50(8.0)	2/50(4.0)	0/50(0.0)	0/50(0.0)
Adjusted rates(b)	8.11	4.26	0.0	0.0
Terminal rates(c)	2/36(5.6)	1/35(2.9)	0/27(0.0)	0/16(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.9081 ?			
Prevalence method(d)	P = 0.9839			
Combined analysis(d)	P = 0.9942			
Cochran-Armitage test(e)	P = 0.0172*			
Fisher Exact test(e)		P = 0.3389	P = 0.0587	P = 0.0587
	SITE : liver			
	TUMOR : hemangioma			
Tumor rate				
Overall rates(a)	7/50(14.0)	2/50(4.0)	1/50(2.0)	0/50(0.0)
Adjusted rates(b)	16.67	2.86	0.0	0.0
Terminal rates(c)	6/36(16.7)	1/35(2.9)	0/27(0.0)	0/16(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.6963			
Prevalence method(d)	P = 0.9990			
Combined analysis(d)	P = 0.9968			
Cochran-Armitage test(e)	P = 0.0031**			
Fisher Exact test(e)		P = 0.0798	P = 0.0297*	P = 0.0062**
	SITE : liver			
	TUMOR : hepatocellular adenoma			
Tumor rate				
Overall rates(a)	12/50(24.0)	17/50(34.0)	18/50(36.0)	3/50(6.0)
Adjusted rates(b)	30.56	40.00	48.39	12.50
Terminal rates(c)	11/36(30.6)	14/35(40.0)	13/27(48.1)	2/16(12.5)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.9104 ?			
Prevalence method(d)	P = 0.8716			
Combined analysis(d)	P = 0.9072			
Cochran-Armitage test(e)	P = 0.0130*			
Fisher Exact test(e)		P = 0.1891	P = 0.1376	P = 0.0113*

Group Name	Control	5000 ppm	10000 ppm	20000 ppm
	SITE : liver TUMOR : hepatocellular carcinoma			
Tumor rate				
Overall rates(a)	16/50(32.0)	11/50(22.0)	14/50(28.0)	39/50(78.0)
Adjusted rates(b)	40.54	22.86	40.63	100.00
Terminal rates(c)	14/36(38.9)	8/35(22.9)	10/27(37.0)	16/16(100.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.2489			
Prevalence method(d)	P < 0.0001**?			
Combined analysis(d)	P < 0.0001**?			
Cochran-Armitage test(e)	P < 0.0001**			
Fisher Exact test(e)		P = 0.1839	P = 0.4138	P < 0.0001**
	SITE : liver TUMOR : hepatoblastoma			
Tumor rate				
Overall rates(a)	1/50(2.0)	12/50(24.0)	18/50(36.0)	38/50(76.0)
Adjusted rates(b)	2.78	21.43	37.04	81.25
Terminal rates(c)	1/36(2.8)	7/35(20.0)	10/27(37.0)	13/16(81.3)
Statistical analysis				
Peto test				
Standard method(d)	P < 0.0001**?			
Prevalence method(d)	P < 0.0001**			
Combined analysis(d)	P < 0.0001**?			
Cochran-Armitage test(e)	P < 0.0001**			
Fisher Exact test(e)		P = 0.0009**	P < 0.0001**	P < 0.0001**
	SITE : liver TUMOR : hemangioma, hemangiosarcoma			
Tumor rate				
Overall rates(a)	8/50(16.0)	3/50(6.0)	1/50(2.0)	0/50(0.0)
Adjusted rates(b)	19.44	5.71	0.0	0.0
Terminal rates(c)	7/36(19.4)	2/35(5.7)	0/27(0.0)	0/16(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.6963			
Prevalence method(d)	P = 0.9994			
Combined analysis(d)	P = 0.9984			
Cochran-Armitage test(e)	P = 0.0013**			
Fisher Exact test(e)		P = 0.0999	P = 0.0154*	P = 0.0029**

Group Name	Control	5000 ppm	10000 ppm	20000 ppm
	SITE : liver			
	TUMOR : hepatocellular adenoma, hepatocellular carcinoma			
Tumor rate				
Overall rates(a)	22/50(44.0)	26/50(52.0)	25/50(50.0)	40/50(80.0)
Adjusted rates(b)	54.05	57.14	68.75	100.00
Terminal rates(c)	19/36(52.8)	20/35(57.1)	18/27(66.7)	16/16(100.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.4509			
Prevalence method(d)	P < 0.0001**			
Combined analysis(d)	P < 0.0001**			
Cochran-Armitage test(e)	P = 0.0002**			
Fisher Exact test(e)		P = 0.2742	P = 0.3444	P = 0.0002**
	SITE : liver			
	TUMOR : hepatocellular carcinoma, hepatoblastoma			
Tumor rate				
Overall rates(a)	16/50(32.0)	19/50(38.0)	28/50(56.0)	43/50(86.0)
Adjusted rates(b)	40.54	37.14	63.33	100.00
Terminal rates(c)	14/36(38.9)	13/35(37.1)	16/27(59.3)	16/16(100.0)
Statistical analysis				
Peto test				
Standard method(d)	P < 0.0001**?			
Prevalence method(d)	P < 0.0001**			
Combined analysis(d)	P < 0.0001**			
Cochran-Armitage test(e)	P < 0.0001**			
Fisher Exact test(e)		P = 0.3377	P = 0.0131*	P < 0.0001**
	SITE : liver			
	TUMOR : hepatocellular adenoma, hepatocellular carcinoma, hepatoblastoma			
Tumor rate				
Overall rates(a)	22/50(44.0)	27/50(54.0)	33/50(66.0)	43/50(86.0)
Adjusted rates(b)	54.05	57.14	80.00	100.00
Terminal rates(c)	19/36(52.8)	20/35(57.1)	21/27(77.8)	16/16(100.0)
Statistical analysis				
Peto test				
Standard method(d)	P < 0.0001**?			
Prevalence method(d)	P < 0.0001**			
Combined analysis(d)	P < 0.0001**			
Cochran-Armitage test(e)	P < 0.0001**			
Fisher Exact test(e)		P = 0.2119	P = 0.0219*	P < 0.0001**

Group Name	Control	5000 ppm	10000 ppm	20000 ppm
	SITE : epididymis TUMOR : histiocytic sarcoma			
Tumor rate				
Overall rates(a)	3/50(6.0)	1/50(2.0)	1/49(2.0)	1/50(2.0)
Adjusted rates(b)	7.32	2.78	2.63	0.0
Terminal rates(c)	2/36(5.6)	0/35(0.0)	0/27(0.0)	0/16(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.0909			
Prevalence method(d)	P = 0.9514			
Combined analysis(d)	P = 0.7538			
Cochran-Armitage test(e)	P = 0.3288			
Fisher Exact test(e)		P = 0.3087	P = 0.3163	P = 0.3087
	SITE : Harderian gland TUMOR : adenoma			
Tumor rate				
Overall rates(a)	3/50(6.0)	2/50(4.0)	3/50(6.0)	2/50(4.0)
Adjusted rates(b)	8.33	5.71	9.09	6.06
Terminal rates(c)	3/36(8.3)	2/35(5.7)	2/27(7.4)	0/16(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = ------			
Prevalence method(d)	P = 0.4762			
Combined analysis(d)	P = ------			
Cochran-Armitage test(e)	P = 0.7421			
Fisher Exact test(e)		P = 0.5000	P = 0.6611	P = 0.5000

(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 ≦ 0.05 ** : P ≦ 0.01
N.C. :Statistical value cannot be calculated and was not significant.

APPENDIX N 2

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS,

MOUSE : FEMALE

(2-YEAR STUDY)

Group Name	Control	5000 ppm	10000 ppm	20000 ppm
	SITE : ALL SITE TUMOR : hemangioma			
Tumor rate				
Overall rates(a)	4/50(8.0)	1/50(2.0)	2/50(4.0)	2/50(4.0)
Adjusted rates(b)	8.70	3.70	6.67	4.88
Terminal rates(c)	2/23(8.7)	1/27(3.7)	2/30(6.7)	0/13(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.9818 ?			
Prevalence method(d)	P = 0.3386			
Combined analysis(d)	P = 0.6881			
Cochran-Armitage test(e)	P = 0.5259			
Fisher Exact test(e)		P = 0.1811	P = 0.3389	P = 0.3389
	SITE : ALL SITE TUMOR : histiocytic sarcoma			
Tumor rate				
Overall rates(a)	18/50(36.0)	17/50(34.0)	15/50(30.0)	15/50(30.0)
Adjusted rates(b)	18.52	18.52	23.33	30.77
Terminal rates(c)	4/23(17.4)	5/27(18.5)	7/30(23.3)	4/13(30.8)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.9388			
Prevalence method(d)	P = 0.1057			
Combined analysis(d)	P = 0.6867			
Cochran-Armitage test(e)	P = 0.4908			
Fisher Exact test(e)		P = 0.5000	P = 0.3355	P = 0.3355

Group Name	Control	5000 ppm	10000 ppm	20000 ppm
	SITE : ALL SITE TUMOR : malignant lymphoma			
Tumor rate				
Overall rates(a)	23/50(46.0)	23/50(46.0)	18/50(36.0)	4/50(8.0)
Adjusted rates(b)	60.87	44.44	33.33	23.08
Terminal rates(c)	14/23(60.9)	12/27(44.4)	10/30(33.3)	3/13(23.1)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.9969			
Prevalence method(d)	P = 0.9915			
Combined analysis(d)	P = 0.9999			
Cochran-Armitage test(e)	P < 0.0001**			
Fisher Exact test(e)		P = 0.5794	P = 0.2081	P < 0.0001**

(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 ≦ 0.05 ** : P ≦ 0.01
N.C. :Statistical value cannot be calculated and was not significant.

Group Name	Control	5000 ppm	10000 ppm	20000 ppm
	SITE : lung			
	TUMOR : bronchiolar-alveolar adenoma			
Tumor rate				
Overall rates(a)	2/50(4.0)	2/50(4.0)	3/50(6.0)	1/50(2.0)
Adjusted rates(b)	8.70	4.76	9.38	7.69
Terminal rates(c)	2/23(8.7)	1/27(3.7)	2/30(6.7)	1/13(7.7)
Statistical analysis				
Peto test				
Standard method(d)	P = ------			
Prevalence method(d)	P = 0.6014			
Combined analysis(d)	P = ------			
Cochran-Armitage test(e)	P = 0.6256			
Fisher Exact test(e)		P = 0.6913	P = 0.5000	P = 0.5000
	SITE : lung			
	TUMOR : bronchiolar-alveolar adenoma, bronchiolar-alveolar carcinoma			
Tumor rate				
Overall rates(a)	2/50(4.0)	2/50(4.0)	5/50(10.0)	1/50(2.0)
Adjusted rates(b)	8.70	4.76	12.50	7.69
Terminal rates(c)	2/23(8.7)	1/27(3.7)	3/30(10.0)	1/13(7.7)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.3849			
Prevalence method(d)	P = 0.5505			
Combined analysis(d)	P = 0.5212			
Cochran-Armitage test(e)	P = 0.7421			
Fisher Exact test(e)		P = 0.6913	P = 0.2180	P = 0.5000
	SITE : lymph node			
	TUMOR : malignant lymphoma			
Tumor rate				
Overall rates(a)	16/50(32.0)	16/50(32.0)	14/50(28.0)	3/50(6.0)
Adjusted rates(b)	34.78	18.52	23.53	15.38
Terminal rates(c)	8/23(34.8)	5/27(18.5)	7/30(23.3)	2/13(15.4)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.9959			
Prevalence method(d)	P = 0.8902			
Combined analysis(d)	P = 0.9973			
Cochran-Armitage test(e)	P = 0.0009**			
Fisher Exact test(e)		P = 0.5848	P = 0.4138	P = 0.0008**

Group Name	Control	5000 ppm	10000 ppm	20000 ppm
	SITE : spleen			
	TUMOR : malignant lymphoma			
Tumor rate				
Overall rates(a)	7/50(14.0)	7/50(14.0)	4/50(8.0)	1/50(2.0)
Adjusted rates(b)	26.09	25.93	10.00	7.69
Terminal rates(c)	6/23(26.1)	7/27(25.9)	3/30(10.0)	1/13(7.7)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.7188			
Prevalence method(d)	P = 0.9668			
Combined analysis(d)	P = 0.9757			
Cochran-Armitage test(e)	P = 0.0202*			
Fisher Exact test(e)		P = 0.6129	P = 0.2623	P = 0.0297*
	SITE : liver			
	TUMOR : hemangioma			
Tumor rate				
Overall rates(a)	3/50(6.0)	1/50(2.0)	0/50(0.0)	0/50(0.0)
Adjusted rates(b)	8.70	3.70	0.0	0.0
Terminal rates(c)	2/23(8.7)	1/27(3.7)	0/30(0.0)	0/13(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.9439 ?			
Prevalence method(d)	P = 0.9646			
Combined analysis(d)	P = 0.9909			
Cochran-Armitage test(e)	P = 0.0405*			
Fisher Exact test(e)		P = 0.3087	P = 0.1212	P = 0.1212
	SITE : liver			
	TUMOR : hepatocellular adenoma			
Tumor rate				
Overall rates(a)	5/50(10.0)	18/50(36.0)	13/50(26.0)	4/50(8.0)
Adjusted rates(b)	21.74	55.56	31.43	15.38
Terminal rates(c)	5/23(21.7)	15/27(55.6)	8/30(26.7)	2/13(15.4)
Statistical analysis				
Peto test				
Standard method(d)	P = ------			
Prevalence method(d)	P = 0.7657			
Combined analysis(d)	P = ------			
Cochran-Armitage test(e)	P = 0.2320			
Fisher Exact test(e)		P = 0.0019**	P = 0.0332*	P = 0.5000

Group Name	Control	5000 ppm	10000 ppm	20000 ppm
	SITE : liver TUMOR : histiocytic sarcoma			
Tumor rate				
Overall rates(a)	1/50(2.0)	0/50(0.0)	0/50(0.0)	3/50(6.0)
Adjusted rates(b)	0.0	0.0	0.0	7.41
Terminal rates(c)	0/23(0.0)	0/27(0.0)	0/30(0.0)	0/13(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.3452			
Prevalence method(d)	P = 0.0125* ?			
Combined analysis(d)	P = 0.0340*			
Cochran-Armitage test(e)	P = 0.0877			
Fisher Exact test(e)		P = 0.5000	P = 0.5000	P = 0.3087
	SITE : liver TUMOR : hepatocellular carcinoma			
Tumor rate				
Overall rates(a)	2/50(4.0)	12/50(24.0)	41/50(82.0)	46/50(92.0)
Adjusted rates(b)	6.06	38.71	100.00	97.06
Terminal rates(c)	1/23(4.3)	9/27(33.3)	30/30(100.0)	12/13(92.3)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.0467* ?			
Prevalence method(d)	P < 0.0001**			
Combined analysis(d)	P < 0.0001**			
Cochran-Armitage test(e)	P < 0.0001**			
Fisher Exact test(e)		P = 0.0038**	P < 0.0001**	P < 0.0001**
	SITE : liver TUMOR : hepatoblastoma			
Tumor rate				
Overall rates(a)	0/50(0.0)	0/50(0.0)	8/50(16.0)	38/50(76.0)
Adjusted rates(b)	0.0	0.0	20.00	61.54
Terminal rates(c)	0/23(0.0)	0/27(0.0)	6/30(20.0)	8/13(61.5)
Statistical analysis				
Peto test				
Standard method(d)	P < 0.0001**?			
Prevalence method(d)	P < 0.0001**			
Combined analysis(d)	P < 0.0001**?			
Cochran-Armitage test(e)	P < 0.0001**			
Fisher Exact test(e)		P = N.C.	P = 0.0029**	P < 0.0001**

Group Name	Control	5000 ppm	10000 ppm	20000 ppm
	SITE : liver			
	TUMOR : hepatocellular adenoma, hepatocellular carcinoma			
Tumor rate				
Overall rates(a)	7/50(14.0)	24/50(48.0)	44/50(88.0)	47/50(94.0)
Adjusted rates(b)	26.09	70.97	100.00	97.06
Terminal rates(c)	6/23(26.1)	19/27(70.4)	30/30(100.0)	12/13(92.3)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.0467* ?			
Prevalence method(d)	P < 0.0001**			
Combined analysis(d)	P < 0.0001**			
Cochran-Armitage test(e)	P < 0.0001**			
Fisher Exact test(e)		P = 0.0002**	P < 0.0001**	P < 0.0001**
	SITE : liver			
	TUMOR : hepatocellular carcinoma, hepatoblastoma			
Tumor rate				
Overall rates(a)	2/50(4.0)	12/50(24.0)	42/50(84.0)	48/50(96.0)
Adjusted rates(b)	6.06	38.71	100.00	100.00
Terminal rates(c)	1/23(4.3)	9/27(33.3)	30/30(100.0)	13/13(100.0)
Statistical analysis				
Peto test				
Standard method(d)	P < 0.0001**?			
Prevalence method(d)	P < 0.0001**?			
Combined analysis(d)	P < 0.0001**			
Cochran-Armitage test(e)	P < 0.0001**			
Fisher Exact test(e)		P = 0.0038**	P < 0.0001**	P < 0.0001**
	SITE : liver			
	TUMOR : hepatocellular adenoma, hepatocellular carcinoma, hepatoblastoma			
Tumor rate				
Overall rates(a)	7/50(14.0)	24/50(48.0)	45/50(90.0)	48/50(96.0)
Adjusted rates(b)	26.09	70.97	100.00	100.00
Terminal rates(c)	6/23(26.1)	19/27(70.4)	30/30(100.0)	13/13(100.0)
Statistical analysis				
Peto test				
Standard method(d)	P < 0.0001**?			
Prevalence method(d)	P < 0.0001**?			
Combined analysis(d)	P < 0.0001**			
Cochran-Armitage test(e)	P < 0.0001**			
Fisher Exact test(e)		P = 0.0002**	P < 0.0001**	P < 0.0001**

Group Name	Control	5000 ppm	10000 ppm	20000 ppm
	SITE : pituitary gland TUMOR : adenoma			
Tumor rate				
Overall rates(a)	3/49(6.1)	7/50(14.0)	5/50(10.0)	0/50(0.0)
Adjusted rates(b)	13.04	18.52	15.63	0.0
Terminal rates(c)	3/23(13.0)	5/27(18.5)	4/30(13.3)	0/13(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = ------			
Prevalence method(d)	P = 0.9394			
Combined analysis(d)	P = ------			
Cochran-Armitage test(e)	P = 0.0882			
Fisher Exact test(e)		P = 0.1672	P = 0.3689	P = 0.1175
	SITE : uterus TUMOR : endometrial stromal polyp			
Tumor rate				
Overall rates(a)	5/50(10.0)	1/50(2.0)	0/50(0.0)	0/50(0.0)
Adjusted rates(b)	21.74	3.70	0.0	0.0
Terminal rates(c)	5/23(21.7)	1/27(3.7)	0/30(0.0)	0/13(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = ------			
Prevalence method(d)	P = 0.9994			
Combined analysis(d)	P = ------			
Cochran-Armitage test(e)	P = 0.0078**			
Fisher Exact test(e)		P = 0.1022	P = 0.0281*	P = 0.0281*
	SITE : uterus TUMOR : histiocytic sarcoma			
Tumor rate				
Overall rates(a)	15/50(30.0)	16/50(32.0)	15/50(30.0)	12/50(24.0)
Adjusted rates(b)	18.52	18.52	23.33	30.77
Terminal rates(c)	4/23(17.4)	5/27(18.5)	7/30(23.3)	4/13(30.8)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.9203			
Prevalence method(d)	P = 0.1119			
Combined analysis(d)	P = 0.6656			
Cochran-Armitage test(e)	P = 0.4294			
Fisher Exact test(e)		P = 0.5000	P = 0.5862	P = 0.3264

Group Name	Control	5000 ppm	10000 ppm	20000 ppm
	SITE : Harderian gland TUMOR : adenoma			
Tumor rate				
Overall rates(a)	3/50(6.0)	1/50(2.0)	2/50(4.0)	3/50(6.0)
Adjusted rates(b)	11.54	3.13	4.76	15.38
Terminal rates(c)	2/23(8.7)	0/27(0.0)	1/30(3.3)	2/13(15.4)
Statistical analysis				
Peto test				
Standard method(d)	P = ------			
Prevalence method(d)	P = 0.3745			
Combined analysis(d)	P = ------			
Cochran-Armitage test(e)	P = 0.7731			
Fisher Exact test(e)		P = 0.3087	P = 0.5000	P = 0.6611

(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.

PPENDIX O 1

HISTOPATHOLOGICAL FINDINGS : METATSASIS OF TUMOR : SUMMARY

MOUSE : MALE : ALL ANIMALS

(2-YEAR STUDY)

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

Organ	Findings	Group Name / No. of Animals on Study	Control 50	5000 ppm 50	10000 ppm 50	20000 ppm 50
{Respiratory system}						
nasal cavit			<50>	<50>	<50>	<50>
	metastasis:subcutis tumor		0	0	0	1
	metastasis:peripheral nerve tumor		0	0	1	0
lung			<50>	<50>	<50>	<50>
	leukemic cell infiltration		2	4	2	1
	metastasis:liver tumor		2	2	2	10
{Hematopoietic system}						
bone marrow			<50>	<50>	<50>	<50>
	leukemic cell infiltration		3	3	3	2
spleen			<50>	<50>	<50>	<50>
	leukemic cell infiltration		2	7	0	2
{Circulatory system}						
heart			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	1	0	0
	metastasis:liver tumor		0	0	0	1
{Digestive system}						
salivary gl			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	1	0	0
stomach			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	1	0	0

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

Organ	Findings	Group Name / No. of Animals on Study	Control 50	5000 ppm 50	10000 ppm 50	20000 ppm 50
{Digestive system}						
stomach		<50>	<50>	<50>	<50>	
	metastasis:spleen tumor		0	0	2	0
	metastasis:epididymis tumor		1	0	0	0
small intes		<50>	<50>	<50>	<50>	
	leukemic cell infiltration		1	3	1	0
liver		<50>	<50>	<50>	<50>	
	leukomic cell infiltration		2	4	1	1
	metastasis:subcutis tumor		0	0	1	1
	metastasis:peripheral nerve tumor		0	0	1	0
	metastasis:spleen tumor		0	0	6	0
	metastasis:epididymis tumor		2	0	0	1
	metastasis:salivary gland tumor		1	0	0	0
pancreas		<50>	<50>	<50>	<50>	
	leukemic cell infiltration		0	2	1	0
{Urinary system}						
kidney		<50>	<50>	<50>	<50>	
	leukemic cell infiltration		1	2	2	2
	metastasis:liver tumor		0	1	0	0
	metastasis:spleen tumor		0	0	1	0
urin bladd		<50>	<50>	<50>	<50>	
	leukemic cell infiltration		1	1	2	0

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

Organ	Findings	Group Name / No. of Animals on Study	Control 50	5000 ppm 50	10000 ppm 50	20000 ppm 50
{Endocrine system}						
pituitary			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	1	0	0
	metastasis:spleen tumor		0	0	1	0
adrenal			<50>	<50>	<50>	<50>
	leukemic cell infiltration		1	1	0	0
	metastasis:spleen tumor		0	0	1	0
{Reproductive system}						
testis			<50>	<50>	<50>	<50>
	metastasis:epididymis tumor		0	0	1	0
epididymis			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	2	1	0
	metastasis:subcutis tumor		0	0	1	0
{Musculoskeletal system}						
muscle			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	0	1	0
{Body cavities}						
peritoneum			<50>	<50>	<50>	<50>
	metastasis:liver tumor		0	0	0	1

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

APPENDIX O 2

HISTOPATHOLOGICAL FINDINGS : METATSASIS OF TUMOR : SUMMARY

MOUSE : FEMALE : ALL ANIMALS

(2-YEAR STUDY)

Organ	Findings	Group Name / No. of Animals on Study	Control 50	5000 ppm 50	10000 ppm 50	20000 ppm 50
{Integumentary system/appandage}						
subcutis			<50>	<50>	<50>	<50>
	leukemic cell infiltration		1	1	1	0
{Respiratory system}						
nasal cavit			<50>	<50>	<50>	<50>
	metastasis:uterus tumor		0	1	2	0
larynx			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	2	0	0
trachea			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	1	0	0
lung			<50>	<50>	<50>	<50>
	leukemic cell infiltration		11	14	8	1
	metastasis:liver tumor		1	0	0	4
	metastasis:uterus tumor		2	5	3	3
	metastasis:peritoneum tumor		1	0	0	0
{Hematopoietic system}						
bone marrow			<50>	<50>	<50>	<50>
	leukemic cell infiltration		7	8	3	2
	metastasis:liver tumor		0	0	0	1
	metastasis:uterus tumor		2	5	3	0
	metastasis:ovary tumor		0	1	0	0

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

Organ	Findings	Group Name / No. of Animals on Study	Control 50	5000 ppm 50	10000 ppm 50	20000 ppm 50
{Hematopoietic system}						
lymph node			<50>	<50>	<50>	<50>
	leukemic cell infiltration		1	3	1	0
	metastasis:uterus tumor		1	7	1	0
	metastasis:subcutis tumor		1	0	0	0
spleen			<50>	<50>	<50>	<50>
	leukemic cell infiltration		11	13	9	1
	metastasis:liver tumor		0	0	1	0
	metastasis:uterus tumor		2	8	4	1
	metastasis:peritoneum tumor		1	0	0	0
{Circulatory system}						
heart			<50>	<50>	<50>	<50>
	leukemic cell infiltration		2	5	3	0
{Digestive system}						
tongue			<50>	<50>	<50>	<50>
	leukemic cell infiltration		1	1	1	0
salivary gl			<50>	<50>	<50>	<50>
	leukemic cell infiltration		13	6	6	2
stomach			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	1	0	0
	metastasis:uterus tumor		1	0	0	0

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

Organ	Findings	Group Name / No. of Animals on Study	Control 50	5000 ppm 50	10000 ppm 50	20000 ppm 50
{Digestive system}						
stomach			<50>	<50>	<50>	<50>
	metastasis:peritoneum tumor		1	0	0	0
	metastasis:subcutis tumor		1	0	0	0
small intes			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	0	1	0
	metastasis:subcutis tumor		1	0	0	0
liver			<50>	<50>	<50>	<50>
	leukemic cell infiltration		13	14	9	1
	metastasis:uterus tumor		10	11	7	5
	metastasis:ovary tumor		0	1	0	0
gall bladd			<50>	<50>	<50>	<50>
	leukemic cell infiltration		1	1	0	0
pancreas			<50>	<50>	<50>	<50>
	leukemic cell infiltration		5	7	6	1
	metastasis:liver tumor		0	0	0	1
	metastasis:uterus tumor		1	4	1	1
	metastasis:subcutis tumor		1	0	0	0
{Urinary system}						
kidney			<50>	<50>	<50>	<50>
	leukemic cell infiltration		4	11	9	1
	metastasis:uterus tumor		3	5	2	2

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

Organ	Findings	Group Name / No. of Animals on Study	Control 50	5000 ppm 50	10000 ppm 50	20000 ppm 50
{Urinary system}						
urin bladd			<50>	<50>	<50>	<50>
	leukemic cell infiltration		5	9	5	1
	metastasis:uterus tumor		1	1	2	0
{Endocrine system}						
thyroid			<50>	<50>	<50>	<50>
	leukemic cell infiltration		1	1	2	0
parathyroid			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	1	0	0
adrenal			<50>	<50>	<50>	<50>
	leukemic cell infiltration		1	1	1	0
	metastasis:uterus tumor		1	1	2	0
{Reproductive system}						
ovary			<50>	<50>	<50>	<50>
	leukemic cell infiltration		7	7	5	1
	metastasis:liver tumor		0	0	0	2
	metastasis:uterus tumor		6	11	5	3
uterus			<50>	<50>	<50>	<50>
	leukemic cell infiltration		4	5	4	0
	metastasis:peritoneum tumor		1	0	0	0
vagina			<50>	<50>	<50>	<50>
	leukemic cell infiltration		3	3	3	0

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

Organ	Findings	Group Name / No. of Animals on Study	Control	5000 ppm	10000 ppm	20000 ppm
			50	50	50	50
{Reproductive system}						
vagina			<50>	<50>	<50>	<50>
	metastasis:uterus tumor		3	1	3	1
{Nervous system}						
brain			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	1	1	0
{Special sense organs/appendage}						
Harder gl			<50>	<50>	<50>	<50>
	leukemic cell infiltration		1	2	3	0
	metastasis:liver tumor		0	0	0	1
{Musculoskeletal system}						
muscle			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	1	2	0
{Body cavities}						
peritoneum			<50>	<50>	<50>	<50>
	leukemic cell infiltration		1	0	0	1
	metastasis:liver tumor		0	0	0	2

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

AAPPENDIX O 3

HISTOPATHOLOGICAL FINDINGS : METASTASIS OF TUMOR : SUMMARY

MOUSE : MALE : SACRIFICED ANIMALS

(2-YEAR STUDY)

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

Organ	Findings	Group Name / No. of Animals on Study	Control 36	5000 ppm 35	10000 ppm 27	20000 ppm 16
{Respiratory system}						
lung			<36>	<35>	<27>	<16>
	leukemic cell infiltration		0	2	1	1
	metastasis:liver tumor		2	2	1	4
{Hematopoietic system}						
bone marrow			<36>	<35>	<27>	<16>
	leukemic cell infiltration		0	0	2	0
spleen			<36>	<35>	<27>	<16>
	leukemic cell infiltration		2	5	0	1
{Digestive system}						
small intes			<36>	<35>	<27>	<16>
	leukemic cell infiltration		0	2	1	0
liver			<36>	<35>	<27>	<16>
	leukemic cell infiltration		0	2	0	1
	metastasis:spleen tumor		0	0	3	0
	metastasis:epididymis tumor		1	0	0	0
	metastasis:salivary gland tumor		1	0	0	0
pancreas			<36>	<35>	<27>	<16>
	leukemic cell infiltration		0	1	0	0
{Urinary system}						
kidney			<36>	<35>	<27>	<16>
	leukemic cell infiltration		0	1	0	1

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

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

Organ	Findings	Group Name / No. of Animals on Study	Control 36	5000 ppm 35	10000 ppm 27	20000 ppm 16
{Urinary system}						
urin bladd			<36>	<35>	<27>	<16>
	leukemic cell infiltration		0	0	2	0
{Reproductive system}						
epididymis			<36>	<35>	<27>	<16>
	leukemic cell infiltration		0	0	1	0
{Musculoskeletal system}						
muscle			<36>	<35>	<27>	<16>
	leukemic cell infiltration		0	0	1	0

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

APPENDIX O 4

HISTOPATHOLOGICAL FINDINGS : METASTASIS OF TUMOR : SUMMARY

MOUSE : FEMALE : SACRIFICED ANIMALS

(2-YEAR STUDY)

Organ	Findings	Group Name / No. of Animals on Study	Control	5000 ppm	10000 ppm	20000 ppm
			23	27	30	13
{Integumentary system/appandage}						
subcutis			<23>	<27>	<30>	<13>
	leukemic cell infiltration		1	0	0	0
{Respiratory system}						
lung			<23>	<27>	<30>	<13>
	leukemic cell infiltration		4	3	2	1
{Hematopoietic system}						
bone marrow			<23>	<27>	<30>	<13>
	leukemic cell infiltration		3	3	2	2
lymph node			<23>	<27>	<30>	<13>
	leukemic cell infiltration		1	3	0	0
spleen			<23>	<27>	<30>	<13>
	leukemic cell infiltration		5	4	5	1
	metastasis:liver tumor		0	0	1	0
{Circulatory system}						
heart			<23>	<27>	<30>	<13>
	leukemic cell infiltration		1	0	1	0
{Digestive system}						
salivary gl			<23>	<27>	<30>	<13>
	leukemic cell infiltration		9	1	3	2
liver			<23>	<27>	<30>	<13>
	leukemic cell infiltration		7	3	3	1

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

Organ	Findings	Group Name / No. of Animals on Study	Control 23	5000 ppm 27	10000 ppm 30	20000 ppm 13
{Digestive system}						
pancreas			<23>	<27>	<30>	<13>
	leukemic cell infiltration		3	3	3	1
	metastasis:uterus tumor		0	0	1	0
{Urinary system}						
kidney			<23>	<27>	<30>	<13>
	leukemic cell infiltration		1	7	3	1
urin bladd			<23>	<27>	<30>	<13>
	leukemic cell infiltration		2	4	1	1
{Reproductive system}						
ovary			<23>	<27>	<30>	<13>
	leukemic cell infiltration		2	1	1	1
	metastasis:liver tumor		0	0	0	1
	metastasis:uterus tumor		0	1	0	0
uterus			<23>	<27>	<30>	<13>
	leukemic cell infiltration		1	0	1	0
vagina			<23>	<27>	<30>	<13>
	leukemic cell infiltration		0	1	1	0
{Nervous system}						
brain			<23>	<27>	<30>	<13>
	leukemic cell infiltration		0	1	0	0

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

Organ	Findings	Group Name / No. of Animals on Study	Control	5000 ppm	10000 ppm	20000 ppm
			23	27	30	13
{Body cavities}						
peritoneum			<23>	<27>	<30>	<13>
	metastasis:liver tumor		0	0	0	2

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

PPENDIX O 5

HISTOPATHOLOGICAL FINDINGS : METASTASIS OF TUMOR : SUMMARY

MOUSE : MALE : DEAD AND MORIBUND ANIMALS

(2-YEAR STUDY)

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

Organ	Findings	Group Name / No. of Animals on Study	Control 14	5000 ppm 15	10000 ppm 23	20000 ppm 34
{Respiratory system}						
nasal cavit			<14>	<15>	<23>	<34>
	metastasis:subcutis tumor		0	0	0	1
	metastasis:peripheral nerve tumor		0	0	1	0
lung			<14>	<15>	<23>	<34>
	leukemic cell infiltration		2	2	1	0
	metastasis:liver tumor		0	0	1	6
{Hematopoietic system}						
bone marrow			<14>	<15>	<23>	<34>
	leukemic cell infiltration		3	3	1	2
spleen			<14>	<15>	<23>	<34>
	leukemic cell infiltration		0	2	0	1
{Circulatory system}						
heart			<14>	<15>	<23>	<34>
	leukemic cell infiltration		0	1	0	0
	metastasis:liver tumor		0	0	0	1
{Digestive system}						
salivary gl			<14>	<15>	<23>	<34>
	leukemic cell infiltration		0	1	0	0
stomach			<14>	<15>	<23>	<34>
	leukemic cell infiltration		0	1	0	0

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

Organ	Findings	Group Name / No. of Animals on Study	Control 14	5000 ppm 15	10000 ppm 23	20000 ppm 34
{Digestive system}						
stomach			<14>	<15>	<23>	<34>
	metastasis:spleen tumor		0	0	2	0
	metastasis:epididymis tumor		1	0	0	0
small intes			<14>	<15>	<23>	<34>
	leukemic cell infiltration		1	1	0	0
liver			<14>	<15>	<23>	<34>
	leukemic cell infiltration		2	2	1	0
	metastasis:subcutis tumor		0	0	1	1
	metastasis:peripheral nerve tumor		0	0	1	0
	metastasis:spleen tumor		0	0	3	0
	metastasis:epididymis tumor		1	0	0	1
pancreas			<14>	<15>	<23>	<34>
	leukemic cell infiltration		0	1	1	0
{Urinary system}						
kidney			<14>	<15>	<23>	<34>
	leukemic cell infiltration		1	1	2	1
	metastasis:liver tumor		0	1	0	0
	metastasis:spleen tumor		0	0	1	0
urin bladd			<14>	<15>	<23>	<34>
	leukemic cell infiltration		1	1	0	0
{Endocrine system}						
pituitary			<14>	<15>	<23>	<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. : 0402
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

Organ	Findings	Group Name / No. of Animals on Study	Control 14	5000 ppm 15	10000 ppm 23	20000 ppm 34
{Endocrine system}						
pituitary			<14>	<15>	<23>	<34>
	metastasis:spleen tumor		0	0	1	0
adrenal			<14>	<15>	<23>	<34>
	leukemic cell infiltration		1	1	0	0
	metastasis:spleen tumor		0	0	1	0
{Reproductive system}						
testis			<14>	<15>	<23>	<34>
	metastasis:epididymis tumor		0	0	1	0
epididymis			<14>	<15>	<23>	<34>
	leukemic cell infiltration		0	2	0	0
	metastasis:subcutis tumor		0	0	1	0
{Body cavities}						
peritoneum			<14>	<15>	<23>	<34>
	metastasis:liver tumor		0	0	0	1

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

APPENDIX O 6

HISTOPATHOLOGICAL FINDINGS : METASTASIS OF TUMOR : SUMMARY

MOUSE : FEMALE : DEAD AND MORIBUND ANIMALS

(2-YEAR STUDY)

Organ	Findings	Group Name / No. of Animals on Study	Control 27	5000 ppm 23	10000 ppm 20	20000 ppm 37
{Integumentary system/appandage}						
subcutis			<27>	<23>	<20>	<37>
	leukemic cell infiltration		0	1	1	0
{Respiratory system}						
nasal cavit			<27>	<23>	<20>	<37>
	metastasis:uterus tumor		0	1	2	0
larynx			<27>	<23>	<20>	<37>
	leukemic cell infiltration		0	2	0	0
trachea			<27>	<23>	<20>	<37>
	leukemic cell infiltration		0	1	0	0
lung			<27>	<23>	<20>	<37>
	leukemic cell infiltration		7	11	6	0
	metastasis:liver tumor		1	0	0	4
	metastasis:uterus tumor		2	5	3	3
	metastasis:peritoneum tumor		1	0	0	0
{Hematopoietic system}						
bone marrow			<27>	<23>	<20>	<37>
	leukemic cell infiltration		4	5	1	0
	metastasis:liver tumor		0	0	0	1
	metastasis:uterus tumor		2	5	3	0
	metastasis:ovary tumor		0	1	0	0

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

Organ	Findings	Group Name / No. of Animals on Study	Control 27	5000 ppm 23	10000 ppm 20	20000 ppm 37
{Hematopoietic system}						
lymph node			<27>	<23>	<20>	<37>
	leukemic cell infiltration		0	0	1	0
	metastasis:uterus tumor		1	7	1	0
	metastasis:subcutis tumor		1	0	0	0
spleen			<27>	<23>	<20>	<37>
	leukemic cell infiltration		6	9	4	0
	metastasis:uterus tumor		2	8	4	1
	metastasis:peritoneum tumor		1	0	0	0
{Circulatory system}						
heart			<27>	<23>	<20>	<37>
	leukemic cell infiltration		1	5	2	0
{Digestive system}						
tongue			<27>	<23>	<20>	<37>
	leukemic cell infiltration		1	1	1	0
salivary gl			<27>	<23>	<20>	<37>
	leukemic cell infiltration		4	5	3	0
stomach			<27>	<23>	<20>	<37>
	leukemic cell infiltration		0	1	0	0
	metastasis:uterus tumor		1	0	0	0
	metastasis:peritoneum tumor		1	0	0	0

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

STUDY NO. : 0402
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

Organ	Findings	Group Name / No. of Animals on Study	Control 27	5000 ppm 23	10000 ppm 20	20000 ppm 37
{Digestive system}						
stomach		<27>	<23>	<20>	<37>	
	metastasis:subcutis tumor	1	0	0	0	
small intes		<27>	<23>	<20>	<37>	
	leukemic cell infiltration	0	0	1	0	
	metastasis:subcutis tumor	1	0	0	0	
liver		<27>	<23>	<20>	<37>	
	leukemic cell infiltration	6	11	6	0	
	metastasis:uterus tumor	10	11	7	5	
	metastasis:ovary tumor	0	1	0	0	
gall bladd		<27>	<23>	<20>	<37>	
	leukemic cell infiltration	1	1	0	0	
pancreas		<27>	<23>	<20>	<37>	
	leukemic cell infiltration	2	4	3	0	
	metastasis:liver tumor	0	0	0	1	
	metastasis:uterus tumor	1	4	0	1	
	metastasis:subcutis tumor	1	0	0	0	
{Urinary system}						
kidney		<27>	<23>	<20>	<37>	
	leukemic cell infiltration	3	4	6	0	
	metastasis:uterus tumor	3	5	2	2	
urin bladd		<27>	<23>	<20>	<37>	
	leukemic cell infiltration	3	5	4	0	

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

Organ	Findings	Group Name / No. of Animals on Study	Control 27	5000 ppm 23	10000 ppm 20	20000 ppm 37
{Urinary system}						
urin bladd			<27>	<23>	<20>	<37>
	metastasis:uterus tumor		1	1	2	0
{Endocrine system}						
thyroid			<27>	<23>	<20>	<37>
	leukemic cell infiltration		1	1	2	0
parathyroid			<27>	<23>	<20>	<37>
	leukemic cell infiltration		0	1	0	0
adrenal			<27>	<23>	<20>	<37>
	leukemic cell infiltration		1	1	1	0
	metastasis:uterus tumor		1	1	2	0
{Reproductive system}						
ovary			<27>	<23>	<20>	<37>
	leukemic cell infiltration		5	6	4	0
	metastasis:liver tumor		0	0	0	1
	metastasis:uterus tumor		6	10	5	3
uterus			<27>	<23>	<20>	<37>
	leukemic cell infiltration		3	5	3	0
	metastasis:peritoneum tumor		1	0	0	0
vagina			<27>	<23>	<20>	<37>
	leukemic cell infiltration		3	2	2	0
	metastasis:uterus tumor		3	1	3	1

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

Organ	Findings	Group Name / No. of Animals on Study	Control 27	5000 ppm 23	10000 ppm 20	20000 ppm 37
{Nervous system}						
brain			<27>	<23>	<20>	<37>
	leukemic cell infiltration		0	0	1	0
{Special sense organs/appendage}						
Harder gl			<27>	<23>	<20>	<37>
	leukemic cell infiltration		1	2	3	0
	motastasis:liver tumor		0	0	0	1
{Musculoskeletal system}						
muscle			<27>	<23>	<20>	<37>
	leukemic cell infiltration		0	1	2	0
{Body cavities}						
peritoneum			<27>	<23>	<20>	<37>
	leukemic cell infiltration		1	0	0	1

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

APPENDIX P 1

IDENTITY AND IMPURITY OF *p*-NITROANISOLE IN THE 2-YEAR FEED STUDY

IDENTITY AND IMPURITY OF *p*-NITROANISOLE IN THE 2-YEAR FEED STUDY

Test Substance : *p*-Nitroanisole (Wako Pure Chemical Industries, Ltd.)

Lot No. : KSJ0005

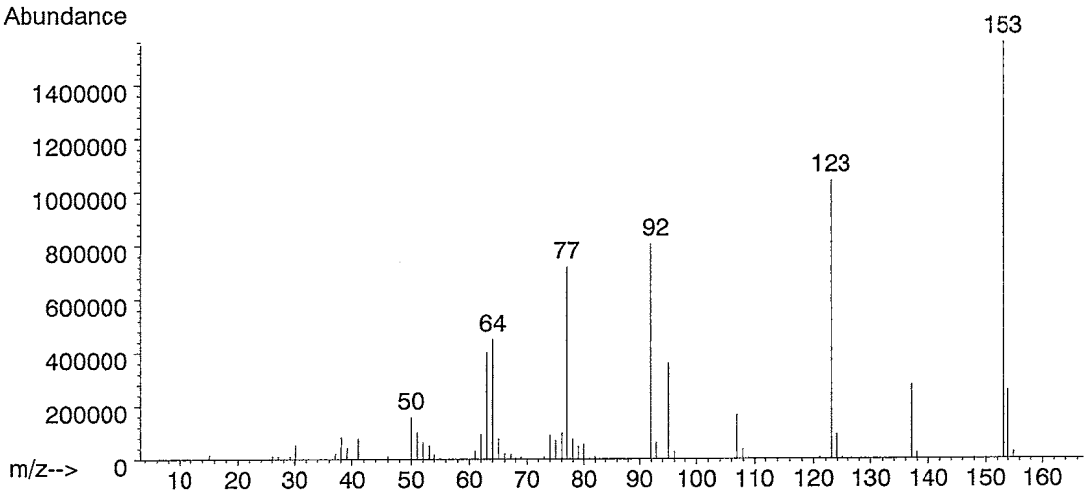
1. Spectral data

Mass Spectrometry

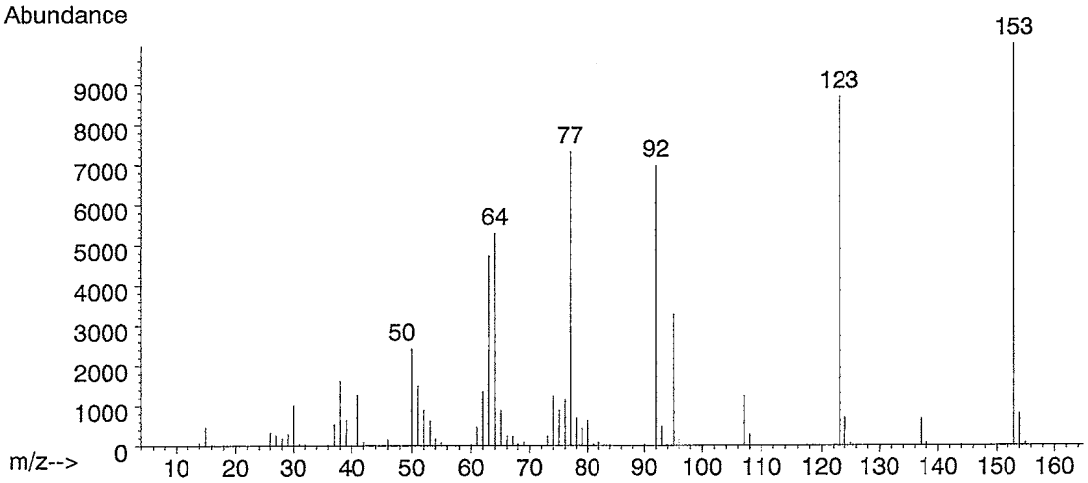
Instrument : Hewlett Packard 5989B Mass Spectrometer

Ionization : EI (Electron Ionization)

Ionization Voltage : 70eV



Mass Spectrum of Test Substance



Mass Spectrum of Literature Data*

Result: The mass spectrum was consistent with literature spectrum.

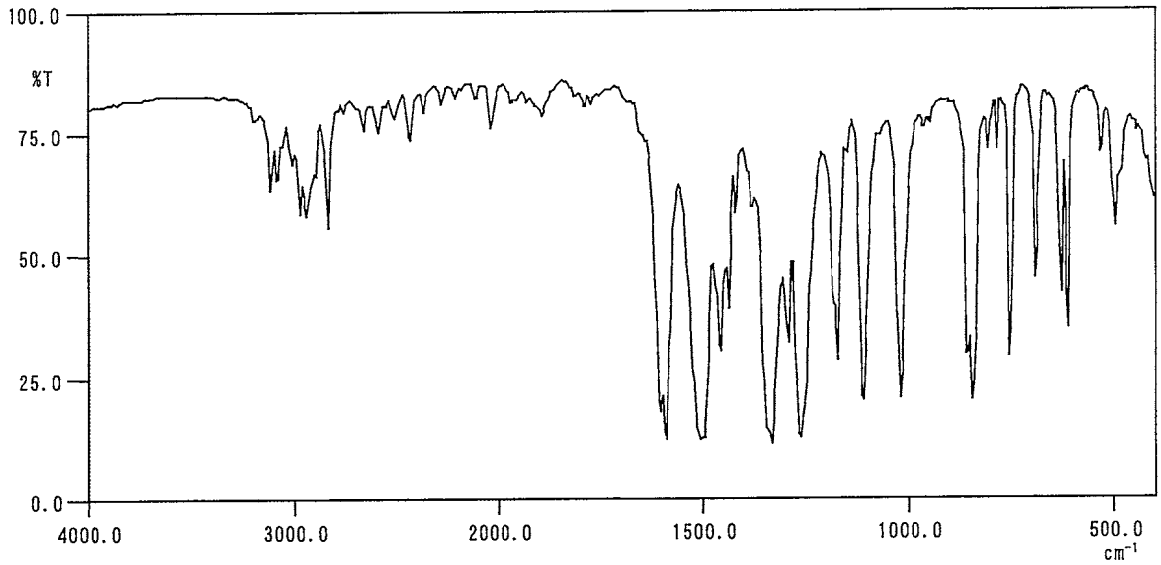
(*McLafferty FW, ed. 1994. Wiley Registry of Mass Spectral Data. 6th ed. New York, NY : John Wiley and Sons.)

Infrared Spectrometry

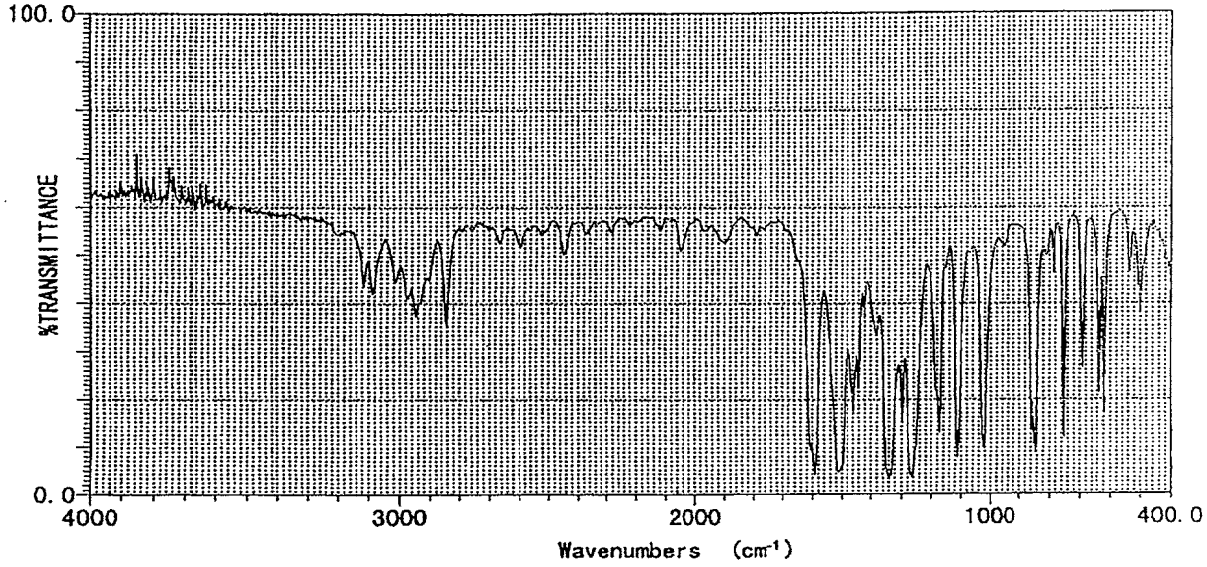
Instrument : Shimadzu FTIR-8200PC Infrared Spectrometer

Cell : KBr Liquid Cell

Resolution : 2.0 cm^{-1}



Infrared Spectrum of Test Substance



Infrared Spectrum of Literature Data*

Result: The infrared spectrum was consistent with literature spectrum.
(*Performed by Wako Pure Chemical Industries, Ltd.)

2. Impurity

Instrument : Hewlett Packard 5890A Gas Chromatograph

Column : INNOWAX (0.2 mmϕ × 50 m)

Column Temperature : 80 °C → (15 °C/min) → 280 °C (5 min)

Flow Rate : 1 mL/min

Detector : FID (Flame Ionization Detector)

Injection Volume : 1 μL

Sample Name	Peak No.	Area (%)	Peak Name
Test Substance	1	0.25	*m*-Chloronitrobenzene
	2	99.75	*p*-Nitroanisole

Result: Gas chromatography indicated one major peak (peak No.2) and one impurity. It was identified by comparing GC-MS with that of *m*-chloronitrobenzene (peak No.1) in the *p*-nitroanisole. The amount in the test substance were 0.25% (The quantity value by the standard sample was 0.28%.) with a gas chromatograph.

3. Conclusion: The test substance was identified as *p*-nitroanisole by mass spectrum and infrared spectrum. Gas chromatography indicated one major peak (*p*-nitroanisole) and one impurity. The impurity was *m*-chloronitrobenzene in the test substance.

APPENDIX P 2

STABILITY OF *p*-NITROANISOLE IN FEEDING OF MOUSES IN THE 2-YEAR FEED STUDY

STABILITY OF *p*-NITROANISOLE IN THE 2-YEAR FEED STUDY

Test Substance : *p*-Nitroanisole (Wako Pure Chemical Industries, Ltd.)

Lot No. : KSJ0005

1. Sample : This lot was used from 1999.12.2 to 2001.12.5. Test substance was stored in a dark place at room temperature.

2. Gas Chromatography

Instrument : Hewlett Packard 5890A Gas Chromatograph

Column : INNOWAX (0.2 mmϕ × 50 m)

Column Temperature : 80 °C → (15 °C/min) → 280 °C (5 min)

Flow Rate : 1 mL/min

Detector : FID (Flame Ionization Detector)

Injection Volume : 1 μL

Date (date analyzed)	Peak No.	Retention Time (min)	Area (%)
1999.11.04	1	10.259	0.25
	2	13.134	99.75
2001.12.26	1	10.244	0.25
	2	13.073	99.75

Result: Gas chromatography indicated one major peak (peak No.2) and one impurity (peak No.1 < 0.3% of total area) analyzed on 1999.11.04 and one major peak (peak No.2) and one impurity (peak No.1 < 0.3% of total area) analyzed on 2001.12.26. No new trace impurity peak in the test substance analyzed on 2001.12.26 was detected.

3. Conclusion: The test substance was stable for about 26 months in a dark place at room temperature.

APPENDIX P 3

CONCENTMOUSEION OF *p*-NITROANISOLE IN FORMULATED DIETS IN THE 2-YEAR FEED STUDY

CONCENTRATION OF *p*-NITROANISOLE IN FORMULATED DIETS IN THE 2-YEAR FEED STUDY

	Target Concentration		
Date Analyzed	5000[a]	10000	20000
1999.12.01	5170 (103)[b]	10200 (102)	20700 (104)
2000.01.26	5200 (104)	10000 (100)	20000 (100)
2000.04.19	4810 (96.2)	9470 (94.7)	19100 (95.5)
2000.07.12	4790 (95.8)	10000 (100)	19100 (95.5)
2000.10.04	4910 (98.2)	9740 (97.4)	19600 (98.0)
2000.12.27	5230 (105)	10200 (102)	20000 (100)
2001.03.21	4890 (97.8)	9880 (98.8)	19900 (99.5)
2001.06.06	5110 (102)	9850 (98.5)	20500 (103)
2001.08.29	5100 (102)	10500 (105)	20700 (104)
2001.11.21	4910 (98.2)	10500 (105)	20000 (100)

[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 mmϕ $\times$ 15 cm)
Column Temperature : Room Temperature
Flow Rate : 1 mL/min
Mobile Phase : Distilled Water : Acetonitrile = 1 : 1
Detector : UV (295 nm)
Injection Volume : 20 μL

APPENDIX P 4

STABILITY OF *p*-NITROANISOLE IN FORMULATED DIETS IN THE 2-YEAR FEED STUDY

STABILITY OF *p*-NITROANISOLE IN FORMULATED DIETS IN THE 2-YEAR FEED STUDY

		Target Concentration	
Date Prepared	Date Analyzed	300[a]	40000
1998.09.24	1998.09.24	314 (100)[b]	40500 (100)
	1998.10.02[c]	264 (84.1)	37700 (93.1)
	1998.10.29[d]	304 (96.8)	39400 (97.3)

[a] ppm
[b] % (Percentage was based on the concentration on date of preparation.)
[c] Animal room samples
[d] Cold storage 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 mmϕ $\times$ 15 cm)
Column Temperature : Room Temperature
Flow Rate : 1 mL/min
Mobile Phase : Distilled Water : Acetonitrile = 1 : 1
Detector : UV (295 nm)
Injection Volume : 20 μL

APPENDIX P 5

HOMOGENEITY OF *p*-NITROANISOLE IN FORMULATED DIETS IN THE 2-YEAR FEED STUDY

HOMOGENEITY OF *p*-NITROANISOLE IN FORMULATED DIETS IN THE 2-YEAR FEED STUDY

	Target Concentration		
	5000[a]	10000	20000
Coefficient Variation	3.33 [b]	3.05	1.26

[a] ppm
[b] % (n=7)

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 mmϕ $\times$ 15 cm)
Column Temperature : Room Temperature
Flow Rate : 1 mL/min
Mobile Phase : Distilled Water : Acetonitrile = 1 : 1
Detector : UV (295 nm)
Injection Volume : 20 µL

APPENDIX Q

METHODS, UNITS AND DECIMAL PLACE FOR HEMATOLOGY AND BIOCHEMISTRY IN THE 2-YEAR FEED STUDY OF *p*-NITROANISOLE

METHODS, UNITS AND DECIMAL PLACE FOR HEMATOLOGY AND BIOCHEMISTRY IN THE 2-YEAR FEED STUDY OF *p*-NITROANISOLE

Item	Method	Unit	Decimal place
Hematology			
Red blood cell (RBC)	Light scattering method[1)]	$\times 10^6/\mu L$	2
Hemoglobin(Hgb)	Cyanmethemoglobin method[1)]	g/dL	1
Hematocrit(Hct)	Calculated as RBC×MCV/10[1)]	%	1
Mean corpuscular volume(MCV)	Light scattering method[1)]	fL	1
Mean corpuscular hemoglobin(MCH)	Calculated as Hgb/RBC×10[1)]	pg	1
Mean corpuscular hemoglobin concentration (MCHC)	Calculated as Hgb/Hct×100[1)]	g/dL	1
Platelet	Light scattering method[1)]	$\times 10^3/\mu L$	0
White blood cell(WBC)	Light scattering method[1)]	$\times 10^3/\mu L$	2
Differential WBC	Pattern recognition method[2)] (Wright staining)	%	0
Biochemistry			
Total protein(TP)	Biuret method[3)]	g/dL	1
Albumin (Alb)	BCG method[3)]	g/dL	1
A/G ratio	Calculated as Alb/(TP−Alb)[3)]	−	1
T-bilirubin	Alkaline azobilirubin method[3)]	mg/dL	2
Glucose	GlcK·G-6-PDH method[3)]	mg/dL	0
T-cholesterol	CE·COD·POD method[3)]	mg/dL	0
Triglyceride	LPL·GK·GPO·POD method[3)]	mg/dL	0
Phospholipid	PLD·ChOD·POD method[3)]	mg/dL	0
Glutamic oxaloacetic transaminase (GOT)	JSCC method[3)]	IU/L	0
Glutamic pyruvic transaminase (GPT)	JSCC method[3)]	IU/L	0
Lactate dehydrogenase (LDH)	SFBC method[3)]	IU/L	0
Alkaline phosphatase (ALP)	GSCC method[3)]	IU/L	0
γ-Glutamyl transpeptidase (γ-GTP)	L-γ-Glutamyl-p-nitroanilide method[3)]	IU/L	0
Creatine phosphokinase (CPK)	JSCC method[3)]	IU/L	0
Urea nitrogen	Urease·GLDH method[3)]	mg/dL	1
Sodium	Ion selective electrode method[3)]	mEq/L	0
Potassium	Ion selective electrode method[3)]	mEq/L	1
Chloride	Ion selective electrode method[3)]	mEq/L	0
Calcium	OCPC method[3)]	mg/dL	1
Inorganic phosphorus	PNP·XOD·POD method[3)]	mg/dL	1

1) Automatic blood cell analyzer (ADVIA120 : Bayer Corporation)
2) Automatic blood cell differential analyzer (MICROX HEG-120NA : OMRON Corporation)
3) Automatic analyzer (Hitachi 7070 : Hitachi,Ltd.)