

グリシドールのマウスを用いた
吸入によるがん原性試験報告書

試験番号：0343

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CLINICAL OBSERVATION : SUMMARY, MOUSE : MALE

(2-YEAR STUDY)

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
DEATH	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MORIBUND SACRIFICE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HUNCHBACK POSITION	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		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
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
DEATH	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MORIBUND SACRIFICE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HUNCHBACK POSITION	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
DEATH	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MORIBUND SACRIFICE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HUNCHBACK POSITION	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		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
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
DEATH	0 ppm	0	0	0	0	0	0	0	0	1	1	1	1	1	1
	4 ppm	0	0	0	0	0	0	0	0	0	0	1	2	2	2
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	40 ppm	0	0	0	0	0	0	0	0	1	1	1	1	1	2
MORIBUND SACRIFICE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HUNCHBACK POSITION	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOBRECTION	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	1	1	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0343
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CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

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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
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
DEATH	0 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	4 ppm	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	13 ppm	1	1	1	1	1	2	2	2	2	2	2	2	2	2
	40 ppm	2	2	2	2	2	2	2	2	3	3	3	3	3	3
MORIBUND SACRIFICE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	1	1	1	1	1	1	1	1	1	1	1	1	1
	40 ppm	0	0	1	1	1	1	2	2	2	3	3	3	3	3
LOCOMOTOR MOVEMENT DECR	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HUNCHBACK POSITION	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	1	0	0	0	0	0
WASTING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
DEATH	0 ppm	1	1	1	1	1	1	1	1	1	1	1	2	2	2
	4 ppm	2	2	3	3	3	3	3	5	5	5	5	5	5	5
	13 ppm	2	2	2	2	3	5	5	5	5	5	6	7	7	7
	40 ppm	4	4	4	4	4	4	4	4	4	4	6	6	8	8
MORIBUND SACRIFICE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	1	1	1	1	1	1	2	2	3	3	3	4	4	4
	40 ppm	3	3	4	5	5	9	9	10	11	12	14	16	21	22
LOCOMOTOR MOVEMENT DECR	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	40 ppm	0	0	1	1	0	0	0	0	0	1	0	1	4	1
HUNCHBACK POSITION	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	1	0	0	1	2	1	0	0	0	0	0
	40 ppm	0	0	1	1	0	0	0	1	0	6	2	4	5	2
WASTING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	1	1	0	0	0	0	0	0	0	0	0	0
SOILED	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	1	1	1	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	3	0	0	0	0	4	1	3	7	2
FROG BELLY	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	1	1	1	1	1	1	1	1	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		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	98-7
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
DEATH	0 ppm	2	2	4	4	4	4	4	4	4	4	4	4	4	5
	4 ppm	5	5	7	7	7	7	7	7	7	7	8	8	8	8
	13 ppm	8	8	9	9	10	10	11	13	15	15	16	16	16	16
	40 ppm	8	8	8	8	8	8	8	8	8	9	10	11	12	13
MORIBUND SACRIFICE	0 ppm	0	0	1	1	1	3	4	4	4	4	4	4	4	4
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	13 ppm	4	4	4	4	5	6	6	6	6	6	7	7	8	8
	40 ppm	23	24	24	24	26	26	27	27	28	29	29	29	29	29
LOCOMOTOR MOVEMENT DECR	0 ppm	0	0	1	0	0	0	1	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	13 ppm	0	0	0	0	1	1	0	0	0	0	0	0	1	0
	40 ppm	0	0	0	0	1	0	1	0	1	0	0	0	0	0
HUNCHBACK POSITION	0 ppm	1	1	1	0	1	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	1	0	0	1	1	1	1	0	1	1	0	3	2
	40 ppm	2	4	3	3	2	1	6	4	5	3	2	2	4	3
WASTING	0 ppm	0	0	1	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	1	0	0	0	0	0	0	0	1	0
	40 ppm	0	0	0	0	0	0	0	0	1	0	0	0	0	0
SOILED	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	0 ppm	1	1	1	0	1	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	13 ppm	0	1	0	0	2	1	1	1	0	0	0	0	1	1
	40 ppm	2	3	2	2	2	1	4	5	6	3	2	2	3	2
FROG BELLY	0 ppm	0	0	0	0	0	0	0	0	1	2	2	2	2	2
	4 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
		1	1	1	1	1	1
DEATH	0 ppm	7	7	7	7	7	8
	4 ppm	8	9	11	11	11	13
	13 ppm	16	17	19	20	21	21
	40 ppm	13	13	13	13	13	13
MORIBUND SACRIFICE	0 ppm	4	4	4	4	4	4
	4 ppm	1	2	2	2	2	2
	13 ppm	8	8	8	10	10	11
	40 ppm	31	31	32	32	32	34
LOCOMOTOR MOVEMENT DECR	0 ppm	0	0	0	0	0	0
	4 ppm	0	1	0	0	0	0
	13 ppm	0	0	0	2	0	0
	40 ppm	2	0	0	0	0	0
HUNCHBACK POSITION	0 ppm	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0
	13 ppm	2	1	0	2	1	1
	40 ppm	3	2	1	4	4	3
WASTING	0 ppm	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0
SOILED	0 ppm	0	0	0	0	0	0
	4 ppm	1	0	0	0	0	0
	13 ppm	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0
PILORECTION	0 ppm	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0
	13 ppm	2	1	0	0	0	0
	40 ppm	2	2	1	2	2	1
FROG BELLY	0 ppm	1	1	1	1	1	2
	4 ppm	1	2	1	1	1	1
	13 ppm	0	1	0	0	0	0
	40 ppm	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
SOILED PERI GENITALIA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EYE OPACITY	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CLOSED EYELID	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CORNEAL OPACITY	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	1	1	1	1	1
	13 ppm	0	0	0	1	1	1	1	1	1	1	1	1	1	1
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EYE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
SOILED PERI GENITALIA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EYE OPACITY	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CLOSED EYELID	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CORNEAL OPACITY	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	0 ppm	0	0	1	1	1	1	1	1	1	1	1	1	1	1
	4 ppm	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	13 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EYE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
SOILED PERI GENITALIA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EYE OPACITY	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CLOSED EYELID	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CORNEAL OPACITY	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	0 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	2
	4 ppm	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	13 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EYE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		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
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
SOILED PERI GENITALIA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EYE OPACITY	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CLOSED EYELID	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CORNEAL OPACITY	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	0 ppm	2	2	2	2	2	2	2	2	1	1	1	1	1	1
	4 ppm	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	13 ppm	1	1	1	1	1	1	1	1	1	1	1	2	3	2
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
M. EYE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		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
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
SOILED PERI GENITALIA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EYE OPACITY	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	1	1	1	1	1	1	1	1	1
	40 ppm	0	0	0	0	0	1	1	1	1	1	1	1	1	1
CLOSED EYELID	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CORNEAL OPACITY	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	1	1	1	1	1	1	1	1	1
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	0 ppm	1	1	1	1	1	1	1	3	4	4	4	4	4	4
	4 ppm	2	2	2	2	2	2	2	2	2	2	2	2	3	3
	13 ppm	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	40 ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	2
M. NOSE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	1	1	1	1	1	1	1	1	0	0	0	0	0	0
M. EYE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	1	1	1	1	1	1	1	1	1	1
	13 ppm	0	0	0	0	1	1	2	2	2	1	1	1	1	1
	40 ppm	0	0	1	1	1	1	1	1	1	1	1	1	1	1

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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	82-7	83-7	84-7
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
SOILED PERI GENITALIA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	1	1	1	1	1	1	1	1	0	0
EXOPHTHALMOS	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	1	1	1	1	1	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EYE OPACITY	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	1	1	1	1	1	1	1	1	1	1
	13 ppm	1	1	1	1	2	3	3	3	3	2	2	2	2	2
	40 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CLOSED EYELID	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	13 ppm	0	0	0	0	0	0	0	0	0	1	1	1	1	1
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CORNEAL OPACITY	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	1	1	1	1	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	0 ppm	4	4	4	4	4	4	4	5	5	5	5	4	5	6
	4 ppm	3	3	3	3	3	3	3	1	1	1	1	1	1	2
	13 ppm	2	2	2	3	3	3	3	2	2	2	1	1	2	2
	40 ppm	2	2	1	1	1	1	1	1	1	1	1	1	1	0
M. NOSE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	2	2	1	2	1
M. EYE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	13 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	40 ppm	1	1	1	1	1	1	1	3	3	3	3	3	2	2

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Clinical sign	Group Name	Administration Week-day													
		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	98-7
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
SOILED PERI GENITALIA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	1	0	0	0	1	1	1	1	1	1
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EYE OPACITY	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	1	1	1	1	1	1	1	1	0	0	0	0	0	0
	13 ppm	2	2	2	2	2	1	1	1	1	1	1	1	1	1
	40 ppm	1	0	0	0	0	0	0	0	0	0	0	0	0	0
CLOSED EYELID	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	13 ppm	1	1	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CORNEAL OPACITY	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	0 ppm	6	6	5	5	5	4	4	4	4	4	4	4	4	5
	4 ppm	2	2	3	3	4	5	5	5	6	6	5	6	6	5
	13 ppm	2	2	3	3	3	4	5	4	3	3	3	4	4	4
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
M. NOSE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	1	1	1	1	1	1	1	1	1	0	0	0	0	0
M. EYE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	13 ppm	1	1	1	1	1	2	2	2	2	2	2	2	3	3
	40 ppm	2	2	2	2	2	3	3	3	3	2	1	1	1	1

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Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
		1	1	1	1	1	1
SOILED PERI GENITALIA	0 ppm	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0
	40 ppm	1	0	0	0	0	0
EXOPHTHALMOS	0 ppm	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0
	13 ppm	1	1	1	1	1	1
	40 ppm	0	0	0	0	0	0
EYE OPACITY	0 ppm	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0
	13 ppm	1	1	1	2	1	1
	40 ppm	0	0	0	0	0	0
CLOSED EYELID	0 ppm	0	0	0	0	0	0
	4 ppm	1	1	0	0	0	0
	13 ppm	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0
CORNEAL OPACITY	0 ppm	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0
INTERNAL MASS	0 ppm	3	3	3	4	4	4
	4 ppm	5	3	4	4	4	4
	13 ppm	4	4	3	3	2	2
	40 ppm	1	0	0	0	0	0
M. NOSE	0 ppm	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0
M. EYE	0 ppm	0	0	0	0	0	0
	4 ppm	1	1	1	1	1	1
	13 ppm	3	3	3	3	2	2
	40 ppm	1	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. PERI MOUTH	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EAR	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NECK	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. HINDLIMB	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANUS	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. PERI MOUTH	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EAR	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NECK	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. HINDLIMB	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANUS	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. PERI MOUTH	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EAR	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NECK	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. HINDLIMB	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANUS	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		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
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. PERI MOUTH	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EAR	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NECK	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. HINDLIMB	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANUS	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		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
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. PERI MOUTH	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EAR	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NECK	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. HINDLIMB	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANUS	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. PERI MOUTH	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EAR	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NECK	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	1	1	0	0	0	0
M. HINDLIMB	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	2	2	2	3	3	3	3	3	2	1
M. ANUS	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		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	98-7
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. PERI MOUTH	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	1	1	1	1	1	1	1	1	1	1	1
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EAR	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NECK	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	2
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. HINDLIMB	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	1	1	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	1	1	1	1	1	1	1	1	3	2	2	1	1	1
M. ANUS	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
		1	1	1	1	1	1
M. PERI MOUTH	0 ppm	0	0	0	0	0	0
	4 ppm	1	1	1	1	1	1
	13 ppm	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0
M. EAR	0 ppm	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0
	13 ppm	1	1	1	1	1	1
	40 ppm	0	0	0	0	0	0
M. NECK	0 ppm	0	0	0	0	0	0
	4 ppm	0	0	0	0	1	1
	13 ppm	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0
M. BREAST	0 ppm	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0
	13 ppm	2	2	2	2	1	1
	40 ppm	0	0	0	0	0	0
M. ABDOMEN	0 ppm	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0
M. HINDLIMB	0 ppm	0	0	1	1	1	1
	4 ppm	0	0	0	0	1	1
	13 ppm	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0
M. GENITALIA	0 ppm	0	0	0	0	1	1
	4 ppm	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0
	40 ppm	1	0	0	0	0	0
M. ANUS	0 ppm	0	0	0	0	0	0
	4 ppm	1	1	0	0	0	0
	13 ppm	0	1	1	1	1	1
	40 ppm	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. TAIL	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ULCER	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EROSION	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GASPING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. TAIL	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ULCER	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EROSION	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GASPING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. TAIL	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ULCER	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EROSION	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	0 ppm	0	0	0	0	1	1	1	1	1	1	1	1	1	1
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GASPING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		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
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. TAIL	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ULCER	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EROSION	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	0 ppm	1	1	1	1	1	1	1	1	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GASPING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	1	1	1	2	1	0	0	0
	13 ppm	0	0	0	1	1	1	1	1	1	1	1	1	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	1	1	1	1	0

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		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
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. TAIL	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ULCER	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EROSION	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	0 ppm	0	0	0	0	0	0	0	0	1	1	1	1	1	1
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GASPING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	1	1	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	1	1	0	0	1	1	1

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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	82-7	83-7	84-7
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. TAIL	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ULCER	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EROSION	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	1	1	1	1	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	1	1	1	1	1	1	1	1	0	0
CRUSTA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	1	1	1	1	1
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	0 ppm	1	1	1	1	1	1	1	1	1	1	1	1	2	2
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GASPING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	1	0	0	0	0	1	0
IRREGULAR BREATHING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	2
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	1	2	1	1	1	2	1	2	2	0	3	3
	40 ppm	0	1	1	1	4	2	5	8	8	12	8	10	10	6

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Clinical sign	Group Name	Administration Week-day													
		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	98-7
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. TAIL	0 ppm	0	0	0	0	1	1	1	1	1	1	2	2	2	2
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	1	1	1	1	1	1
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ULCER	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EROSION	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	13 ppm	1	2	2	2	1	1	1	1	1	1	1	1	1	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	0 ppm	2	2	2	1	1	1	1	1	1	1	1	1	1	1
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GASPING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	0 ppm	2	2	1	0	1	0	1	0	0	0	0	1	1	1
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	0
	13 ppm	1	2	2	6	5	3	4	4	4	7	8	7	10	8
	40 ppm	3	5	4	6	7	3	6	5	5	5	4	2	5	4

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Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
		1	1	1	1	1	1
M. TAIL	0 ppm	2	2	2	2	2	2
	4 ppm	0	0	0	0	0	0
	13 ppm	1	1	2	2	2	2
	40 ppm	0	0	0	0	0	0
ANEMIA	0 ppm	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0
ULCER	0 ppm	0	0	0	0	0	1
	4 ppm	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0
EROSION	0 ppm	0	0	1	2	2	2
	4 ppm	0	0	1	2	2	2
	13 ppm	1	1	1	0	0	0
	40 ppm	0	0	0	0	0	0
CRUSTA	0 ppm	0	0	0	0	0	0
	4 ppm	1	1	1	1	1	1
	13 ppm	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0
TORTICOLLIS	0 ppm	1	1	1	1	1	1
	4 ppm	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0
GASPING	0 ppm	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0
IRREGULAR BREATHING	0 ppm	0	0	0	0	0	0
	4 ppm	0	1	0	0	0	0
	13 ppm	8	9	8	8	6	6
	40 ppm	4	2	1	4	4	3

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Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
BRADYPNEA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRA. SOUND	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190)

BAIS 3

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		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
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
BRADYPNEA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRA. SOUND	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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BAIS 3

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
BRADYPNEA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRA. SOUND	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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BAIS 3

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		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
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
BRADYPNEA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRA. SOUND	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	1	1	1	1	1	1	1	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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BAIS 3

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		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
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
BRADYPNEA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRA. SOUND	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	1	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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BAIS 3

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
BRADYPNEA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	1	0	0	0	0	0	1	0	0	0	0
ABNORMAL RESPIRA. SOUND	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	1	1	0	0	0
	40 ppm	0	0	0	0	4	0	2	2	2	6	3	5	2	3
SUBNORMAL TEMP	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	40 ppm	0	0	1	1	0	0	0	0	0	1	0	0	3	0

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STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		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	98-7
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
BRADYPNEA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	1	0	0	0	0	0	0	0
ABNORMAL RESPIRA. SOUND	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	1	1	0	1	1	1	1	2	2	2	1	2	3	6
	40 ppm	3	2	1	1	1	1	2	2	4	1	2	2	1	3
SUBNORMAL TEMP	0 ppm	0	0	1	0	0	0	1	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	40 ppm	0	0	0	0	0	0	1	0	1	0	0	0	0	0

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STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
		1	1	1	1	1	1
BRADYPNEA	0 ppm	0	0	0	0	0	0
	4 ppm	0	1	0	0	0	0
	13 ppm	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0
ABNORMAL RESPIRA. SOUND	0 ppm	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0
	13 ppm	7	7	7	6	4	4
	40 ppm	2	2	1	2	2	2
SUBNORMAL TEMP	0 ppm	0	0	0	0	0	0
	4 ppm	0	1	0	0	0	0
	13 ppm	0	0	0	0	0	0
	40 ppm	1	0	0	0	0	0

(HAN190)

BAIS 3

APPENDIX A 2

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
DEATH	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MORIBUND SACRIFICE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HUNCHBACK POSITION	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATAXIC GAIT	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
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CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 42

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
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
DEATH	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MORIBUND SACRIFICE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HUNCHBACK POSITION	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATAXIC GAIT	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	0 ppm	0	0	0	0	0	0	1	1	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
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CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

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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
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
DEATH	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	1	1	1	1	1
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MORIBUND SACRIFICE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HUNCHBACK POSITION	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATAXIC GAIT	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		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
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
DEATH	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	13 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	2
	40 ppm	0	0	0	0	1	1	1	1	1	1	1	1	1	1
MORIBUND SACRIFICE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	1	1	1	1	1	1
LOCOMOTOR MOVEMENT DECR	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HUNCHBACK POSITION	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATAXIC GAIT	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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		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
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
DEATH	0 ppm	0	0	0	0	1	1	2	3	3	3	3	3	3	3
	4 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	2
	13 ppm	2	2	2	2	2	2	3	3	3	3	4	4	5	6
	40 ppm	1	2	2	3	3	4	4	4	4	5	6	7	8	8
MORIBUND SACRIFICE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	1	1	1	1	1	1	1	1	1	1	1	2	2	3
LOCOMOTOR MOVEMENT DECR	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
HUNCHBACK POSITION	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	1	1	0	0	0
ATAXIC GAIT	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
WASTING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	1	0	0	0	0	0	0	0	0	1	2	0	0	1
SOILED	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1

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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	82-7	83-7	84-7
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
DEATH	0 ppm	4	4	4	4	4	4	4	4	4	6	6	7	7	7
	4 ppm	2	3	3	3	3	3	4	4	4	4	5	5	5	6
	13 ppm	6	6	6	6	7	8	10	11	11	12	12	13	13	14
	40 ppm	8	8	9	11	12	13	13	13	13	14	14	16	16	16
MORIBUND SACRIFICE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	1	1	1	1	1	1	1	1	1	1	2	3	3	4
	13 ppm	0	0	1	1	2	2	2	5	5	5	6	6	6	6
	40 ppm	3	3	3	3	4	6	6	9	11	12	14	14	14	14
LOCOMOTOR MOVEMENT DECR	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	13 ppm	0	0	0	0	0	0	0	2	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	1	0	0	1	0	0	0
HUNCHBACK POSITION	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	13 ppm	0	0	0	0	0	1	1	3	0	0	2	0	1	0
	40 ppm	0	0	0	2	0	1	1	4	1	3	2	0	2	1
ATAXIC GAIT	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	1	1	1	1	1	1	1	1	0	0	0	0	0	0
WASTING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	3	0	1	0	0	0	0
SOILED	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	1	1	1	1	1	1	1	1	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		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	98-7
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
DEATH	0 ppm	7	7	7	7	7	9	9	10	12	12	14	14	15	16
	4 ppm	6	6	8	9	9	10	10	11	12	12	12	13	13	13
	13 ppm	14	14	14	15	15	15	15	17	17	17	18	18	21	21
	40 ppm	16	17	17	17	18	18	18	19	20	21	21	21	21	21
MORIBUND SACRIFICE	0 ppm	0	0	0	1	1	1	1	1	1	1	1	1	1	1
	4 ppm	4	4	4	5	5	5	5	6	8	8	8	9	9	9
	13 ppm	6	6	6	6	8	9	9	9	9	10	10	10	11	11
	40 ppm	15	16	17	18	19	19	23	23	24	24	24	24	25	26
LOCOMOTOR MOVEMENT DECR	0 ppm	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	2	0	0	1	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	1	0	0	1	0
	40 ppm	1	0	0	0	1	0	1	0	1	0	0	0	1	1
HUNCHBACK POSITION	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	1	1	1	0	0	0	0	0	2	0	0	0	0	0
	13 ppm	0	1	1	3	4	1	1	1	1	1	0	0	1	0
	40 ppm	4	1	1	3	4	3	3	1	1	0	0	1	1	1
ATAXIC GAIT	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	1	1	1	1	1	1
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	13 ppm	0	0	0	0	0	0	0	0	0	1	0	0	1	0
	40 ppm	1	0	1	1	0	0	0	0	1	0	0	0	0	1
SOILED	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
		1	1	1	1	1	1
DEATH	0 ppm	17	18	19	19	19	19
	4 ppm	14	14	15	15	17	17
	13 ppm	22	23	23	24	25	27
	40 ppm	21	21	21	21	21	21
MORIBUND SACRIFICE	0 ppm	2	2	2	2	3	3
	4 ppm	9	10	10	10	11	11
	13 ppm	11	11	12	12	13	13
	40 ppm	26	26	26	27	27	27
LOCOMOTOR MOVEMENT DECR	0 ppm	0	0	0	0	1	0
	4 ppm	0	0	0	0	1	0
	13 ppm	0	0	1	0	0	0
	40 ppm	0	0	0	1	0	0
HUNCHBACK POSITION	0 ppm	0	0	0	1	1	1
	4 ppm	0	0	0	0	0	1
	13 ppm	0	0	0	2	1	0
	40 ppm	0	0	0	1	0	1
ATAXIC GAIT	0 ppm	0	0	0	0	1	0
	4 ppm	1	0	0	0	0	0
	13 ppm	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0
PARALYTIC GAIT	0 ppm	0	0	0	0	0	0
	4 ppm	0	0	0	0	1	0
	13 ppm	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0
WASTING	0 ppm	0	0	0	1	2	1
	4 ppm	1	0	1	1	1	0
	13 ppm	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0
SOILED	0 ppm	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
PILOERECTOR	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EYE OPACITY	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CORNEAL OPACITY	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NOSE HEMORRHAGIC DISCHA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	0 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	4 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	13 ppm	0	0	0	0	0	1	1	1	1	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
PILOERECTION	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EYE OPACITY	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CORNEAL OPACITY	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NOSE HEMORRHAGIC DISCHA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	0 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	4 ppm	1	1	1	1	1	1	1	2	2	2	2	2	2	2
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
PILOERECTON	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EYE OPACITY	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CORNEAL OPACITY	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NOSE HEMORRHAGIC DISCHA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	0 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	4 ppm	2	2	2	2	2	2	1	1	1	1	1	1	1	1
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	1
M. NOSE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		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
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
PILOERECTOR	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EYE OPACITY	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CORNEAL OPACITY	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NOSE HEMORRHAGIC DISCHARGE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	0 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	4 ppm	1	1	1	1	1	1	2	2	2	2	1	1	1	1
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	40 ppm	1	1	1	1	1	1	1	1	0	0	0	0	1	1
M. NOSE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		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
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
PILOBRECTION	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	0 ppm	0	0	0	0	1	1	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EYE OPACITY	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CORNEAL OPACITY	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NOSE HEMORRHAGIC DISCHA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	0 ppm	2	2	3	3	3	3	3	3	3	4	4	5	5	5
	4 ppm	1	1	1	1	1	1	1	2	2	4	4	4	4	3
	13 ppm	1	1	2	2	2	4	4	4	4	4	4	5	4	3
	40 ppm	1	1	1	1	1	2	2	2	2	2	1	2	1	1
M. NOSE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
PILOERECTON	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	1	1	1	1	0	0	1	0	1	0
	40 ppm	0	0	1	1	2	3	1	4	0	2	0	0	1	1
FROG BELLY	0 ppm	0	0	0	0	0	0	0	2	2	0	0	0	0	0
	4 ppm	1	0	0	0	0	0	0	0	0	0	2	2	1	1
	13 ppm	0	1	0	1	1	0	1	0	0	0	0	0	1	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EYE OPACITY	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	1	1	1	1	0	0	0
	40 ppm	0	0	1	1	1	1	0	0	0	0	0	0	0	1
CORNEAL OPACITY	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NOSE HEMORRHAGIC DISCHA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	0 ppm	4	4	5	6	6	6	6	6	6	4	6	6	6	6
	4 ppm	4	3	4	4	6	7	6	6	7	7	7	7	6	6
	13 ppm	3	3	4	4	7	7	7	6	4	4	4	4	5	6
	40 ppm	1	1	1	1	2	2	2	4	3	2	2	1	1	1
M. NOSE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	1	1	1	1	1	1	1

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Clinical sign	Group Name	Administration Week-day													
		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	98-7
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
PILOERECTION	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	1	1	1	1	1	3	1	1	1	1	1
	13 ppm	0	2	2	2	1	0	0	0	0	0	0	0	0	0
	40 ppm	2	1	0	1	3	2	3	1	1	0	0	1	1	1
FROG BELLY	0 ppm	0	0	0	0	0	0	0	1	2	3	2	2	1	1
	4 ppm	2	3	2	1	2	1	4	3	3	2	2	1	0	1
	13 ppm	0	1	2	1	0	0	2	0	0	2	2	3	0	1
	40 ppm	0	0	0	1	1	1	3	1	1	0	0	0	0	0
EXOPHTHALMOS	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EYE OPACITY	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	1	1	1	1	0	0	0	0	0	0	0	0	0	0
CORNEAL OPACITY	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	1	1	1	1	1	1	1	1	1	1	1	1	1
	40 ppm	0	0	0	0	0	0	1	1	1	0	0	0	0	0
NOSE HEMORRHAGIC DISCHA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	0 ppm	6	6	6	6	6	5	5	5	5	5	4	5	4	3
	4 ppm	5	5	4	3	4	6	6	4	5	3	3	3	2	2
	13 ppm	6	7	7	7	5	6	6	5	5	6	5	6	4	4
	40 ppm	1	2	2	2	4	4	3	2	2	1	1	1	1	1
M. NOSE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	1	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
		1	1	1	1	1	1
PILOERECTION	0 ppm	0	0	0	0	0	1
	4 ppm	1	0	1	2	2	1
	13 ppm	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0
FROG BELLY	0 ppm	1	0	0	0	0	0
	4 ppm	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0
EXOPHTHALMOS	0 ppm	1	1	1	1	1	1
	4 ppm	0	0	0	0	0	0
	13 ppm	0	1	1	1	1	0
	40 ppm	0	0	0	0	0	0
EYE OPACITY	0 ppm	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0
CORNEAL OPACITY	0 ppm	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0
	13 ppm	1	1	1	0	0	0
	40 ppm	0	0	0	0	0	0
NOSE HEMORRHAGIC DISCHA	0 ppm	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0
	13 ppm	0	0	1	0	0	0
	40 ppm	0	0	0	0	0	0
INTERNAL MASS	0 ppm	3	4	3	3	4	4
	4 ppm	1	1	1	2	0	0
	13 ppm	3	3	4	6	5	5
	40 ppm	0	0	0	0	0	0
M. NOSE	0 ppm	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. EYE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NECK	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. EYE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NECK	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. EYE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NECK	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		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
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. EYE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NECK	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		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
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. EYE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NECK	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	1	1	1	1	1	1	1	1	1
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
ANEMIA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. EYE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	1	0	0	1	1	1	1	1	1	1	1	1
M. NECK	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	1	1	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	1	1	1	1	1	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	1	1	1	1	1	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	1	1	1	1	0	0	0	0	0	0	0	0	0	0
	40 ppm	2	2	2	1	1	1	1	1	1	1	0	0	0	0
ANEMIA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	13 ppm	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		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	98-7
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. EYE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	1	1	1	1	1	1	1	2	2	1	1	1	1	0
M. NECK	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	1	1	1	0	0	0	0	0	0	0	0	0
M. ABDOMEN	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	1	1	1	1	1	1	0	0	0	0	0	0
ANEMIA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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 REPORT TYPE : A1 104

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SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
		1	1	1	1	1	1
M. EYE	0 ppm	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0
M. NECK	0 ppm	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0
M. BREAST	0 ppm	1	0	0	0	0	0
	4 ppm	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0
M. ABDOMEN	0 ppm	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0
	13 ppm	0	0	1	1	1	1
	40 ppm	0	0	0	0	0	0
M. ANTERIOR. DORSUM	0 ppm	1	1	1	1	1	1
	4 ppm	0	0	0	0	0	0
	13 ppm	1	1	1	0	0	0
	40 ppm	0	0	0	0	0	0
M. POSTERIOR DORSUM	0 ppm	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0
	13 ppm	1	1	1	1	1	1
	40 ppm	0	0	0	0	0	0
M. GENITALIA	0 ppm	0	0	0	1	1	1
	4 ppm	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0
ANEMIA	0 ppm	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0

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ANIMAL : MOUSE Crj:BDF1
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Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
CRUSTA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHAGE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GASPING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BRADYPNEA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SHALLOW BREATHING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
CRUSTA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHAGE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GASPING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BRADYPNEA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SHALLOW BREATHING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
CRUSTA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHAGE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	0 ppm	0	0	0	0	0	1	1	1	1	1	1	1	1	1
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GASPING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BRADYPNEA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SHALLOW BREATHING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		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
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
CRUSTA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHAGE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	0 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GASPING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	1	1	1	1	1	1	1	1	1	1	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BRADYPNEA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SHALLOW BREATHING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		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
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
CRUSTA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHAGE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	0 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GASPING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	1	1	0	0	0
BRADYPNEA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SHALLOW BREATHING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
CRUSTA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHAGE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	0 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GASPING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	1	1	0	1
	13 ppm	0	0	0	0	1	4	2	4	1	1	2	1	3	2
	40 ppm	0	0	4	4	3	5	5	7	4	4	4	1	5	6
BRADYPNEA	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	1	0	0	0	0	0	0
DEEP BREATHING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SHALLOW BREATHING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 71

Clinical sign	Group Name	Administration Week-day													
		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	98-7
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
CRUSTA	0 ppm	0	0	1	1	1	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	1	1	1	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHAGE	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	0 ppm	1	1	1	1	1	1	2	2	2	2	1	1	1	1
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GASPING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	0 ppm	0	0	1	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	2	0	0	0	0	0
	13 ppm	2	4	5	5	4	2	3	2	2	2	1	1	2	1
	40 ppm	6	3	3	7	5	4	5	4	3	3	3	3	4	2
BRADYPNEA	0 ppm	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	1	0	0	1	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	1	0	0	0	0	0	0	0
DEEP BREATHING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0
SHALLOW BREATHING	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 72

Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
		1	1	1	1	1	1
CRUSTA	0 ppm	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0
HEMORRHAGE	0 ppm	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0
TORTICOLLIS	0 ppm	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0
GASPING	0 ppm	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0
IRREGULAR BREATHING	0 ppm	1	0	0	1	0	0
	4 ppm	0	0	0	0	0	1
	13 ppm	1	1	1	2	2	2
	40 ppm	1	2	2	2	1	1
BRADYPNEA	0 ppm	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0
DEEP BREATHING	0 ppm	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	1
	13 ppm	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0
SHALLOW BREATHING	0 ppm	0	0	0	0	1	0
	4 ppm	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 73

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
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
ABNORMAL RESPIRA. SOUND	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190)

BAIS 3

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 74

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
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
ABNORMAL RESPIRA. SOUND	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190)

BAIS 3

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 75

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
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
ABNORMAL RESPIRA.SOUND	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190)

BAIS 3

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 76

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
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
ABNORMAL RESPIRA. SOUND	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	1	1	1	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190)

BAIS 3

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 77

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
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
ABNORMAL RESPIRA. SOUND	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1

(HAN190)

BAIS 3

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

PAGE : 78

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	82-7	83-7	84-7
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
ABNORMAL RESPIRA. SOUND	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0	1	2	0	1	1	0	0	1
	40 ppm	0	0	1	1	1	1	0	0	1	4	3	1	1	2
SUBNORMAL TEMP	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	1	1	0	1
	13 ppm	0	0	0	0	1	0	0	1	0	0	1	0	0	0
	40 ppm	0	0	0	0	0	0	0	1	0	0	1	0	0	0

(HAN190)

BAIS 3

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 79

Clinical sign	Group Name	Administration Week-day													
		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	98-7
		1	1	1	1	1	1	1	1	1	1	1	1	1	1
ABNORMAL RESPIRA. SOUND	0 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	13 ppm	1	1	1	2	3	1	1	1	1	1	0	1	1	1
	40 ppm	2	0	1	1	0	2	0	1	2	1	1	2	2	1
SUBNORMAL TEMP	0 ppm	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0	0	0	2	0	0	1	0	0
	13 ppm	0	0	0	0	0	0	0	0	0	1	0	0	1	0
	40 ppm	0	0	0	1	0	0	0	0	0	0	0	0	0	1

(HAN190)

BAIS 3

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

PAGE : 80

Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
		1	1	1	1	1	1
ABNORMAL RESPIRA. SOUND	0 ppm	0	0	0	0	0	0
	4 ppm	0	0	0	0	0	0
	13 ppm	1	1	1	1	1	0
	40 ppm	1	2	2	2	1	1
SUBNORMAL TEMP	0 ppm	0	0	0	0	1	0
	4 ppm	0	0	0	0	0	0
	13 ppm	0	0	0	0	0	0
	40 ppm	0	0	0	1	0	0

(HAN190)

BAIS 3

APPENDIX B 1

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

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 1

Group Name	Administration week						
	0	1	2	3	4	5	6
0 ppm	22.3± 0.8	23.8± 1.0	24.6± 1.1	25.4± 1.3	25.9± 1.5	26.4± 1.8	27.4± 1.9
4 ppm	22.3± 0.8	23.5± 1.0	24.0± 1.0**	24.6± 1.1**	25.2± 1.1**	25.8± 1.2	26.4± 1.4
13 ppm	22.3± 0.8	23.7± 0.9	24.6± 1.0	25.3± 1.2	26.0± 1.3	26.5± 1.3	27.1± 1.5
40 ppm	22.3± 0.8	23.1± 0.9**	23.7± 1.0**	24.2± 1.0**	24.9± 1.1**	25.3± 1.1**	25.9± 1.1**

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

Test of Dunnett

(HAN260)

BAIS 3

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 2

Group Name	Administration week						
	7	8	9	10	11	12	13
0 ppm	27.7± 2.1	28.3± 2.3	28.9± 2.3	29.3± 2.4	30.4± 2.5	30.8± 2.7	31.2± 3.3
4 ppm	26.7± 1.6*	27.3± 1.6	27.7± 1.8*	28.2± 1.9	29.1± 1.9*	29.5± 2.0	30.0± 2.3
13 ppm	27.9± 1.6	28.2± 1.7	28.7± 1.9	29.1± 2.0	29.9± 2.2	30.8± 2.4	30.9± 2.4
40 ppm	26.1± 1.3**	26.4± 1.3**	27.0± 1.3**	27.4± 1.4**	27.9± 1.5**	28.5± 1.5**	29.0± 1.7**

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

Test of Dunnett

(HAN260)

BAIS 3

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 3

Group Name	Administration week						
	14	18	22	26	30	34	38
0 ppm	32.1± 2.8	34.9± 3.1	36.6± 3.3	39.0± 3.8	40.5± 4.1	41.4± 4.8	43.0± 4.8
4 ppm	30.7± 2.4	33.1± 3.0**	35.2± 3.3	37.7± 3.6	39.0± 4.2	40.3± 4.6	41.8± 4.8
13 ppm	31.5± 2.5	33.9± 2.8	35.9± 3.2	38.3± 3.7	39.9± 4.5	41.3± 4.9	42.5± 4.9
40 ppm	29.5± 1.8**	31.7± 2.4**	33.7± 3.0**	35.7± 2.7**	36.7± 3.2**	37.5± 3.2**	38.4± 3.3**
Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Dunnett							

(HAN260)

BAIS 3

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 4

Group Name	Administration week											
	42	46	50	54	58	62	66					
0 ppm	44.4± 4.9	45.4± 5.0	46.8± 5.0	47.7± 4.7	47.6± 4.7	49.1± 4.9	49.1± 5.3					
4 ppm	43.4± 4.9	43.9± 4.9	44.5± 5.7	45.9± 5.1	46.1± 5.2	47.3± 5.4	47.7± 5.4					
13 ppm	43.3± 5.1	43.8± 6.0	44.9± 6.0	45.7± 6.3	46.1± 5.5	47.1± 5.9	47.5± 6.0					
40 ppm	39.2± 3.9**	39.7± 4.1**	40.3± 4.3**	40.5± 5.1**	39.8± 4.7**	40.4± 4.9**	39.7± 3.9**					

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

Test of Dunnett

(HAN260)

BAIS 3

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 5

Group Name	Administration week						
	70	74	78	82	86	90	94
0 ppm	49.3± 5.6	49.6± 5.9	49.8± 6.1	50.3± 6.9	49.3± 7.4	50.2± 7.0	49.2± 7.3
4 ppm	48.4± 5.5	49.1± 5.7	49.7± 6.3	50.3± 6.6	50.1± 7.3	50.2± 7.2	50.1± 7.2
13 ppm	47.3± 6.6	46.8± 8.1	46.8± 6.8	47.0± 6.5	45.5± 7.6	43.4± 8.2**	41.9± 7.6**
40 ppm	38.2± 4.6**	37.3± 5.1**	35.2± 5.4**	33.9± 7.4**	35.3± 7.3**	35.2± 5.3**	32.4± 4.6**

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

Test of Dunnett

(HAN260)

BAIS 3

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

PAGE : 6

Group Name	Administration week		
	98	102	104
0 ppm	48.6± 7.9	48.3± 6.9	47.7± 7.5
4 ppm	49.7± 7.1	49.3± 7.6	49.1± 7.7
13 ppm	39.0± 9.2**	37.7± 8.7**	38.2± 7.6**
40 ppm	30.0± 5.0**	27.2± 5.0**	29.0± 2.3**

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

Test of Dunnett

(HAN260)

BAIS 3

APPENDIX B 2

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

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 7

Group Name	Administration week						
	0	1	2	3	4	5	6
0 ppm	18.1± 0.7	18.9± 0.9	19.8± 0.9	20.5± 1.0	21.4± 0.9	21.9± 1.1	22.4± 1.1
4 ppm	18.1± 0.7	18.7± 0.8	19.8± 0.9	20.4± 1.1	21.2± 1.0	21.6± 1.1	22.2± 1.0
13 ppm	18.1± 0.7	18.9± 0.8	19.9± 1.0	20.5± 0.9	21.2± 1.1	21.6± 1.2	22.0± 0.9
40 ppm	18.1± 0.7	18.7± 0.9	19.5± 0.8	20.1± 0.9	20.9± 0.9	21.2± 0.9**	21.8± 1.0
Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Dunnett							

(HAN260)

BAIS 3

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 8

Group Name	Administration week						
	7	8	9	10	11	12	13
0 ppm	22.6± 1.2	22.7± 1.2	23.2± 1.2	23.1± 1.1	24.1± 1.6	24.1± 1.2	24.3± 1.3
4 ppm	22.4± 1.1	22.4± 1.2	22.7± 1.2	22.9± 1.3	24.0± 1.4	23.9± 1.5	24.1± 1.5
13 ppm	22.4± 1.2	22.7± 1.3	22.7± 1.0	22.9± 1.3	23.6± 1.2	24.1± 1.3	24.1± 1.2
40 ppm	22.1± 1.0	22.2± 0.9	22.7± 0.9	22.7± 1.0	23.5± 1.0	23.8± 1.0	23.6± 1.1*
Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Dunnett							

(HAN260)

BAIS 3

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 9

Group Name	Administration week						
	14	18	22	26	30	34	38
0 ppm	24.6± 1.6	25.5± 1.6	26.0± 1.9	27.1± 2.3	27.8± 2.4	27.5± 2.2	28.3± 2.7
4 ppm	24.5± 1.8	25.4± 1.7	26.0± 2.0	27.0± 2.5	27.9± 2.4	27.8± 2.4	28.3± 3.0
13 ppm	24.2± 1.5	25.0± 1.4	25.6± 1.6	26.9± 1.9	27.2± 2.2	27.7± 2.6	28.3± 2.2
40 ppm	23.9± 1.2	24.8± 1.3	25.6± 1.3	26.2± 1.6	26.8± 1.8	27.3± 2.2	27.3± 2.4

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

(HAN260)

BAIS 3

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 10

Group Name	Administration week						
	42	46	50	54	58	62	66
0 ppm	29.1± 3.1	29.1± 3.1	29.8± 3.5	29.8± 3.2	29.5± 2.9	29.8± 2.7	29.9± 3.1
4 ppm	29.0± 3.2	29.1± 3.2	30.0± 3.5	30.1± 3.7	30.3± 3.9	31.1± 3.7	31.5± 4.1
13 ppm	29.2± 2.7	29.2± 3.1	30.3± 3.2	30.4± 2.8	30.8± 2.7	31.7± 2.8**	32.3± 3.1**
40 ppm	28.1± 2.2	28.1± 2.3	28.9± 2.3	28.9± 2.2	29.1± 2.4	29.6± 2.4	28.8± 3.2

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

Test of Dunnett

(HAN260)

BAIS 3

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 11

Group Name	Administration week						
	70	74	78	82	86	90	94
0 ppm	30.1± 3.2	30.8± 3.7	31.3± 4.0	30.8± 3.4	31.2± 3.6	31.0± 3.8	31.7± 4.3
4 ppm	32.1± 4.4*	31.8± 3.9	32.0± 4.1	32.9± 5.0*	32.9± 4.7	33.5± 5.1	33.7± 6.1
13 ppm	32.2± 3.4*	32.7± 3.5	31.7± 4.2	33.0± 3.4**	34.0± 3.7*	33.8± 3.7*	32.8± 5.1
40 ppm	28.5± 3.6	28.7± 4.3*	28.0± 5.3**	30.2± 3.5	27.9± 4.5*	28.4± 6.1	27.2± 3.1
Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Dunnett							

(HAN260)

BAIS 3

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

PAGE : 12

Group Name	Administration week		
	98	102	104
0 ppm	31.2± 4.7	30.3± 3.8	30.8± 4.0
4 ppm	32.1± 4.2	31.2± 4.2	31.8± 4.6
13 ppm	33.8± 3.8	32.4± 4.0	33.1± 3.2
40 ppm	21.4± 1.6**	21.1± 0.2 ?	21.2± 0.0 ?

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

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

APPENDIX C 1

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

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 1

Group Name	Administration week						
	1	2	3	4	5	6	7
0 ppm	4.1± 0.3	4.0± 0.2	4.1± 0.2	4.1± 0.2	4.2± 0.3	4.4± 0.3	4.3± 0.3
4 ppm	4.1± 0.3	3.9± 0.3	4.1± 0.2	4.1± 0.2	4.2± 0.2	4.3± 0.2	4.3± 0.2
13 ppm	4.1± 0.2	4.0± 0.3	4.1± 0.2	4.2± 0.3	4.2± 0.2	4.3± 0.2	4.2± 0.2
40 ppm	3.9± 0.3**	3.9± 0.2	4.0± 0.2	4.1± 0.2	4.0± 0.2**	4.1± 0.2**	4.0± 0.3**

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

Test of Dunnett

(HAN260)

BAIS 3

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 2

Group Name	Administration week						
	8	9	10	11	12	13	14
0 ppm	4.5± 0.3	4.5± 0.3	4.6± 0.4	4.6± 0.4	4.7± 0.3	4.6± 0.5	4.7± 0.4
4 ppm	4.3± 0.2	4.4± 0.3	4.5± 0.2	4.5± 0.2	4.5± 0.2**	4.5± 0.3	4.5± 0.3
13 ppm	4.3± 0.3	4.3± 0.3**	4.4± 0.3	4.4± 0.3**	4.5± 0.3	4.5± 0.3*	4.6± 0.3
40 ppm	4.2± 0.2**	4.1± 0.2**	4.2± 0.3**	4.3± 0.2**	4.3± 0.3**	4.5± 0.2**	4.4± 0.3**

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

Test of Dunnett

(HAN260)

BAIS 3

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 3

Group Name	Administration week						
	18	22	26	30	34	38	42
0 ppm	4.8± 0.3	4.8± 0.3	4.9± 0.3	4.9± 0.3	5.0± 0.5	5.2± 0.4	5.0± 0.4
4 ppm	4.7± 0.3	4.7± 0.3	4.8± 0.3	4.8± 0.3	5.0± 0.4	5.1± 0.3	4.8± 0.3**
13 ppm	4.7± 0.3	4.7± 0.3	4.9± 0.3	4.8± 0.3	5.1± 0.3	5.2± 0.3	4.9± 0.3
40 ppm	4.5± 0.4**	4.5± 0.4**	4.7± 0.3**	4.5± 0.3**	4.7± 0.4**	4.9± 0.3**	4.6± 0.3**
Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Dunnett							

(HAN260)

BAIS 3

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 4

Group Name	Administration week						
	46	50	54	58	62	66	70
0 ppm	5.1± 0.4	5.2± 0.3	5.2± 0.3	5.2± 0.3	5.4± 0.4	5.4± 0.4	5.4± 0.6
4 ppm	5.0± 0.3	5.0± 0.5**	5.1± 0.3	5.1± 0.4	5.1± 0.4**	5.3± 0.4	5.2± 0.4
13 ppm	5.0± 0.5	5.1± 0.4	5.2± 0.4	5.1± 0.7	5.3± 0.4	5.3± 0.4	5.2± 0.7
40 ppm	4.7± 0.3**	4.8± 0.4**	4.8± 0.4**	4.6± 0.5**	4.7± 0.7**	4.6± 0.3**	4.4± 0.4**

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

Test of Dunnett

(HAN260)

BAIS 3

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 5

Group Name	Administration week						
	74	78	82	86	90	94	98
0 ppm	5.4± 0.4	5.4± 0.4	5.2± 0.5	5.0± 0.7	5.2± 0.5	5.4± 0.5	5.5± 0.6
4 ppm	5.2± 0.4	5.4± 0.5	5.3± 0.4	5.2± 0.4	5.3± 0.4	5.5± 0.5	5.5± 0.5
13 ppm	5.3± 0.6	5.2± 0.8	5.2± 0.5	5.0± 0.7	4.8± 0.9*	4.8± 1.0**	4.8± 0.9**
40 ppm	4.5± 0.7**	4.2± 1.0**	4.2± 1.1**	4.2± 0.7**	4.1± 0.5**	4.1± 0.4**	4.0± 0.8**

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

Test of Dunnett

(HAN260)

BAIS 3

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

PAGE : 6

Group Name	Administration week	
	102	104
0 ppm	5.4± 0.6	5.4± 0.9
4 ppm	5.4± 0.5	5.4± 0.6
13 ppm	4.8± 0.8**	4.9± 0.6
40 ppm	3.9± 0.7**	4.7± 0.7

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

Test of Dunnett

(HAN260)

BAIS 3

APPENDIX C 2

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

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 7

Group Name	Administration week 1	2	3	4	5	6	7
0 ppm	3.4± 0.2	3.5± 0.2	3.7± 0.2	3.9± 0.2	4.1± 0.3	4.2± 0.3	4.2± 0.3
4 ppm	3.5± 0.2	3.5± 0.2	3.7± 0.2	3.9± 0.3	4.0± 0.2	4.2± 0.3	4.2± 0.3
13 ppm	3.5± 0.2	3.5± 0.3	3.6± 0.2	3.9± 0.3	3.9± 0.3	4.0± 0.3**	4.0± 0.3*
40 ppm	3.4± 0.3	3.5± 0.2	3.6± 0.3	3.7± 0.2**	3.8± 0.2**	3.9± 0.3**	3.9± 0.3**
Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Dunnett							

(HAN260)

BAIS 3

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 8

Group Name	Administration week						
	8	9	10	11	12	13	14
0 ppm	4.3± 0.3	4.3± 0.3	4.4± 0.3	4.4± 0.4	4.4± 0.4	4.4± 0.3	4.4± 0.3
4 ppm	4.3± 0.3	4.2± 0.2	4.3± 0.3	4.4± 0.3	4.3± 0.3	4.4± 0.3	4.4± 0.4
13 ppm	4.1± 0.3**	4.0± 0.2**	4.2± 0.3**	4.2± 0.2**	4.2± 0.3**	4.2± 0.3**	4.2± 0.3**
40 ppm	4.0± 0.3**	4.0± 0.3**	4.1± 0.3**	4.1± 0.3**	4.1± 0.3**	4.1± 0.3**	4.1± 0.3**

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

Test of Dunnett

(HAN260)

BAIS 3

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 9

Group Name	Administration week						
	18	22	26	30	34	38	42
0 ppm	4.6± 0.3	4.5± 0.3	4.5± 0.4	4.7± 0.5	4.7± 0.5	4.8± 0.5	4.5± 0.4
4 ppm	4.5± 0.3	4.5± 0.3	4.4± 0.4	4.6± 0.4	4.7± 0.4	4.8± 0.5	4.5± 0.5
13 ppm	4.3± 0.4**	4.3± 0.4**	4.4± 0.4	4.4± 0.4**	4.7± 0.4	4.7± 0.4	4.7± 0.4
40 ppm	4.2± 0.3**	4.2± 0.4**	4.3± 0.3**	4.3± 0.3**	4.6± 0.4	4.5± 0.6	4.5± 0.4

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

Test of Dunnett

(HAN260)

BAIS 3

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 10

Group Name	Administration week						
	46	50	54	58	62	66	70
0 ppm	4.5± 0.8	4.7± 0.5	4.6± 0.5	4.5± 0.4	4.4± 0.4	4.6± 0.5	4.5± 0.4
4 ppm	4.6± 0.5	4.8± 0.5	4.6± 0.5	4.6± 0.6	4.6± 0.5*	4.8± 0.5	4.7± 0.5
13 ppm	4.6± 0.6	4.8± 0.5	4.8± 0.5	4.7± 0.4*	4.8± 0.4**	4.9± 0.6*	4.7± 0.8*
40 ppm	4.4± 0.6	4.6± 0.4	4.6± 0.7	4.4± 0.4	4.4± 0.4	4.4± 0.4	4.3± 0.7

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

Test of Dunnett

(HAN260)

BAIS 3

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 11

Group Name	Administration week						
	74	78	82	86	90	94	98
0 ppm	4.7± 0.6	4.8± 0.5	4.5± 0.4	4.5± 0.5	4.5± 0.5	4.8± 0.7	4.9± 0.7
4 ppm	4.5± 0.6	4.8± 0.7	4.7± 0.6	4.5± 0.6	4.8± 0.7	5.0± 0.9	5.0± 0.7
13 ppm	4.7± 0.6	4.7± 0.7	4.9± 0.6*	5.0± 0.6**	5.1± 0.7**	4.9± 0.7	5.1± 0.5
40 ppm	4.4± 0.5*	4.4± 0.7*	4.4± 0.5	4.0± 0.8*	4.4± 0.8	5.0± 1.0	4.1± 0.3

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

Test of Dunnett

(HAN260)

BAIS 3

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

PAGE : 12

Group Name	Administration week	
	102	104
0 ppm	4.7± 0.8	4.8± 0.6
4 ppm	4.9± 0.7	4.9± 0.4
13 ppm	5.0± 0.9	5.1± 1.0
40 ppm	4.2± 0.8 ?	3.8± 0.0 ?

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

Test of Dunnett

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

APPENDIX D 1

HEMATOLOGY : SUMMARY, MOUSE : MALE

(2-YEAR STUDY)

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 MEASURE. TIME : 1
 SEX : MALE

HEMATOLOGY (SUMMARY)
 ALL ANIMALS (105W)

REPORT TYPE : A1

PAGE : 1

Group Name	NO. of Animals	RED BLOOD CELL 10 ⁶ /μl		HEMOGLOBIN g/dl		HEMATOCRIT %		MCV fl		MCH pg		MCHC g/dl		PLATELET 10 ³ /μl	
0 ppm	35	9.43±	1.26	13.5±	1.6	43.6±	4.8	46.5±	2.9	14.4±	0.8	30.9±	0.7	1868±	427
4 ppm	33	9.72±	0.83	13.9±	1.1	44.9±	3.4	46.2±	1.7	14.3±	0.6	31.0±	0.6	1703±	450
13 ppm	18	9.53±	1.61	13.4±	2.3	43.7±	7.4	45.9±	2.3	14.1±	0.6	30.7±	0.8	1718±	520
40 ppm	2	10.28±	0.11 ?	14.1±	0.1 ?	45.7±	0.7 ?	44.5±	0.1 ?	13.7±	0.0 ?	30.8±	0.2 ?	1607±	206 ?

Significant difference ; * : $P \leq 0.05$

** : $P \leq 0.01$

Test of Dunnett

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

(HCL070)

BAIS 3

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 MEASURE. TIME : 1
 SEX : MALE

HEMATOLOGY (SUMMARY)
 ALL ANIMALS (105W)

REPORT TYPE : A1

PAGE : 2

Group Name	NO. of Animals	WBC 10 ³ /μl		Differential N-BAND		WBC (%) N-SEG		EOSINO		BASO		MONO		LYMPHO		OTHER	
0 ppm	35	4.16±	8.52	2±	1	30±	14	1±	1	0±	0	4±	3	59±	15	4±	12
4 ppm	33	2.82±	1.37	2±	1	29±	13	1±	1	0±	0	5±	2	61±	13	2±	4
13 ppm	18	2.30±	1.25	3±	3	38±	23	1±	1	0±	0	4±	3	52±	24	2±	2
40 ppm	2	1.78±	0.05 ?	2±	2 ?	34±	2 ?	1±	1 ?	0±	0 ?	2±	0 ?	62±	2 ?	1±	1 ?

Significant difference ; * : $P \leq 0.05$

** : $P \leq 0.01$

Test of Dunnett

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

(HCL070)

BAIS 3

APPENDIX D 2

HEMATOLOGY : SUMMARY, MOUSE : FEMALE

(2-YEAR STUDY)

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 MEASURE. TIME : 1
 SEX : FEMALE

HEMATOLOGY (SUMMARY)
 ALL ANIMALS (105W)

REPORT TYPE : A1

PAGE : 3

Group Name	NO. of Animals	RED BLOOD CELL 10 ⁶ /μl		HEMOGLOBIN g/dl		HEMATOCRIT %		MCV fl		MCH pg		MCHC g/dl		PLATELET 10 ³ /μl	
0 ppm	26	9.11±	1.58	13.1±	2.0	42.3±	5.5	46.9±	3.6	14.5±	0.8	31.1±	1.1	1042±	295
4 ppm	22	9.48±	1.15	13.8±	1.6	44.1±	4.5	46.6±	2.2	14.6±	0.5	31.2±	0.9	1087±	209
13 ppm	10	8.58±	1.41	12.7±	2.0	41.0±	5.9	48.0±	3.0	14.9±	1.0	30.9±	0.9	860±	439
40 ppm	1	9.42±	0.00 ?	12.8±	0.0 ?	42.7±	0.0 ?	45.3±	0.0 ?	13.6±	0.0 ?	30.1±	0.0 ?	802±	0 ?

Significant difference ; * : $P \leq 0.05$

** : $P \leq 0.01$

Test of Dunnett

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

(HCL070)

BAIS 3

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 MEASURE. TIME : 1
 SEX : FEMALE

HEMATOLOGY (SUMMARY)
 ALL ANIMALS (105W)

REPORT TYPE : A1

PAGE : 4

Group Name	NO. of Animals	WBC 10 ⁹ /μl		Differential N-BAND		WBC (%) N-SEG		EOSINO		BASO		MONO		LYMPHO		OTHER	
0 ppm	26	2.16±	1.88	2±	3	29±	14	1±	1	0±	0	5±	3	56±	17	7±	11
4 ppm	22	2.27±	1.39	1±	2	28±	13	1±	2	0±	0	6±	3	59±	12	5±	9
13 ppm	10	3.85±	3.13	2±	2	35±	14	1±	1	0±	0	3±	2	52±	17	7±	8
40 ppm	1	0.52±	0.00 ?	2±	0 ?	52±	0 ?	0±	0 ?	0±	0 ?	5±	0 ?	39±	0 ?	2±	0 ?

Significant difference ; * : $P \leq 0.05$

** : $P \leq 0.01$

Test of Dunnett

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

(HCL070)

BAIS 3

APPENDIX E 1

BIOCHEMISTRY : SUMMARY, MOUSE : MALE

(2-YEAR STUDY)

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 MEASURE. TIME : 1
 SEX : MALE

BIOCHEMISTRY (SUMMARY)
 ALL ANIMALS (105W)

REPORT TYPE : A1

PAGE : 1

Group Name	NO. of Animals	TOTAL PROTEIN g/dl		ALBUMIN g/dl		A/G RATIO		T-BILIRUBIN mg/dl		GLUCOSE mg/dl		T-CHOLESTEROL mg/dl		TRIGLYCERIDE mg/dl	
0 ppm	36	5.1±	0.5	2.7±	0.3	1.1±	0.2	0.15±	0.05	185±	43	109±	28	35±	19
4 ppm	33	5.1±	0.6	2.8±	0.4	1.2±	0.2	0.14±	0.04	185±	36	111±	65	36±	19
13 ppm	18	5.0±	0.7	2.8±	0.4	1.3±	0.1	0.15±	0.02	152±	45*	98±	40*	26±	11
40 ppm	3	5.2±	0.2	2.7±	0.2	1.1±	0.1	0.17±	0.03	161±	6	87±	13	14±	1*

Significant difference ; * : $P \leq 0.05$

** : $P \leq 0.01$

Test of Dunnett

(HCL074)

BAIS 3

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 MEASURE. TIME : 1
 SEX : MALE

BIOCHEMISTRY (SUMMARY)
 ALL ANIMALS (105W)

REPORT TYPE : A1

PAGE : 2

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	
0 ppm	36	192±	47	85±	84	55±	66	378±	371	118±	33	2±	1	71±	77
4 ppm	33	201±	100	154±	390	81±	202	376±	467	171±	211*	2±	1	50±	22
13 ppm	18	166±	50*	212±	479	428±	1547	1593±	4958	148±	59*	3±	3	353±	1078
40 ppm	3	154±	19	206±	262	216±	330	479±	215	129±	22	6±	6	64±	5

Significant difference ; * : $P \leq 0.05$

** : $P \leq 0.01$

Test of Dunnett

(HCL074)

BAIS 3

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
MEASURE. TIME : 1
SEX : MALE

BIOCHEMISTRY (SUMMARY)
ALL ANIMALS (105W)

REPORT TYPE : A1

PAGE : 3

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	
0 ppm	36	26.0±	12.8	154±	2	4.2±	0.5	122±	3	8.8±	0.6	6.9±	1.1
4 ppm	33	23.3±	4.5	153±	2	4.2±	0.3	122±	2	8.9±	0.5	7.0±	1.0
13 ppm	18	50.6±	70.8	154±	3	4.7±	1.2	120±	5	8.7±	0.4	9.5±	7.8
40 ppm	3	25.3±	5.0	154±	2	5.0±	0.8	120±	2	8.5±	0.5	7.5±	0.3

Significant difference ; * : $P \leq 0.05$

** : $P \leq 0.01$

Test of Dunnett

(HCL074)

BAIS 3

APPENDIX E 2

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

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 MEASURE. TIME : 1
 SEX : FEMALE

BIOCHEMISTRY (SUMMARY)
 ALL ANIMALS (105W)

REPORT TYPE : A1

PAGE : 4

Group Name	NO. of Animals	TOTAL PROTEIN g/dl		ALBUMIN g/dl		A/G RATIO		T-BILIRUBIN mg/dl		GLUCOSE mg/dl		T-CHOLESTEROL mg/dl		TRIGLYCERIDE mg/dl	
0 ppm	27	5.0±	0.5	2.7±	0.3	1.3±	0.2	0.15±	0.04	128±	39	73±	26	25±	14
4 ppm	22	5.3±	0.6	2.8±	0.3	1.2±	0.2	0.18±	0.16	129±	44	78±	26	22±	11
13 ppm	10	4.8±	1.2	2.6±	0.5	1.3±	0.3	0.16±	0.07	140±	42	78±	20	21±	9
40 ppm	1	4.5±	0.0 ?	2.6±	0.0 ?	1.4±	0.0 ?	0.13±	0.00 ?	110±	0 ?	52±	0 ?	7±	0 ?

Significant difference : * : $P \leq 0.05$

** : $P \leq 0.01$

Test of Dunnett

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

(HCL074)

BAIS 3

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 MEASURE. TIME : 1
 SEX : FEMALE

BIOCHEMISTRY (SUMMARY)
 ALL ANIMALS (105W)

REPORT TYPE : A1

PAGE : 5

Group Name	NO. of Animals	PHOSPHOLIPID mg/dl		GOT IU/l		GPT IU/l		LDH IU/l		ALP IU/l		G-GTP IU/l		CPK IU/l	
0 ppm	27	135±	46	134±	123	44±	24	1079±	2836	252±	108	2±	1	206±	247
4 ppm	22	141±	35	124±	116	58±	77	443±	387	233±	124	3±	2	145±	277
13 ppm	10	139±	49	138±	110	86±	134	902±	1334	205±	132	3±	1	92±	70
40 ppm	1	93±	0 ?	253±	0 ?	91±	0 ?	276±	0 ?	274±	0 ?	2±	0 ?	57±	0 ?

Significant difference ; * : $P \leq 0.05$

** : $P \leq 0.01$

Test of Dunnett

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

(HCL074)

BAIS 3

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 MEASURE. TIME : 1
 SEX : FEMALE

BIOCHEMISTRY (SUMMARY)
 ALL ANIMALS (105W)

REPORT TYPE : A1

PAGE : 6

Group Name	NO. of Animals	UREA NITROGEN mg/dl		SODIUM mEq/l		POTASSIUM mEq/l		CHLORIDE mEq/l		CALCIUM mg/dl		INORGANIC PHOSPHORUS mg/dl	
0 ppm	27	27.6±	24.5	153±	2	4.2±	0.5	123±	4	9.0±	0.7	6.8±	1.2
4 ppm	22	22.0±	12.8	152±	1	4.3±	0.4	122±	2	9.1±	0.6	7.0±	1.9
13 ppm	10	23.8±	13.5	151±	3	4.4±	0.7	122±	2	8.9±	0.6	7.2±	1.2
40 ppm	1	16.6±	0.0 ?	153±	0 ?	4.2±	0.0 ?	119±	0 ?	8.5±	0.0 ?	6.4±	0.0 ?

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

Test of Dunnett

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

APPENDIX F 1

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

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 MEASURE. TIME : 1
 SEX : MALE

URINALYSIS

REPORT TYPE : A1

PAGE : 1

Group Name	NO. of Animals	pH							CHI	Protein						CHI	Glucose						CHI	Ketone body						CHI	Occult blood					CHI
		5.0	6.0	6.5	7.0	7.5	8.0	8.5		-	±	+	2+	3+	4+		-	±	+	2+	3+	4+		-	±	+	2+	3+	4+		-	±	+	2+	3+	
0 ppm	38	0	4	9	11	9	4	1		0	9	22	5	2	0		38	0	0	0	0	0		24	10	4	0	0	0		35	0	2	0	1	
4 ppm	35	0	0	9	12	11	2	1		0	6	24	4	1	0		35	0	0	0	0	0		22	13	0	0	0	0		31	0	1	0	3	
13 ppm	19	0	3	6	3	5	2	0		0	4	13	2	0	0		19	0	0	0	0	0		6	12	1	0	0	0	*	16	2	0	1	0	
40 ppm	5	0	1	2	1	1	0	0		0	0	5	0	0	0		5	0	0	0	0	0		0	3	2	0	0	0	*	4	0	1	0	0	

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

Test of CHI SQUARE

(HCL101)

BAIS 3

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
MEASURE. TIME : 1
SEX : MALE

URINALYSIS

REPORT TYPE : A1

PAGE : 2

Group Name	NO. of Animals	Urobilinogen					CHI
		±	+	2+	3+	4+	
0 ppm	38	38	0	0	0	0	0
4 ppm	35	35	0	0	0	0	0
13 ppm	19	19	0	0	0	0	0
40 ppm	5	5	0	0	0	0	0

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

Test of CHI SQUARE

(HCL101)

BAIS 3

APPENDIX F 2

URINALYSIS : SUMMARY, MOUSE : FEMALE

(2-YEAR STUDY)

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 MEASURE. TIME : 1
 SEX : FEMALE

URINALYSIS

REPORT TYPE : A1

PAGE : 3

Group Name	NO. of Animals	pH							CHI	Protein						CHI	Glucose						CHI	Ketone body						CHI	Occult blood					CHI
		5.0	6.0	6.5	7.0	7.5	8.0	8.5		-	±	+	2+	3+	4+		-	±	+	2+	3+	4+		-	±	+	2+	3+	4+		-	±	+	2+	3+	
0 ppm	28	0	1	4	4	6	12	1		0	6	9	11	2	0		28	0	0	0	0	0		11	15	2	0	0	0		20	2	0	2	4	
4 ppm	22	0	0	1	4	8	9	0		0	5	10	6	1	0		22	0	0	0	0	0		5	15	1	1	0	0		18	1	0	1	2	
13 ppm	10	0	0	0	2	3	4	1		0	1	7	2	0	0		10	0	0	0	0	0		0	9	1	0	0	0		10	0	0	0	0	
40 ppm	1	0	0	1	0	0	0	0	?	0	0	0	1	0	0	?	1	0	0	0	0	0	?	0	0	1	0	0	0	?	1	0	0	0	0	?

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

Test of CHI SQUARE

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

(HCL101)

BAIS 3

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
MEASURE. TIME : 1
SEX : FEMALE

URINALYSIS

REPORT TYPE : A1

PAGE : 4

Group Name	NO. of Animals	Urobilinogen					CHI
		±	+	2+	3+	4+	
0 ppm	28	28	0	0	0	0	
4 ppm	22	22	0	0	0	0	
13 ppm	10	10	0	0	0	0	
40 ppm	1	1	0	0	0	0	?

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

Test of CHI SQUARE

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

(HCL101)

BAIS 3

APPENDIX G 1

GROSS FINDINGS : SUMMARY, MOUSE : MALE

ALL ANIMALS

(2-YEAR STUDY)

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 1

Organ	Findings	Group Name NO. of Animals	0 ppm		4 ppm		13 ppm		40 ppm	
			50	(%)	50	(%)	50	(%)	50	(%)
skin/app	nodule		0	(0)	1	(2)	1	(2)	2	(4)
	ulcer		0	(0)	0	(0)	0	(0)	1	(2)
	erosion		1	(2)	1	(2)	1	(2)	0	(0)
	scab		0	(0)	1	(2)	1	(2)	0	(0)
subcutis	hemorrhage		1	(2)	0	(0)	0	(0)	0	(0)
	mass		2	(4)	4	(8)	2	(4)	5	(10)
nasal cavit	red zone		0	(0)	0	(0)	0	(0)	2	(4)
lung	red		1	(2)	0	(0)	0	(0)	0	(0)
	white zone		1	(2)	1	(2)	0	(0)	1	(2)
	red zone		1	(2)	1	(2)	0	(0)	0	(0)
	edema		0	(0)	0	(0)	1	(2)	0	(0)
	nodule		8	(16)	10	(20)	4	(8)	6	(12)
	adhesion		0	(0)	0	(0)	0	(0)	1	(2)
lymph node	enlarged		4	(8)	9	(18)	8	(16)	2	(4)
	nodule		0	(0)	0	(0)	1	(2)	0	(0)
thymus	enlarged		0	(0)	0	(0)	1	(2)	0	(0)
spleen	enlarged		4	(8)	3	(6)	2	(4)	0	(0)
	white zone		1	(2)	0	(0)	0	(0)	0	(0)
	black zone		2	(4)	1	(2)	0	(0)	1	(2)
	nodule		0	(0)	2	(4)	0	(0)	1	(2)
	deformed		1	(2)	0	(0)	0	(0)	0	(0)
	accentuation of white pulp		1	(2)	1	(2)	0	(0)	0	(0)

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

Organ	Findings	Group Name NO. of Animals	0 ppm		4 ppm		13 ppm		40 ppm	
			50	(%)	50	(%)	50	(%)	50	(%)
heart	hypertrophy		0	(0)	0	(0)	1	(2)	0	(0)
	adhesion		0	(0)	0	(0)	0	(0)	1	(2)
salivary gl	nodule		1	(2)	0	(0)	2	(4)	0	(0)
forestomach	nodule		0	(0)	0	(0)	1	(2)	0	(0)
gl stomach	nodule		1	(2)	1	(2)	0	(0)	0	(0)
	ulcer		1	(2)	0	(0)	0	(0)	0	(0)
	erosion		0	(0)	1	(2)	0	(0)	0	(0)
	thick		3	(6)	2	(4)	0	(0)	0	(0)
stomach	nodule		0	(0)	0	(0)	0	(0)	1	(2)
	gas		0	(0)	0	(0)	2	(4)	1	(2)
small intes	nodule		0	(0)	2	(4)	0	(0)	1	(2)
	gas		0	(0)	0	(0)	4	(8)	8	(16)
cecum	gas		0	(0)	0	(0)	0	(0)	1	(2)
large intes	nodule		0	(0)	0	(0)	0	(0)	1	(2)
	gas		0	(0)	0	(0)	2	(4)	4	(8)
liver	enlarged		0	(0)	0	(0)	1	(2)	2	(4)
	pale		0	(0)	0	(0)	0	(0)	1	(2)
	white zone		0	(0)	7	(14)	3	(6)	2	(4)
	red zone		2	(4)	2	(4)	3	(6)	0	(0)
	nodule		16	(32)	19	(38)	12	(24)	8	(16)
	cyst		0	(0)	1	(2)	0	(0)	0	(0)
	nodular		0	(0)	0	(0)	0	(0)	1	(2)

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 3

Organ	Findings	Group Name NO. of Animals	0 ppm		4 ppm		13 ppm		40 ppm	
			50	(%)	50	(%)	50	(%)	50	(%)
pancreas	nodule		0	(0)	0	(0)	1	(2)	1	(2)
kidney	pale		0	(0)	0	(0)	1	(2)	0	(0)
	white zone		1	(2)	1	(2)	1	(2)	0	(0)
	red zone		0	(0)	0	(0)	0	(0)	1	(2)
	yellow zone		0	(0)	1	(2)	0	(0)	0	(0)
	nodule		1	(2)	0	(0)	1	(2)	1	(2)
	cyst		1	(2)	0	(0)	0	(0)	0	(0)
	hydronephrosis		5	(10)	5	(10)	2	(4)	2	(4)
urin bladd	nodule		1	(2)	0	(0)	0	(0)	0	(0)
	thick		2	(4)	0	(0)	0	(0)	0	(0)
	urine:marked retention		3	(6)	2	(4)	1	(2)	2	(4)
pituitary	enlarged		0	(0)	0	(0)	1	(2)	0	(0)
testis	atrophic		1	(2)	0	(0)	0	(0)	0	(0)
	white zone		0	(0)	1	(2)	0	(0)	0	(0)
	nodule		0	(0)	0	(0)	1	(2)	0	(0)
	adhesion		0	(0)	0	(0)	0	(0)	1	(2)
	absence		0	(0)	0	(0)	0	(0)	1	(2)
epididymis	nodule		0	(0)	0	(0)	2	(4)	3	(6)
semin ves	yellow		0	(0)	1	(2)	0	(0)	0	(0)
prostate	nodule		0	(0)	1	(2)	0	(0)	0	(0)
prep/cli gl	nodule		2	(4)	3	(6)	2	(4)	2	(4)
	induration		0	(0)	0	(0)	1	(2)	0	(0)

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 4

Organ	Findings	Group Name NO. of Animals	0 ppm		4 ppm		13 ppm		40 ppm	
			50	(%)	50	(%)	50	(%)	50	(%)
brain	red patch		0	(0)	1	(2)	0	(0)	0	(0)
periph nerv	nodule		1	(2)	0	(0)	1	(2)	3	(6)
eye	atrophic		0	(0)	0	(0)	1	(2)	0	(0)
	turbid		0	(0)	0	(0)	1	(2)	0	(0)
	white		0	(0)	0	(0)	0	(0)	1	(2)
Harder gl	enlarged		2	(4)	1	(2)	4	(8)	1	(2)
	nodule		0	(0)	0	(0)	3	(6)	7	(14)
pleura	nodule		0	(0)	0	(0)	1	(2)	0	(0)
mediastinum	mass		2	(4)	0	(0)	0	(0)	0	(0)
abdominal c	hemorrhage		0	(0)	2	(4)	1	(2)	0	(0)
	ascites		0	(0)	2	(4)	2	(4)	1	(2)
thoracic ca	hemorrhage		1	(2)	0	(0)	0	(0)	0	(0)
	pleural fluid		1	(2)	2	(4)	1	(2)	0	(0)
other	swollen		0	(0)	0	(0)	1	(2)	0	(0)
	nodule		0	(0)	0	(0)	0	(0)	2	(4)
	tail:nodule		2	(4)	0	(0)	2	(4)	0	(0)
	ear:nodule		0	(0)	0	(0)	1	(2)	0	(0)
	hindlimb:nodule		0	(0)	0	(0)	1	(2)	0	(0)
	nose:elevated		0	(0)	0	(0)	0	(0)	2	(4)
	nose:nodule		0	(0)	0	(0)	0	(0)	1	(2)
whole body	anemic		0	(0)	0	(0)	0	(0)	1	(2)

APPENDIX G 2

GROSS FINDINGS : SUMMARY, MOUSE : MALE

DEAD AND MORIBUND ANIMALS

(2-YEAR STUDY)

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 1

Organ	Findings	Group Name NO. of Animals	0 ppm 12 (%)	4 ppm 15 (%)	13 ppm 32 (%)	40 ppm 47 (%)
skin/app	nodule		0 (0)	0 (0)	0 (0)	2 (4)
	ulcer		0 (0)	0 (0)	0 (0)	1 (2)
	erosion		0 (0)	0 (0)	1 (3)	0 (0)
	scab		0 (0)	0 (0)	1 (3)	0 (0)
subcutis	hemorrhage		1 (8)	0 (0)	0 (0)	0 (0)
	mass		0 (0)	1 (7)	1 (3)	5 (11)
nasal cavit	red zone		0 (0)	0 (0)	0 (0)	2 (4)
lung	red		1 (8)	0 (0)	0 (0)	0 (0)
	white zone		1 (8)	1 (7)	0 (0)	1 (2)
	red zone		0 (0)	1 (7)	0 (0)	0 (0)
	edema		0 (0)	0 (0)	1 (3)	0 (0)
	nodule		4 (33)	2 (13)	3 (9)	5 (11)
	adhesion		0 (0)	0 (0)	0 (0)	1 (2)
lymph node	enlarged		2 (17)	4 (27)	5 (16)	2 (4)
thymus	enlarged		0 (0)	0 (0)	1 (3)	0 (0)
spleen	enlarged		1 (8)	2 (13)	2 (6)	0 (0)
	white zone		1 (8)	0 (0)	0 (0)	0 (0)
	black zone		0 (0)	0 (0)	0 (0)	1 (2)
	nodule		0 (0)	1 (7)	0 (0)	1 (2)
	deformed		1 (8)	0 (0)	0 (0)	0 (0)
heart	hypertrophy		0 (0)	0 (0)	1 (3)	0 (0)
	adhesion		0 (0)	0 (0)	0 (0)	1 (2)

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 2

Organ	Findings	Group Name NO. of Animals	0 ppm		4 ppm		13 ppm		40 ppm	
			12	(%)	15	(%)	32	(%)	47	(%)
stomach	nodule		0	(0)	0	(0)	0	(0)	1	(2)
	gas		0	(0)	0	(0)	2	(6)	1	(2)
small intes	nodule		0	(0)	1	(7)	0	(0)	1	(2)
	gas		0	(0)	0	(0)	3	(9)	8	(17)
cecum	gas		0	(0)	0	(0)	0	(0)	1	(2)
large intes	nodule		0	(0)	0	(0)	0	(0)	1	(2)
	gas		0	(0)	0	(0)	2	(6)	4	(9)
liver	enlarged		0	(0)	0	(0)	1	(3)	2	(4)
	pale		0	(0)	0	(0)	0	(0)	1	(2)
	white zone		0	(0)	5	(33)	2	(6)	1	(2)
	red zone		1	(8)	0	(0)	2	(6)	0	(0)
	nodule		6	(50)	8	(53)	7	(22)	8	(17)
	nodular		0	(0)	0	(0)	0	(0)	1	(2)
	pancreas		0	(0)	0	(0)	1	(3)	1	(2)
kidney	pale		0	(0)	0	(0)	1	(3)	0	(0)
	white zone		0	(0)	0	(0)	1	(3)	0	(0)
	red zone		0	(0)	0	(0)	0	(0)	1	(2)
	yellow zone		0	(0)	1	(7)	0	(0)	0	(0)
	nodule		1	(8)	0	(0)	1	(3)	1	(2)
	hydronephrosis		1	(8)	3	(20)	2	(6)	2	(4)
urin bladd	nodule		1	(8)	0	(0)	0	(0)	0	(0)
	urine:marked retention		3	(25)	2	(13)	1	(3)	2	(4)

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 3

Organ	Findings	Group Name NO. of Animals	0 ppm	4 ppm	13 ppm	40 ppm
			12 (%)	15 (%)	32 (%)	47 (%)
pituitary	enlarged		0 (0)	0 (0)	1 (3)	0 (0)
testis	nodule		0 (0)	0 (0)	1 (3)	0 (0)
	adhesion		0 (0)	0 (0)	0 (0)	1 (2)
	absence		0 (0)	0 (0)	0 (0)	1 (2)
epididymis	nodule		0 (0)	0 (0)	1 (3)	3 (6)
semin ves	yellow		0 (0)	1 (7)	0 (0)	0 (0)
prostate	nodule		0 (0)	1 (7)	0 (0)	0 (0)
prep/cli gl	nodule		1 (8)	1 (7)	0 (0)	2 (4)
	induration		0 (0)	0 (0)	1 (3)	0 (0)
brain	red patch		0 (0)	1 (7)	0 (0)	0 (0)
periph nerv	nodule		1 (8)	0 (0)	1 (3)	3 (6)
eye	atrophic		0 (0)	0 (0)	1 (3)	0 (0)
	white		0 (0)	0 (0)	0 (0)	1 (2)
Harder gl	enlarged		2 (17)	0 (0)	3 (9)	1 (2)
	nodule		0 (0)	0 (0)	2 (6)	7 (15)
pleura	nodule		0 (0)	0 (0)	1 (3)	0 (0)
mediastinum	mass		2 (17)	0 (0)	0 (0)	0 (0)
abdominal c	hemorrhage		0 (0)	2 (13)	1 (3)	0 (0)
	ascites		0 (0)	1 (7)	2 (6)	1 (2)
thoracic ca	hemorrhage		1 (8)	0 (0)	0 (0)	0 (0)
	pleural fluid		1 (8)	2 (13)	1 (3)	0 (0)
other	swollen		0 (0)	0 (0)	1 (3)	0 (0)

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 4

Organ	Findings	Group Name NO. of Animals	0 ppm		4 ppm		13 ppm		40 ppm	
			12	(%)	15	(%)	32	(%)	47	(%)
other	nodule		0	(0)	0	(0)	0	(0)	2	(4)
	hindlimb:nodule		0	(0)	0	(0)	1	(3)	0	(0)
	nose:elevated		0	(0)	0	(0)	0	(0)	2	(4)
	nose:nodule		0	(0)	0	(0)	0	(0)	1	(2)
whole body	anemic		0	(0)	0	(0)	0	(0)	1	(2)

(HPT080)

BAIS 3

APPENDIX G 3

GROSS FINDINGS : SUMMARY, MOUSE : MALE

SACRIFICED ANIMALS

(2-YEAR STUDY)

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

GROSS FINDINGS (SUMMARY)
SACRIFICED ANIMALS (105W)

PAGE : 1

Organ	Findings	Group Name NO. of Animals	0 ppm		4 ppm		13 ppm		40 ppm	
			38	(%)	35	(%)	18	(%)	3	(%)
skin/app	nodule		0	(0)	1	(3)	1	(6)	0	(0)
	erosion		1	(3)	1	(3)	0	(0)	0	(0)
	scab		0	(0)	1	(3)	0	(0)	0	(0)
subcutis	mass		2	(5)	3	(9)	1	(6)	0	(0)
lung	red zone		1	(3)	0	(0)	0	(0)	0	(0)
	nodule		4	(11)	8	(23)	1	(6)	1	(33)
lymph node	enlarged		2	(5)	5	(14)	3	(17)	0	(0)
	nodule		0	(0)	0	(0)	1	(6)	0	(0)
spleen	enlarged		3	(8)	1	(3)	0	(0)	0	(0)
	black zone		2	(5)	1	(3)	0	(0)	0	(0)
	nodule		0	(0)	1	(3)	0	(0)	0	(0)
	accentuation of white pulp		1	(3)	1	(3)	0	(0)	0	(0)
salivary gl	nodule		1	(3)	0	(0)	2	(11)	0	(0)
forestomach	nodule		0	(0)	0	(0)	1	(6)	0	(0)
gl stomach	nodule		1	(3)	1	(3)	0	(0)	0	(0)
	ulcer		1	(3)	0	(0)	0	(0)	0	(0)
	erosion		0	(0)	1	(3)	0	(0)	0	(0)
	thick		3	(8)	2	(6)	0	(0)	0	(0)
	nodule		0	(0)	1	(3)	0	(0)	0	(0)
small intes	gas		0	(0)	0	(0)	1	(6)	0	(0)
	nodule		0	(0)	1	(3)	0	(0)	0	(0)
liver	white zone		0	(0)	2	(6)	1	(6)	1	(33)
	red zone		1	(3)	2	(6)	1	(6)	0	(0)

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

GROSS FINDINGS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 2

Organ	Findings	Group Name NO. of Animals	0 ppm	4 ppm	13 ppm	40 ppm
			38 (%)	35 (%)	18 (%)	3 (%)
liver	nodule		10 (26)	11 (31)	5 (28)	0 (0)
	cyst		0 (0)	1 (3)	0 (0)	0 (0)
kidney	white zone		1 (3)	1 (3)	0 (0)	0 (0)
	cyst		1 (3)	0 (0)	0 (0)	0 (0)
	hydronephrosis		4 (11)	2 (6)	0 (0)	0 (0)
urin bladd	thick		2 (5)	0 (0)	0 (0)	0 (0)
testis	atrophic		1 (3)	0 (0)	0 (0)	0 (0)
	white zone		0 (0)	1 (3)	0 (0)	0 (0)
epididymis	nodule		0 (0)	0 (0)	1 (6)	0 (0)
prep/cli gl	nodule		1 (3)	2 (6)	2 (11)	0 (0)
eye	turbid		0 (0)	0 (0)	1 (6)	0 (0)
Harder gl	enlarged		0 (0)	1 (3)	1 (6)	0 (0)
	nodule		0 (0)	0 (0)	1 (6)	0 (0)
abdominal c	ascites		0 (0)	1 (3)	0 (0)	0 (0)
other	tail:nodule		2 (5)	0 (0)	2 (11)	0 (0)
	ear:nodule		0 (0)	0 (0)	1 (6)	0 (0)

APPENDIX G 4

GROSS FINDINGS : SUMMARY, MOUSE : FEMALE

ALL ANIMALS

(2-YEAR STUDY)

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 5

Organ	Findings	Group Name NO. of Animals	0 ppm	4 ppm	13 ppm	40 ppm
			50 (%)	50 (%)	50 (%)	49 (%)
skin/app	scab		0 (0)	0 (0)	1 (2)	0 (0)
subcutis	edema		5 (10)	8 (16)	6 (12)	5 (10)
	mass		2 (4)	0 (0)	6 (12)	6 (12)
nasal cavit	red zone		0 (0)	0 (0)	1 (2)	2 (4)
lung	white		0 (0)	0 (0)	1 (2)	0 (0)
	brown		0 (0)	1 (2)	0 (0)	0 (0)
	red zone		0 (0)	0 (0)	0 (0)	2 (4)
	edema		2 (4)	0 (0)	1 (2)	0 (0)
	nodule		2 (4)	1 (2)	2 (4)	3 (6)
	adhesion		1 (2)	0 (0)	0 (0)	0 (0)
lymph node	enlarged		12 (24)	7 (14)	11 (22)	3 (6)
thymus	enlarged		0 (0)	1 (2)	0 (0)	0 (0)
	nodule		0 (0)	1 (2)	0 (0)	0 (0)
spleen	enlarged		10 (20)	10 (20)	8 (16)	2 (4)
	black zone		0 (0)	0 (0)	0 (0)	1 (2)
	nodule		1 (2)	0 (0)	2 (4)	0 (0)
	accentuation of white pulp		0 (0)	1 (2)	1 (2)	0 (0)
heart	enlarged		0 (0)	0 (0)	0 (0)	1 (2)
	white		0 (0)	0 (0)	1 (2)	0 (0)
	white zone		1 (2)	0 (0)	0 (0)	0 (0)
forestomach	nodule		0 (0)	1 (2)	0 (0)	0 (0)
gl stomach	thick		3 (6)	0 (0)	1 (2)	0 (0)

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 6

Organ	Findings	Group Name NO. of Animals	0 ppm		4 ppm		13 ppm		40 ppm	
			50	(%)	50	(%)	50	(%)	49	(%)
stomach	gas		0	(0)	0	(0)	0	(0)	2	(4)
small intes	red zone		0	(0)	1	(2)	0	(0)	0	(0)
	dilated		0	(0)	1	(2)	0	(0)	0	(0)
	gas		0	(0)	0	(0)	0	(0)	3	(6)
cecum	nodule		1	(2)	0	(0)	0	(0)	0	(0)
	gas		0	(0)	0	(0)	0	(0)	2	(4)
large intes	gas		0	(0)	0	(0)	0	(0)	1	(2)
liver	enlarged		2	(4)	6	(12)	5	(10)	5	(10)
	pale		0	(0)	0	(0)	1	(2)	0	(0)
	brown		0	(0)	1	(2)	0	(0)	0	(0)
	white zone		2	(4)	9	(18)	11	(22)	6	(12)
	red zone		5	(10)	2	(4)	3	(6)	2	(4)
	nodule		4	(8)	7	(14)	5	(10)	4	(8)
	cyst		0	(0)	1	(2)	0	(0)	0	(0)
	rough		0	(0)	2	(4)	0	(0)	0	(0)
	adhesion		0	(0)	1	(2)	0	(0)	0	(0)
	accentuation of lobular structure		0	(0)	1	(2)	0	(0)	0	(0)
bile duct	dilated		0	(0)	0	(0)	0	(0)	1	(2)
pancreas	nodule		1	(2)	1	(2)	0	(0)	1	(2)
kidney	enlarged		0	(0)	2	(4)	0	(0)	0	(0)
	atrophic		1	(2)	1	(2)	0	(0)	0	(0)
	white		0	(0)	2	(4)	0	(0)	0	(0)

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 7

Organ	Findings	Group Name NO. of Animals	0 ppm		4 ppm		13 ppm		40 ppm	
			50	(%)	50	(%)	50	(%)	49	(%)
kidney	white zone		1	(2)	1	(2)	1	(2)	0	(0)
	nodule		1	(2)	1	(2)	0	(0)	0	(0)
	cyst		0	(0)	0	(0)	1	(2)	0	(0)
	hydronephrosis		3	(6)	6	(12)	4	(8)	2	(4)
urin bladd	urine:marked retention		0	(0)	0	(0)	1	(2)	1	(2)
pituitary	enlarged		2	(4)	4	(8)	1	(2)	1	(2)
	red zone		2	(4)	1	(2)	1	(2)	0	(0)
	black zone		0	(0)	1	(2)	0	(0)	0	(0)
	nodule		1	(2)	0	(0)	2	(4)	1	(2)
adrenal	enlarged		0	(0)	1	(2)	0	(0)	0	(0)
ovary	enlarged		3	(6)	6	(12)	9	(18)	3	(6)
	red		1	(2)	0	(0)	0	(0)	1	(2)
	nodule		0	(0)	0	(0)	1	(2)	0	(0)
	cyst		11	(22)	5	(10)	5	(10)	11	(22)
uterus	enlarged		1	(2)	0	(0)	0	(0)	0	(0)
	nodule		11	(22)	16	(32)	21	(42)	14	(29)
	fluid		0	(0)	1	(2)	0	(0)	0	(0)
vagina	nodule		0	(0)	0	(0)	0	(0)	1	(2)
brain	red zone		1	(2)	0	(0)	0	(0)	0	(0)
	nodule		1	(2)	0	(0)	0	(0)	0	(0)
spinal cord	red zone		1	(2)	0	(0)	0	(0)	0	(0)
periph nerv	nodule		0	(0)	0	(0)	2	(4)	0	(0)

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 8

Organ	Findings	Group Name NO. of Animals	0 ppm		4 ppm		13 ppm		40 ppm	
			50	(%)	50	(%)	50	(%)	49	(%)
eye	turbid		0	(0)	0	(0)	2	(4)	2	(4)
Harder gl	enlarged		1	(2)	0	(0)	1	(2)	3	(6)
	nodule		0	(0)	0	(0)	2	(4)	3	(6)
Zymbal gl	nodule		0	(0)	0	(0)	0	(0)	1	(2)
muscle	nodule		0	(0)	0	(0)	1	(2)	1	(2)
mediastinum	mass		2	(4)	1	(2)	4	(8)	3	(6)
peritoneum	nodule		0	(0)	1	(2)	1	(2)	0	(0)
	thick		2	(4)	3	(6)	1	(2)	0	(0)
retroperit	mass		0	(0)	0	(0)	2	(4)	0	(0)
abdominal c	hemorrhage		6	(12)	0	(0)	4	(8)	2	(4)
	ascites		6	(12)	15	(30)	11	(22)	2	(4)
thoracic ca	hemorrhage		0	(0)	0	(0)	2	(4)	1	(2)
	pleural fluid		9	(18)	9	(18)	9	(18)	8	(16)
other	nose:nodule		0	(0)	0	(0)	0	(0)	1	(2)

(HPT080)

BAIS 3

APPENDIX G 6

GROSS FINDINGS : SUMMARY, MOUSE : FEMALE

SACRIFICED ANIMALS

(2-YEAR STUDY)

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

GROSS FINDINGS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 3

Organ	Findings	Group Name NO. of Animals	0 ppm	4 ppm	13 ppm	40 ppm
			28 (%)	22 (%)	10 (%)	1 (%)
subcutis	mass		2 (7)	0 (0)	1 (10)	0 (0)
lung	nodule		1 (4)	1 (5)	1 (10)	0 (0)
lymph node	enlarged		3 (11)	2 (9)	2 (20)	0 (0)
spleen	enlarged		2 (7)	2 (9)	1 (10)	0 (0)
	nodule		1 (4)	0 (0)	1 (10)	0 (0)
	accentuation of white pulp		0 (0)	1 (5)	0 (0)	0 (0)
forestomach	nodule		0 (0)	1 (5)	0 (0)	0 (0)
gl stomach	thick		3 (11)	0 (0)	1 (10)	0 (0)
liver	white zone		0 (0)	0 (0)	1 (10)	0 (0)
	red zone		4 (14)	1 (5)	0 (0)	0 (0)
	nodule		3 (11)	3 (14)	1 (10)	1 (100)
	cyst		0 (0)	1 (5)	0 (0)	0 (0)
pancreas	nodule		1 (4)	0 (0)	0 (0)	0 (0)
kidney	atrophic		1 (4)	1 (5)	0 (0)	0 (0)
	white zone		1 (4)	1 (5)	0 (0)	0 (0)
	hydronephrosis		2 (7)	1 (5)	1 (10)	0 (0)
pituitary	enlarged		1 (4)	2 (9)	0 (0)	0 (0)
	red zone		2 (7)	1 (5)	1 (10)	0 (0)
	black zone		0 (0)	1 (5)	0 (0)	0 (0)
	nodule		0 (0)	0 (0)	1 (10)	0 (0)
adrenal	enlarged		0 (0)	1 (5)	0 (0)	0 (0)
ovary	enlarged		1 (4)	0 (0)	0 (0)	0 (0)

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

GROSS FINDINGS (SUMMARY)
SACRIFICED ANIMALS (105W)

PAGE : 4

Organ	Findings	Group Name NO. of Animals	0 ppm		4 ppm		13 ppm		40 ppm	
			28	(%)	22	(%)	10	(%)	1	(%)
ovary	red		1	(4)	0	(0)	0	(0)	0	(0)
	cyst		10	(36)	2	(9)	1	(10)	0	(0)
uterus	enlarged		1	(4)	0	(0)	0	(0)	0	(0)
	nodule		4	(14)	3	(14)	3	(30)	0	(0)
brain	nodule		1	(4)	0	(0)	0	(0)	0	(0)
Harder gl	enlarged		1	(4)	0	(0)	0	(0)	0	(0)
mediastinum	mass		0	(0)	1	(5)	0	(0)	0	(0)
abdominal c	ascites		3	(11)	2	(9)	3	(30)	0	(0)
thoracic ca	pleural fluid		0	(0)	1	(5)	0	(0)	0	(0)

(HPT080)

BAIS 3

APPENDIX G 5

GROSS FINDINGS : SUMMARY, MOUSE : FEMALE

DEAD AND MORIBUND ANIMALS

(2-YEAR STUDY)

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 5

Organ	Findings	Group Name NO. of Animals	0 ppm		4 ppm		13 ppm		40 ppm	
			22	(%)	28	(%)	40	(%)	48	(%)
skin/app	scab		0	(0)	0	(0)	1	(3)	0	(0)
subcutis	edema		5	(23)	8	(29)	6	(15)	5	(10)
	mass		0	(0)	0	(0)	5	(13)	6	(13)
nasal cavit	red zone		0	(0)	0	(0)	1	(3)	2	(4)
lung	white		0	(0)	0	(0)	1	(3)	0	(0)
	brown		0	(0)	1	(4)	0	(0)	0	(0)
	red zone		0	(0)	0	(0)	0	(0)	2	(4)
	edema		2	(9)	0	(0)	1	(3)	0	(0)
	nodule		1	(5)	0	(0)	1	(3)	3	(6)
	adhesion		1	(5)	0	(0)	0	(0)	0	(0)
lymph node	enlarged		9	(41)	5	(18)	9	(23)	3	(6)
thymus	enlarged		0	(0)	1	(4)	0	(0)	0	(0)
	nodule		0	(0)	1	(4)	0	(0)	0	(0)
spleen	enlarged		8	(36)	8	(29)	7	(18)	2	(4)
	black zone		0	(0)	0	(0)	0	(0)	1	(2)
	nodule		0	(0)	0	(0)	1	(3)	0	(0)
	accentuation of white pulp		0	(0)	0	(0)	1	(3)	0	(0)
heart	enlarged		0	(0)	0	(0)	0	(0)	1	(2)
	white		0	(0)	0	(0)	1	(3)	0	(0)
	white zone		1	(5)	0	(0)	0	(0)	0	(0)
stomach	gas		0	(0)	0	(0)	0	(0)	2	(4)
small intes	red zone		0	(0)	1	(4)	0	(0)	0	(0)

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 6

Organ	Findings	Group Name NO. of Animals	0 ppm		4 ppm		13 ppm		40 ppm	
			22	(%)	28	(%)	40	(%)	48	(%)
small intes	dilated		0	(0)	1	(4)	0	(0)	0	(0)
	gas		0	(0)	0	(0)	0	(0)	3	(6)
cecum	nodule		1	(5)	0	(0)	0	(0)	0	(0)
	gas		0	(0)	0	(0)	0	(0)	2	(4)
large intes	gas		0	(0)	0	(0)	0	(0)	1	(2)
liver	enlarged		2	(9)	6	(21)	5	(13)	5	(10)
	pale		0	(0)	0	(0)	1	(3)	0	(0)
	brown		0	(0)	1	(4)	0	(0)	0	(0)
	white zone		2	(9)	9	(32)	10	(25)	6	(13)
	red zone		1	(5)	1	(4)	3	(8)	2	(4)
	nodule		1	(5)	4	(14)	4	(10)	3	(6)
	rough		0	(0)	2	(7)	0	(0)	0	(0)
	adhesion		0	(0)	1	(4)	0	(0)	0	(0)
	accentuation of lobular structure		0	(0)	1	(4)	0	(0)	0	(0)
bile duct	dilated		0	(0)	0	(0)	0	(0)	1	(2)
pancreas	nodule		0	(0)	1	(4)	0	(0)	1	(2)
kidney	enlarged		0	(0)	2	(7)	0	(0)	0	(0)
	white		0	(0)	2	(7)	0	(0)	0	(0)
	white zone		0	(0)	0	(0)	1	(3)	0	(0)
	nodule		1	(5)	1	(4)	0	(0)	0	(0)
	cyst		0	(0)	0	(0)	1	(3)	0	(0)
	hydronephrosis		1	(5)	5	(18)	3	(8)	2	(4)

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 7

Organ	Findings	Group Name NO. of Animals	0 ppm		4 ppm		13 ppm		40 ppm	
			22	(%)	28	(%)	40	(%)	48	(%)
urin bladd	urine:marked retention		0	(0)	0	(0)	1	(3)	1	(2)
pituitary	enlarged		1	(5)	2	(7)	1	(3)	1	(2)
	nodule		1	(5)	0	(0)	1	(3)	1	(2)
ovary	enlarged		2	(9)	6	(21)	9	(23)	3	(6)
	red		0	(0)	0	(0)	0	(0)	1	(2)
	nodule		0	(0)	0	(0)	1	(3)	0	(0)
	cyst		1	(5)	3	(11)	4	(10)	11	(23)
uterus	nodule		7	(32)	13	(46)	18	(45)	14	(29)
	fluid		0	(0)	1	(4)	0	(0)	0	(0)
vagina	nodule		0	(0)	0	(0)	0	(0)	1	(2)
brain	red zone		1	(5)	0	(0)	0	(0)	0	(0)
spinal cord	red zone		1	(5)	0	(0)	0	(0)	0	(0)
periph nerv	nodule		0	(0)	0	(0)	2	(5)	0	(0)
eye	turbid		0	(0)	0	(0)	2	(5)	2	(4)
Harder gl	enlarged		0	(0)	0	(0)	1	(3)	3	(6)
	nodule		0	(0)	0	(0)	2	(5)	3	(6)
Zymbal gl	nodule		0	(0)	0	(0)	0	(0)	1	(2)
muscle	nodule		0	(0)	0	(0)	1	(3)	1	(2)
mediastinum	mass		2	(9)	0	(0)	4	(10)	3	(6)
peritoneum	nodule		0	(0)	1	(4)	1	(3)	0	(0)
	thick		2	(9)	3	(11)	1	(3)	0	(0)
retroperit	mass		0	(0)	0	(0)	2	(5)	0	(0)

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 8

Organ	Findings	Group Name		0 ppm		4 ppm		13 ppm		40 ppm	
		NO. of Animals		22	(%)	28	(%)	40	(%)	48	(%)
abdominal c	hemorrhage			6	(27)	0	(0)	4	(10)	2	(4)
	ascites			3	(14)	13	(46)	8	(20)	2	(4)
thoracic ca	hemorrhage			0	(0)	0	(0)	2	(5)	1	(2)
	pleural fluid			9	(41)	8	(29)	9	(23)	8	(17)
other	nose:nodule			0	(0)	0	(0)	0	(0)	1	(2)

(HPT080)

BAIS 3

APPENDIX H 1

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

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE
 UNIT: g

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

PAGE : 1

Group Name	NO. of Animals	Body Weight	ADRENALS		TESTES		HEART		LUNGS		KIDNEYS	
0 ppm	38	43.2± 7.5	0.017±	0.010	0.214±	0.034	0.235±	0.040	0.230±	0.059	1.514±	3.370
4 ppm	35	44.9± 7.9	0.016±	0.004	0.204±	0.048	0.235±	0.027	0.254±	0.102	1.012±	2.035
13 ppm	18	34.3± 7.4**	0.013±	0.003	0.197±	0.033	0.211±	0.026*	0.216±	0.027	0.631±	0.065
40 ppm	3	25.4± 2.4**	0.011±	0.003	0.196±	0.016	0.176±	0.023**	0.224±	0.055	0.560±	0.054

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

Test of Dunnett

(HCL040)

BAIS 3

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE
UNIT: g

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

PAGE : 2

Group Name	NO. of Animals	SPLEEN		LIVER		BRAIN	
0 ppm	38	0.128±	0.141	1.661±	0.445	0.457±	0.017
4 ppm	35	0.149±	0.203	1.870±	0.743	0.456±	0.017
13 ppm	18	0.063±	0.029**	1.457±	0.221	0.453±	0.018
40 ppm	3	0.048±	0.006*	1.046±	0.091*	0.439±	0.007

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

Test of Dunnett

(HCL040)

BAIS 3

APPENDIX H 2

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

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE
 UNIT: g

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

PAGE : 3

Group Name	NO. of Animals	Body Weight	ADRENALS	OVARIES	HEART	LUNGS	KIDNEYS
0 ppm	28	26.4± 3.4	0.015± 0.003	0.080± 0.080	0.176± 0.027	0.219± 0.022	0.473± 0.166
4 ppm	22	27.8± 4.7	0.022± 0.035	0.034± 0.019**	0.183± 0.028	0.215± 0.038	0.490± 0.165
13 ppm	10	28.6± 3.3	0.014± 0.004	0.043± 0.021	0.178± 0.022	0.222± 0.055	0.565± 0.312
40 ppm	1	18.7± 0.0 ?	0.009± 0.000 ?	0.011± 0.000 ?	0.127± 0.000 ?	0.188± 0.000 ?	0.378± 0.000 ?
Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Dunnett							

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

(HCL040)

BAIS 3

STUDY NO. : 0343
 ANIMAL : MOUSE CrJ:BDF1
 REPORT TYPE : A1
 SEX : FEMALE
 UNIT: g

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

PAGE : 4

Group Name	NO. of Animals	SPLEEN		LIVER		BRAIN	
0 ppm	28	0.257±	0.370	1.396±	0.375	0.473±	0.020
4 ppm	22	0.188±	0.248	1.406±	0.313	0.482±	0.026
13 ppm	10	0.350±	0.498	1.636±	0.352	0.473±	0.021
40 ppm	1	0.048±	0.000 ?	0.807±	0.000 ?	0.428±	0.000 ?

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

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

(HCL040)

BAIS 3

APPENDIX I 1

ORGAN WEIGHT, RELATIVE : SUMMARY, MOUSE : MALE

(2-YEAR STUDY)

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE
 UNIT: %

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

PAGE : 1

Group Name	NO. of Animals	Body Weight (g)	ADRENALS	TESTES	HEART	LUNGS	KIDNEYS
0 ppm	38	43.2± 7.5	0.041± 0.023	0.508± 0.105	0.561± 0.148	0.550± 0.177	3.457± 7.180
4 ppm	35	44.9± 7.9	0.037± 0.011	0.467± 0.130	0.540± 0.115	0.583± 0.249	2.346± 4.791
13 ppm	18	34.3± 7.4**	0.039± 0.008	0.598± 0.164*	0.633± 0.109	0.652± 0.136*	1.889± 0.276**
40 ppm	3	25.4± 2.4**	0.043± 0.017	0.776± 0.087**	0.690± 0.052	0.880± 0.181*	2.200± 0.009*

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

Test of Dunnett

(HCL042)

BAIS 3

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE
UNIT: %

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

PAGE : 2

Group Name	NO. of Animals	SPLEEN	LIVER	BRAIN
0 ppm	38	0.317± 0.371	3.940± 1.166	1.093± 0.214
4 ppm	35	0.354± 0.493	4.401± 2.513	1.052± 0.219
13 ppm	18	0.189± 0.097	4.436± 1.304	1.378± 0.294**
40 ppm	3	0.193± 0.043	4.114± 0.084	1.740± 0.196**

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

Test of Dunnett

(HCL042)

BAIS 3

APPENDIX I 2

ORGAN WEIGHT, RELATIVE : SUMMARY, MOUSE : FEMALE

(2-YEAR STUDY)

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE
 UNIT: %

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

PAGE : 3

Group Name	NO. of Animals	Body Weight (g)	ADRENALS	OVARIES	HEART	LUNGS	KIDNEYS
0 ppm	28	26.4 ± 3.4	0.057 ± 0.011	0.294 ± 0.281	0.671 ± 0.098	0.838 ± 0.108	1.818 ± 0.757
4 ppm	22	27.8 ± 4.7	0.079 ± 0.123	0.126 ± 0.076**	0.677 ± 0.165	0.792 ± 0.169	1.809 ± 0.658
13 ppm	10	28.6 ± 3.3	0.050 ± 0.010	0.150 ± 0.062	0.626 ± 0.069	0.796 ± 0.281	1.957 ± 0.936
40 ppm	1	18.7 ± 0.0 ?	0.048 ± 0.000 ?	0.059 ± 0.000 ?	0.679 ± 0.000 ?	1.005 ± 0.000 ?	2.021 ± 0.000 ?

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

Test of Dunnett

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

(HCL042)

BAIS 3

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE
UNIT: %

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

PAGE : 4

Group Name	NO. of Animals	SPLEEN	LIVER	BRAIN
0 ppm	28	0.929± 1.205	5.224± 0.894	1.818± 0.254
4 ppm	22	0.676± 0.881	5.113± 1.024	1.797± 0.410
13 ppm	10	1.182± 1.559	5.788± 1.480	1.673± 0.180
40 ppm	1	0.257± 0.000 ?	4.316± 0.000 ?	2.289± 0.000 ?

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

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

(HCL042)

BAIS 3

APPENDIX J 1

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS : SUMMARY

MOUSE : MALE : ALL ANIMALS

(2-YEAR STUDY)

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 1

		Group Name	0 ppm				4 ppm				13 ppm				40 ppm			
		No. of Animals on Study	50				50				50				50			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Integumentary system/appandage}																		
skin/app			<50>				<50>				<50>				<50>			
	ulcer		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)
	inflammation		1	1	0	0	0	1	0	0	0	0	2	0	0	1	0	0
			(2)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(2)	(0)	(0)
	hyperplasia:epidermis		0	1	0	0	1	0	0	0	0	0	0	0	2	0	0	0
		(0)	(2)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	
subcutis	scar:dermis		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)
	epidermal cyst		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)
	sebaceous hyperplasia		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
hyperplasia:mast cell	hemorrhage		<50>				<50>				<50>				<50>			
			0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(2)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
hyperplasia:mast cell	hyperplasia:mast cell		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 : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 2

Organ	Findings	Group Name No. of Animals on Study				0 ppm				4 ppm				13 ppm				40 ppm			
		Grade				50				50				50				50			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
{Integumentary system/appandage}																					
subcutis		<50>				<50>				<50>				<50>							
	xanthogranuloma	0	0	0	0	0	1	1	0	1	0	0	0	0	3	0	0				
		(0)	(0)	(0)	(0)	(0)	(2)	(2)	(0)	(2)	(0)	(0)	(0)	(0)	(6)	(0)	(0)				
{Respiratory system}																					
nasal cavit		<50>				<50>				<50>				<50>							
	exudate	0	0	0	0	1	0	0	0	4	7	3	0 **	7	12	5	0 **				
		(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(8)	(14)	(6)	(0)	(14)	(24)	(10)	(0)				
	angiectasis	0	0	0	0	0	1	0	0	2	2	0	0	3	2	0	0				
		(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(4)	(4)	(0)	(0)	(6)	(4)	(0)	(0)				
	hemorrhage	0	0	0	0	0	0	0	0	2	3	8	0 **	2	11	8	0 **				
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(6)	(16)	(0)	(4)	(22)	(16)	(0)				
	thrombus	0	0	0	0	0	0	0	0	3	0	0	0	1	1	0	0				
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(2)	(2)	(0)	(0)				
	squamous cell hyperplasia	0	0	0	0	0	1	0	0	2	0	0	0	3	0	0	0				
		(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(4)	(0)	(0)	(0)	(6)	(0)	(0)	(0)				
	eosinophilic change:olfactory epithelium	16	0	0	0	8	2	0	0	9	2	0	0	13	1	0	0				
		(32)	(0)	(0)	(0)	(16)	(4)	(0)	(0)	(18)	(4)	(0)	(0)	(26)	(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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 3

Organ	Findings	Group Name No. of Animals on Study Grade				0 ppm 50				4 ppm 50				13 ppm 50				40 ppm 50			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)				
{Respiratory system}																					
nasal cavit		<50>				<50>				<50>				<50>							
	eosinophilic change:respiratory epithelium	15 (30)	2 (4)	0 (0)	0 (0)	11 (22)	2 (4)	0 (0)	0 (0)	9 (18)	2 (4)	0 (0)	0 (0)	11 (22)	1 (2)	0 (0)	0 (0)				
	inflammation:respiratory epithelium	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)	3 (6)	2 (4)	0 (0)	0 (0)				
	inflammation:olfactory epithelium	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)				
	respiratory metaplasia:olfactory epithelium	11 (22)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)	37 (74)	12 (24)	0 (0)	0 (0)	8 (16)	40 (80)	1 (2)	0 (0)				
	respiratory metaplasia:gland	26 (52)	0 (0)	0 (0)	0 (0)	9 (18)	1 (2)	0 (0)	0 (0)	41 (82)	6 (12)	0 (0)	0 (0)	9 (18)	41 (82)	0 (0)	0 (0)				
	basal cell hyperplasia:olfactory epithelium	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)				
	squamous cell metaplasia:respiratory epithelium	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	1 (2)	0 (0)	0 (0)	7 (14)	24 (48)	1 (2)	0 (0)	8 (16)	18 (36)	4 (8)	0 (0)				
	cuboidal change:respiratory epithelium	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (4)	1 (2)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)				

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 4

Organ	Findings	0 ppm				4 ppm				13 ppm				40 ppm			
		50				50				50				50			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																	
nasal cavit		<50>				<50>				<50>				<50>			
	squamous cell metaplasia with atypia:respiratory epithelium	0	0	0	0	0	0	0	0	2	6	0	0 *	4	11	1	0 **
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(12)	(0)	(0)	(8)	(22)	(2)	(0)
	squamous cell hyperplasia with atypia	0	0	0	0	0	0	0	0	5	1	0	0 *	12	5	0	0 **
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(10)	(2)	(0)	(0)	(24)	(10)	(0)	(0)
	atypia:respiratory epithelium	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)
	hyperplasia with atypia:respiratory epithelium	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	hyperplasia with atypia:nasal gland	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)	(4)	(0)	(0)	(0)
	hyperplasia:transitional epithelium	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	xanthogranuloma	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(2)	(0)	(0)	(0)
	atrophy:olfactory epithelium	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 5

Organ	Findings	Group Name No. of Animals on Study				0 ppm 50				4 ppm 50				13 ppm 50				40 ppm 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>				<50>					
	atrophy:respiratory epithelium	0	0	0	0	0	1	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	
		(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	necrosis:olfactory epithelium	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	
		(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	necrosis:respiratory epithelium	0	0	0	0	0	0	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	hyperplasia:respiratory epithelium	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	necrosis:squamous epithelium	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	thickening of bone:turbinate	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
nasopharynx		<50>				<50>				<50>				<50>				<50>					
	exudate	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	eosinophilic change	1	1	0	0	1	0	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	
		(2)	(2)	(0)	(0)	(2)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 6

Organ	Findings	Group Name No. of Animals on Study				0 ppm 50				4 ppm 50				13 ppm 50				40 ppm 50			
		Grade																			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																					
nasopharynx		<50>				<50>				<50>				<50>				<50>			
	inflammation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
lung		<50>				<50>				<50>				<50>				<50>			
	congestion	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hemorrhage	3	0	0	0	6	0	0	0	2	0	0	0	2	0	0	0	2	0	0	0
		(6)	(0)	(0)	(0)	(12)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(4)	(0)	(0)	(0)
	edema	0	0	0	0	0	0	0	0	1	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)	(2)	(0)	(0)	(0)
	deposit of hemosiderin	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	inflammatory infiltration	2	1	0	0	1	0	0	0	6	0	0	0	4	0	0	0	4	0	0	0
		(4)	(2)	(0)	(0)	(2)	(0)	(0)	(0)	(12)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(8)	(0)	(0)	(0)
	perivascular inflammation	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	fibrosis:focal	1	0	0	0	1	0	0	0	0	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)	(0)	(0)	(0)	(0)

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 7

		Group Name	0 ppm				4 ppm				13 ppm				40 ppm			
		No. of Animals on Study	50				50				50				50			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
lung			<50>				<50>				<50>				<50>			
	accumulation of foamy cells		2	1	0	0	2	0	0	0	3	0	0	0	3	0	0	0
			(4)	(2)	(0)	(0)	(4)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
	bronchiolar cell hyperplasia		0	0	0	0	4	0	0	0	2	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	bronchiolar-alveolar cell hyperplasia		4	0	1	0	2	1	0	0	2	1	0	0	0	0	0	0
			(8)	(0)	(2)	(0)	(4)	(2)	(0)	(0)	(4)	(2)	(0)	(0)	(0)	(0)	(0)	(0)
{Hematopoietic system}																		
bone marrow			<50>				<50>				<50>				<50>			
	thrombus		0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	myelofibrosis		0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	erythropoiesis:increased		0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(0)	(0)	(0)	(0)
	granulopoiesis:increased		2	1	0	0	2	1	0	0	2	0	0	0	1	1	0	0
			(4)	(2)	(0)	(0)	(4)	(2)	(0)	(0)	(4)	(0)	(0)	(0)	(2)	(2)	(0)	(0)

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

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
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HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 8

		Group Name	0 ppm				4 ppm				13 ppm				40 ppm			
		No. of Animals on Study	50				50				50				50			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Hematopoietic system}																		
bone marrow			<50>				<50>				<50>				<50>			
	hyperplasia:vascular		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)
lymph node			<50>				<50>				<50>				<50>			
	deposit of amyloid		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)	(4)	(0)	(0)
	plasma cell hyperplasia		0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	lymphadenitis		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)
	follicular hyperplasia		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)
	xanthogranuloma		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)
spleen			<50>				<50>				<49>				<50>			
	congestion		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)

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

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

b : Number of animals with lesion

(c) c : b / a * 100

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
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HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
ALL ANIMALS (0-105W)

PAGE : 9

Organ	Findings	Group Name No. of Animals on Study				0 ppm 50				4 ppm 50				13 ppm 50				40 ppm 50			
		Grade				1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Hematopoietic system}																					
spleen		<50>				<50>				<49>				<50>							
	deposit of melanin	2	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0				
		(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)				
	extramedullary hematopoiesis	5	4	2	0	4	7	2	0	4	5	2	0	4	4	4	0				
		(10)	(8)	(4)	(0)	(8)	(14)	(4)	(0)	(8)	(10)	(4)	(0)	(8)	(8)	(8)	(0)				
	hyperplasia:vascular	1	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0				
		(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(2)	(0)	(0)				
	follicular hyperplasia	5	1	0	0	2	2	2	0	3	0	0	0	2	0	0	0				
		(10)	(2)	(0)	(0)	(4)	(4)	(4)	(0)	(6)	(0)	(0)	(0)	(4)	(0)	(0)	(0)				
	xanthogranuloma	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)				
{Circulatory system}																					
heart		<50>				<50>				<50>				<50>							
	necrosis:focal	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)				
	mineralization	1	0	0	0	0	0	1	0	4	0	0	0	1	0	0	0				
		(2)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(8)	(0)	(0)	(0)	(2)	(0)	(0)	(0)				

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 10

		Group Name	0 ppm				4 ppm				13 ppm				40 ppm			
		No. of Animals on Study	50				50				50				50			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Circulatory system}																		
heart			<50>				<50>				<50>				<50>			
	granulation		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	myocardial degeneration		0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(2)	(0)	(0)
	myocardial fibrosis		1	0	0	0	1	0	0	0	1	0	0	0	1	1	0	0
			(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(2)	(0)	(0)
	pericarditis		1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)
	arteritis		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)	(0)	(0)
	dilatation:right ventricle		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)
artery/aort			<50>				<50>				<50>				<50>			
	arteritis		1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
			(2)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Digestive system}																		
tooth			<50>				<50>				<50>				<50>			
	dysplasia		19	0	0	0	26	0	0	0	19	0	0	0	12	0	0	0
			(38)	(0)	(0)	(0)	(52)	(0)	(0)	(0)	(38)	(0)	(0)	(0)	(24)	(0)	(0)	(0)

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

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 11

Organ	Findings	Group Name	0 ppm				4 ppm				13 ppm				40 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}																		
tongue			<50>				<50>				<50>				<50>			
	ulcer		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	arteritis		0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(2)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
salivary gl			<50>				<50>				<50>				<50>			
	atrophy		1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	lymphocytic infiltration		35	0	0	0	33	0	0	0	26	0	0	0	23	0	0	0 *
			(70)	(0)	(0)	(0)	(66)	(0)	(0)	(0)	(52)	(0)	(0)	(0)	(46)	(0)	(0)	(0)
	xanthogranuloma		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)
stomach			<50>				<50>				<50>				<50>			
	inflammatory 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)	(2)	(0)	(0)	(0)
	erosion:forestomach		1	0	0	0	2	0	0	0	1	0	0	0	1	0	0	0
			(2)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 12

Organ	Findings	Group Name No. of Animals on Study				0 ppm				4 ppm				13 ppm				40 ppm			
		Grade				50				50				50				50			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																					
stomach		<50>				<50>				<50>				<50>				<50>			
	ulcer:forestomach	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	hyperplasia:forestomach	0	0	0	0	0	0	0	0	1	2	1	0	4	3	0	0 *	8	6	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(4)	(2)	(0)	(8)	(6)	(0)	(0)	(8)	(6)	(0)	(0)
	erosion:glandular stomach	6	0	0	0	3	3	0	0	2	0	0	0	1	0	0	0	2	0	0	0
		(12)	(0)	(0)	(0)	(6)	(6)	(0)	(0)	(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	ulcer:glandular stomach	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)
	hyperplasia:glandular stomach	17	20	6	0	15	24	4	0	16	22	1	0	22	15	1	0	44	30	2	0
		(34)	(40)	(12)	(0)	(30)	(48)	(8)	(0)	(32)	(44)	(2)	(0)	(44)	(30)	(2)	(0)	(44)	(30)	(2)	(0)
liver		<50>				<50>				<50>				<50>				<50>			
	angiectasis	1	0	0	0	1	1	0	0	0	0	2	0	0	0	2	0	0	0	0	0
		(2)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)
	necrosis:central	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
		(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)
	necrosis:focal	5	0	0	0	4	0	0	0	1	1	0	0	2	0	0	0	4	0	0	0
		(10)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(4)	(0)	(0)	(0)	(4)	(0)	(0)	(0)

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

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 13

		Group Name No. of Animals on Study				0 ppm 50				4 ppm 50				13 ppm 50				40 ppm 50			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)			
{Digestive system}																					
liver																					
			<50>				<50>				<50>				<50>						
	necrosis: single cell		1	0	0	0	2	0	0	0	0	0	0	0	2	0	0	0			
			(2)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)			
	fatty change		1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0			
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)			
	deposit of amyloid		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)			
	degeneration: focal		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0			
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)			
	inflammatory infiltration		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)			
	granulation		18	1	0	0	22	0	0	0	9	0	0	0	5	0	0	0 **			
			(36)	(2)	(0)	(0)	(44)	(0)	(0)	(0)	(18)	(0)	(0)	(0)	(10)	(0)	(0)	(0)			
	inflammatory cell nest		0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0			
			(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)			
	intestinal metaplasia		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0			
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)			

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 14

Organ	Findings	Group Name No. of Animals on Study				0 ppm 50				4 ppm 50				13 ppm 50				40 ppm 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>				<50>			
	fibrosis:focal	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	extramedullary hematopoiesis	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	clear cell focus	3	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(6)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	acidophilic cell focus	2	2	1	0	1	1	1	0	7	1	2	0	3	0	0	0	3	0	0	0
		(4)	(4)	(2)	(0)	(2)	(2)	(2)	(0)	(14)	(2)	(4)	(0)	(6)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
	basophilic cell focus	1	1	0	0	4	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0
		(2)	(2)	(0)	(0)	(8)	(0)	(0)	(0)	(4)	(2)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	spongiosis hepatitis	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	biliary cyst	3	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(6)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	xanthogranuloma	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 15

		Group Name	0 ppm				4 ppm				13 ppm				40 ppm			
		No. of Animals on Study	50				50				50				50			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
liver			<50>				<50>				<50>				<50>			
	focal fatty change		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
pancreas			<50>				<50>				<50>				<50>			
	islet cell hyperplasia		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Urinary system}																		
kidney			<50>				<50>				<50>				<50>			
	hemorrhage		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	infarct		1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
			(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	cyst		2	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0
			(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)
	hyaline droplet		0	0	0	0	2	0	0	0	3	0	0	0	3	0	0	0
			(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(6)	(0)	(0)	(0)

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 16

Organ_____	Findings_____	Group Name	0 ppm				4 ppm				13 ppm				40 ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
<hr/>																		
{Urinary system}																		
kidney																		
			<50>				<50>				<50>				<50>			
basophilic change			19	1	0	0	27	0	0	0	21	0	0	0	25	0	0	0
			(38)	(2)	(0)	(0)	(54)	(0)	(0)	(0)	(42)	(0)	(0)	(0)	(50)	(0)	(0)	(0)
hyaline cast			2	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0
			(4)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
inflammation			0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
lymphocytic infiltration			8	0	0	0	7	0	0	0	2	0	0	0	0	0	0	0**
			(16)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
inflammatory polyp			0	1	3	0	0	3	1	0	1	0	1	0	0	0	0	0
			(0)	(2)	(6)	(0)	(0)	(6)	(2)	(0)	(2)	(0)	(2)	(0)	(0)	(0)	(0)	(0)
arteritis			0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
hydronephrosis			0	1	3	0	2	3	0	0	0	0	1	1	1	1	0	0
			(0)	(2)	(6)	(0)	(4)	(6)	(0)	(0)	(0)	(0)	(2)	(2)	(2)	(2)	(0)	(0)
mineralization:cortico-medullary junction			0	0	0	0	1	0	0	0	3	0	0	0	4	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(8)	(0)	(0)	(0)

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 17

Organ	Findings	0 ppm				4 ppm				13 ppm				40 ppm			
		50				50				50				50			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																	
kidney		<50>				<50>				<50>				<50>			
	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)
	mineralization:pelvis	2	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0
		(4)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	mineralization:cortex	16	0	0	0	12	0	0	0	29	0	0	0 *	32	1	0	0 **
		(32)	(0)	(0)	(0)	(24)	(0)	(0)	(0)	(58)	(0)	(0)	(0)	(64)	(2)	(0)	(0)
	vacuolic change:proximal tubule	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)
urin bladd		<50>				<50>				<50>				<50>			
	inflammation	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
		(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)
	xanthogranuloma	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Endocrine system}																	
pituitary		<49>				<50>				<50>				<49>			
	angiectasis	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 : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 18

Organ	Findings	Group Name	0 ppm				4 ppm				13 ppm				40 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	cyst		<49>				<50>				<50>				<49>			
		5	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	
		(10)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	
	hyperplasia	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	
		(2)	(2)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	Rathke pouch	4	0	0	0	2	0	0	0	2	0	0	0	1	0	0	0	
		(8)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	
thyroid	C-cell hyperplasia		<50>				<50>				<50>				<50>			
		10	0	0	0	5	0	0	0	4	0	0	0	6	0	0	0	
		(20)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(12)	(0)	(0)	(0)	
	focal follicular cell hyperplasia	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)	
adrenal	angiectasis		<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)	
	cyst	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
		(2)	(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 : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 19

Organ_____	Findings_____	Group Name	0 ppm				4 ppm				13 ppm				40 ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																		
adrenal			<50>				<50>				<50>				<50>			
	spindle-cell hyperplasia	27	0	0	0	25	1	0	0	26	0	0	0	31	0	0	0	
		(54)	(0)	(0)	(0)	(50)	(2)	(0)	(0)	(52)	(0)	(0)	(0)	(62)	(0)	(0)	(0)	
	hyperplasia:cortical cell	5	2	0	0	12	1	0	0	7	1	0	0	2	0	0	0	
		(10)	(4)	(0)	(0)	(24)	(2)	(0)	(0)	(14)	(2)	(0)	(0)	(4)	(0)	(0)	(0)	
	hyperplasia:medulla	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	
		(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	
	focal fatty change:cortex	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)	
{Reproductive system}																		
testis			<50>				<50>				<50>				<50>			
	aplasia	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)	
	atrophy	9	4	0	0	12	7	0	0	11	2	0	0	6	0	0	0	
		(18)	(8)	(0)	(0)	(24)	(14)	(0)	(0)	(22)	(4)	(0)	(0)	(12)	(0)	(0)	(0)	
	mineralization	25	2	0	0	26	3	1	0	32	4	0	0	35	1	0	0	
		(50)	(4)	(0)	(0)	(52)	(6)	(2)	(0)	(64)	(8)	(0)	(0)	(70)	(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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 20

Organ	Findings	Group Name No. of Animals on Study				0 ppm 50				4 ppm 50				13 ppm 50				40 ppm 50			
		Grade																			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Reproductive system}																					
testis	inflammation	<50>				<50>				<50>				<50>				<50>			
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	interstitial cell hyperplasia	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	xanthogranuloma	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
epididymis	inflammation	<50>				<50>				<50>				<50>				<50>			
		1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
		(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	spermatogenic granuloma	2	0	0	0	2	0	0	0	1	0	0	0	0	1	0	0	0	1	0	0
		(4)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(2)	(0)	(0)
	xanthogranuloma	0	1	0	0	2	0	0	0	1	1	0	0	0	2	0	0	0	2	0	0
		(0)	(2)	(0)	(0)	(4)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(2)	(4)	(0)	(0)	(0)	(4)	(0)	(0)
prostate	inflammation	<50>				<50>				<50>				<50>				<50>			
		1	0	0	0	1	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0
		(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 21

Organ	Findings	Group Name	0 ppm				4 ppm				13 ppm				40 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
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Reproductive system}																		
prep/cli gl			<50>				<50>				<50>				<50>			
	duct ectasia	0	1	0	0	0	2	1	0	0	2	0	0	0	2	0	0	
		(0)	(2)	(0)	(0)	(0)	(4)	(2)	(0)	(0)	(4)	(0)	(0)	(0)	(4)	(0)	(0)	
	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)	
{Nervous system}																		
brain			<50>				<50>				<50>				<50>			
	hemorrhage	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)	
	vacuolic 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)	(2)	(0)	(0)	(0)		
	mineralization	34	0	0	0	36	0	0	0	29	0	0	0	21	0	0	0 *	
		(68)	(0)	(0)	(0)	(72)	(0)	(0)	(0)	(58)	(0)	(0)	(0)	(42)	(0)	(0)	(0)	
	perivascular inflammation	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
spinal cord			<50>				<50>				<50>				<50>			
	hemorrhage	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 : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 22

Organ	Findings	Group Name No. of Animals on Study Grade	0 ppm 50				4 ppm 50				13 ppm 50				40 ppm 50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Nervous system}																		
spinal cord	perivascular inflammation		<50>				<50>				<50>				<50>			
			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
periph nerv	xanthogranuloma		<50>				<50>				<50>				<50>			
			0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Special sense organs/appendage}																		
eye	hemorrhage		<50>				<50>				<50>				<49>			
			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)	(0)	(0)
	keratitis		0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(2)	(2)	(0)	(0)
Harder gl	degeneration		<50>				<50>				<50>				<49>			
			1	0	0	0	2	0	0	0	0	0	4	0	1	0	0	0
			(2)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(2)	(0)	(0)	(0)
	hyperplasia		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 : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 23

Organ	Findings	Group Name				0 ppm				4 ppm				13 ppm				40 ppm			
		No. of Animals on Study				50				50				50				50			
		Grade				1				2				3				4			
		(%)				(%)				(%)				(%)				(%)			

{Musculoskeletal system}

		<50>				<50>				<50>				<50>			
muscle	mineralization	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)

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

(HPT150)

BAIS3

APPENDIX J 2

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS : SUMMARY

MOUSE : MALE : DEAD AND MORIBUND ANIMALS

(2-YEAR STUDY)

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 1

Organ	Findings	Group Name No. of Animals on Study Grade				0 ppm 12				4 ppm 15				13 ppm 32				40 ppm 47			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Integumentary system/appandage}																					
skin/app		<12>				<15>				<32>				<47>							
	inflammation	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia:epidermis	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	scar:dermis	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	sebaceous hyperplasia	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
subcutis		<12>				<15>				<32>				<47>							
	hemorrhage	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	xanthogranuloma	0	0	0	0	0	1	1	0	0	0	0	0	0	3	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(7)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(0)	(0)	(0)
{Respiratory system}																					
nasal cavit		<12>				<15>				<32>				<47>							
	exudate	0	0	0	0	1	0	0	0	1	6	1	0	7	10	5	0 *				
		(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(3)	(19)	(3)	(0)	(15)	(21)	(11)	(0)				

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 2

Organ	Findings	Group Name No. of Animals on Study				0 ppm				4 ppm				13 ppm				40 ppm			
		Grade				12				15				32				47			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																					
nasal cavit		<12>				<15>				<32>				<47>							
	angiectasis	0	0	0	0	0	1	0	0	1	1	0	0	3	2	0	0				
		(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(3)	(3)	(0)	(0)	(6)	(4)	(0)	(0)				
	hemorrhage	0	0	0	0	0	0	0	0	1	2	7	0	2	11	7	0				
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(6)	(22)	(0)	(4)	(23)	(15)	(0)				
	thrombus	0	0	0	0	0	0	0	0	2	0	0	0	1	1	0	0				
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(2)	(2)	(0)	(0)				
	squamous cell hyperplasia	0	0	0	0	0	1	0	0	1	0	0	0	2	0	0	0				
		(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(3)	(0)	(0)	(0)	(4)	(0)	(0)	(0)				
	eosinophilic change:olfactory epithelium	4	0	0	0	0	2	0	0 *	4	2	0	0	11	1	0	0				
		(33)	(0)	(0)	(0)	(0)	(13)	(0)	(0)	(13)	(6)	(0)	(0)	(23)	(2)	(0)	(0)				
	eosinophilic change:respiratory epithelium	4	0	0	0	2	1	0	0	5	2	0	0	10	1	0	0				
		(33)	(0)	(0)	(0)	(13)	(7)	(0)	(0)	(16)	(6)	(0)	(0)	(21)	(2)	(0)	(0)				
	inflammation:respiratory epithelium	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0				
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(2)	(0)	(0)				
	inflammation:olfactory epithelium	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 : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 3

		Group Name No. of Animals on Study				0 ppm 12				4 ppm 15				13 ppm 32				40 ppm 47			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)			
{Respiratory system}																					
nasal cavit																					
	respiratory metaplasia:olfactory epithelium		<12>				<15>				<32>				<47>						
			2	0	0	0	0	0	0	0	24	8	0	0 **	8	37	1	0 **			
			(17)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(75)	(25)	(0)	(0)	(17)	(79)	(2)	(0)			
	respiratory metaplasia:gland		5	0	0	0	0	0	0	0 *	27	3	0	0 **	9	38	0	0 **			
			(42)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(84)	(9)	(0)	(0)	(19)	(81)	(0)	(0)			
	basal cell hyperplasia:olfactory epithelium		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
			(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)			
	squamous cell metaplasia:respiratory epithelium		0	0	0	0	0	1	0	0	4	15	0	0 **	8	18	3	0 **			
			(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(13)	(47)	(0)	(0)	(17)	(38)	(6)	(0)			
	cuboidal change:respiratory epithelium		0	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0			
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(3)	(0)	(0)	(0)	(2)	(0)	(0)			
	squamous cell metaplasia with atypia:respiratory epithelium		0	0	0	0	0	0	0	0	2	6	0	0	4	9	1	0			
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(19)	(0)	(0)	(9)	(19)	(2)	(0)			
	squamous cell hyperplasia with atypia		0	0	0	0	0	0	0	0	1	0	0	0	11	5	0	0			
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(23)	(11)	(0)	(0)			
	atypia:respiratory epithelium		0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0			
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(2)	(0)	(0)	(0)			

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 4

Organ_____	Findings_____	Group Name No. of Animals on Study				0 ppm 12				4 ppm 15				13 ppm 32				40 ppm 47			
		Grade				1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																					
nasal cavit		<12>				<15>				<32>				<47>							
	hyperplasia with atypia:respiratory epithelium	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	hyperplasia with atypia:nasal gland	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)
	xanthogranuloma	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(2)	(0)	(0)	(0)
	atrophy:olfactory epithelium	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	atrophy:respiratory epithelium	0	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)	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
	necrosis:olfactory epithelium	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	necrosis:respiratory epithelium	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(4)	(0)	(0)	(0)
	hyperplasia:respiratory epithelium	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 5

Organ	Findings	Group Name No. of Animals on Study				0 ppm				4 ppm				13 ppm				40 ppm			
		Grade				12				15				32				47			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																					
nasal cavit		<12>				<15>				<32>				<47>							
	thickening of bone:turbinate	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)
nasopharynx		<12>				<15>				<32>				<47>							
	exudate	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	eosinophilic change	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	0	0	0
		(0)	(8)	(0)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)
lung		<12>				<15>				<32>				<47>							
	congestion	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hemorrhage	2	0	0	0	2	0	0	0	2	0	0	0	2	0	0	0	2	0	0	0
		(17)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(4)	(0)	(0)	(0)
		<12>				<15>				<32>				<47>							
	edema	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)

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

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

b : Number of animals with lesion

(c) c : b / a * 100

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Chi Square

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

PAGE : 6

		Group Name	0 ppm				4 ppm				13 ppm				40 ppm			
		No. of Animals on Study	12				15				32				47			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
lung			<12>				<15>				<32>				<47>			
	deposit of hemosiderin		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)
	inflammatory infiltration		1	0	0	0	1	0	0	0	6	0	0	0	4	0	0	0
			(8)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(19)	(0)	(0)	(0)	(9)	(0)	(0)	(0)
	perivascular inflammation		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)
	fibrosis:focal		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
accumulation of foamy cells		1	0	0	0	0	0	0	0	3	0	0	0	3	0	0	0	
		(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	
bronchiolar cell hyperplasia		0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	
		(0)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
bronchiolar-alveolar cell hyperplasia		0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	
		(0)	(0)	(8)	(0)	(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
{Hematopoietic system}																		
bone marrow			<12>				<15>				<32>				<47>			
	thrombus		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
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HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 7

Organ	Findings	Group Name No. of Animals on Study Grade				0 ppm 12				4 ppm 15				13 ppm 32				40 ppm 47			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Hematopoietic system}																					
bone marrow		<12>				<15>				<32>				<47>							
	erythropoiesis:increased	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(3)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	granulopoiesis:increased	1	0	0	0	2	0	0	0	1	0	0	0	1	1	0	0	1	1	0	0
		(8)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(3)	(2)	(2)	(0)	(2)	(2)	(0)	(0)
	hyperplasia:vascular	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
lymph node		<12>				<15>				<32>				<47>							
	deposit of amyloid	0	0	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)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(4)	(0)	(0)
	plasma cell hyperplasia	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	lymphadenitis	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)
	follicular hyperplasia	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)
	xanthogranuloma	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 8

Organ	Findings	Group Name No. of Animals on Study Grade				0 ppm 12				4 ppm 15				13 ppm 32				40 ppm 47			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Hematopoietic system}																					
spleen		<12>				<15>				<31>				<47>							
	congestion	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	deposit of melanin	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	extramedullary hematopoiesis	1	3	1	0	1	5	2	0	2	4	2	0	3	4	4	0	3	4	4	0
		(8)	(25)	(8)	(0)	(7)	(33)	(13)	(0)	(6)	(13)	(6)	(0)	(6)	(9)	(9)	(0)	(6)	(9)	(9)	(0)
	hyperplasia:vascular	1	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	1	0	0
		(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)
	follicular hyperplasia	0	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)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(4)	(0)	(0)	(0)
	xanthogranuloma	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Circulatory system}																					
heart		<12>				<15>				<32>				<47>							
	necrosis:focal	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 9

		0 ppm				4 ppm				13 ppm				40 ppm			
		12				15				32				47			
		Grade				Grade				Grade				Grade			
Organ	Findings	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Circulatory system}																	
heart		<12>				<15>				<32>				<47>			
	mineralization	0	0	0	0	0	0	1	0	4	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(13)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	granulation	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	myocardial degeneration	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(2)	(0)	(0)
	myocardial fibrosis	0	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0
		(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(2)	(0)	(0)
	pericarditis	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
		(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)
	arteritis	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	dilatation:right ventricle	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)
artery/aort		<12>				<15>				<32>				<47>			
	arteritis	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

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

b : Number of animals with lesion

(c) c : b / a * 100

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

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 10

		Group Name	0 ppm				4 ppm				13 ppm				40 ppm			
		No. of Animals on Study	12				15				32				47			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
tooth	dysplasia		<12>				<15>				<32>				<47>			
		4	0	0	0	4	0	0	0	10	0	0	0	11	0	0	0	
			(33)	(0)	(0)	(0)	(27)	(0)	(0)	(0)	(31)	(0)	(0)	(0)	(23)	(0)	(0)	(0)
tongue	ulcer		<12>				<15>				<32>				<47>			
		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	arteritis		0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
salivary gl	lymphocytic infiltration		<12>				<15>				<32>				<47>			
		6	0	0	0	4	0	0	0	12	0	0	0	21	0	0	0	
			(50)	(0)	(0)	(0)	(27)	(0)	(0)	(0)	(38)	(0)	(0)	(0)	(45)	(0)	(0)	(0)
stomach	inflammatory infiltration		<12>				<15>				<32>				<47>			
		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)	(2)	(0)	(0)	
	erosion:forestomach		0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	ulcer:forestomach		0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 11

Organ	Findings	Group Name No. of Animals on Study Grade				0 ppm 12				4 ppm 15				13 ppm 32				40 ppm 47			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																					
stomach		<12>				<15>				<32>				<47>							
	hyperplasia:forestomach	0	0	0	0	0	0	0	0	1	2	0	0	4	3	0	0				
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(6)	(0)	(0)	(9)	(6)	(0)	(0)				
	erosion:glandular stomach	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)				
	ulcer:glandular stomach	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)				
	hyperplasia:glandular stomach	7	0	0	0	7	3	0	0	12	13	1	0 *	21	14	1	0				
		(58)	(0)	(0)	(0)	(47)	(20)	(0)	(0)	(38)	(41)	(3)	(0)	(45)	(30)	(2)	(0)				
liver		<12>				<15>				<32>				<47>							
	angiectasis	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)	(6)	(0)	(0)	(0)	(0)	(0)				
	necrosis:central	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)				
	necrosis:focal	2	0	0	0	2	0	0	0	0	1	0	0	1	0	0	0				
		(17)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(2)	(0)	(0)	(0)				
	necrosis:single cell	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)	(4)	(0)	(0)	(0)				

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 12

Organ	Findings	Group Name	0 ppm				4 ppm				13 ppm				40 ppm			
		No. of Animals on Study	12				15				32				47			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
liver			<12>				<15>				<32>				<47>			
	fatty 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)	(2)	(0)	(0)	(0)
	deposit of amyloid		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	degeneration:focal		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)
	granulation		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)	(4)	(0)	(0)	(0)
	inflammatory cell nest		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)	
extramedullary hematopoiesis		0	0	0	0	1	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)	(0)	
acidophilic cell focus		0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	0	
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(3)	(0)	(0)	(2)	(0)	(0)	(0)	
basophilic cell focus		0	0	0	0	1	0	0	0	2	1	0	0	0	0	0	0	
		(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(6)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	

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

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

b b : Number of animals with lesion

(c) c : b / a * 100

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 13

Organ_____	Findings_____	Group Name	0 ppm				4 ppm				13 ppm				40 ppm			
		No. of Animals on Study	12				15				32				47			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
liver			<12>				<15>				<32>				<47>			
	spongiosis hepatis		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
pancreas			<12>				<15>				<32>				<47>			
	islet cell hyperplasia		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Urinary system}																		
kidney			<12>				<15>				<32>				<47>			
	hemorrhage		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)
	infarct		0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	cyst		0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)
	hyaline droplet		0	0	0	0	1	0	0	0	3	0	0	0	3	0	0	0
			(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(6)	(0)	(0)	(0)

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 14

Organ	Findings	Group Name No. of Animals on Study Grade				0 ppm 12				4 ppm 15				13 ppm 32				40 ppm 47			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)				
{Urinary system}																					
kidney		<12>				<15>				<32>				<47>							
	basophilic change	1 (8)	0 (0)	0 (0)	0 (0)	4 (27)	0 (0)	0 (0)	0 (0)	10 (31)	0 (0)	0 (0)	0 (0)	23 (49)	0 (0)	0 (0)	0 (0)	0 * (0)			
	hyaline cast	0 (0)	0 (0)	0 (0)	0 (0)	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)			
	inflammation	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)	0 (0)	0 (0)			
	lymphocytic infiltration	0 (0)	0 (0)	0 (0)	0 (0)	2 (13)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)			
	inflammatory polyp	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (7)	1 (7)	0 (0)	1 (3)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)			
	arteritis	0 (0)	1 (8)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)			
	hydronephrosis	0 (0)	0 (0)	1 (8)	0 (0)	2 (13)	1 (7)	0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	1 (3)	1 (2)	1 (2)	0 (0)	0 (0)	0 (0)			
	mineralization:cortico-medullary junction	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	3 (9)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)	0 (0)			

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

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 15

		Group Name	0 ppm				4 ppm				13 ppm				40 ppm			
		No. of Animals on Study	12				15				32				47			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																		
kidney			<12>				<15>				<32>				<47>			
	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)	(2)	(0)	(0)	(0)
	mineralization:pelvis		1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
			(8)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	mineralization:cortex		2	0	0	0	2	0	0	0	16	0	0	0	29	1	0	0 *
			(17)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(50)	(0)	(0)	(0)	(62)	(2)	(0)	(0)
	vacuolic change:proximal tubule		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)
urin bladd			<12>				<15>				<32>				<47>			
	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)
	xanthogranuloma		0	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)
{Endocrine system}																		
pituitary			<12>				<15>				<32>				<46>			
	angiectasis		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)	(2)	(0)	(0)	(0)	

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 16

Organ	Findings	Group Name No. of Animals on Study				0 ppm				4 ppm				13 ppm				40 ppm			
		Grade				12				15				32				47			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																					
pituitary	cyst	<12>				<15>				<32>				<46>							
		1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0				
		(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)				
	hyperplasia	<12>				<15>				<32>				<46>							
		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)				
thyroid	C-cell hyperplasia	<12>				<15>				<32>				<47>							
		0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0				
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)				
	focal follicular cell hyperplasia	<12>				<15>				<32>				<47>							
		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)				
adrenal	cyst	<12>				<15>				<32>				<47>							
		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)				
	spindle-cell hyperplasia	<12>				<15>				<32>				<47>							
		5	0	0	0	7	0	0	0	17	0	0	0	30	0	0	0				
		(42)	(0)	(0)	(0)	(47)	(0)	(0)	(0)	(53)	(0)	(0)	(0)	(64)	(0)	(0)	(0)				
	hyperplasia:cortical cell	<12>				<15>				<32>				<47>							
		0	0	0	0	1	0	0	0	3	0	0	0	1	0	0	0				
		(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(2)	(0)	(0)	(0)				

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

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 17

Organ	Findings	Group Name	0 ppm				4 ppm				13 ppm				40 ppm			
		No. of Animals on Study	12				15				32				47			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																		
adrenal			<12>				<15>				<32>				<47>			
	hyperplasia:medulla		0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	
{Reproductive system}																		
testis			<12>				<15>				<32>				<47>			
	aplasia		0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	
	atrophy		0	0	0	0	1	0	0	0	5	1	0	5	0	0	0	
			(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(16)	(3)	(0)	(11)	(0)	(0)	(0)	
	mineralization		6	0	0	0	5	1	0	0	22	3	0	32	1	0	0	
			(50)	(0)	(0)	(0)	(33)	(7)	(0)	(0)	(69)	(9)	(0)	(68)	(2)	(0)	(0)	
	inflammation		0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	
	interstitial cell hyperplasia		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	
	xanthogranuloma		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	

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

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

b b : Number of animals with lesion

(c) c : b / a * 100

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 18

Organ	Findings	0 ppm				4 ppm				13 ppm				40 ppm			
		12				15				32				47			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Reproductive system}																	
epididymis		<12>				<15>				<32>				<47>			
	inflammation	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	spermatogenic granuloma	2	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0 *
		(17)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(2)	(0)	(0)
	xanthogranuloma	0	0	0	0	0	0	0	0	1	1	0	0	0	2	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(3)	(0)	(0)	(0)	(4)	(0)	(0)
prostate		<12>				<15>				<32>				<47>			
	inflammation	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)
prep/cli gl		<12>				<15>				<32>				<47>			
	duct ectasia	0	0	0	0	0	1	0	0	0	1	0	0	0	2	0	0
		(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(4)	(0)	(0)
	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)
{Nervous system}																	
brain		<12>				<15>				<32>				<47>			
	hemorrhage	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)

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

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 19

Organ	Findings	Group Name No. of Animals on Study				0 ppm				4 ppm				13 ppm				40 ppm			
		Grade				12				15				32				47			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Nervous system}																					
brain		<12>				<15>				<32>				<47>							
	vacuolic change	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	mineralization	4	0	0	0	10	0	0	0	14	0	0	0	20	0	0	0	20	0	0	0
		(33)	(0)	(0)	(0)	(67)	(0)	(0)	(0)	(44)	(0)	(0)	(0)	(43)	(0)	(0)	(0)	(43)	(0)	(0)	(0)
spinal cord		<12>				<15>				<32>				<47>							
	hemorrhage	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
periph nerv		<12>				<15>				<32>				<47>							
	xanthogranuloma	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Special sense organs/appendage}																					
eye		<12>				<15>				<32>				<46>							
	hemorrhage	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	keratitis	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(2)	(2)	(0)	(0)

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

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

b : Number of animals with lesion

(c) c : b / a * 100

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

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 20

Organ	Findings	Group Name				0 ppm				4 ppm				13 ppm				40 ppm			
		No. of Animals on Study				12				15				32				47			
		Grade				1				2				3				4			
						(%)				(%)				(%)				(%)			

{Special sense organs/appendage}

		<12>				<15>				<32>				<46>			
Harder gl	degeneration	1	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0
		(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(9)	(0)	(2)	(0)	(0)	(0)

{Musculoskeletal system}

		<12>				<15>				<32>				<47>			
muscle	mineralization	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)

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

APPENDIX J 3

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS : SUMMARY

MOUSE : MALE : SACRIFICED ANIMALS

(2-YEAR STUDY)

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 1

Organ	Findings	0 ppm				4 ppm				13 ppm				40 ppm			
		No. of Animals on Study				No. of Animals on Study				No. of Animals on Study				No. of Animals on Study			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Integumentary system/appandage}																	
skin/app	ulcer	<38>				<35>				<18>				< 3>			
		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	inflammation	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
		(3)	(3)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
subcutis	hyperplasia:epidermis	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(3)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	epidermal cyst	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)
	hemorrhage	<38>				<35>				<18>				< 3>			
		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)
	hyperplasia:mast cell	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)
	xanthogranuloma	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)	(0)	(0)	(0)	(0)
{Respiratory system}																	
nasal cavit	exudate	<38>				<35>				<18>				< 3>			
		0	0	0	0	0	0	0	0	3	1	2	0 **	0	2	0	0 **
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(17)	(6)	(11)	(0)	(0)	(67)	(0)	(0)

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

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

b : Number of animals with lesion

(c) c : b / a * 100

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 2

Organ	Findings	Group Name No. of Animals on Study				0 ppm 38				4 ppm 35				13 ppm 18				40 ppm 3					
		Grade				1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
{Respiratory system}																							
nasal cavit		<38>				<35>				<18>				< 3>									
	angiectasis	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	hemorrhage	0	0	0	0	0	0	0	0	1	1	1	0	0	0	1	0	0	0	0	0	0	
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(6)	(6)	(0)	(0)	(0)	(33)	(0)	(0)	(0)	(0)	(0)	(0)	
	thrombus	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	squamous cell hyperplasia	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(33)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	eosinophilic change:olfactory epithelium	12	0	0	0	8	0	0	0	5	0	0	0	2	0	0	0	0	0	0	0	0	
		(32)	(0)	(0)	(0)	(23)	(0)	(0)	(0)	(28)	(0)	(0)	(0)	(67)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	eosinophilic change:respiratory epithelium	11	2	0	0	9	1	0	0	4	0	0	0	1	0	0	0	0	0	0	0	0	
		(29)	(5)	(0)	(0)	(26)	(3)	(0)	(0)	(22)	(0)	(0)	(0)	(33)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	inflammation:respiratory epithelium	0	0	0	0	0	0	0	0	3	0	0	0	2	1	0	0	0	0	0	0	**	
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(17)	(0)	(0)	(0)	(67)	(33)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	respiratory metaplasia:olfactory epithelium	9	0	0	0	2	0	0	0	13	4	0	0	0	3	0	0	0	0	0	0	**	
		(24)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(72)	(22)	(0)	(0)	(0)	(100)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 3

Organ	Findings	0 ppm				4 ppm				13 ppm				40 ppm			
		No. of Animals on Study				No. of Animals on Study				No. of Animals on Study				No. of Animals on Study			
		Grade	1	2	3	4	Grade	1	2	3	4	Grade	1	2	3	4	Grade
			(%)	(%)	(%)	(%)		(%)	(%)	(%)	(%)		(%)	(%)	(%)	(%)	
{Respiratory system}																	
nasal cavit			<38>					<35>					<18>				
	respiratory metaplasia:gland	21	0	0	0	0	9	1	0	0	0 *	14	3	0	0	0 **	0
		(55)	(0)	(0)	(0)	(0)	(26)	(3)	(0)	(0)	(0)	(78)	(17)	(0)	(0)	(0)	(0)
	squamous cell metaplasia:respiratory epithelium	0	0	0	0	0	1	0	0	0	0	3	9	1	0	0 **	0
		(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(17)	(50)	(6)	(0)	(0)	(0)
	cuboidal change:respiratory epithelium	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)	(0)	(0)
	squamous cell metaplasia with atypia:respiratory epithelium	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 **
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	squamous cell hyperplasia with atypia	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0 **	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(22)	(6)	(0)	(0)	(0)	(0)
	hyperplasia:transitional epithelium	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)	(11)	(0)	(0)	(0)	(0)	(0)
	xanthogranuloma	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)	(0)
	atrophy:respiratory epithelium	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 4

Organ	Findings	0 ppm				4 ppm				13 ppm				40 ppm			
		No. of Animals on Study				No. of Animals on Study				No. of Animals on Study				No. of Animals on Study			
		Grade	1	2	3	4	Grade	1	2	3	4	Grade	1	2	3	4	Grade
			(%)	(%)	(%)	(%)		(%)	(%)	(%)	(%)		(%)	(%)	(%)	(%)	
{Respiratory system}																	
nasal cavit			<38>					<35>					<18>				
	necrosis:olfactory epithelium		0	0	0	0		1	0	0	0		1	0	0	0	
			(0)	(0)	(0)	(0)		(3)	(0)	(0)	(0)		(6)	(0)	(0)	(0)	
	necrosis:respiratory epithelium		0	0	0	0		0	0	0	0		2	0	0	0	
			(0)	(0)	(0)	(0)		(0)	(0)	(0)	(0)		(11)	(0)	(0)	(0)	
	hyperplasia:respiratory epithelium		0	0	0	0		0	0	0	0		0	0	0	0	
			(0)	(0)	(0)	(0)		(0)	(0)	(0)	(0)		(0)	(0)	(0)	(0)	
	necrosis:squamous epithelium		0	0	0	0		0	0	0	0		0	1	0	0	
			(0)	(0)	(0)	(0)		(0)	(0)	(0)	(0)		(0)	(6)	(0)	(0)	
nasopharynx			<38>					<35>					<18>				
	eosinophilic change		1	0	0	0		1	0	0	0		0	0	0	0	
			(3)	(0)	(0)	(0)		(3)	(0)	(0)	(0)		(0)	(0)	(0)	(0)	
lung			<38>					<35>					<18>				
	hemorrhage		1	0	0	0		4	0	0	0		0	0	0	0	
			(3)	(0)	(0)	(0)		(11)	(0)	(0)	(0)		(0)	(0)	(0)	(0)	
	inflammatory infiltration		1	1	0	0		0	0	0	0		0	0	0	0	
			(3)	(3)	(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 ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Chi Square

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 5

		0 ppm				4 ppm				13 ppm				40 ppm			
		38				35				18				3			
Group Name	No. of Animals on Study																
Grade		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Organ_____	Findings_____	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																	
lung		<38>				<35>				<18>				< 3>			
	perivascular inflammation	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	fibrosis:focal	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	accumulation of foamy cells	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0
		(3)	(3)	(0)	(0)	(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	bronchiolar cell hyperplasia	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	bronchiolar-alveolar cell hyperplasia	4	0	0	0	2	0	0	0	2	1	0	0	0	0	0	0
		(11)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(11)	(6)	(0)	(0)	(0)	(0)	(0)	(0)
{Hematopoietic system}																	
bone marrow		<38>				<35>				<18>				< 3>			
	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)
	myelofibrosis	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)	(0)	(0)	(0)	(0)

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

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

b b : Number of animals with lesion

(c) c : b / a * 100

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 6

		Group Name	0 ppm				4 ppm				13 ppm				40 ppm			
		No. of Animals on Study	38				35				18				3			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Hematopoietic system}																		
bone marrow			<38>				<35>				<18>				< 3>			
	granulopoiesis:increased		1	1	0	0	0	1	0	0	1	0	0	0	0	0	0	0
			(3)	(3)	(0)	(0)	(0)	(3)	(0)	(0)	(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
spleen			<38>				<35>				<18>				< 3>			
	deposit of melanin		2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(5)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	extramedullary hematopoiesis		4	1	1	0	3	2	0	0	2	1	0	0	1	0	0	0
			(11)	(3)	(3)	(0)	(9)	(6)	(0)	(0)	(11)	(6)	(0)	(0)	(33)	(0)	(0)	(0)
	follicular hyperplasia		5	1	0	0	2	2	2	0	3	0	0	0	0	0	0	0
			(13)	(3)	(0)	(0)	(6)	(6)	(6)	(0)	(17)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Circulatory system}																		
heart			<38>				<35>				<18>				< 3>			
	mineralization		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	myocardial fibrosis		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)	(0)	(0)	(0)	(0)

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 7

Organ	Findings	Group Name No. of Animals on Study Grade	0 ppm 38				4 ppm 35				13 ppm 18				40 ppm 3			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Circulatory system}																		
artery/aort	arteritis		<38>				<35>				<18>				< 3>			
			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)
{Digestive system}																		
tooth	dysplasia		<38>				<35>				<18>				< 3>			
			15	0	0	0	22	0	0	0	9	0	0	0	1	0	0	0
			(39)	(0)	(0)	(0)	(63)	(0)	(0)	(0)	(50)	(0)	(0)	(0)	(33)	(0)	(0)	(0)
tongue	arteritis		<38>				<35>				<18>				< 3>			
			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)
salivary gl	atrophy		<38>				<35>				<18>				< 3>			
			1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
			(3)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	lymphocytic infiltration		29	0	0	0	29	0	0	0	14	0	0	0	2	0	0	0
			(76)	(0)	(0)	(0)	(83)	(0)	(0)	(0)	(78)	(0)	(0)	(0)	(67)	(0)	(0)	(0)
	xanthogranuloma		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 8

Organ	Group Name No. of Animals on Study Grade	0 ppm 38				4 ppm 35				13 ppm 18				40 ppm 3				
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
{Digestive system}																		
stomach		<38>				<35>				<18>				< 3>				
	erosion:forestomach	1 (3)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	
	hyperplasia:forestomach	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)	0 (0)	0 (0)	
	erosion:glandular stomach	6 (16)	0 (0)	0 (0)	0 (0)	3 (9)	3 (9)	0 (0)	0 (0)	2 (11)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	
	hyperplasia:glandular stomach	10 (26)	20 (53)	6 (16)	0 (0)	8 (23)	21 (60)	4 (11)	0 (0)	4 (22)	9 (50)	0 (0)	0 (0)	0 (0)	1 (33)	1 (33)	0 (0)	0 (0)
liver		<38>				<35>				<18>				< 3>				
	angiectasis	1 (3)	0 (0)	0 (0)	0 (0)	1 (3)	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	
	necrosis:central	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)	
	necrosis:focal	3 (8)	0 (0)	0 (0)	0 (0)	2 (6)	0 (0)	0 (0)	0 (0)	1 (6)	0 (0)	0 (0)	0 (0)	0 (0)	1 (33)	0 (0)	0 (0)	0 (0)
	necrosis:single cell	1 (3)	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)	0 (0)

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 9

Organ	Findings	Group Name				0 ppm				4 ppm				13 ppm				40 ppm			
		No. of Animals on Study				38				35				18				3			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
{Digestive system}																					
liver			<38>				<35>				<18>				< 3>						
	fatty change		1	0	0	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)	(0)	(0)	(0)	
	inflammatory infiltration		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
		(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	granulation		18	1	0	0	22	0	0	0	9	0	0	0	3	0	0	0	0	0	
		(47)	(3)	(0)	(0)	(0)	(63)	(0)	(0)	(0)	(50)	(0)	(0)	(0)	(100)	(0)	(0)	(0)	(0)	(0)	
	inflammatory cell nest		0	0	0	0	0	1	0	0	0	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)	
	intestinal metaplasia		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)		
	fibrosis:focal		1	0	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)	(0)	(0)		
	extramedullary hematopoiesis		0	0	0	0	1	0	0	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)		
	clear cell focus		3	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0		
		(8)	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)		

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

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

b : Number of animals with lesion

(c) c : b / a * 100

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 10

		0 ppm				4 ppm				13 ppm				40 ppm			
		38				35				18				3			
Group Name	No. of Animals on Study																
Grade		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Organ	Findings	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																	
liver		<38>				<35>				<18>				< 3>			
	acidophilic cell focus	2	2	1	0	1	1	1	0	6	0	2	0 *	2	0	0	0 **
		(5)	(5)	(3)	(0)	(3)	(3)	(3)	(0)	(33)	(0)	(11)	(0)	(67)	(0)	(0)	(0)
	basophilic cell focus	1	1	0	0	3	0	0	0	0	0	0	0	0	0	0	0
		(3)	(3)	(0)	(0)	(9)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	biliary cyst	3	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0
		(8)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	xanthogranuloma	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)	(0)	(0)	(0)	(0)
	focal fatty change	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Urinary system}																	
kidney		<38>				<35>				<18>				< 3>			
	infarct	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(3)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	cyst	2	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0
		(5)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(33)	(0)	(0)	(0)
Grade	1 : Slight	2 : Moderate	3 : Marked	4 : Severe													
< a >	a : Number of animals examined at the site																
b	b : Number of animals with lesion																
(c)	c : b / a * 100																
Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square																	

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 11

		Group Name	0 ppm				4 ppm				13 ppm				40 ppm			
		No. of Animals on Study	38				35				18				3			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																		
kidney			<38>				<35>				<18>				< 3>			
	hyaline droplet		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)
	basophilic change		18	1	0	0	23	0	0	0	11	0	0	0	2	0	0	0
			(47)	(3)	(0)	(0)	(66)	(0)	(0)	(0)	(61)	(0)	(0)	(0)	(67)	(0)	(0)	(0)
	hyaline cast		2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
			(5)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	lymphocytic infiltration		8	0	0	0	5	0	0	0	2	0	0	0	0	0	0	0
			(21)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
inflammatory polyp		0	1	3	0	0	2	0	0	0	0	0	0	0	0	0	0	
		(0)	(3)	(8)	(0)	(0)	(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
hydronephrosis		0	1	2	0	0	2	0	0	0	0	0	0	0	0	0	0	
		(0)	(3)	(5)	(0)	(0)	(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
mineralization:cortico-medullary junction		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)	(33)	(0)	(0)	(0)	
mineralization:papilla		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)	

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 12

Organ_____	Findings_____	Group Name	0 ppm				4 ppm				13 ppm				40 ppm			
		No. of Animals on Study	38				35				18				3			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																		
kidney	mineralization:pelvis		<38>				<35>				<18>				< 3>			
		1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	
		(3)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	mineralization:cortex		14	0	0	0	10	0	0	0	13	0	0	0 *	3	0	0	0
			(37)	(0)	(0)	(0)	(29)	(0)	(0)	(0)	(72)	(0)	(0)	(0)	(100)	(0)	(0)	(0)
urin bladd	inflammation		<38>				<35>				<18>				< 3>			
		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)	
{Endocrine system}																		
pituitary	cyst		<37>				<35>				<18>				< 3>			
		4	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
		(11)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)		
	hyperplasia		1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	
			(3)	(3)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)		
	Rathke pouch		4	0	0	0	2	0	0	0	2	0	0	0	1	0	0	
			(11)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(33)	(0)	(0)	

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

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 13

Organ	Findings	Group Name No. of Animals on Study Grade	0 ppm 38				4 ppm 35				13 ppm 18				40 ppm 3			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																		
thyroid			<38>				<35>				<18>				< 3>			
	C-cell hyperplasia		10 (26)	0 (0)	0 (0)	0 (0)	5 (14)	0 (0)	0 (0)	0 (0)	4 (22)	0 (0)	0 (0)	0 (0)	1 (33)	0 (0)	0 (0)	0 (0)
adrenal			<38>				<35>				<18>				< 3>			
	angiectasis		0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	cyst		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)
	spindle-cell hyperplasia		22 (58)	0 (0)	0 (0)	0 (0)	18 (51)	1 (3)	0 (0)	0 (0)	9 (50)	0 (0)	0 (0)	0 (0)	1 (33)	0 (0)	0 (0)	0 (0)
	hyperplasia:cortical cell		5 (13)	2 (5)	0 (0)	0 (0)	11 (31)	1 (3)	0 (0)	0 (0)	4 (22)	1 (6)	0 (0)	0 (0)	1 (33)	0 (0)	0 (0)	0 (0)
	hyperplasia:medulla		1 (3)	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)
	focal fatty change:cortex		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (6)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
{Reproductive system}																		
testis			<38>				<35>				<18>				< 3>			
	atrophy		9 (24)	4 (11)	0 (0)	0 (0)	11 (31)	7 (20)	0 (0)	0 (0)	6 (33)	1 (6)	0 (0)	0 (0)	1 (33)	0 (0)	0 (0)	0 (0)

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 14

Organ	Findings	Group Name No. of Animals on Study Grade	0 ppm 38				4 ppm 35				13 ppm 18				40 ppm 3			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Reproductive system}																		
testis	mineralization		<38>				<35>				<18>				< 3>			
			19	2	0	0	21	2	1	0	10	1	0	0	3	0	0	0
			(50)	(5)	(0)	(0)	(60)	(6)	(3)	(0)	(56)	(6)	(0)	(0)	(100)	(0)	(0)	(0)
epididymis	inflammation		<38>				<35>				<18>				< 3>			
			1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
			(3)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	spermatogenic granuloma		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	xanthogranuloma		0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0
			(0)	(3)	(0)	(0)	(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
prostate	inflammation		<38>				<35>				<18>				< 3>			
			1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(3)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
prep/cli gl	duct ectasia		<38>				<35>				<18>				< 3>			
			0	1	0	0	0	1	1	0	0	1	0	0	0	0	0	0
			(0)	(3)	(0)	(0)	(0)	(3)	(3)	(0)	(0)	(6)	(0)	(0)	(0)	(0)	(0)	(0)
{Nervous system}																		
brain	mineralization		<38>				<35>				<18>				< 3>			
			30	0	0	0	26	0	0	0	15	0	0	0	1	0	0	0
			(79)	(0)	(0)	(0)	(74)	(0)	(0)	(0)	(83)	(0)	(0)	(0)	(33)	(0)	(0)	(0)

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 15

		Group Name	0 ppm				4 ppm				13 ppm				40 ppm			
		No. of Animals on Study	38				35				18				3			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Nervous system}																		
brain			<38>				<35>				<18>				< 3>			
	perivascular inflammation		3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
spinal cord			<38>				<35>				<18>				< 3>			
	perivascular inflammation		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Special sense organs/appendage}																		
eye			<38>				<35>				<18>				< 3>			
	keratitis		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)	(0)	(0)
Harder gl			<38>				<35>				<18>				< 3>			
	degeneration		0	0	0	0	2	0	0	0	0	0	1	0	0	0	0	0
			(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(0)	(0)
	hyperplasia		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)

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

APPENDIX J 4

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS : SUMMARY

MOUSE : FEMALE: ALL ANIMALS

(2-YEAR STUDY)

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 24

Organ	Findings	Group Name No. of Animals on Study Grade				0 ppm 50				4 ppm 50				13 ppm 50				40 ppm 49			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Integumentary system/appandage}																					
skin/app	scab	<50>				<50>				<50>				<49>							
		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Respiratory system}																					
nasal cavit	exudate	<50>				<50>				<50>				<49>							
		1	1	0	0	0	0	0	0	2	3	0	0	2	7	7	0	0	0	0	0
		(2)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(6)	(0)	(0)	(4)	(14)	(14)	(0)	(0)	(0)	(0)	(0)
	angiectasis	0	0	0	0	0	0	0	0	4	0	0	0	0	1	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)
	hemorrhage	0	0	0	0	0	0	0	0	4	4	2	0 *	7	11	10	1 **	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(8)	(4)	(0)	(14)	(22)	(20)	(2)	(0)	(0)	(0)	(0)
	thrombus	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	squamous cell hyperplasia	0	0	0	0	0	0	0	0	3	0	0	0	6	1	0	0 *	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(12)	(2)	(0)	(0)	(0)	(0)	(0)	(0)
	eosinophilic change:olfactory epithelium	11	0	0	0	9	1	0	0	3	0	0	0 *	4	0	0	0	0	0	0	0
		(22)	(0)	(0)	(0)	(18)	(2)	(0)	(0)	(6)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 25

Organ	Findings	Group Name No. of Animals on Study Grade				0 ppm 50				4 ppm 50				13 ppm 50				40 ppm 49			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																					
nasal cavit		<50>				<50>				<50>				<49>							
	eosinophilic change:respiratory epithelium	19 (38)	18 (36)	6 (12)	1 (2)	15 (30)	17 (34)	6 (12)	1 (2)	10 (20)	33 (66)	1 (2)	0 * (0)	22 (45)	9 (18)	2 (4)	0 * (0)				
	inflammation:respiratory epithelium	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	3 (6)	1 (2)	0 (0)	0 (0)				
	inflammation:olfactory epithelium	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)	1 (2)	0 (0)	0 (0)				
	respiratory metaplasia:olfactory epithelium	1 (2)	1 (2)	0 (0)	0 (0)	33 (66)	0 (0)	0 (0)	0 ** (0)	19 (38)	29 (58)	2 (4)	0 ** (0)	0 (0)	42 (86)	7 (14)	0 ** (0)				
	respiratory metaplasia:gland	7 (14)	0 (0)	0 (0)	0 (0)	27 (54)	1 (2)	0 (0)	0 ** (0)	21 (42)	29 (58)	0 (0)	0 ** (0)	0 (0)	44 (90)	5 (10)	0 ** (0)				
	basal cell hyperplasia: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)				
	inflammation:transitional epithelium	3 (6)	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)				
	squamous cell metaplasia:respiratory epithelium	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	11 (22)	9 (18)	0 (0)	0 ** (0)	4 (8)	11 (22)	1 (2)	0 ** (0)				

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 26

		Group Name	0 ppm				4 ppm				13 ppm				40 ppm			
		No. of Animals on Study	50				50				50				49			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
nasal cavit			<50>				<50>				<50>				<49>			
	cuboidal change:respiratory epithelium		0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(4)	(0)	(0)
	squamous cell metaplasia with atypia:respiratory epithelium		0	0	0	0	0	0	0	0	1	5	0	0 *	3	23	1	0 **
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(10)	(0)	(0)	(6)	(47)	(2)	(0)
	squamous cell hyperplasia with atypia		0	0	0	0	0	0	0	0	1	0	0	0	3	4	0	0 *
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(6)	(8)	(0)	(0)
	hyperplasia:transitional epithelium		0	0	0	0	1	0	0	0	6	0	0	0 *	1	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(12)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
atrophy:olfactory epithelium		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)	
atrophy:respiratory epithelium		0	0	0	0	0	0	0	0	5	0	0	0	4	1	0	0	
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(8)	(2)	(0)	(0)	
necrosis:olfactory epithelium		0	0	0	0	0	0	0	0	4	2	1	0	0	0	0	0	
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(4)	(2)	(0)	(0)	(0)	(0)	(0)	
necrosis:respiratory epithelium		0	0	0	0	0	0	0	0	2	0	0	0	4	1	0	0	
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(8)	(2)	(0)	(0)	

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 27

		Group Name No. of Animals on Study				0 ppm 50				4 ppm 50				13 ppm 50				40 ppm 49			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)			
{Respiratory system}																					
nasal cavit			<50>				<50>				<50>				<49>						
	hyperplasia:respiratory epithelium		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0			
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)			
	necrosis:squamous epithelium		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)			
nasopharynx			<50>				<50>				<50>				<49>						
	eosinophilic change		11	0	0	0	12	1	1	0	10	2	0	0	19	1	0	0			
			(22)	(0)	(0)	(0)	(24)	(2)	(2)	(0)	(20)	(4)	(0)	(0)	(39)	(2)	(0)	(0)			
larynx			<49>				<50>				<50>				<49>						
	inflammation		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0			
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)			
	squamous cell hyperplasia		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0			
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)			
lung			<50>				<50>				<50>				<49>						
	congestion		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)			
	hemorrhage		2	1	0	0	1	0	0	0	0	0	0	0	2	0	0	0			
			(4)	(2)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)			

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 28

		Group Name	0 ppm				4 ppm				13 ppm				40 ppm			
		No. of Animals on Study	50				50				50				49			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
lung			<50>				<50>				<50>				<49>			
	edema		0	0	0	0	0	1	0	0	0	0	0	0	2	0	0	0
			(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)
	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)
	deposit of hemosiderin		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)
	inflammatory infiltration		5	0	0	0	3	0	0	0	4	1	0	0	0	1	0	0 *
			(10)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(8)	(2)	(0)	(0)	(0)	(2)	(0)	(0)
	accumulation of foamy cells		1	0	0	0	0	0	0	0	1	0	0	0	3	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
	bronchopneumonia		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)
	bronchiolar-alveolar cell hyperplasia		1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
{Hematopoietic system}																		
bone marrow			<50>				<50>				<50>				<49>			
	proliferation:histiocyte		1	0	0	0	1	0	0	0	3	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 29

		Group Name	0 ppm				4 ppm				13 ppm				40 ppm			
		No. of Animals on Study	50				50				50				49			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Hematopoietic system}																		
bone marrow			<50>				<50>				<50>				<49>			
	decreased 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)	(2)	(0)	(0)	(0)	(0)	(0)	(0)
	myelofibrosis		4	0	0	0	2	0	0	0	2	0	0	0	4	0	0	0
			(8)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(8)	(0)	(0)	(0)
	erythropoiesis:increased		0	0	0	0	3	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	granulopoiesis:increased		3	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
			(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(0)	(0)	(0)	(0)
lymph node			<50>				<50>				<50>				<49>			
	mastcell hyperplasia		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	lymphadenitis		0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(4)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	follicular hyperplasia		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
spleen			<50>				<50>				<50>				<49>			
	congestion		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)	(0)	(0)

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 30

		Group Name	0 ppm				4 ppm				13 ppm				40 ppm			
		No. of Animals on Study	50				50				50				49			
Organ_____	Findings_____	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
<hr/>																		
{Hematopoietic system}																		
spleen																		
			<50>				<50>				<50>				<49>			
	deposit of amyloid		0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	deposit of hemosiderin		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)
	deposit of melanin		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)	(6)	(0)	(0)	(0)
	extramedullary hematopoiesis		4	7	4	0	5	10	4	0	5	12	4	0	7	10	1	0
			(8)	(14)	(8)	(0)	(10)	(20)	(8)	(0)	(10)	(24)	(8)	(0)	(14)	(20)	(2)	(0)
	hyperplasia:vascular		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)
	follicular hyperplasia		0	5	0	0	0	2	1	0	0	1	0	0	0	0	0	0
			(0)	(10)	(0)	(0)	(0)	(4)	(2)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)

{Circulatory system}

heart			<50>				<50>				<50>				<49>							
	thrombus		1	1	0	0	0	2	0	0	0	2	0	0	0	1	0	0				
			(2)	(2)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(2)	(0)	(0)				

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 31

		Group Name	0 ppm				4 ppm				13 ppm				40 ppm			
		No. of Animals on Study	50				50				50				49			
Organ_____	Findings_____	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Circulatory system}																		
heart			<50>				<50>				<50>				<49>			
	necrosis:zonal		0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(2)	(0)
	necrosis:focal		0	1	0	0	0	1	0	0	1	0	0	0	0	0	0	0
			(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	mineralization		0	0	0	0	1	0	0	0	4	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	granulation		0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	inflammatory cell nest		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	myocardial degeneration		0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(0)	(0)	(0)	(0)
	myocardial fibrosis		0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0
			(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)
	pericarditis		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)	(0)	(0)	(0)

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

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 32

		Group Name	0 ppm				4 ppm				13 ppm				40 ppm			
		No. of Animals on Study	50				50				50				49			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Circulatory system}																		
heart	arteritis		<50>				<50>				<50>				<49>			
		0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
artery/aort	arteritis		<50>				<50>				<50>				<49>			
		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Digestive system}																		
tooth	dysplasia		<50>				<50>				<50>				<49>			
		3	0	0	0	3	0	0	0	3	0	0	0	3	0	0	0	0
		(6)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(0)
tongue	inflammation		<50>				<50>				<50>				<49>			
		1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
		(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)
	arteritis		1	1	1	0	0	1	0	0	0	0	0	0	0	1	0	0
(2)		(2)	(2)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	
salivary gl	inflammatory infiltration		<50>				<50>				<50>				<49>			
		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 33

		Group Name	0 ppm				4 ppm				13 ppm				40 ppm			
		No. of Animals on Study	50				50				50				49			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
salivary gl			<50>				<50>				<50>				<49>			
	lymphocytic infiltration		20	0	0	0	22	0	0	0	16	0	0	0	18	0	0	0
			(40)	(0)	(0)	(0)	(44)	(0)	(0)	(0)	(32)	(0)	(0)	(0)	(37)	(0)	(0)	(0)
stomach			<50>				<50>				<50>				<49>			
	hyperplasia:mast cell		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)
	erosion:forestomach		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)
	ulcer:forestomach		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia:forestomach		0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	
	erosion:glandular stomach		1	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia:glandular stomach		19	23	1	0	26	19	0	0	17	23	0	0	25	13	0	0
			(38)	(46)	(2)	(0)	(52)	(38)	(0)	(0)	(34)	(46)	(0)	(0)	(51)	(27)	(0)	(0)
large intes			<50>				<50>				<50>				<49>			
	polyp		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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 34

		Group Name	0 ppm				4 ppm				13 ppm				40 ppm			
		No. of Animals on Study	50				50				50				49			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
liver			<50>				<50>				<50>				<49>			
	angiectasis		5 (10)	1 (2)	1 (2)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	1 (2)	3 (6)	0 (0)	0 (0)	3 (6)	1 (2)	0 (0)	0 (0)
	necrosis:central		0 (0)	1 (2)	1 (2)	0 (0)	1 (2)	0 (0)	1 (2)	0 (0)	1 (2)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	necrosis:focal		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	cyst		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)
	deposit of amyloid		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)
	inflammatory infiltration		0 (0)	2 (4)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)
	lymphocytic infiltration		0 (0)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
granulation		21 (42)	0 (0)	0 (0)	0 (0)	18 (36)	0 (0)	0 (0)	0 (0)	8 (16)	0 (0)	0 (0)	0 (0)	0 ** (0)	2 (4)	1 (2)	0 (0)	0 ** (0)

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

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 35

		Group Name	0 ppm				4 ppm				13 ppm				40 ppm			
		No. of Animals on Study	50				50				50				49			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
liver			<50>				<50>				<50>				<49>			
	intestinal metaplasia		0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0
			(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)
	extramedullary hematopoiesis		1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(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		3	1	0	0	0	1	0	0	1	2	1	0	5	1	0	0
			(6)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(2)	(4)	(2)	(0)	(10)	(2)	(0)	(0)
	mixed cell focus		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)
	cholangiofibrosis		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)
	biliary cyst		1	0	0	0	2	0	0	0	3	0	0	0	1	0	0	0
			(2)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
gall bladd			<50>				<50>				<50>				<49>			
	intestinal metaplasia		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 : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Chi Square

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 36

		Group Name	0 ppm				4 ppm				13 ppm				40 ppm			
		No. of Animals on Study	50				50				50				49			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
pancreas																		
	atrophy		<50>				<50>				<50>				<49>			
			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)
{Urinary system}																		
kidney																		
	infarct		<50>				<50>				<50>				<49>			
			3	1	0	0	1	0	0	0	2	0	0	0	0	0	0	0
			(6)	(2)	(0)	(0)	(2)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	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)
	hyaline droplet		8	3	0	0	11	1	0	0	21	1	0	0 *	10	1	0	0
			(16)	(6)	(0)	(0)	(22)	(2)	(0)	(0)	(42)	(2)	(0)	(0)	(20)	(2)	(0)	(0)
	basophilic change		3	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0
			(6)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	deposit of amyloid		0	1	0	0	1	1	0	0	0	0	0	0	0	0	1	0
			(0)	(2)	(0)	(0)	(2)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)
	hyaline cast		4	0	0	0	6	1	0	0	2	0	0	0	2	0	0	0
			(8)	(0)	(0)	(0)	(12)	(2)	(0)	(0)	(4)	(0)	(0)	(0)	(4)	(0)	(0)	(0)

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 37

Organ	Findings	Group Name No. of Animals on Study Grade				0 ppm 50				4 ppm 50				13 ppm 50				40 ppm 49			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																					
kidney		<50>				<50>				<50>				<49>							
	lymphocytic infiltration	4	0	0	0	3	0	0	0	2	0	0	0	1	0	0	0				
		(8)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)				
	inflammatory polyp	1	1	0	0	2	3	0	0	0	2	0	0	0	2	0	0				
		(2)	(2)	(0)	(0)	(4)	(6)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(4)	(0)	(0)				
	hydronephrosis	1	5	0	0	1	6	1	0	2	2	0	0	0	1	1	0				
		(2)	(10)	(0)	(0)	(2)	(12)	(2)	(0)	(4)	(4)	(0)	(0)	(0)	(2)	(2)	(0)				
	mineralization:papilla	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
		(6)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)				
	dilatation:tubular lumen	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)				
urin bladd		<50>				<50>				<50>				<49>							
	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	0	0	0	0	5	0	0	0	4	0	0	0	1	0	0	0				
		(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(2)	(0)	(0)	(0)				
{Endocrine system}																					
pituitary		<50>				<49>				<50>				<49>							
	angiectasis	2	0	0	0	0	1	0	0	3	0	0	0	1	0	0	0				
		(4)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(6)	(0)	(0)	(0)	(2)	(0)	(0)	(0)				

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

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

b : Number of animals with lesion

(c) c : b / a * 100

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

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 38

		Group Name	0 ppm				4 ppm				13 ppm				40 ppm			
		No. of Animals on Study	50				50				50				49			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																		
pituitary	cyst		<50>				<49>				<50>				<49>			
		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia	9	6	0	0	8	1	0	0	6	3	1	0	7	2	0	0	
		(18)	(12)	(0)	(0)	(16)	(2)	(0)	(0)	(12)	(6)	(2)	(0)	(14)	(4)	(0)	(0)	
	Rathke pouch	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
		(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	
thyroid	granulation		<49>				<50>				<50>				<49>			
		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)	
	atypical hyperplasia	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	
		(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	follicular hyperplasia	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
		(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	C-cell hyperplasia	11	0	0	0	18	0	0	0	12	0	0	0	10	0	0	0	
		(22)	(0)	(0)	(0)	(36)	(0)	(0)	(0)	(24)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	
parathyroid	lymphocytic infiltration		<15>				<18>				<20>				<19>			
		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
		(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
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HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
ALL ANIMALS (0-105W)

PAGE : 39

Organ_____	Findings_____	Group Name	0 ppm				4 ppm				13 ppm				40 ppm			
		No. of Animals on Study	50				50				50				49			
Grade		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
{Endocrine system}																		
parathyroid		<15>				<18>				<20>				<19>				
	hyperplasia	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
adrenal		<50>				<50>				<49>				<49>				
	hemorrhage	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		(2)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	deposit of amyloid	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
		(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	
	extramedullary hematopoiesis	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)	
	spindle-cell hyperplasia	34	15	0	0	36	11	0	0	30	16	0	0	35	13	0	0	
		(68)	(30)	(0)	(0)	(72)	(22)	(0)	(0)	(61)	(33)	(0)	(0)	(71)	(27)	(0)	(0)	
	hyperplasia:cortical cell	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)	(4)	(0)	(0)	(0)	
	focal fatty change:cortex	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	
		(2)	(2)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	

{Reproductive system}

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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

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

PAGE : 40

Organ	Findings	Group Name No. of Animals on Study				0 ppm 50				4 ppm 50				13 ppm 50				40 ppm 49			
		Grade																			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Reproductive system}																					
ovary		<50>				<50>				<50>				<49>							
	hemorrhage	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	cyst	9	6	0	0	5	5	0	0	6	3	0	0	7	6	0	0				
		(18)	(12)	(0)	(0)	(10)	(10)	(0)	(0)	(12)	(6)	(0)	(0)	(14)	(12)	(0)	(0)				
	deposit of amyloid	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)				
uterus		<50>				<50>				<50>				<49>							
	thrombus	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:gland	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)				
	cystic endometrial hyperplasia	18	5	0	0	8	6	0	0	10	8	0	0	8	2	0	0 *				
		(36)	(10)	(0)	(0)	(16)	(12)	(0)	(0)	(20)	(16)	(0)	(0)	(16)	(4)	(0)	(0)				
	xanthogranuloma	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)				
mammary gl		<50>				<50>				<50>				<49>							
	hyperplasia	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)				

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
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ALL ANIMALS (0-105W)

PAGE : 41

		Group Name	0 ppm				4 ppm				13 ppm				40 ppm			
		No. of Animals on Study	50				50				50				49			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Reproductive system}																		
mammary gl			<50>				<50>				<50>				<49>			
	squamous cell metaplasia		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)
	galactoceles		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)
{Nervous system}																		
brain			<50>				<50>				<50>				<49>			
	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)
	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)
	vacuolic change		0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(2)	(0)	(0)
	mineralization		20	0	0	0	22	0	0	0	20	0	0	0	9	0	0	0 *
			(40)	(0)	(0)	(0)	(44)	(0)	(0)	(0)	(40)	(0)	(0)	(0)	(18)	(0)	(0)	(0)
	perivascular inflammation		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 : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 42

		Group Name	0 ppm				4 ppm				13 ppm				40 ppm			
		No. of Animals on Study	50				50				50				49			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Nervous system}																		
spinal cord			<50>				<50>				<50>				<49>			
	hemorrhage		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)
	perivascular inflammation		1	0	0	0	1	0	0	0	2	0	0	0	1	0	0	0
			(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
{Special sense organs/appendage}																		
eye			<50>				<50>				<50>				<49>			
	keratitis		1	0	0	0	1	0	0	0	4	0	0	0	5	1	0	0
			(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(10)	(2)	(0)	(0)
Harder gl			<50>				<50>				<50>				<49>			
	lymphocytic infiltration		2	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0
			(4)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Musculoskeletal system}																		
muscle			<50>				<50>				<50>				<49>			
	mineralization		1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
			(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)

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

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 43

Organ	Findings	Group Name No. of Animals on Study Grade	0 ppm 50				4 ppm 50				13 ppm 50				40 ppm 49			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Musculoskeletal system}																		
muscle	inflammation		<50>				<50>				<50>				<49>			
			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)
{Body cavities}																		
adipose	granulation		<50>				<50>				<50>				<49>			
			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 : * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Chi Square

(HPT150)

BAIS3

APPENDIX J 5

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS : SUMMARY

MOUSE : FEMALE : DEAD AND MORIBUND ANIMALS

(2-YEAR STUDY)

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 21

Organ	Findings	Group Name No. of Animals on Study Grade				0 ppm 22				4 ppm 28				13 ppm 40				40 ppm 48			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Integumentary system/appandage}																					
skin/app		<22>				<28>				<40>				<48>							
	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)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Respiratory system}																					
nasal cavit		<22>				<28>				<40>				<48>							
	exudate	1	0	0	0	0	0	0	0	1	2	0	0	2	6	7	0				
		(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(5)	(0)	(0)	(4)	(13)	(15)	(0)				
	angiectasis	0	0	0	0	0	0	0	0	3	0	0	0	0	1	0	0				
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(2)	(0)	(0)				
	hemorrhage	0	0	0	0	0	0	0	0	3	4	2	0	7	10	10	1 **				
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(10)	(5)	(0)	(15)	(21)	(21)	(2)				
	thrombus	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)				
	squamous cell hyperplasia	0	0	0	0	0	0	0	0	2	0	0	0	6	1	0	0				
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(13)	(2)	(0)	(0)				
	eosinophilic change:olfactory epithelium	4	0	0	0	6	1	0	0	3	0	0	0	4	0	0	0				
		(18)	(0)	(0)	(0)	(21)	(4)	(0)	(0)	(8)	(0)	(0)	(0)	(8)	(0)	(0)	(0)				

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

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 22

Organ	Findings	0 ppm 22				4 ppm 28				13 ppm 40				40 ppm 48			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																	
nasal cavit		<22>				<28>				<40>				<48>			
	eosinophilic change:respiratory epithelium	9 (41)	8 (36)	1 (5)	0 (0)	6 (21)	9 (32)	4 (14)	0 (0)	9 (23)	25 (63)	1 (3)	0 (0)	22 (46)	9 (19)	2 (4)	0 (0)
	inflammation:respiratory epithelium	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 (6)	1 (2)	0 (0)	0 (0)
	inflammation:olfactory epithelium	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)	1 (2)	0 (0)	0 (0)
	respiratory metaplasia:olfactory epithelium	0 (0)	0 (0)	0 (0)	0 (0)	16 (57)	0 (0)	0 (0)	0 ** (0)	16 (40)	22 (55)	2 (5)	0 ** (0)	0 (0)	41 (85)	7 (15)	0 ** (0)
	respiratory metaplasia:gland	2 (9)	0 (0)	0 (0)	0 (0)	17 (61)	0 (0)	0 (0)	0 ** (0)	18 (45)	22 (55)	0 (0)	0 ** (0)	0 (0)	43 (90)	5 (10)	0 ** (0)
	inflammation:transitional epithelium	1 (5)	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)	0 (0)
	squamous cell metaplasia:respiratory epithelium	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	8 (20)	9 (23)	0 (0)	0 ** (0)	4 (8)	10 (21)	1 (2)	0 * (0)
	cuboidal change:respiratory epithelium	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)	2 (4)	0 (0)	0 (0)

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

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 23

Organ	Findings	Group Name No. of Animals on Study Grade				0 ppm 22				4 ppm 28				13 ppm 40				40 ppm 48			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																					
nasal cavit		<22>				<28>				<40>				<48>							
	squamous cell metaplasia with atypia:respiratory epithelium	0	0	0	0	0	0	0	0	1	2	0	0	3	23	1	0 **				
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(5)	(0)	(0)	(6)	(48)	(2)	(0)				
	squamous cell hyperplasia with atypia	0	0	0	0	0	0	0	0	0	0	0	0	3	4	0	0				
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(8)	(0)	(0)				
	hyperplasia:transitional epithelium	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0				
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(2)	(0)	(0)	(0)				
	atrophy:olfactory epithelium	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)				
	atrophy:respiratory epithelium	0	0	0	0	0	0	0	0	3	0	0	0	4	1	0	0				
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(8)	(2)	(0)	(0)				
	necrosis:olfactory epithelium	0	0	0	0	0	0	0	0	4	2	1	0	0	0	0	0				
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(10)	(5)	(3)	(0)	(0)	(0)	(0)	(0)				
	necrosis:respiratory epithelium	0	0	0	0	0	0	0	0	2	0	0	0	4	1	0	0				
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(8)	(2)	(0)	(0)				
	hyperplasia:respiratory epithelium	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 : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 24

Organ	Findings	Group Name No. of Animals on Study Grade	0 ppm 22				4 ppm 28				13 ppm 40				40 ppm 48			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
nasal cavit	necrosis:squamous epithelium		<22>				<28>				<40>				<48>			
			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
nasopharynx	eosinophilic change		<22>				<28>				<40>				<48>			
			7	0	0	0	9	0	1	0	10	2	0	0	19	1	0	0
			(32)	(0)	(0)	(0)	(32)	(0)	(4)	(0)	(25)	(5)	(0)	(0)	(40)	(2)	(0)	(0)
larynx	inflammation		<22>				<28>				<40>				<48>			
			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)
	squamous cell hyperplasia		<22>				<28>				<40>				<48>			
			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)
lung	congestion		<22>				<28>				<40>				<48>			
			0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	hemorrhage		<22>				<28>				<40>				<48>			
			1	1	0	0	1	0	0	0	0	0	0	0	2	0	0	0
			(5)	(5)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)
	edema		<22>				<28>				<40>				<48>			
			0	0	0	0	0	1	0	0	0	0	0	0	2	0	0	0
			(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)

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

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 25

Organ	Findings	Group Name No. of Animals on Study Grade				0 ppm 22				4 ppm 28				13 ppm 40				40 ppm 48			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																					
lung		<22>				<28>				<40>				<48>							
	thrombus	0 (0)	1 (5)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	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 (3)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	inflammatory infiltration	0 (0)	0 (0)	0 (0)	0 (0)	2 (7)	0 (0)	0 (0)	0 (0)	3 (8)	1 (3)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	accumulation of foamy cells	1 (5)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	bronchopneumonia	0 (0)	0 (0)	0 (0)	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)	0 (0)
	bronchiolar-alveolar cell hyperplasia	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
{Hematopoietic system}																					
bone marrow		<22>				<28>				<40>				<48>							
	proliferation:histiocyte	1 (5)	0 (0)	0 (0)	0 (0)	1 (4)	0 (0)	0 (0)	0 (0)	3 (8)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 26

Organ_____	Findings_____	Group Name	0 ppm				4 ppm				13 ppm				40 ppm			
		No. of Animals on Study	22				28				40				48			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Hematopoietic system}																		
bone marrow			<22>				<28>				<40>				<48>			
	decreased hematopoiesis		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	myelofibrosis		0	0	0	0	1	0	0	0	0	0	0	0	4	0	0	0
			(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)
	erythropoiesis:increased		0	0	0	0	3	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	granulopoiesis:increased		2	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
			(9)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(3)	(0)	(0)	(0)	(0)	(0)	(0)
lymph node			<22>				<28>				<40>				<48>			
	lymphadenitis		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
spleen			<22>				<28>				<40>				<48>			
	congestion		0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	deposit of amyloid		0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(5)	(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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 27

		Group Name No. of Animals on Study Grade				0 ppm 22				4 ppm 28				13 ppm 40				40 ppm 48			
Organ_____	Findings_____	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)				
{Hematopoietic system}																					
spleen		<22>				<28>				<40>				<48>							
	deposit of hemosiderin	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)				
	deposit of melanin	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)	(6)	(0)	(0)	(0)				
	extramedullary hematopoiesis	3	5	4	0	3	10	4	0	4	11	4	0	7	10	1	0				
		(14)	(23)	(18)	(0)	(11)	(36)	(14)	(0)	(10)	(28)	(10)	(0)	(15)	(21)	(2)	(0)				
	follicular hyperplasia	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)				
{Circulatory system}																					
heart		<22>				<28>				<40>				<48>							
	thrombus	1	1	0	0	0	2	0	0	0	2	0	0	0	1	0	0				
		(5)	(5)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(2)	(0)	(0)				
	necrosis:zonal	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0				
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(2)	(0)	(0)				
	necrosis:focal	0	1	0	0	0	1	0	0	1	0	0	0	0	0	0	0				
		(0)	(5)	(0)	(0)	(0)	(4)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)				

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

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 28

		Group Name	0 ppm				4 ppm				13 ppm				40 ppm			
		No. of Animals on Study	22				28				40				48			
Organ_____	Findings_____	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Circulatory system}																		
heart			<22>				<28>				<40>				<48>			
	mineralization		0	0	0	0	1	0	0	0	4	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	granulation		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)
	myocardial degeneration		0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(3)	(3)	(0)	(0)	(0)	(0)	(0)	(0)
	myocardial fibrosis		0	1	0	0	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)	(2)	(0)	(0)
	pericarditis		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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	arteritis		0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Digestive system}																		
tooth			<22>				<28>				<40>				<48>			
	dysplasia		0	0	0	0	1	0	0	0	2	0	0	0	3	0	0	0
			(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(6)	(0)	(0)	(0)

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 29

		Group Name	0 ppm				4 ppm				13 ppm				40 ppm			
		No. of Animals on Study	22				28				40				48			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
tongue			<22>				<28>				<40>				<48>			
	inflammation		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	arteritis		1	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0
			(5)	(5)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
salivary gl			<22>				<28>				<40>				<48>			
	lymphocytic infiltration		2	0	0	0	6	0	0	0	9	0	0	0	17	0	0	0 *
			(9)	(0)	(0)	(0)	(21)	(0)	(0)	(0)	(23)	(0)	(0)	(0)	(35)	(0)	(0)	(0)
stomach			<22>				<28>				<40>				<48>			
	hyperplasia:mast cell		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	erosion:forestomach		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	ulcer:forestomach		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia:forestomach		0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(4)	(0)	(0)	(0)

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

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 30

		Group Name	0 ppm				4 ppm				13 ppm				40 ppm			
		No. of Animals on Study	22				28				40				48			
Organ_____	Findings_____	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
stomach			<22>				<28>				<40>				<48>			
	erosion:glandular stomach		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)
	hyperplasia:glandular stomach		13	4	0	0	20	3	0	0	16	15	0	0	25	12	0	0
			(59)	(18)	(0)	(0)	(71)	(11)	(0)	(0)	(40)	(38)	(0)	(0)	(52)	(25)	(0)	(0)
large intes			<22>				<28>				<40>				<48>			
	polyp		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)
liver			<22>				<28>				<40>				<48>			
	angiectasis		0	0	0	0	0	0	0	0	1	2	0	0	2	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(5)	(0)	(0)	(4)	(2)	(0)	(0)
	necrosis:central		0	1	1	0	1	0	1	0	1	1	0	0	0	0	0	0
			(0)	(5)	(5)	(0)	(4)	(0)	(4)	(0)	(3)	(3)	(0)	(0)	(0)	(0)	(0)	(0)
	necrosis:focal		0	0	0	0	0	0	0	0	2	0	1	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(3)	(0)	(0)	(0)	(0)	(0)
	deposit of amyloid		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 31

		Group Name No. of Animals on Study Grade				0 ppm 22				4 ppm 28				13 ppm 40				40 ppm 48			
Organ	Findings	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)				
{Digestive system}																					
liver		<22>				<28>				<40>				<48>							
	inflammatory infiltration	0 (0)	1 (5)	0 (0)	0 (0)	1 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)				
	lymphocytic infiltration	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)				
	granulation	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (5)	0 (0)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)				
	intestinal metaplasia	0 (0)	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)				
	extramedullary hematopoiesis	1 (5)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)				
	acidophilic cell focus	1 (5)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (5)	1 (3)	0 (0)	5 (10)	0 (0)	0 (0)	0 (0)				
	cholangiofibrosis	0 (0)	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)				
	biliary cyst	0 (0)	0 (0)	0 (0)	0 (0)	1 (4)	0 (0)	0 (0)	0 (0)	2 (5)	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																					

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 32

Organ	Findings	Group Name No. of Animals on Study Grade	0 ppm 22				4 ppm 28				13 ppm 40				40 ppm 48			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
gall bladd	intestinal metaplasia		<22>				<28>				<40>				<48>			
			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)
pancreas	atrophy		<22>				<28>				<40>				<48>			
			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)
{Urinary system}																		
kidney	infarct		<22>				<28>				<40>				<48>			
			0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	cyst		<22>				<28>				<40>				<48>			
			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)
	hyaline droplet		<22>				<28>				<40>				<48>			
			5	3	0	0	11	1	0	0	18	1	0	0	10	1	0	0
			(23)	(14)	(0)	(0)	(39)	(4)	(0)	(0)	(45)	(3)	(0)	(0)	(21)	(2)	(0)	(0)
	basophilic change		<22>				<28>				<40>				<48>			
			0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(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

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 33

Organ_____	Findings_____	Group Name	0 ppm				4 ppm				13 ppm				40 ppm			
		No. of Animals on Study	22				28				40				48			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
<hr/>																		
{Urinary system}																		
kidney																		
			<22>				<28>				<40>				<48>			
deposit of amyloid			0	1	0	0	1	1	0	0	0	0	0	0	0	0	1	0
			(0)	(5)	(0)	(0)	(4)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)
hyaline cast			1	0	0	0	3	1	0	0	2	0	0	0	2	0	0	0
			(5)	(0)	(0)	(0)	(11)	(4)	(0)	(0)	(5)	(0)	(0)	(0)	(4)	(0)	(0)	(0)
lymphocytic infiltration			0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
inflammatory polyp			1	0	0	0	1	1	0	0	0	1	0	0	0	2	0	0
			(5)	(0)	(0)	(0)	(4)	(4)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(4)	(0)	(0)
hydronephrosis			1	2	0	0	0	5	0	0	2	1	0	0	0	1	1	0
			(5)	(9)	(0)	(0)	(0)	(18)	(0)	(0)	(5)	(3)	(0)	(0)	(0)	(2)	(2)	(0)
mineralization:papilla			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
dilatation:tubular lumen			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)
urin bladd																		
			<22>				<28>				<40>				<48>			
lymphocytic infiltration			0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(2)	(0)	(0)	(0)

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

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
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HISTOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 34

		Group Name	0 ppm				4 ppm				13 ppm				40 ppm			
		No. of Animals on Study	22				28				40				48			
Organ_____	Findings_____	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																		
pituitary			<22>				<27>				<40>				<48>			
	angiectasis		0	0	0	0	0	0	0	0	3	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	cyst		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)
	hyperplasia		0	1	0	0	3	0	0	0	5	0	0	0	7	2	0	0
			(0)	(5)	(0)	(0)	(11)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(15)	(4)	(0)	(0)
	Rathke pouch		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)
thyroid			<22>				<28>				<40>				<48>			
	granulation		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	C-cell hyperplasia		0	0	0	0	4	0	0	0	6	0	0	0	9	0	0	0
			(0)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(15)	(0)	(0)	(0)	(19)	(0)	(0)	(0)
parathyroid			< 6>				<10>				<15>				<18>			
	hyperplasia		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 35

Organ	Findings	Group Name No. of Animals on Study Grade				0 ppm 22				4 ppm 28				13 ppm 40				40 ppm 48			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																					
adrenal		<22>				<28>				<39>				<48>							
	hemorrhage	1 (5)	1 (5)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	deposit of amyloid	0 (0)	1 (5)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)
	extramedullary hematopoiesis	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)	0 (0)	0 (0)	0 (0)	0 (0)
	spindle-cell hyperplasia	17 (77)	4 (18)	0 (0)	0 (0)	23 (82)	4 (14)	0 (0)	0 (0)	26 (67)	10 (26)	0 (0)	0 (0)	35 (73)	12 (25)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	hyperplasia:cortical 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)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	focal fatty change:cortex	1 (5)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
{Reproductive system}																					
ovary		<22>				<28>				<40>				<48>							
	angiectasis	1 (5)	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)	0 (0)	0 (0)	0 (0)	0 (0)

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 36

Organ	Findings	Group Name No. of Animals on Study Grade				0 ppm 22				4 ppm 28				13 ppm 40				40 ppm 48			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Reproductive system}																					
ovary		<22>				<28>				<40>				<48>							
	hemorrhage	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	cyst	2	0	0	0	2	2	0	0	3	2	0	0	7	6	0	0				
		(9)	(0)	(0)	(0)	(7)	(7)	(0)	(0)	(8)	(5)	(0)	(0)	(15)	(13)	(0)	(0)				
	deposit of amyloid	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
		(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)				
uterus		<22>				<28>				<40>				<48>							
	cystic endometrial hyperplasia	7	1	0	0	3	1	0	0	6	5	0	0	7	2	0	0				
		(32)	(5)	(0)	(0)	(11)	(4)	(0)	(0)	(15)	(13)	(0)	(0)	(15)	(4)	(0)	(0)				
	xanthogranuloma	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
		(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)				
mammary gl		<22>				<28>				<40>				<48>							
	hyperplasia	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)				
	squamous cell metaplasia	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 : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0343
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 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 37

		Group Name No. of Animals on Study				0 ppm 22				4 ppm 28				13 ppm 40				40 ppm 48			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)			
{Nervous system}																					
brain			<22>				<28>				<40>				<48>						
	hemorrhage		0 (0)	1 (5)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)			
	thrombus		0 (0)	1 (5)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)			
	vacuolic 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)	3 (6)	1 (2)	0 (0)	0 (0)			
	mineralization		6 (27)	0 (0)	0 (0)	0 (0)	10 (36)	0 (0)	0 (0)	0 (0)	0 (0)	17 (43)	0 (0)	0 (0)	0 (0)	9 (19)	0 (0)	0 (0)			
spinal cord			<22>				<28>				<40>				<48>						
	hemorrhage		1 (5)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)			
	perivascular inflammation		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)			
{Special sense organs/appendage}																					
eye			<22>				<28>				<40>				<48>						
	keratitis		1 (5)	0 (0)	0 (0)	0 (0)	1 (4)	0 (0)	0 (0)	0 (0)	3 (8)	0 (0)	0 (0)	0 (0)	5 (10)	1 (2)	0 (0)	0 (0)			

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

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 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 38

Organ	Findings	Group Name No. of Animals on Study				0 ppm				4 ppm				13 ppm				40 ppm			
		Grade				22				28				40				48			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)

{Special sense organs/appendage}

Harder gl	lymphocytic infiltration	<22>				<28>				<40>				<48>			
		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)
	hyperplasia	<22>				<28>				<40>				<48>			
		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)

{Musculoskeletal system}

muscle	mineralization	<22>				<28>				<40>				<48>			
		1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
		(5)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(2)	(0)	(0)	(0)

{Body cavities}

adipose	granulation	<22>				<28>				<40>				<48>			
		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

(HPT150)

BAIS3

APPENDIX J 6

HISTOLOGICAL FINDINGS : NON-NEOPLASTIC LESIONS : SUMMARY

MOUSE : FEMALE : SACRIFICED ANIMALS

(2-YEAR STUDY)

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 16

		Group Name No. of Animals on Study				0 ppm 28				4 ppm 22				13 ppm 10				40 ppm 1			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)			
{Respiratory system}																					
nasal cavit			<28>				<22>				<10>				< 1>						
	exudate		0	1	0	0	0	0	0	0	1	1	0	0	0	1	0	0			
			(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(10)	(10)	(0)	(0)	(0)	(0)	(100)	(0)			
	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)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)			
	hemorrhage		0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0			
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(100)	(0)			
	squamous cell hyperplasia		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0			
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)			
	eosinophilic change:olfactory epithelium		7	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0			
			(25)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)			
	eosinophilic change:respiratory epithelium		10	10	5	1	9	8	2	1	1	8	0	0	0	0	0	0			
			(36)	(36)	(18)	(4)	(41)	(36)	(9)	(5)	(10)	(80)	(0)	(0)	(0)	(0)	(0)	(0)			
	respiratory metaplasia:olfactory epithelium		1	1	0	0	17	0	0	0 **	3	7	0	0 **	0	1	0	0			
			(4)	(4)	(0)	(0)	(77)	(0)	(0)	(0)	(30)	(70)	(0)	(0)	(0)	(100)	(0)	(0)			

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

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

b : Number of animals with lesion

(c) c : b / a * 100

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Chi Square

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 17

Organ	Findings	Group Name	0 ppm				4 ppm				13 ppm				40 ppm			
		No. of Animals on Study	28				22				10				1			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)

{Respiratory system}																																																						
nasal cavit																																																						
respiratory metaplasia:gland	<table><tr><td></td><td colspan="4"><28></td><td colspan="4"><22></td><td colspan="4"><10></td><td colspan="4">< 1></td></tr><tr><td></td><td>5</td><td>0</td><td>0</td><td>0</td><td>10</td><td>1</td><td>0</td><td>0 *</td><td>3</td><td>7</td><td>0</td><td>0 **</td><td>0</td><td>1</td><td>0</td><td>0</td><td>?</td></tr><tr><td></td><td>(18)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(45)</td><td>(5)</td><td>(0)</td><td>(0)</td><td>(30)</td><td>(70)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(100)</td><td>(0)</td><td>(0)</td><td></td></tr></table>		<28>				<22>				<10>				< 1>					5	0	0	0	10	1	0	0 *	3	7	0	0 **	0	1	0	0	?		(18)	(0)	(0)	(0)	(45)	(5)	(0)	(0)	(30)	(70)	(0)	(0)	(0)	(100)	(0)	(0)	
	<28>				<22>				<10>				< 1>																																									
	5	0	0	0	10	1	0	0 *	3	7	0	0 **	0	1	0	0	?																																					
	(18)	(0)	(0)	(0)	(45)	(5)	(0)	(0)	(30)	(70)	(0)	(0)	(0)	(100)	(0)	(0)																																						
basal cell hyperplasia:olfactory epithelium	<table><tr><td></td><td>0</td><td>0</td><td>0</td><td>0</td><td>1</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>?</td></tr><tr><td></td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(5)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td></td></tr></table>		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	?		(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)																		
	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	?																																					
	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)																																						
inflammation:transitional epithelium	<table><tr><td></td><td>2</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>?</td></tr><tr><td></td><td>(7)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td></td></tr></table>		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)	(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)	(0)	(0)	(0)	(0)																																						
squamous cell metaplasia:respiratory epithelium	<table><tr><td></td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>3</td><td>0</td><td>0</td><td>0 *</td><td>0</td><td>1</td><td>0</td><td>0</td><td>?</td></tr><tr><td></td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(30)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(100)</td><td>(0)</td><td>(0)</td><td></td></tr></table>		0	0	0	0	0	0	0	0	3	0	0	0 *	0	1	0	0	?		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(30)	(0)	(0)	(0)	(0)	(100)	(0)	(0)																		
	0	0	0	0	0	0	0	0	3	0	0	0 *	0	1	0	0	?																																					
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(30)	(0)	(0)	(0)	(0)	(100)	(0)	(0)																																						
squamous cell metaplasia with atypia:respiratory epithelium	<table><tr><td></td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>3</td><td>0</td><td>0 *</td><td>0</td><td>0</td><td>0</td><td>0</td><td>?</td></tr><tr><td></td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(30)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td></td></tr></table>		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)	(30)	(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)	(30)	(0)	(0)	(0)	(0)	(0)	(0)																																						
squamous cell hyperplasia with atypia	<table><tr><td></td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>1</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>?</td></tr><tr><td></td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(10)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td></td></tr></table>		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	?		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)																		
	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	?																																					
	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)																																						
hyperplasia:transitional epithelium	<table><tr><td></td><td>0</td><td>0</td><td>0</td><td>0</td><td>1</td><td>0</td><td>0</td><td>0</td><td>4</td><td>0</td><td>0</td><td>0 **</td><td>0</td><td>0</td><td>0</td><td>0</td><td>?</td></tr><tr><td></td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(5)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(40)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td>(0)</td><td></td></tr></table>		0	0	0	0	1	0	0	0	4	0	0	0 **	0	0	0	0	?		(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(40)	(0)	(0)	(0)	(0)	(0)	(0)	(0)																		
	0	0	0	0	1	0	0	0	4	0	0	0 **	0	0	0	0	?																																					
	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(40)	(0)	(0)	(0)	(0)	(0)	(0)	(0)																																						

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
< a > a : Number of animals examined at the site
b b : Number of animals with lesion
(c) c : b / a * 100
Significant difference : * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Chi Square
? : Significant test is not applied,because No. of data in this group is less than 3.

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 18

		Group Name	0 ppm				4 ppm				13 ppm				40 ppm				
		No. of Animals on Study	28				22				10				1				
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
{Respiratory system}																			
nasal cavit			<28>				<22>				<10>				< 1>				
	atrophy:respiratory epithelium		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	?
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
			<28>				<22>				<10>				< 1>				
	necrosis:squamous epithelium		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	?
			(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
nasopharynx			<28>				<22>				<10>				< 1>				
	eosinophilic change		4	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	?
			(14)	(0)	(0)	(0)	(14)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
lung			<28>				<22>				<10>				< 1>				
	hemorrhage		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)	
			<28>				<22>				<10>				< 1>				
	inflammatory infiltration		5	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	?
			(18)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
			<28>				<22>				<10>				< 1>				
	bronchiolar-alveolar cell 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 ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Chi Square

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 19

		Group Name	0 ppm				4 ppm				13 ppm				40 ppm				
		No. of Animals on Study	28				22				10				1				
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
Organ	Findings		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
{Hematopoietic system}																			
bone marrow			<28>				<22>				<10>				< 1>				
	myelofibrosis		4	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	?
			(14)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	granulopoiesis:increased		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)	
lymph node			<28>				<22>				<10>				< 1>				
	mastcell hyperplasia		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	?
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	lymphadenitis		0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	?
			(0)	(4)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	follicular hyperplasia		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	?
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
spleen			<28>				<22>				<10>				< 1>				
	extramedullary hematopoiesis		1	2	0	0	2	0	0	0	1	1	0	0	0	0	0	0	?
			(4)	(7)	(0)	(0)	(9)	(0)	(0)	(0)	(10)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	

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

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

b : Number of animals with lesion

(c) c : b / a * 100

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Chi Square

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 20

		Group Name	0 ppm				4 ppm				13 ppm				40 ppm				
		No. of Animals on Study	28				22				10				1				
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
{Hematopoietic system}																			
spleen			<28>				<22>				<10>				< 1>				
	hyperplasia:vascular		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	?
			(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	follicular hyperplasia		0	5	0	0	0	1	1	0	0	1	0	0	0	0	0	0	?
			(0)	(18)	(0)	(0)	(0)	(5)	(5)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	
{Circulatory system}																			
heart			<28>				<22>				<10>				< 1>				
	inflammatory cell nest		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)	
artery/aort			<28>				<22>				<10>				< 1>				
	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)	
{Digestive system}																			
tooth			<28>				<22>				<10>				< 1>				
	dysplasia		3	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	?
			(11)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	

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

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

b : Number of animals with lesion

(c) c : b / a * 100

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Chi Square

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 21

		0 ppm				4 ppm				13 ppm				40 ppm			
		28				22				10				1			
Group Name	No. of Animals on Study																
Grade		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Organ	Findings	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																	
tongue		<28>				<22>				<10>				< 1>			
	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)
	arteritis	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
salivary gl		<28>				<22>				<10>				< 1>			
	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)
	lymphocytic infiltration	18	0	0	0	16	0	0	0	7	0	0	0	1	0	0	0
		(64)	(0)	(0)	(0)	(73)	(0)	(0)	(0)	(70)	(0)	(0)	(0)	(100)	(0)	(0)	(0)
stomach		<28>				<22>				<10>				< 1>			
	hyperplasia:mast cell	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	erosion:glandular stomach	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
		(4)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

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

b b : Number of animals with lesion

(c) c : b / a * 100

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Chi Square

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 22

Organ	Findings	0 ppm				4 ppm				13 ppm				40 ppm			
		No. of Animals on Study				No. of Animals on Study				No. of Animals on Study				No. of Animals on Study			
		Grade	1	2	3	4	Grade	1	2	3	4	Grade	1	2	3	4	Grade
			(%)	(%)	(%)	(%)		(%)	(%)	(%)	(%)		(%)	(%)	(%)	(%)	
{Digestive system}																	
stomach			<28>					<22>					<10>				
	hyperplasia:glandular stomach		6	19	1	0		6	16	0	0		1	8	0	0	
			(21)	(68)	(4)	(0)		(27)	(73)	(0)	(0)		(10)	(80)	(0)	(0)	
liver			<28>					<22>					<10>				
	angiectasis		5	1	1	0		1	0	0	0		0	1	0	0	
			(18)	(4)	(4)	(0)		(5)	(0)	(0)	(0)		(0)	(10)	(0)	(0)	
	cyst		0	0	0	0		0	1	0	0		0	0	0	0	
			(0)	(0)	(0)	(0)		(0)	(5)	(0)	(0)		(0)	(0)	(0)	(0)	
	inflammatory infiltration		0	1	0	0		1	0	0	0		0	0	0	0	
			(0)	(4)	(0)	(0)		(5)	(0)	(0)	(0)		(0)	(0)	(0)	(0)	
	lymphocytic infiltration		0	0	0	0		2	0	0	0		0	0	0	0	
			(0)	(0)	(0)	(0)		(9)	(0)	(0)	(0)		(0)	(0)	(0)	(0)	
	granulation		21	0	0	0		18	0	0	0		6	0	0	0	
			(75)	(0)	(0)	(0)		(82)	(0)	(0)	(0)		(60)	(0)	(0)	(0)	

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

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

b : Number of animals with lesion

(c) c : b / a * 100

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Chi Square

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 23

		Group Name	0 ppm				4 ppm				13 ppm				40 ppm				
		No. of Animals on Study	28				22				10				1				
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
{Digestive system}																			
liver			<28>				<22>				<10>				< 1>				
	intestinal metaplasia		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)	
	extramedullary hematopoiesis		0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	?
			(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(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)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	acidophilic cell focus		2	1	0	0	0	1	0	0	1	0	0	0	0	1	0	?	
			(7)	(4)	(0)	(0)	(0)	(5)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(100)	(0)	(0)	
	mixed cell focus		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	?	
			(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	biliary cyst		1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	?	
			(4)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
{Urinary system}																			
kidney			<28>				<22>				<10>				< 1>				
	infarct		3	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	?
			(11)	(4)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	

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

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

b : Number of animals with lesion

(c) c : b / a * 100

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Chi Square

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

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 24

		Group Name No. of Animals on Study Grade				0 ppm 28				4 ppm 22				13 ppm 10				40 ppm 1			
Organ	Findings	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)				
{Urinary system}																					
kidney		<28>				<22>				<10>				< 1>							
	hyaline droplet	3 (11)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	3 (30)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	?			
	basophilic change	3 (11)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	?			
	hyaline cast	3 (11)	0 (0)	0 (0)	0 (0)	3 (14)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	?			
	lymphocytic infiltration	4 (14)	0 (0)	0 (0)	0 (0)	3 (14)	0 (0)	0 (0)	0 (0)	1 (10)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	?			
	inflammatory polyp	0 (0)	1 (4)	0 (0)	0 (0)	1 (5)	2 (9)	0 (0)	0 (0)	0 (0)	1 (10)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	?			
	hydronephrosis	0 (0)	3 (11)	0 (0)	0 (0)	1 (5)	1 (5)	1 (5)	0 (0)	0 (0)	1 (10)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	?			
	mineralization:papilla	2 (7)	0 (0)	0 (0)	0 (0)	1 (5)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	?			

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

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

b b : Number of animals with lesion

(c) c : b / a * 100

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

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 25

		Group Name	0 ppm				4 ppm				13 ppm				40 ppm				
		No. of Animals on Study	28				22				10				1				
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
{Urinary system}																			
urin bladd			<28>				<22>				<10>				< 1>				
	inflammation		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)	
	lymphocytic infiltration		0	0	0	0	5	0	0	0 *	2	0	0	0	0	0	0	0	?
			(0)	(0)	(0)	(0)	(23)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
{Endocrine system}																			
pituitary			<28>				<22>				<10>				< 1>				
	angiectasis		2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	?
			(7)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	hyperplasia		9	5	0	0	5	1	0	0	1	3	1	0	0	0	0	0	?
			(32)	(18)	(0)	(0)	(23)	(5)	(0)	(0)	(10)	(30)	(10)	(0)	(0)	(0)	(0)	(0)	
	Rathke pouch		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 : Number of animals with lesion

(c) c : b / a * 100

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

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 26

Organ_____	Findings_____	Group Name	0 ppm				4 ppm				13 ppm				40 ppm				
		No. of Animals on Study	28				22				10				1				
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
{Endocrine system}																			
thyroid			<27>				<22>				<10>				< 1>				
	atypical hyperplasia		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	?	
			(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)		
	follicular hyperplasia		0	0	0	0	1	0	0	0	0	0	0	0	0	0	?		
			(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)			
	C-cell hyperplasia		11	0	0	0	14	0	0	0	6	0	0	0	1	0	?		
			(41)	(0)	(0)	(0)	(64)	(0)	(0)	(0)	(60)	(0)	(0)	(0)	(100)	(0)			
parathyroid			< 9>				< 8>				< 5>				< 1>				
	lymphocytic infiltration		0	0	0	0	1	0	0	0	0	0	0	0	0	0	?		
			(0)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)			
adrenal			<28>				<22>				<10>				< 1>				
	spindle-cell hyperplasia		17	11	0	0	13	7	0	0	4	6	0	0	0	1	0	?	
			(61)	(39)	(0)	(0)	(59)	(32)	(0)	(0)	(40)	(60)	(0)	(0)	(0)	(100)	(0)		
	hyperplasia:cortical cell		1	0	0	0	0	0	0	0	0	0	0	0	1	0	?		
			(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(100)	(0)			

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

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

b b : Number of animals with lesion

(c) c : b / a * 100

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Chi Square

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

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 27

Organ	Findings	Group Name No. of Animals on Study				0 ppm				4 ppm				13 ppm				40 ppm			
		Grade				28				22				10				1			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																					
adrenal		<28>				<22>				<10>				< 1>							
	focal fatty change:cortex	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	?
		(0)	(4)	(0)	(0)	(9)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
{Reproductive system}																					
ovary		<28>				<22>				<10>				< 1>							
	angiectasis	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	?
		(7)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	cyst	7	6	0	0	3	3	0	0	3	1	0	0	0	0	0	0	0	0	0	?
		(25)	(21)	(0)	(0)	(14)	(14)	(0)	(0)	(30)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
uterus		<28>				<22>				<10>				< 1>							
	thrombus	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	?
		(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	hyperplasia:gland	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	?
		(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
 < a > a : Number of animals examined at the site
 b : Number of animals with lesion
 (c) c : b / a * 100
 Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square
 ? : Significant test is not applied, because No. of data in this group is less than 3.

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 28

Organ	Findings	Group Name	0 ppm				4 ppm				13 ppm				40 ppm			
		No. of Animals on Study	28				22				10				1			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Reproductive system}																		
uterus			<28>				<22>				<10>				< 1>			
	cystic endometrial hyperplasia	11	4	0	0	5	5	0	0	4	3	0	0	1	0	0	0	?
		(39)	(14)	(0)	(0)	(23)	(23)	(0)	(0)	(40)	(30)	(0)	(0)	(100)	(0)	(0)	(0)	
mammary gl			<28>				<22>				<10>				< 1>			
	galactoceles	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	?
		(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
{Nervous system}																		
brain			<28>				<22>				<10>				< 1>			
	mineralization	14	0	0	0	12	0	0	0	3	0	0	0	0	0	0	0	?
		(50)	(0)	(0)	(0)	(55)	(0)	(0)	(0)	(30)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	perivascular inflammation	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	?
		(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
spinal cord			<28>				<22>				<10>				< 1>			
	perivascular inflammation	1	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	?
		(4)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	

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

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

b b : Number of animals with lesion

(c) c : b / a * 100

Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Chi Square

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

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 29

Organ	Findings	Group Name No. of Animals on Study				0 ppm				4 ppm				13 ppm				40 ppm			
		Grade				28				22				10				1			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Special sense organs/appendage}																					
eye		<28>				<22>				<10>				<1>							
	keratitis	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	?
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
Harder gl		<28>				<22>				<10>				<1>							
	lymphocytic infiltration	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	?
		(7)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
{Musculoskeletal system}																					
muscle		<28>				<22>				<10>				<1>							
	inflammation	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	?
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	

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

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

b : Number of animals with lesion

(c) c : b / a * 100

Significant difference : * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Chi Square .

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

(HPT150)

BAIS3

APPENDIX K 1

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

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 1

Time-related Weeks	Items	Group Name	0 ppm	4 ppm	13 ppm	40 ppm
0 - 52	NO. OF EXAMINED ANIMALS		1	0	0	1
	NO. OF ANIMALS WITH TUMORS		0	0	0	1
	NO. OF ANIMALS WITH SINGLE TUMORS		0	0	0	1
	NO. OF ANIMALS WITH MULTIPLE TUMORS		0	0	0	0
	NO. OF BENIGN TUMORS		0	0	0	0
	NO. OF MALIGNANT TUMORS		0	0	0	1
	NO. OF TOTAL TUMORS		0	0	0	1
53 - 78	NO. OF EXAMINED ANIMALS		0	5	7	13
	NO. OF ANIMALS WITH TUMORS		0	3	6	13
	NO. OF ANIMALS WITH SINGLE TUMORS		0	2	3	8
	NO. OF ANIMALS WITH MULTIPLE TUMORS		0	1	3	5
	NO. OF BENIGN TUMORS		0	1	5	5
	NO. OF MALIGNANT TUMORS		0	3	4	16
	NO. OF TOTAL TUMORS		0	4	9	21
79 - 104	NO. OF EXAMINED ANIMALS		11	10	25	33
	NO. OF ANIMALS WITH TUMORS		10	10	23	33
	NO. OF ANIMALS WITH SINGLE TUMORS		4	5	12	12
	NO. OF ANIMALS WITH MULTIPLE TUMORS		6	5	11	21
	NO. OF BENIGN TUMORS		7	7	20	26
	NO. OF MALIGNANT TUMORS		12	12	28	42
	NO. OF TOTAL TUMORS		19	19	48	68
105 - 105	NO. OF EXAMINED ANIMALS		38	35	18	3
	NO. OF ANIMALS WITH TUMORS		23	27	16	3
	NO. OF ANIMALS WITH SINGLE TUMORS		15	14	2	2
	NO. OF ANIMALS WITH MULTIPLE TUMORS		8	13	14	1
	NO. OF BENIGN TUMORS		16	22	19	0
	NO. OF MALIGNANT TUMORS		15	24	18	4
	NO. OF TOTAL TUMORS		31	46	37	4

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 2

Time-related Weeks	Items	Group Name	0 ppm	4 ppm	13 ppm	40 ppm
0 - 105	NO. OF EXAMINED ANIMALS		50	50	50	50
	NO. OF ANIMALS WITH TUMORS		33	40	45	50
	NO. OF ANIMALS WITH SINGLE TUMORS		19	21	17	23
	NO. OF ANIMALS WITH MULTIPLE TUMORS		14	19	28	27
	NO. OF BENIGN TUMORS		23	30	44	31
	NO. OF MALIGNANT TUMORS		27	39	50	63
	NO. OF TOTAL TUMORS		50	69	94	94

(HPT070)

BAIS3

APPENDIX K 2

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

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 3

Time-related Weeks	Items	Group Name	0 ppm	4 ppm	13 ppm	40 ppm
0 - 52	NO. OF EXAMINED ANIMALS		0	1	1	2
	NO. OF ANIMALS WITH TUMORS		0	1	1	1
	NO. OF ANIMALS WITH SINGLE TUMORS		0	1	1	1
	NO. OF ANIMALS WITH MULTIPLE TUMORS		0	0	0	0
	NO. OF BENIGN TUMORS		0	0	1	0
	NO. OF MALIGNANT TUMORS		0	1	0	1
	NO. OF TOTAL TUMORS		0	1	1	1
53 - 78	NO. OF EXAMINED ANIMALS		4	4	15	20
	NO. OF ANIMALS WITH TUMORS		4	3	15	20
	NO. OF ANIMALS WITH SINGLE TUMORS		4	2	7	12
	NO. OF ANIMALS WITH MULTIPLE TUMORS		0	1	8	8
	NO. OF BENIGN TUMORS		0	0	5	12
	NO. OF MALIGNANT TUMORS		4	4	21	22
	NO. OF TOTAL TUMORS		4	4	26	34
79 - 104	NO. OF EXAMINED ANIMALS		18	23	24	26
	NO. OF ANIMALS WITH TUMORS		16	21	24	26
	NO. OF ANIMALS WITH SINGLE TUMORS		12	16	9	9
	NO. OF ANIMALS WITH MULTIPLE TUMORS		4	5	15	17
	NO. OF BENIGN TUMORS		6	6	11	18
	NO. OF MALIGNANT TUMORS		15	21	36	40
	NO. OF TOTAL TUMORS		21	27	47	58
105 - 105	NO. OF EXAMINED ANIMALS		28	22	10	1
	NO. OF ANIMALS WITH TUMORS		20	17	7	1
	NO. OF ANIMALS WITH SINGLE TUMORS		13	15	1	0
	NO. OF ANIMALS WITH MULTIPLE TUMORS		7	2	6	1
	NO. OF BENIGN TUMORS		11	8	6	1
	NO. OF MALIGNANT TUMORS		20	12	11	1
	NO. OF TOTAL TUMORS		31	20	17	2

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 4

Time-related Weeks	Items	Group Name	0 ppm	4 ppm	13 ppm	40 ppm
0 - 105	NO. OF EXAMINED ANIMALS		50	50	50	49
	NO. OF ANIMALS WITH TUMORS		40	42	47	48
	NO. OF ANIMALS WITH SINGLE TUMORS		29	34	18	22
	NO. OF ANIMALS WITH MULTIPLE TUMORS		11	8	29	26
	NO. OF BENIGN TUMORS		17	14	23	31
	NO. OF MALIGNANT TUMORS		39	38	68	64
	NO. OF TOTAL TUMORS		56	52	91	95

(HPT070)

BAIS3

APPENDIX L 1

HISTOLOGICAL FINDINGS : NEOPLASTIC LESIONS : SUMMARY

MOUSE : MALE

(2-YEAR STUDY)

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 1

Organ	Findings	Group Name No. of animals on Study	0 ppm 50	4 ppm 50	13 ppm 50	40 ppm 50
{Integumentary system/appandage}						
skin/app			<50>	<50>	<50>	<50>
	squamous cell carcinoma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
subcutis			<50>	<50>	<50>	<50>
	lipoma		0 (0%)	1 (2%)	0 (0%)	0 (0%)
	leiomyoma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
	hemangioma		0 (0%)	1 (2%)	0 (0%)	1 (2%)
	histiocytic sarcoma		1 (2%)	1 (2%)	3 (6%)	3 (6%)
	hemangiosarcoma		0 (0%)	0 (0%)	2 (4%)	0 (0%)
{Respiratory system}						
nasal cavit			<50>	<50>	<50>	<50>
	squamous cell papilloma		0 (0%)	0 (0%)	1 (2%)	0 (0%)
	adenoma		0 (0%)	0 (0%)	3 (6%)	2 (4%)
	hemangioma		0 (0%)	3 (6%)	13 (26%)	7 (14%)
	squamous cell carcinoma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
	adenocarcinoma		0 (0%)	0 (0%)	0 (0%)	3 (6%)
	hemangiosarcoma		0 (0%)	0 (0%)	17 (34%)	33 (66%)

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

(HPT085)

BAIS3

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 2

Organ	Findings	Group Name No. of animals on Study	0 ppm 50	4 ppm 50	13 ppm 50	40 ppm 50
{Respiratory system}						
lung	bronchiolar-alveolar adenoma		<50> 3 (6%)	<50> 5 (10%)	<50> 5 (10%)	<50> 5 (10%)
	bronchiolar-alveolar carcinoma		4 (8%)	7 (14%)	3 (6%)	4 (8%)
{Hematopoietic system}						
bone marrow	hemangioma		<50> 1 (2%)	<50> 1 (2%)	<50> 1 (2%)	<50> 0 (0%)
	histiocytic sarcoma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
lymph node	histiocytic sarcoma		<50> 1 (2%)	<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)
	malignant lymphoma		5 (10%)	8 (16%)	9 (18%)	4 (8%)
spleen	hemangioma		<50> 0 (0%)	<50> 0 (0%)	<49> 3 (6%)	<50> 0 (0%)
	malignant lymphoma		1 (2%)	2 (4%)	1 (2%)	0 (0%)
	hemangiosarcoma		2 (4%)	3 (6%)	0 (0%)	1 (2%)
{Circulatory system}						
heart	hemangioma		<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)
{Digestive system}						
tooth	histiocytic sarcoma		<50> 0 (0%)	<50> 1 (2%)	<50> 1 (2%)	<50> 1 (2%)

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

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 3

Organ	Findings	Group Name No. of animals on Study	0 ppm 50	4 ppm 50	13 ppm 50	40 ppm 50
{Digestive system}						
tongue	squamous cell carcinoma		<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)
	histiocytic sarcoma		0 (0%)	0 (0%)	1 (2%)	0 (0%)
salivary gl	histiocytic sarcoma		<50> 1 (2%)	<50> 0 (0%)	<50> 2 (4%)	<50> 0 (0%)
stomach	squamous cell papilloma		<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)
	squamous cell carcinoma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
	mastcytoma:malignant		1 (2%)	0 (0%)	0 (0%)	0 (0%)
small intes	adenoma		<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)	<50> 0 (0%)
	histiocytic sarcoma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
large intes	histiocytic sarcoma		<50> 0 (0%)	<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)
liver	hemangioma		<50> 3 (6%)	<50> 2 (4%)	<50> 3 (6%)	<50> 2 (4%)
	hepatocellular adenoma		11 (22%)	11 (22%)	5 (10%)	3 (6%)
	histiocytic sarcoma		0 (0%)	4 (8%)	1 (2%)	2 (4%)
	hemangiosarcoma		1 (2%)	0 (0%)	0 (0%)	0 (0%)

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

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 4

Organ	Findings	Group Name No. of animals on Study	0 ppm 50	4 ppm 50	13 ppm 50	40 ppm 50
{Digestive system}						
liver			<50>	<50>	<50>	<50>
	hepatocellular carcinoma		4 (8%)	8 (16%)	5 (10%)	0 (0%)
{Urinary system}						
kidney			<50>	<50>	<50>	<50>
	renal cell carcinoma		2 (4%)	0 (0%)	0 (0%)	1 (2%)
urin bladd			<50>	<50>	<50>	<50>
	transitional cell papilloma		1 (2%)	0 (0%)	1 (2%)	0 (0%)
	histiocytic sarcoma		2 (4%)	0 (0%)	0 (0%)	0 (0%)
{Reproductive system}						
epididymis			<50>	<50>	<50>	<50>
	hemangioma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
	histiocytic sarcoma		1 (2%)	2 (4%)	1 (2%)	2 (4%)
semin ves			<50>	<50>	<50>	<50>
	histiocytic sarcoma		0 (0%)	1 (2%)	0 (0%)	0 (0%)
prostate			<50>	<50>	<50>	<50>
	adenocarcinoma		0 (0%)	1 (2%)	0 (0%)	0 (0%)
{Nervous system}						
periph nerv			<50>	<50>	<50>	<50>
	histiocytic sarcoma		1 (2%)	0 (0%)	3 (6%)	3 (6%)
{Special sense organs/appendage}						
Harder gl			<50>	<50>	<50>	<49>
	adenoma		2 (4%)	6 (12%)	7 (14%)	10 (20%)

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

APPENDIX L 2

HISTOLOGICAL FINDINGS : NEOPLASTIC LESIONS : SUMMARY

MOUSE : FEMALE

(2-YEAR STUDY)

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 5

Organ	Findings	Group Name No. of animals on Study	0 ppm 50	4 ppm 50	13 ppm 50	40 ppm 49
{Integumentary system/appandage}						
subcutis	hemangioma		<50> 0 (0%)	<50> 0 (0%)	<50> 0 (0%)	<49> 1 (2%)
	histiocytic sarcoma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
{Respiratory system}						
nasal cavit	squamous cell papilloma		<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)	<49> 1 (2%)
	adenoma		0 (0%)	0 (0%)	0 (0%)	3 (6%)
	hemangioma		0 (0%)	0 (0%)	5 (10%)	10 (20%)
	squamous cell carcinoma		0 (0%)	0 (0%)	0 (0%)	4 (8%)
	adenocarcinoma		0 (0%)	0 (0%)	0 (0%)	2 (4%)
	sarcoma:NOS		0 (0%)	0 (0%)	0 (0%)	1 (2%)
	hemangiosarcoma		0 (0%)	1 (2%)	16 (32%)	21 (43%)
lung	bronchiolar-alveolar adenoma		<50> 2 (4%)	<50> 1 (2%)	<50> 1 (2%)	<49> 3 (6%)
	bronchiolar-alveolar carcinoma		2 (4%)	0 (0%)	2 (4%)	1 (2%)
{Hematopoietic system}						
bone marrow	hemangioma		<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)	<49> 0 (0%)

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

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 6

Organ	Findings	Group Name No. of animals on Study	0 ppm 50	4 ppm 50	13 ppm 50	40 ppm 49
{Hematopoietic system}						
lymph node	hemangioma		<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)	<49> 0 (0%)
	malignant lymphoma		17 (34%)	14 (28%)	14 (28%)	6 (12%)
	mastcytoma:malignant		0 (0%)	0 (0%)	0 (0%)	1 (2%)
thymus	malignant lymphoma		<49> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)	<49> 0 (0%)
spleen	malignant lymphoma		<50> 4 (8%)	<50> 2 (4%)	<50> 2 (4%)	<49> 1 (2%)
	hemangiosarcoma		0 (0%)	0 (0%)	1 (2%)	0 (0%)
{Digestive system}						
stomach	squamous cell papilloma		<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)	<49> 0 (0%)
liver	hemangioma		<50> 1 (2%)	<50> 1 (2%)	<50> 1 (2%)	<49> 0 (0%)
	hepatocellular adenoma		4 (8%)	3 (6%)	1 (2%)	1 (2%)
	histiocytic sarcoma		0 (0%)	2 (4%)	2 (4%)	1 (2%)
	hepatocellular carcinoma		0 (0%)	1 (2%)	0 (0%)	0 (0%)
gall bladd	papillary adenoma		<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)	<49> 0 (0%)

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

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 7

Organ	Findings	Group Name No. of animals on Study	0 ppm 50	4 ppm 50	13 ppm 50	40 ppm 49
{Urinary system}						
urin bladd	hemangioma		<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)	<49> 0 (0%)
{Endocrine system}						
pituitary	adenoma		<50> 4 (8%)	<49> 4 (8%)	<50> 1 (2%)	<49> 1 (2%)
	craniopharyngioma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
	adenocarcinoma		2 (4%)	1 (2%)	0 (0%)	1 (2%)
adrenal	pheochromocytoma:malignant		<50> 0 (0%)	<50> 0 (0%)	<49> 1 (2%)	<49> 0 (0%)
{Reproductive system}						
ovary	cystadenoma		<50> 2 (4%)	<50> 0 (0%)	<50> 1 (2%)	<49> 1 (2%)
	hemangioma		0 (0%)	0 (0%)	0 (0%)	2 (4%)
uterus	endometrial stromal polyp		<50> 2 (4%)	<50> 3 (6%)	<50> 2 (4%)	<49> 0 (0%)
	histiocytic sarcoma		12 (24%)	15 (30%)	22 (44%)	18 (37%)
mammary gl	adenocarcinoma		<50> 2 (4%)	<50> 0 (0%)	<50> 5 (10%)	<49> 4 (8%)
{Nervous system}						
periph nerv	histiocytic sarcoma		<50> 0 (0%)	<50> 0 (0%)	<50> 2 (4%)	<49> 0 (0%)

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

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 8

Organ	Findings	Group Name No. of animals on Study	0 ppm 50	4 ppm 50	13 ppm 50	40 ppm 49
{Special sense organs/appendage}						
Harder gl	adenoma		<50> 1 (2%)	<50> 1 (2%)	<50> 6 (12%)	<49> 7 (14%)
Zymbal gl	squamous cell carcinoma		<50> 0 (0%)	<50> 0 (0%)	<50> 0 (0%)	<49> 1 (2%)
{Body cavities}						
mediastinum	histiocytic sarcoma		<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)	<49> 1 (2%)
peritoneum	hemangioma		<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)	<49> 0 (0%)
	mesothelioma		<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)	<49> 0 (0%)

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

(HPT085)

BAIS3

APPENDIX M 1

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL
ANALYSIS, MOUSE : MALE
(2-YEAR STUDY)

STUDY No. : 0343
ANIMAL : MOUSE Crj:BDF1
SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 1

Group Name	0 ppm	4 ppm	13 ppm	40 ppm
SITE : subcutis TUMOR : histiocytic sarcoma				
Tumor rate				
Overall rates(a)	1/50(2.0)	1/50(2.0)	3/50(6.0)	3/50(6.0)
Adjusted rates(b)	2.63	2.86	16.67	7.69
Terminal rates(c)	1/38(2.6)	1/35(2.9)	3/18(16.7)	0/ 3(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.0254* ?			
Prevalence method(d)	P = 0.0341*			
Combined analysis(d)	P = 0.0039**			
Cochran-Armitage test(e)	P = 0.2569			
Fisher Exact test(e)		P = 0.7525	P = 0.3087	P = 0.3087
SITE : nasal cavity TUMOR : adenoma				
Tumor rate				
Overall rates(a)	0/50(0.0)	0/50(0.0)	3/50(6.0)	2/50(4.0)
Adjusted rates(b)	0.0	0.0	13.64	12.50
Terminal rates(c)	0/38(0.0)	0/35(0.0)	2/18(11.1)	0/ 3(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.0103*			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.1655			
Fisher Exact test(e)		P = N. C.	P = 0.1212	P = 0.2475
SITE : nasal cavity TUMOR : hemangioma				
Tumor rate				
Overall rates(a)	0/50(0.0)	3/50(6.0)	13/50(26.0)	7/50(14.0)
Adjusted rates(b)	0.0	7.14	38.89	20.00
Terminal rates(c)	0/38(0.0)	2/35(5.7)	7/18(38.9)	0/ 3(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.0006**			
Prevalence method(d)	P = 0.0122*			
Combined analysis(d)	P = 0.0001**			
Cochran-Armitage test(e)	P = 0.0582			
Fisher Exact test(e)		P = 0.1212	P < 0.0001**	P = 0.0062**

STUDY No. : 0343
 ANIMAL : MOUSE Crj:BDF1
 SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 2

Group Name	0 ppm	4 ppm	13 ppm	40 ppm
SITE : nasal cavity TUMOR : adenocarcinoma				
Tumor rate				
Overall rates(a)	0/50(0.0)	0/50(0.0)	0/50(0.0)	3/50(6.0)
Adjusted rates(b)	0.0	0.0	0.0	8.00
Terminal rates(c)	0/38(0.0)	0/35(0.0)	0/18(0.0)	0/ 3(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.1204			
Prevalence method(d)	P = 0.0038**?			
Combined analysis(d)	P = 0.0005**?			
Cochran-Armitage test(e)	P = 0.0040**			
Fisher Exact test(e)		P = N. C.	P = N. C.	P = 0.1212
SITE : nasal cavity TUMOR : hemangiosarcoma				
Tumor rate				
Overall rates(a)	0/50(0.0)	0/50(0.0)	17/50(34.0)	33/50(66.0)
Adjusted rates(b)	0.0	0.0	31.82	66.67
Terminal rates(c)	0/38(0.0)	0/35(0.0)	4/18(22.2)	2/ 3(66.7)
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 < 0.0001**	P < 0.0001**
SITE : nasal cavity TUMOR : adenoma, adenocarcinoma				
Tumor rate				
Overall rates(a)	0/50(0.0)	0/50(0.0)	3/50(6.0)	5/50(10.0)
Adjusted rates(b)	0.0	0.0	13.64	14.29
Terminal rates(c)	0/38(0.0)	0/35(0.0)	2/18(11.1)	0/ 3(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.1204			
Prevalence method(d)	P = 0.0016**			
Combined analysis(d)	P = 0.0004**			
Cochran-Armitage test(e)	P = 0.0038**			
Fisher Exact test(e)		P = N. C.	P = 0.1212	P = 0.0281*

STUDY No. : 0343
 ANIMAL : MOUSE Crj:BDF1
 SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 3

Group Name	0 ppm	4 ppm	13 ppm	40 ppm
SITE : nasal cavity TUMOR : hemangioma, hemangiosarcoma				
Tumor rate				
Overall rates(a)	0/50(0.0)	3/50(6.0)	30/50(60.0)	40/50(80.0)
Adjusted rates(b)	0.0	7.14	65.22	75.00
Terminal rates(c)	0/38(0.0)	2/35(5.7)	11/18(61.1)	2/ 3(66.7)
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 = 0.1212	P < 0.0001**	P < 0.0001**
SITE : lung TUMOR : bronchiolar-alveolar adenoma				
Tumor rate				
Overall rates(a)	3/50(6.0)	5/50(10.0)	5/50(10.0)	5/50(10.0)
Adjusted rates(b)	7.89	13.89	13.79	25.00
Terminal rates(c)	3/38(7.9)	4/35(11.4)	2/18(11.1)	0/ 3(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.0533			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.6516			
Fisher Exact test(e)		P = 0.3575	P = 0.3575	P = 0.3575
SITE : lung TUMOR : bronchiolar-alveolar carcinoma				
Tumor rate				
Overall rates(a)	4/50(8.0)	7/50(14.0)	3/50(6.0)	4/50(8.0)
Adjusted rates(b)	6.52	17.14	5.56	33.33
Terminal rates(c)	2/38(5.3)	6/35(17.1)	1/18(5.6)	1/ 3(33.3)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.0253*			
Prevalence method(d)	P = 0.4185			
Combined analysis(d)	P = 0.0725			
Cochran-Armitage test(e)	P = 0.6402			
Fisher Exact test(e)		P = 0.2623	P = 0.5000	P = 0.6425

STUDY No. : 0343
ANIMAL : MOUSE Crj:BDF1
SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 4

Group Name	0 ppm	4 ppm	13 ppm	40 ppm
SITE : lung TUMOR : bronchiolar-alveolar adenoma, bronchiolar-alveolar carcinoma				
Tumor rate				
Overall rates(a)	7/50(14.0)	11/50(22.0)	8/50(16.0)	9/50(18.0)
Adjusted rates(b)	13.16	27.78	19.05	40.00
Terminal rates(c)	5/38(13.2)	9/35(25.7)	3/18(16.7)	1/ 3(33.3)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.0253*			
Prevalence method(d)	P = 0.1039			
Combined analysis(d)	P = 0.0200*			
Cochran-Armitage test(e)	P = 0.9121			
Fisher Exact test(e)		P = 0.2178	P = 0.5000	P = 0.3929
SITE : lymph node TUMOR : malignant lymphoma				
Tumor rate				
Overall rates(a)	5/50(10.0)	8/50(16.0)	9/50(18.0)	4/50(8.0)
Adjusted rates(b)	7.89	17.14	22.22	20.00
Terminal rates(c)	3/38(7.9)	6/35(17.1)	4/18(22.2)	0/ 3(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.2001			
Prevalence method(d)	P = 0.0487*			
Combined analysis(d)	P = 0.0405*			
Cochran-Armitage test(e)	P = 0.4070			
Fisher Exact test(e)		P = 0.2768	P = 0.1940	P = 0.5000
SITE : spleen TUMOR : hemangioma				
Tumor rate				
Overall rates(a)	0/50(0.0)	0/50(0.0)	3/49(6.1)	0/50(0.0)
Adjusted rates(b)	0.0	0.0	9.68	0.0
Terminal rates(c)	0/38(0.0)	0/35(0.0)	0/18(0.0)	0/ 3(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.2475			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.8885			
Fisher Exact test(e)		P = N. C.	P = 0.1175	P = N. C.

STUDY No. : 0343
ANIMAL : MOUSE Crj:BDF1
SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 5

Group Name	0 ppm	4 ppm	13 ppm	40 ppm
SITE : spleen TUMOR : hemangiosarcoma				
Tumor rate				
Overall rates(a)	2/50(4.0)	3/50(6.0)	0/49(0.0)	1/50(2.0)
Adjusted rates(b)	4.17	2.86	0.0	4.76
Terminal rates(c)	1/38(2.6)	1/35(2.9)	0/18(0.0)	0/ 3(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.5838			
Prevalence method(d)	P = 0.3874			
Combined analysis(d)	P = 0.5009			
Cochran-Armitage test(e)	P = 0.3738			
Fisher Exact test(e)		P = 0.5000	P = 0.2525	P = 0.5000
SITE : spleen TUMOR : hemangioma, hemangiosarcoma				
Tumor rate				
Overall rates(a)	2/50(4.0)	3/50(6.0)	3/49(6.1)	1/50(2.0)
Adjusted rates(b)	4.17	2.86	9.68	4.76
Terminal rates(c)	1/38(2.6)	1/35(2.9)	0/18(0.0)	0/ 3(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.5838			
Prevalence method(d)	P = 0.3270			
Combined analysis(d)	P = 0.4142			
Cochran-Armitage test(e)	P = 0.4156			
Fisher Exact test(e)		P = 0.5000	P = 0.4903	P = 0.5000
SITE : liver TUMOR : hemangioma				
Tumor rate				
Overall rates(a)	3/50(6.0)	2/50(4.0)	3/50(6.0)	2/50(4.0)
Adjusted rates(b)	5.26	4.44	5.88	0.0
Terminal rates(c)	2/38(5.3)	1/35(2.9)	0/18(0.0)	0/ 3(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.0279*			
Prevalence method(d)	P = 0.7360			
Combined analysis(d)	P = 0.1787			
Cochran-Armitage test(e)	P = 0.7471			
Fisher Exact test(e)		P = 0.5000	P = 0.6611	P = 0.5000

STUDY No. : 0343
ANIMAL : MOUSE Crj:BDF1
SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 6

Group Name	0 ppm	4 ppm	13 ppm	40 ppm
SITE : liver TUMOR : hepatocellular adenoma				
Tumor rate				
Overall rates(a)	11/50(22.0)	11/50(22.0)	5/50(10.0)	3/50(6.0)
Adjusted rates(b)	23.40	28.57	22.22	9.38
Terminal rates(c)	8/38(21.1)	10/35(28.6)	4/18(22.2)	0/ 3(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.3343			
Prevalence method(d)	P = 0.7838			
Combined analysis(d)	P = 0.7745			
Cochran-Armitage test(e)	P = 0.0117*			
Fisher Exact test(e)		P = 0.5952	P = 0.0857	P = 0.0204*
SITE : liver TUMOR : histiocytic sarcoma				
Tumor rate				
Overall rates(a)	0/50(0.0)	4/50(8.0)	1/50(2.0)	2/50(4.0)
Adjusted rates(b)	0.0	2.86	0.0	0.0
Terminal rates(c)	0/38(0.0)	1/35(2.9)	0/18(0.0)	0/ 3(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.0800			
Prevalence method(d)	P = 0.3478			
Combined analysis(d)	P = 0.0901			
Cochran-Armitage test(e)	P = 0.8195			
Fisher Exact test(e)		P = 0.0587	P = 0.5000	P = 0.2475
SITE : liver TUMOR : hepatocellular carcinoma				
Tumor rate				
Overall rates(a)	4/50(8.0)	8/50(16.0)	5/50(10.0)	0/50(0.0)
Adjusted rates(b)	4.88	13.95	20.00	0.0
Terminal rates(c)	1/38(2.6)	3/35(8.6)	3/18(16.7)	0/ 3(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.9176			
Prevalence method(d)	P = 0.6486			
Combined analysis(d)	P = 0.8513			
Cochran-Armitage test(e)	P = 0.0182*			
Fisher Exact test(e)		P = 0.1783	P = 0.5000	P = 0.0587

STUDY No. : 0343
ANIMAL : MOUSE Crj:BDF1
SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 7

Group Name	0 ppm	4 ppm	13 ppm	40 ppm
SITE : liver TUMOR : hemangioma, hemangiosarcoma				
Tumor rate				
Overall rates(a)	4/50(8.0)	2/50(4.0)	3/50(6.0)	2/50(4.0)
Adjusted rates(b)	5.26	4.44	5.88	0.0
Terminal rates(c)	2/38(5.3)	1/35(2.9)	0/18(0.0)	0/ 3(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.0655			
Prevalence method(d)	P = 0.7408			
Combined analysis(d)	P = 0.2512			
Cochran-Armitage test(e)	P = 0.5540			
Fisher Exact test(e)		P = 0.3389	P = 0.5000	P = 0.3389
SITE : liver TUMOR : hepatocellular adenoma, hepatocellular carcinoma				
Tumor rate				
Overall rates(a)	15/50(30.0)	18/50(36.0)	10/50(20.0)	3/50(6.0)
Adjusted rates(b)	28.89	37.21	38.89	9.38
Terminal rates(c)	9/38(23.7)	12/35(34.3)	7/18(38.9)	0/ 3(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.8523			
Prevalence method(d)	P = 0.9211			
Combined analysis(d)	P = 0.9603			
Cochran-Armitage test(e)	P = 0.0003**			
Fisher Exact test(e)		P = 0.3355	P = 0.1779	P = 0.0017**
SITE : peripheral nerves TUMOR : histiocytic sarcoma				
Tumor rate				
Overall rates(a)	1/50(2.0)	0/50(0.0)	3/50(6.0)	3/50(6.0)
Adjusted rates(b)	0.0	0.0	0.0	0.0
Terminal rates(c)	0/38(0.0)	0/35(0.0)	0/18(0.0)	0/ 3(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.0232*			
Prevalence method(d)	P = -----			
Combined analysis(d)	P = 0.0232*			
Cochran-Armitage test(e)	P = 0.1438			
Fisher Exact test(e)		P = 0.5000	P = 0.3087	P = 0.3087

STUDY No. : 0343
ANIMAL : MOUSE Crj:BDF1
SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 8

Group Name	0 ppm	4 ppm	13 ppm	40 ppm
SITE : Harderian gland				
TUMOR : adenoma				
Tumor rate				
Overall rates(a)	2/50(4.0)	6/50(12.0)	7/50(14.0)	10/49(20.4)
Adjusted rates(b)	4.26	12.50	24.00	22.22
Terminal rates(c)	0/38(0.0)	3/35(8.6)	2/18(11.1)	0/ 3(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.0146*			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.0256*			
Fisher Exact test(e)		P = 0.1343	P = 0.0798	P = 0.0126*

(HPT360A)

BAIS3

- (a): Number of tumor-bearing animals/number of animals examined at the site.
(b): Kaplan-Meire estimated tumor incidence at the end of the study after adjusting for intercurrent mortality.
(c): Observed tumor incidence at terminal kill.
(d): Beneath the control incidence are the P-values associated with the trend test.
Standard method : Death analysis
Prevalence method : Incidental tumor test
Combined analysis : Death analysis + Incidental tumor test
(e): The Cochran-Armitage and Fisher exact test compare directly the overall incidence rates.
? : The conditional probabilities of the largest and smallest possible out comes can not estimated or this P-value is beyond the estimated P-value.
----- : There is no data which should be statistical analysis.
Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$
N.C. : Statistical value cannot be calculated and was not significant.

STUDY No. : 0343
ANIMAL : MOUSE Crj:BDF1
SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 1

Group Name	0 ppm	4 ppm	13 ppm	40 ppm
SITE : ALL SITE TUMOR : hemangioma				
Tumor rate				
Overall rates(a)	3/50(6.0)	5/50(10.0)	17/50(34.0)	10/50(20.0)
Adjusted rates(b)	5.26	11.11	39.13	20.00
Terminal rates(c)	2/38(5.3)	3/35(8.6)	7/18(38.9)	0/ 3(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.0001**			
Prevalence method(d)	P = 0.0557			
Combined analysis(d)	P = 0.0001**			
Cochran-Armitage test(e)	P = 0.0896			
Fisher Exact test(e)		P = 0.3575	P = 0.0004**	P = 0.0357*
SITE : ALL SITE TUMOR : histiocytic sarcoma				
Tumor rate				
Overall rates(a)	7/50(14.0)	9/50(18.0)	12/50(24.0)	13/50(26.0)
Adjusted rates(b)	13.16	14.29	27.78	33.33
Terminal rates(c)	5/38(13.2)	5/35(14.3)	5/18(27.8)	1/ 3(33.3)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.0003**			
Prevalence method(d)	P = 0.0075**			
Combined analysis(d)	P < 0.0001**			
Cochran-Armitage test(e)	P = 0.1513			
Fisher Exact test(e)		P = 0.3929	P = 0.1540	P = 0.1054
SITE : ALL SITE TUMOR : malignant lymphoma				
Tumor rate				
Overall rates(a)	6/50(12.0)	10/50(20.0)	10/50(20.0)	4/50(8.0)
Adjusted rates(b)	10.53	22.86	22.22	20.00
Terminal rates(c)	4/38(10.5)	8/35(22.9)	4/18(22.2)	0/ 3(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.1886			
Prevalence method(d)	P = 0.0872			
Combined analysis(d)	P = 0.0595			
Cochran-Armitage test(e)	P = 0.2157			
Fisher Exact test(e)		P = 0.2070	P = 0.2070	P = 0.3703

(HPT360A)

BAIS3

STUDY No. : 0343
ANIMAL : MOUSE Crj:BDF1
SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 2

Group Name	0 ppm	4 ppm	13 ppm	40 ppm
SITE : ALL SITE				
TUMOR : hemangiosarcoma				
Tumor rate				
Overall rates(a)	2/50(4.0)	3/50(6.0)	18/50(36.0)	33/50(66.0)
Adjusted rates(b)	2.63	2.86	31.82	66.67
Terminal rates(c)	1/38(2.6)	1/35(2.9)	4/18(22.2)	2/ 3(66.7)
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 = 0.5000	P < 0.0001**	P < 0.0001**

(HPT360A)

BAIS3

- (a): Number of tumor-bearing animals/number of animals examined at the site.
(b): Kaplan-Meire estimated tumor incidence at the end of the study after adjusting for intercurrent mortality.
(c): Observed tumor incidence at terminal kill.
(d): Beneath the control incidence are the P-values associated with the trend test.
Standard method : Death analysis
Prevalence method : Incidental tumor test
Combined analysis : Death analysis + Incidental tumor test
(e): The Cochran-Armitage and Fisher exact test compare directly the overall incidence rates.
? : The conditional probabilities of the largest and smallest possible out comes can not estimated or this P-value is beyond the estimated P-value.
----- : There is no data which should be statistical analysis.
Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$
N.C. :Statistical value cannot be calculated and was not significant.

APPENDIX M 2

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS, MOUSE : FEMALE (2-YEAR STUDY)

STUDY No. : 0343
ANIMAL : MOUSE Crj:BDF1
SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 9

Group Name	0 ppm	4 ppm	13 ppm	40 ppm
SITE : nasal cavity TUMOR : adenoma				
Tumor rate				
Overall rates(a)	0/50(0.0)	0/50(0.0)	0/50(0.0)	3/49(6.1)
Adjusted rates(b)	0.0	0.0	0.0	100.00
Terminal rates(c)	0/28(0.0)	0/22(0.0)	0/10(0.0)	1/ 1(100.0)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.0007**?			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.0036**			
Fisher Exact test(e)		P = N. C.	P = N. C.	P = 0.1175
SITE : nasal cavity TUMOR : hemangioma				
Tumor rate				
Overall rates(a)	0/50(0.0)	0/50(0.0)	5/50(10.0)	10/49(20.4)
Adjusted rates(b)	0.0	0.0	20.00	13.04
Terminal rates(c)	0/28(0.0)	0/22(0.0)	2/10(20.0)	0/ 1(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.0001**			
Prevalence method(d)	P = 0.0023**			
Combined analysis(d)	P < 0.0001**			
Cochran-Armitage test(e)	P < 0.0001**			
Fisher Exact test(e)		P = N. C.	P = 0.0281*	P = 0.0005**
SITE : nasal cavity TUMOR : squamous cell carcinoma				
Tumor rate				
Overall rates(a)	0/50(0.0)	0/50(0.0)	0/50(0.0)	4/49(8.2)
Adjusted rates(b)	0.0	0.0	0.0	100.00
Terminal rates(c)	0/28(0.0)	0/22(0.0)	0/10(0.0)	1/ 1(100.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.0078**?			
Prevalence method(d)	P < 0.0001**?			
Combined analysis(d)	P < 0.0001**?			
Cochran-Armitage test(e)	P = 0.0008**			
Fisher Exact test(e)		P = N. C.	P = N. C.	P = 0.0563

STUDY No. : 0343
 ANIMAL : MOUSE Crj:BDF1
 SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 10

Group Name	0 ppm	4 ppm	13 ppm	40 ppm
SITE : nasal cavity TUMOR : hemangiosarcoma				
Tumor rate				
Overall rates(a)	0/50(0.0)	1/50(2.0)	16/50(32.0)	21/49(42.9)
Adjusted rates(b)	0.0	2.50	33.33	50.00
Terminal rates(c)	0/28(0.0)	0/22(0.0)	1/10(10.0)	0/ 1(0.0)
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 = 0.5000	P < 0.0001**	P < 0.0001**
SITE : nasal cavity TUMOR : squamous cell papilloma, squamous cell carcinoma				
Tumor rate				
Overall rates(a)	0/50(0.0)	0/50(0.0)	1/50(2.0)	5/49(10.2)
Adjusted rates(b)	0.0	0.0	2.94	100.00
Terminal rates(c)	0/28(0.0)	0/22(0.0)	0/10(0.0)	1/ 1(100.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.0078**?			
Prevalence method(d)	P = 0.0005**			
Combined analysis(d)	P < 0.0001**			
Cochran-Armitage test(e)	P = 0.0006**			
Fisher Exact test(e)		P = N. C.	P = 0.5000	P = 0.0267*
SITE : nasal cavity TUMOR : adenoma, adenocarcinoma				
Tumor rate				
Overall rates(a)	0/50(0.0)	0/50(0.0)	0/50(0.0)	5/49(10.2)
Adjusted rates(b)	0.0	0.0	0.0	100.00
Terminal rates(c)	0/28(0.0)	0/22(0.0)	0/10(0.0)	1/ 1(100.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.0851			
Prevalence method(d)	P = 0.0003**?			
Combined analysis(d)	P < 0.0001**?			
Cochran-Armitage test(e)	P = 0.0002**			
Fisher Exact test(e)		P = N. C.	P = N. C.	P = 0.0267*

STUDY No. : 0343
ANIMAL : MOUSE Crj:BDF1
SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 11

Group Name	0 ppm	4 ppm	13 ppm	40 ppm
SITE : nasal cavity TUMOR : hemangioma, hemangiosarcoma				
Tumor rate				
Overall rates(a)	0/50(0.0)	1/50(2.0)	21/50(42.0)	31/49(63.3)
Adjusted rates(b)	0.0	2.50	46.67	50.00
Terminal rates(c)	0/28(0.0)	0/22(0.0)	3/10(30.0)	0/ 1(0.0)
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 = 0.5000	P < 0.0001**	P < 0.0001**
SITE : lung TUMOR : bronchiolar-alveolar adenoma				
Tumor rate				
Overall rates(a)	2/50(4.0)	1/50(2.0)	1/50(2.0)	3/49(6.1)
Adjusted rates(b)	7.14	4.55	7.69	14.29
Terminal rates(c)	2/28(7.1)	1/22(4.5)	0/10(0.0)	0/ 1(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.0198*			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.3443			
Fisher Exact test(e)		P = 0.5000	P = 0.5000	P = 0.4903
SITE : lung TUMOR : bronchiolar-alveolar adenoma, bronchiolar-alveolar carcinoma				
Tumor rate				
Overall rates(a)	4/50(8.0)	1/50(2.0)	3/50(6.0)	4/49(8.2)
Adjusted rates(b)	14.29	4.55	15.38	22.22
Terminal rates(c)	4/28(14.3)	1/22(4.5)	1/10(10.0)	0/ 1(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.3010			
Prevalence method(d)	P = 0.0080**			
Combined analysis(d)	P = 0.0122*			
Cochran-Armitage test(e)	P = 0.5199			
Fisher Exact test(e)		P = 0.1811	P = 0.5000	P = 0.6311

STUDY No. : 0343
ANIMAL : MOUSE Crj:BDF1
SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 12

Group Name	0 ppm	4 ppm	13 ppm	40 ppm
SITE : lymph node TUMOR : malignant lymphoma				
Tumor rate				
Overall rates(a)	17/50(34.0)	14/50(28.0)	14/50(28.0)	6/49(12.2)
Adjusted rates(b)	21.43	27.27	31.25	14.29
Terminal rates(c)	6/28(21.4)	6/22(27.3)	3/10(30.0)	0/ 1(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.2409			
Prevalence method(d)	P = 0.1526			
Combined analysis(d)	P = 0.1378			
Cochran-Armitage test(e)	P = 0.0113*			
Fisher Exact test(e)		P = 0.3329	P = 0.3329	P = 0.0094**
SITE : spleen TUMOR : malignant lymphoma				
Tumor rate				
Overall rates(a)	4/50(8.0)	2/50(4.0)	2/50(4.0)	1/49(2.0)
Adjusted rates(b)	10.71	9.09	0.0	0.0
Terminal rates(c)	3/28(10.7)	2/22(9.1)	0/10(0.0)	0/ 1(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.2841			
Prevalence method(d)	P = 0.8503			
Combined analysis(d)	P = 0.4353			
Cochran-Armitage test(e)	P = 0.2435			
Fisher Exact test(e)		P = 0.3389	P = 0.3389	P = 0.1874
SITE : liver TUMOR : hepatocellular adenoma				
Tumor rate				
Overall rates(a)	4/50(8.0)	3/50(6.0)	1/50(2.0)	1/49(2.0)
Adjusted rates(b)	10.81	12.00	3.70	5.26
Terminal rates(c)	3/28(10.7)	2/22(9.1)	0/10(0.0)	0/ 1(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.5953			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.1725			
Fisher Exact test(e)		P = 0.5000	P = 0.1811	P = 0.1874

STUDY No. : 0343
ANIMAL : MOUSE Crj:BDF1
SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 13

Group Name	0 ppm	4 ppm	13 ppm	40 ppm
SITE : liver TUMOR : hepatocellular adenoma, hepatocellular carcinoma				
Tumor rate				
Overall rates(a)	4/50(8.0)	4/50(8.0)	1/50(2.0)	1/49(2.0)
Adjusted rates(b)	10.81	12.00	3.70	5.26
Terminal rates(c)	3/28(10.7)	2/22(9.1)	0/10(0.0)	0/ 1(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.7572			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.1313			
Fisher Exact test(e)		P = 0.6425	P = 0.1811	P = 0.1874
SITE : pituitary gland TUMOR : adenoma				
Tumor rate				
Overall rates(a)	4/50(8.0)	4/49(8.2)	1/50(2.0)	1/49(2.0)
Adjusted rates(b)	9.52	12.50	3.85	8.33
Terminal rates(c)	1/28(3.6)	2/22(9.1)	0/10(0.0)	0/ 1(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.3681			
Prevalence method(d)	P = 0.5807			
Combined analysis(d)	P = 0.5863			
Cochran-Armitage test(e)	P = 0.1291			
Fisher Exact test(e)		P = 0.6311	P = 0.1811	P = 0.1874
SITE : pituitary gland TUMOR : adenoma, adenocarcinoma				
Tumor rate				
Overall rates(a)	6/50(12.0)	5/49(10.2)	1/50(2.0)	2/49(4.1)
Adjusted rates(b)	15.63	16.67	3.85	25.00
Terminal rates(c)	3/28(10.7)	3/22(13.6)	0/10(0.0)	0/ 1(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.3681			
Prevalence method(d)	P = 0.4376			
Combined analysis(d)	P = 0.4439			
Cochran-Armitage test(e)	P = 0.1278			
Fisher Exact test(e)		P = 0.5144	P = 0.0559	P = 0.1409

STUDY No. : 0343
 ANIMAL : MOUSE Crj:BDF1
 SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 14

Group Name	0 ppm	4 ppm	13 ppm	40 ppm
SITE : uterus TUMOR : endometrial stromal polyp				
Tumor rate				
Overall rates(a)	2/50(4.0)	3/50(6.0)	2/50(4.0)	0/49(0.0)
Adjusted rates(b)	7.14	6.67	20.00	0.0
Terminal rates(c)	2/28(7.1)	1/22(4.5)	2/10(20.0)	0/ 1(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.6483			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.1316			
Fisher Exact test(e)		P = 0.5000	P = 0.6913	P = 0.2525
SITE : uterus TUMOR : histiocytic sarcoma				
Tumor rate				
Overall rates(a)	12/50(24.0)	15/50(30.0)	22/50(44.0)	18/49(36.7)
Adjusted rates(b)	17.86	13.64	33.33	13.64
Terminal rates(c)	5/28(17.9)	3/22(13.6)	3/10(30.0)	0/ 1(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P < 0.0001**			
Prevalence method(d)	P = 0.0371*			
Combined analysis(d)	P < 0.0001**			
Cochran-Armitage test(e)	P = 0.2466			
Fisher Exact test(e)		P = 0.3264	P = 0.0283*	P = 0.1230
SITE : mammary gland TUMOR : adenocarcinoma				
Tumor rate				
Overall rates(a)	2/50(4.0)	0/50(0.0)	5/50(10.0)	4/49(8.2)
Adjusted rates(b)	7.14	0.0	15.79	22.22
Terminal rates(c)	2/28(7.1)	0/22(0.0)	1/10(10.0)	0/ 1(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.0264*			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.1639			
Fisher Exact test(e)		P = 0.2475	P = 0.2180	P = 0.3292

STUDY No. : 0343
ANIMAL : MOUSE Crj:BDF1
SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 15

Group Name	0 ppm	4 ppm	13 ppm	40 ppm
SITE : Harderian gland				
TUMOR : adenoma				
Tumor rate				
Overall rates(a)	1/50(2.0)	1/50(2.0)	6/50(12.0)	7/49(14.3)
Adjusted rates(b)	3.57	4.55	17.86	25.00
Terminal rates(c)	1/28(3.6)	1/22(4.5)	0/10(0.0)	0/ 1(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.0025**			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.0094**			
Fisher Exact test(e)		P = 0.7525	P = 0.0559	P = 0.0277*

(HPT360A)

BAIS3

- (a): Number of tumor-bearing animals/number of animals examined at the site.
 (b): Kaplan-Meire estimated tumor incidence at the end of the study after adjusting for intercurrent mortality.
 (c): Observed tumor incidence at terminal kill.
 (d): Beneath the control incidence are the P-values associated with the trend test.
 Standard method : Death analysis
 Prevalence method : Incidental tumor test
 Combined analysis : Death analysis + Incidental tumor test
 (e): The Cochran-Armitage and Fisher exact test compare directly the overall incidence rates.
 ? : The conditional probabilities of the largest and smallest possible out comes can not estimated or this P-value is beyond the estimated P-value.
 ----- : There is no data which should be statistical analysis.
 Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$
 N.C. : Statistical value cannot be calculated and was not significant.

STUDY No. : 0343
ANIMAL : MOUSE Crj:BDF1
SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 3

Group Name	0 ppm	4 ppm	13 ppm	40 ppm
SITE : ALL SITE TUMOR : hemangioma				
Tumor rate				
Overall rates(a)	1/50(2.0)	1/50(2.0)	10/50(20.0)	11/49(22.4)
Adjusted rates(b)	0.0	0.0	40.00	17.39
Terminal rates(c)	0/28(0.0)	0/22(0.0)	4/10(40.0)	0/ 1(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.0015**			
Prevalence method(d)	P = 0.0045**			
Combined analysis(d)	P = 0.0001**			
Cochran-Armitage test(e)	P = 0.0004**			
Fisher Exact test(e)		P = 0.7525	P = 0.0039**	P = 0.0017**
SITE : ALL SITE TUMOR : histiocytic sarcoma				
Tumor rate				
Overall rates(a)	12/50(24.0)	17/50(34.0)	27/50(54.0)	21/49(42.9)
Adjusted rates(b)	17.86	13.64	41.67	18.18
Terminal rates(c)	5/28(17.9)	3/22(13.6)	4/10(40.0)	0/ 1(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P < 0.0001**			
Prevalence method(d)	P = 0.0123*			
Combined analysis(d)	P < 0.0001**			
Cochran-Armitage test(e)	P = 0.1075			
Fisher Exact test(e)		P = 0.1891	P = 0.0019**	P = 0.0375*
SITE : ALL SITE TUMOR : malignant lymphoma				
Tumor rate				
Overall rates(a)	21/50(42.0)	17/50(34.0)	16/50(32.0)	7/49(14.3)
Adjusted rates(b)	32.14	36.36	31.25	14.29
Terminal rates(c)	9/28(32.1)	8/22(36.4)	3/10(30.0)	0/ 1(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.2430			
Prevalence method(d)	P = 0.2629			
Combined analysis(d)	P = 0.1855			
Cochran-Armitage test(e)	P = 0.0025**			
Fisher Exact test(e)		P = 0.2684	P = 0.2038	P = 0.0020**

(HPT360A)

BAIS3

STUDY No. : 0343
ANIMAL : MOUSE Crj:BDF1
SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 4

Group Name	0 ppm	4 ppm	13 ppm	40 ppm
SITE : ALL SITE				
TUMOR : hemangiosarcoma				
Tumor rate				
Overall rates(a)	0/50(0.0)	1/50(2.0)	17/50(34.0)	21/49(42.9)
Adjusted rates(b)	0.0	2.50	40.00	50.00
Terminal rates(c)	0/28(0.0)	0/22(0.0)	2/10(20.0)	0/ 1(0.0)
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 = 0.5000	P < 0.0001**	P < 0.0001**

(HPT360A)

BAIS3

- (a): Number of tumor-bearing animals/number of animals examined at the site.
 (b): Kaplan-Meire estimated tumor incidence at the end of the study after adjusting for intercurrent mortality.
 (c): Observed tumor incidence at terminal kill.
 (d): Beneath the control incidence are the P-values associated with the trend test.
 Standard method : Death analysis
 Prevalence method : Incidental tumor test
 Combined analysis : Death analysis + Incidental tumor test
 (e): The Cochran-Armitage and Fisher exact test compare directly the overall incidence rates.
 ? : The conditional probabilities of the largest and smallest possible out comes can not estimated or this P-value is beyond the estimated P-value.
 ----- : There is no data which should be statistical analysis.
 Significant difference ; * : $P \leq 0.05$ ** : $P \leq 0.01$
 N.C. : Statistical value cannot be calculated and was not significant.

APPENDIX N 1

HISTOLOGICAL FINDINGS : METASTASIS OF TUMOR : SUMMARY

MOUSE : MALE : ALL ANIMALS

(2-YEAR STUDY)

STUDY NO. : 0343
 ANIMAL : MOUSE CrJ:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 1

		Group Name	0 ppm	4 ppm	13 ppm	40 ppm
		No. of Animals on Study	50	50	50	50
Organ	Findings					
{Integumentary system/appandage}						
skin/app			<50>	<50>	<50>	<50>
	leukemic cell infiltration		1	0	1	0
subcutis			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	0	1	0
{Respiratory system}						
nasal cavit			<50>	<50>	<50>	<50>
	leukemic cell infiltration		1	0	3	0
	metastasis:peripheral nerve tumor		0	0	1	1
	metastasis:tooth tumor		0	0	1	0
lung			<50>	<50>	<50>	<50>
	leukemic cell infiltration		4	1	3	1
	metastasis:liver tumor		4	1	1	1
	metastasis:peripheral nerve tumor		0	0	0	1
	metastasis:spleen tumor		0	1	0	0
	metastasis:stomach tumor		0	0	0	1
{Hematopoietic system}						
bone marrow			<50>	<50>	<50>	<50>
	leukemic cell infiltration		3	0	2	2
	metastasis:liver tumor		0	1	0	0
	metastasis:peripheral nerve tumor		0	0	0	1

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

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 2

Organ	Findings	Group Name No. of Animals on Study	0 ppm 50	4 ppm 50	13 ppm 50	40 ppm 50
{Hematopoietic system}						
lymph node			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	1	1	0
	metastasis:liver tumor		0	1	0	0
thymus			<50>	<50>	<50>	<50>
	metastasis:peripheral nerve tumor		0	0	0	1
spleen			<50>	<50>	<49>	<50>
	leukemic cell infiltration		6	4	3	2
	metastasis:liver tumor		0	1	0	0
{Circulatory system}						
heart			<50>	<50>	<50>	<50>
	leukemic cell infiltration		2	0	0	0
	metastasis:subcutis tumor		0	0	0	1
{Digestive system}						
tongue			<50>	<50>	<50>	<50>
	metastasis:peripheral nerve tumor		0	0	1	0
salivary gl			<50>	<50>	<50>	<50>
	leukemic cell infiltration		2	0	1	1
stomach			<50>	<50>	<50>	<50>
	leukemic cell infiltration		2	0	2	0
	metastasis:seminal vesicle tumor		0	1	0	0
large intes			<50>	<50>	<50>	<50>
	leukemic cell infiltration		1	0	0	0
< a >	a : Number of animals examined at the site					
b	b : Number of animals with lesion					

STUDY NO. : 0343
ANIMAL : MOUSE CrJ:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 3

		Group Name No. of Animals on Study	0 ppm 50	4 ppm 50	13 ppm 50	40 ppm 50
Organ	Findings					
{Digestive system}						
liver			<50>	<50>	<50>	<50>
	leukemic cell infiltration		3	0	4	1
	metastasis:subcutis tumor		1	0	0	1
	metastasis:peripheral nerve tumor		0	0	0	2
	metastasis:spleen tumor		0	1	0	0
	metastasis:tooth tumor		0	0	1	0
pancreas			<50>	<50>	<50>	<50>
	leukemic cell infiltration		2	0	3	0
{Urinary system}						
kidney			<50>	<50>	<50>	<50>
	leukemic cell infiltration		3	0	3	0
	metastasis:liver tumor		0	2	0	0
	metastasis:peripheral nerve tumor		0	0	0	1
	metastasis:seminal vesicle tumor		0	1	0	0
	metastasis:salivary gland tumor		1	0	0	0
urin bladd			<50>	<50>	<50>	<50>
	leukemic cell infiltration		1	0	0	0
	metastasis:prostate tumor		0	1	0	0
{Endocrine system}						
pituitary			<50>	<50>	<50>	<50>
	leukemic cell infiltration		2	0	1	0

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

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 4

Organ	Findings	Group Name No. of Animals on Study	0 ppm 50	4 ppm 50	13 ppm 50	40 ppm 50
{Endocrine system}						
pituitary			<50>	<50>	<50>	<50>
	metastasis:peripheral nerve tumor		1	0	2	0
thyroid			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	0	1	0
adrenal			<50>	<50>	<50>	<50>
	leukemic cell infiltration		1	0	2	0
	metastasis:liver tumor		0	1	0	0
{Reproductive system}						
testis			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	0	1	0
epididymis			<50>	<50>	<50>	<50>
	leukemic cell infiltration		1	1	1	0
	metastasis:liver tumor		0	0	0	1
	metastasis:subcutis tumor		0	0	1	0
semin ves			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	0	1	0
prostate			<50>	<50>	<50>	<50>
	leukemic cell infiltration		2	0	0	0
	metastasis:kidney tumor		0	0	0	1
ovi d/v def			<50>	<50>	<50>	<50>
	metastasis:peripheral nerve tumor		0	0	0	1
{Nervous system}						
brain			<50>	<50>	<50>	<50>
	metastasis:peripheral nerve tumor		1	0	3	2
< a >	a : Number of animals examined at the site					
b	b : Number of animals with lesion					

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 5

		Group Name	0 ppm	4 ppm	13 ppm	40 ppm
		No. of Animals on Study	50	50	50	50
Organ	Findings					
{Nervous system}						
spinal cord	metastasis:peripheral nerve tumor		<50> 0	<50> 0	<50> 1	<50> 0
{Special sense organs/appendage}						
Harder gl	leukemic cell infiltration		<50> 2	<50> 0	<50> 1	<50> 0
{Musculoskeletal system}						
muscle	leukemic cell infiltration		<50> 1	<50> 0	<50> 0	<50> 0
{Body cavities}						
pleura	leukemic cell infiltration		<50> 0	<50> 0	<50> 1	<50> 0
< a >	a : Number of animals examined at the site					
b	b : Number of animals with lesion					

(JPT150)

BAIS3

APPENDIX N 2

HISTOLOGICAL FINDINGS : METASTASIS OF TUMOR : SUMMARY

MOUSE : MALE : DEAD AND MORIBUND ANIMALS

(2-YEAR STUDY)

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 1

Organ	Findings	Group Name No. of Animals on Study	0 ppm 12	4 ppm 15	13 ppm 32	40 ppm 47
{Integumentary system/appandage}						
skin/app	leukemic cell infiltration		<12> 0	<15> 0	<32> 1	<47> 0
subcutis	leukemic cell infiltration		<12> 0	<15> 0	<32> 1	<47> 0
{Respiratory system}						
nasal cavit	leukemic cell infiltration		<12> 1	<15> 0	<32> 3	<47> 0
	metastasis:peripheral nerve tumor		0	0	1	1
	metastasis:tooth tumor		0	0	1	0
lung	leukemic cell infiltration		<12> 1	<15> 0	<32> 3	<47> 1
	metastasis:liver tumor		4	1	0	1
	metastasis:peripheral nerve tumor		0	0	0	1
	metastasis:spleen tumor		0	1	0	0
	metastasis:stomach tumor		0	0	0	1
{Hematopoietic system}						
bone marrow	leukemic cell infiltration		<12> 1	<15> 0	<32> 2	<47> 2
	metastasis:liver tumor		0	1	0	0
	metastasis:peripheral nerve tumor		0	0	0	1
< a >	a : Number of animals examined at the site					
b	b : Number of animals with lesion					

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 2

Organ		Group Name No. of Animals on Study	0 ppm 12	4 ppm 15	13 ppm 32	40 ppm 47
{Hematopoietic system}						
lymph node			<12>	<15>	<32>	<47>
	leukemic cell infiltration		0	0	1	0
	metastasis:liver tumor		0	1	0	0
thymus			<12>	<15>	<32>	<47>
	metastasis:peripheral nerve tumor		0	0	0	1
spleen			<12>	<15>	<31>	<47>
	leukemic cell infiltration		2	0	3	2
	metastasis:liver tumor		0	1	0	0
{Circulatory system}						
heart			<12>	<15>	<32>	<47>
	leukemic cell infiltration		1	0	0	0
	metastasis:subcutis tumor		0	0	0	1
{Digestive system}						
tongue			<12>	<15>	<32>	<47>
	metastasis:peripheral nerve tumor		0	0	1	0
salivary gl			<12>	<15>	<32>	<47>
	leukemic cell infiltration		1	0	1	1
stomach			<12>	<15>	<32>	<47>
	leukemic cell infiltration		1	0	2	0
	metastasis:seminal vesicle tumor		0	1	0	0
liver			<12>	<15>	<32>	<47>
	leukemic cell infiltration		1	0	4	1
< a > a : Number of animals examined at the site b : Number of animals with lesion						

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 3

Group Name No. of Animals on Study		0 ppm 12	4 ppm 15	13 ppm 32	40 ppm 47
Organ	Findings				
{Digestive system}					
liver	metastasis:subcutis tumor	<12> 0	<15> 0	<32> 0	<47> 1
	metastasis:peripheral nerve tumor	0	0	0	2
	metastasis:spleen tumor	0	1	0	0
	metastasis:tooth tumor	0	0	1	0
pancreas	leukemic cell infiltration	<12> 1	<15> 0	<32> 3	<47> 0
{Urinary system}					
kidney	leukemic cell infiltration	<12> 1	<15> 0	<32> 3	<47> 0
	metastasis:liver tumor	0	2	0	0
	metastasis:peripheral nerve tumor	0	0	0	1
	metastasis:seminal vesicle tumor	0	1	0	0
urin bladd	metastasis:prostate tumor	<12> 0	<15> 1	<32> 0	<47> 0
{Endocrine system}					
pituitary	leukemic cell infiltration	<12> 1	<15> 0	<32> 1	<47> 0
	metastasis:peripheral nerve tumor	1	0	2	0
thyroid	leukemic cell infiltration	<12> 0	<15> 0	<32> 1	<47> 0
< a > a : Number of animals examined at the site b b : Number of animals with lesion					

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 4

Organ	Findings	Group Name No. of Animals on Study	0 ppm 12	4 ppm 15	13 ppm 32	40 ppm 47
{Endocrine system}						
adrenal	leukemic cell infiltration		<12> 0	<15> 0	<32> 2	<47> 0
{Reproductive system}						
testis	leukemic cell infiltration		<12> 0	<15> 0	<32> 1	<47> 0
epididymis	leukemic cell infiltration		<12> 0	<15> 0	<32> 1	<47> 0
	metastasis:liver tumor		0	0	0	1
semin ves	leukemic cell infiltration		<12> 0	<15> 0	<32> 1	<47> 0
prostate	leukemic cell infiltration		<12> 1	<15> 0	<32> 0	<47> 0
	metastasis:kidney tumor		0	0	0	1
ovi d/v def	metastasis:peripheral nerve tumor		<12> 0	<15> 0	<32> 0	<47> 1
{Nervous system}						
brain	metastasis:peripheral nerve tumor		<12> 1	<15> 0	<32> 3	<47> 2
spinal cord	metastasis:peripheral nerve tumor		<12> 0	<15> 0	<32> 1	<47> 0
{Special sense organs/appendage}						
Harder gl	leukemic cell infiltration		<12> 1	<15> 0	<32> 1	<47> 0

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : MALE

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

PAGE : 5

Organ	Findings	Group Name No. of Animals on Study	0 ppm 12	4 ppm 15	13 ppm 32	40 ppm 47
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{Body cavities}

pleura	leukemic cell infiltration	<12> 0	<15> 0	<32> 1	<47> 0
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< a > a : Number of animals examined at the site
b b : Number of animals with lesion

(JPT150)

BAIS3

APPENDIX N 3

HISTOLOGICAL FINDINGS : METASTASIS OF TUMOR : SUMMARY

MOUSE : MALE : SACRIFICED ANIMALS

(2-YEAR STUDY)

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 1

Group Name No. of Animals on Study		0 ppm 38	4 ppm 35	13 ppm 18	40 ppm 3
Organ	Findings				
{Integumentary system/appandage}					
skin/app	leukemic cell infiltration	<38> 1	<35> 0	<18> 0	< 3> 0
{Respiratory system}					
lung	leukemic cell infiltration	<38> 3	<35> 1	<18> 0	< 3> 0
	metastasis:liver tumor	0	0	1	0
{Hematopoietic system}					
bone marrow	leukemic cell infiltration	<38> 2	<35> 0	<18> 0	< 3> 0
lymph node	leukemic cell infiltration	<38> 0	<35> 1	<18> 0	< 3> 0
spleen	leukemic cell infiltration	<38> 4	<35> 4	<18> 0	< 3> 0
{Circulatory system}					
heart	leukemic cell infiltration	<38> 1	<35> 0	<18> 0	< 3> 0
{Digestive system}					
salivary gl	leukemic cell infiltration	<38> 1	<35> 0	<18> 0	< 3> 0
stomach	leukemic cell infiltration	<38> 1	<35> 0	<18> 0	< 3> 0
< a >	a : Number of animals examined at the site				
b	b : Number of animals with lesion				

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 2

Organ	Findings	Group Name No. of Animals on Study	0 ppm 38	4 ppm 35	13 ppm 18	40 ppm 3
{Digestive system}						
large intes	leukemic cell infiltration		<38> 1	<35> 0	<18> 0	< 3> 0
liver	leukemic cell infiltration		<38> 2	<35> 0	<18> 0	< 3> 0
	metastasis:subcutis tumor		1	0	0	0
pancreas	leukemic cell infiltration		<38> 1	<35> 0	<18> 0	< 3> 0
{Urinary system}						
kidney	leukemic cell infiltration		<38> 2	<35> 0	<18> 0	< 3> 0
	metastasis:salivary gland tumor		1	0	0	0
urin bladd	leukemic cell infiltration		<38> 1	<35> 0	<18> 0	< 3> 0
{Endocrine system}						
pituitary	leukemic cell infiltration		<37> 1	<35> 0	<18> 0	< 3> 0
adrenal	leukemic cell infiltration		<38> 1	<35> 0	<18> 0	< 3> 0
	metastasis:liver tumor		0	1	0	0
{Reproductive system}						
epididymis	leukemic cell infiltration		<38> 1	<35> 1	<18> 0	< 3> 0
< a > a : Number of animals examined at the site						
b b : Number of animals with lesion						

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 3

		Group Name	0 ppm	4 ppm	13 ppm	40 ppm
		No. of Animals on Study	38	35	18	3
Organ	Findings					
{Reproductive system}						
epididymis	metastasis:subcutis tumor		<38> 0	<35> 0	<18> 1	< 3> 0
prostate	leukemic cell infiltration		<38> 1	<35> 0	<18> 0	< 3> 0
{Special sense organs/appendage}						
Harder gl	leukemic cell infiltration		<38> 1	<35> 0	<18> 0	< 3> 0
{Musculoskeletal system}						
muscle	leukemic cell infiltration		<38> 1	<35> 0	<18> 0	< 3> 0
< a > a : Number of animals examined at the site						
b b : Number of animals with lesion						

(JPT150)

BAIS3

APPENDIX N 4

HISTOLOGICAL FINDINGS : METASTASIS OF TUMOR : SUMMARY

MOUSE : FEMALE: ALL ANIMALS

(2-YEAR STUDY)

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 6

Organ	Findings	Group Name No. of Animals on Study	0 ppm 50	4 ppm 50	13 ppm 50	40 ppm 49
{Integumentary system/appandage}						
skin/app			<50>	<50>	<50>	<49>
	leukemic cell infiltration		0	1	1	0
subcutis			<50>	<50>	<50>	<49>
	leukemic cell infiltration		0	1	2	2
	metastasis:uterus tumor		1	0	1	0
{Respiratory system}						
nasal cavit			<50>	<50>	<50>	<49>
	leukemic cell infiltration		0	0	0	1
	metastasis:uterus tumor		0	1	0	1
	metastasis:peripheral nerve tumor		0	0	1	0
lung			<50>	<50>	<50>	<49>
	leukemic cell infiltration		17	12	8	5
	metastasis:liver tumor		0	2	2	1
	metastasis:uterus tumor		4	6	8	5
	metastasis:mediastinum tumor		0	0	0	1
{Hematopoietic system}						
bone marrow			<50>	<50>	<50>	<49>
	leukemic cell infiltration		2	9	2	1
	metastasis:liver tumor		0	1	0	1
	metastasis:uterus tumor		0	1	2	0
< a >	a : Number of animals examined at the site					
b	b : Number of animals with lesion					

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 7

Group Name		0 ppm	4 ppm	13 ppm	40 ppm
No. of Animals on Study		50	50	50	49
Organ	Findings				
{Hematopoietic system}					
lymph node		<50>	<50>	<50>	<49>
	leukemic cell infiltration	1	0	2	1
	metastasis:uterus tumor	1	1	4	0
thymus		<50>	<50>	<50>	<49>
	leukemic cell infiltration	0	1	1	0
spleen		<50>	<50>	<50>	<49>
	leukemic cell infiltration	7	7	9	3
	metastasis:mediastinum tumor	0	0	1	0
{Circulatory system}					
heart		<50>	<50>	<50>	<49>
	leukemic cell infiltration	4	5	5	3
	metastasis:uterus tumor	3	3	2	4
	metastasis:mediastinum tumor	0	0	1	1
{Digestive system}					
tongue		<50>	<50>	<50>	<49>
	leukemic cell infiltration	4	5	3	0
salivary gl		<50>	<50>	<50>	<49>
	leukemic cell infiltration	5	7	3	2
stomach		<50>	<50>	<50>	<49>
	leukemic cell infiltration	3	7	7	3
	metastasis:uterus tumor	2	3	1	2
< a >	a : Number of animals examined at the site				
b	b : Number of animals with lesion				

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 8

Organ	Findings	Group Name No. of Animals on Study	0 ppm 50	4 ppm 50	13 ppm 50	40 ppm 49
{Digestive system}						
small intes	leukemic cell infiltration		<50> 1	<50> 2	<50> 0	<49> 1
	metastasis:liver tumor		0	0	1	0
large intes	leukemic cell infiltration		<50> 2	<50> 2	<50> 1	<49> 0
liver	leukemic cell infiltration		<50> 10	<50> 10	<50> 9	<49> 5
	metastasis:uterus tumor		6	11	16	11
	metastasis:mediastinum tumor		0	0	1	0
gall bladd	leukemic cell infiltration		<50> 0	<50> 0	<50> 0	<49> 1
pancreas	leukemic cell infiltration		<50> 4	<50> 6	<50> 3	<49> 3
	metastasis:uterus tumor		2	4	0	1
{Urinary system}						
kidney	leukemic cell infiltration		<50> 7	<50> 5	<50> 4	<49> 2
	metastasis:uterus tumor		2	3	5	3
urin bladd	leukemic cell infiltration		<50> 4	<50> 8	<50> 2	<49> 2
	metastasis:uterus tumor		0	2	2	0

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

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 9

Organ	Findings	Group Name No. of Animals on Study	0 ppm 50	4 ppm 50	13 ppm 50	40 ppm 49
{Endocrine system}						
pituitary	leukemic cell infiltration		<50> 3	<50> 0	<50> 0	<49> 0
	metastasis:uterus tumor		0	1	0	0
thyroid	leukemic cell infiltration		<50> 0	<50> 2	<50> 2	<49> 0
adrenal	leukemic cell infiltration		<50> 2	<50> 2	<50> 2	<49> 1
	metastasis:liver tumor		0	0	1	0
	metastasis:uterus tumor		1	1	0	0
{Reproductive system}						
ovary	leukemic cell infiltration		<50> 6	<50> 10	<50> 5	<49> 3
	metastasis:liver tumor		0	0	0	1
	metastasis:uterus tumor		5	8	9	5
	metastasis:peripheral nerve tumor		0	0	1	0
uterus	leukemic cell infiltration		<50> 4	<50> 2	<50> 6	<49> 1
vagina	leukemic cell infiltration		<50> 3	<50> 2	<50> 4	<49> 1
mammary gl	leukemic cell infiltration		<50> 1	<50> 0	<50> 1	<49> 1

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

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 10

Organ	Findings	Group Name No. of Animals on Study	0 ppm 50	4 ppm 50	13 ppm 50	40 ppm 49
{Nervous system}						
brain	leukemic cell infiltration		<50> 4	<50> 0	<50> 0	<49> 0
	metastasis:pituitary tumor		2	1	0	1
	metastasis:peripheral nerve tumor		0	0	2	0
spinal cord	leukemic cell infiltration		<50> 2	<50> 0	<50> 0	<49> 0
	leukemic cell infiltration		<50> 0	<50> 3	<50> 1	<49> 1
{Special sense organs/appendage}						
eye	leukemic cell infiltration		<50> 1	<50> 1	<50> 1	<49> 1
	leukemic cell infiltration		<50> 1	<50> 3	<50> 2	<49> 2
{Musculoskeletal system}						
muscle	leukemic cell infiltration		<50> 1	<50> 3	<50> 3	<49> 2
	leukemic cell infiltration		<50> 1	<50> 3	<50> 2	<49> 2
{Body cavities}						
mediastinum	metastasis:lung tumor		<50> 0	<50> 0	<50> 1	<49> 0
	leukemic cell infiltration		<50> 2	<50> 2	<50> 1	<49> 0
< a > b : Number of animals with lesion						

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 11

Organ	Findings	Group Name No. of Animals on Study	0 ppm 50	4 ppm 50	13 ppm 50	40 ppm 49
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{Body cavities}

peritoneum	metastasis:uterus tumor	<50> 0	<50> 1	<50> 0	<49> 0
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< a > a : Number of animals examined at the site
b b : Number of animals with lesion

(JPT150)

BAIS3

APPENDIX N 5

HISTOLOGICAL FINDINGS : METASTASIS OF TUMOR : SUMMARY

MOUSE : FEMALE : DEAD AND MORIBUND ANIMALS

(2-YEAR STUDY)

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 6

		Group Name	0 ppm	4 ppm	13 ppm	40 ppm
		No. of Animals on Study	22	28	40	48
Organ	Findings					
{Integumentary system/appandage}						
skin/app			<22>	<28>	<40>	<48>
	leukemic cell infiltration		0	1	1	0
subcutis			<22>	<28>	<40>	<48>
	leukemic cell infiltration		0	1	2	2
	metastasis:uterus tumor		1	0	1	0
{Respiratory system}						
nasal cavit			<22>	<28>	<40>	<48>
	leukemic cell infiltration		0	0	0	1
	metastasis:uterus tumor		0	1	0	1
lung	metastasis:peripheral nerve tumor		0	0	1	0
			<22>	<28>	<40>	<48>
	leukemic cell infiltration		11	9	8	5
	metastasis:liver tumor		0	2	1	1
	metastasis:uterus tumor		4	6	7	5
	metastasis:mediastinum tumor		0	0	0	1
{Hematopoietic system}						
bone marrow			<22>	<28>	<40>	<48>
	leukemic cell infiltration		1	5	2	1
	metastasis:liver tumor		0	1	0	1
	metastasis:uterus tumor		0	1	2	0

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 7

		Group Name No. of Animals on Study	0 ppm 22	4 ppm 28	13 ppm 40	40 ppm 48
Organ	Findings					
{Hematopoietic system}						
lymph node			<22>	<28>	<40>	<48>
	leukemic cell infiltration		1	0	2	1
	metastasis:uterus tumor		0	1	4	0
thymus			<22>	<28>	<40>	<48>
	leukemic cell infiltration		0	1	1	0
spleen			<22>	<28>	<40>	<48>
	leukemic cell infiltration		6	5	7	3
	metastasis:mediastinum tumor		0	0	1	0
{Circulatory system}						
heart			<22>	<28>	<40>	<48>
	leukemic cell infiltration		3	5	5	3
	metastasis:uterus tumor		3	3	2	4
	metastasis:mediastinum tumor		0	0	1	1
{Digestive system}						
tongue			<22>	<28>	<40>	<48>
	leukemic cell infiltration		1	4	3	0
salivary gl			<22>	<28>	<40>	<48>
	leukemic cell infiltration		2	5	3	2
stomach			<22>	<28>	<40>	<48>
	leukemic cell infiltration		2	6	7	3
	metastasis:uterus tumor		1	3	1	2
< a >	a : Number of animals examined at the site					
b	b : Number of animals with lesion					

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 8

Organ	Findings	Group Name No. of Animals on Study	0 ppm 22	4 ppm 28	13 ppm 40	40 ppm 48
{Digestive system}						
small intes			<22>	<28>	<40>	<48>
	leukemic cell infiltration		0	2	0	1
large intes			<22>	<28>	<40>	<48>
	leukemic cell infiltration		2	2	1	0
liver			<22>	<28>	<40>	<48>
	leukemic cell infiltration		7	8	7	5
	metastasis:uterus tumor		6	11	15	11
	metastasis:mediastinum tumor		0	0	1	0
gall bladd			<22>	<28>	<40>	<48>
	leukemic cell infiltration		0	0	0	1
pancreas			<22>	<28>	<40>	<48>
	leukemic cell infiltration		3	5	3	3
	metastasis:uterus tumor		1	4	0	1
{Urinary system}						
kidney			<22>	<28>	<40>	<48>
	leukemic cell infiltration		5	4	4	2
	metastasis:uterus tumor		2	3	4	3
urin bladd			<22>	<28>	<40>	<48>
	leukemic cell infiltration		2	6	2	2
	metastasis:uterus tumor		0	2	2	0
{Endocrine system}						
pituitary			<22>	<28>	<40>	<48>
	leukemic cell infiltration		3	0	0	0

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

STUDY NO. : 0343
ANIMAL : MOUSE Crj:BDF1
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 9

Group Name No. of Animals on Study		0 ppm 22	4 ppm 28	13 ppm 40	40 ppm 48
Organ	Findings				
{Endocrine system}					
pituitary		<22>	<28>	<40>	<48>
	metastasis:uterus tumor	0	1	0	0
thyroid		<22>	<28>	<40>	<48>
	leukemic cell infiltration	0	2	2	0
adrenal		<22>	<28>	<40>	<48>
	leukemic cell infiltration	2	1	2	1
	metastasis:liver tumor	0	0	1	0
	metastasis:uterus tumor	1	1	0	0
{Reproductive system}					
ovary		<22>	<28>	<40>	<48>
	leukemic cell infiltration	4	8	5	3
	metastasis:liver tumor	0	0	0	1
	metastasis:uterus tumor	5	8	9	5
uterus		<22>	<28>	<40>	<48>
	leukemic cell infiltration	2	2	6	1
	metastasis:peripheral nerve tumor	0	0	1	0
vagina		<22>	<28>	<40>	<48>
	leukemic cell infiltration	3	2	4	1
mammary gl		<22>	<28>	<40>	<48>
	leukemic cell infiltration	1	0	1	1
{Nervous system}					
brain		<22>	<28>	<40>	<48>
	leukemic cell infiltration	3	0	0	0
< a >	a : Number of animals examined at the site				
b	b : Number of animals with lesion				

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 10

		Group Name No. of Animals on Study	0 ppm 22	4 ppm 28	13 ppm 40	40 ppm 48
Organ	Findings					
{Nervous system}						
brain	metastasis:pituitary tumor		<22> 0	<28> 0	<40> 0	<48> 1
	metastasis:peripheral nerve tumor		0	0	2	0
spinal cord	leukemic cell infiltration		<22> 1	<28> 0	<40> 0	<48> 0
	leukemic cell infiltration		<22> 0	<28> 3	<40> 1	<48> 1
{Special sense organs/appendage}						
eye	leukemic cell infiltration		<22> 1	<28> 1	<40> 1	<48> 1
	leukemic cell infiltration		<22> 1	<28> 3	<40> 2	<48> 2
{Musculoskeletal system}						
muscle	leukemic cell infiltration		<22> 1	<28> 2	<40> 3	<48> 2
{Body cavities}						
mediastinum	metastasis:lung tumor		<22> 0	<28> 0	<40> 1	<48> 0
	leukemic cell infiltration		<22> 2	<28> 2	<40> 1	<48> 0
peritoneum	metastasis:uterus tumor		0	1	0	0
< a >	a : Number of animals examined at the site					
b	b : Number of animals with lesion					

APPENDIX N 6

HISTOLOGICAL FINDINGS : METASTASIS OF TUMOR : SUMMARY

MOUSE : FEMALE : SACRIFICED ANIMALS

(2-YEAR STUDY)

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 4

Organ	Findings	Group Name No. of Animals on Study	0 ppm 28	4 ppm 22	13 ppm 10	40 ppm 1
{Respiratory system}						
lung			<28>	<22>	<10>	< 1>
	leukemic cell infiltration		6	3	0	0
	metastasis:liver tumor		0	0	1	0
	metastasis:uterus tumor		0	0	1	0
{Hematopoietic system}						
bone marrow			<28>	<22>	<10>	< 1>
	leukemic cell infiltration		1	4	0	0
lymph node			<28>	<22>	<10>	< 1>
	metastasis:uterus tumor		1	0	0	0
spleen			<28>	<22>	<10>	< 1>
	leukemic cell infiltration		1	2	2	0
{Circulatory system}						
heart			<28>	<22>	<10>	< 1>
	leukemic cell infiltration		1	0	0	0
{Digestive system}						
tongue			<28>	<22>	<10>	< 1>
	leukemic cell infiltration		3	1	0	0
salivary gl			<28>	<22>	<10>	< 1>
	leukemic cell infiltration		3	2	0	0
stomach			<28>	<22>	<10>	< 1>
	leukemic cell infiltration		1	1	0	0
< a >	a : Number of animals examined at the site					
b	b : Number of animals with lesion					

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

Group Name		0 ppm	4 ppm	13 ppm	40 ppm	
Organ	Findings	No. of Animals on Study	28	22	10	1
{Digestive system}						
stomach		<28>	<22>	<10>	< 1>	
	metastasis:uterus tumor	1	0	0	0	
small intes		<28>	<22>	<10>	< 1>	
	leukemic cell infiltration	1	0	0	0	
	metastasis:liver tumor	0	0	1	0	
liver		<28>	<22>	<10>	< 1>	
	leukemic cell infiltration	3	2	2	0	
	metastasis:uterus tumor	0	0	1	0	
pancreas		<28>	<22>	<10>	< 1>	
	leukemic cell infiltration	1	1	0	0	
	metastasis:uterus tumor	1	0	0	0	
{Urinary system}						
kidney		<28>	<22>	<10>	< 1>	
	leukemic cell infiltration	2	1	0	0	
	metastasis:uterus tumor	0	0	1	0	
urin bladd		<28>	<22>	<10>	< 1>	
	leukemic cell infiltration	2	2	0	0	
{Endocrine system}						
adrenal		<28>	<22>	<10>	< 1>	
	leukemic cell infiltration	0	1	0	0	
{Reproductive system}						
ovary		<28>	<22>	<10>	< 1>	
	leukemic cell infiltration	2	2	0	0	
< a >	a : Number of animals examined at the site					
b	b : Number of animals with lesion					

STUDY NO. : 0343
 ANIMAL : MOUSE Crj:BDF1
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 6

		Group Name	0 ppm	4 ppm	13 ppm	40 ppm
		No. of Animals on Study	28	22	10	1
Organ	Findings					
{Reproductive system}						
uterus			<28>	<22>	<10>	< 1>
	leukemic cell infiltration		2	0	0	0
{Nervous system}						
brain			<28>	<22>	<10>	< 1>
	leukemic cell infiltration		1	0	0	0
	metastasis:pituitary tumor		2	1	0	0
spinal cord			<28>	<22>	<10>	< 1>
	leukemic cell infiltration		1	0	0	0
{Musculoskeletal system}						
muscle			<28>	<22>	<10>	< 1>
	leukemic cell infiltration		0	1	0	0
< a > a : Number of animals examined at the site b b : Number of animals with lesion						
(JPT150)			BAIS3			

APPENDIX O 1

IDENTITY AND IMPURITY OF GLYCIDOL IN THE 2-YEAR INHALATION STUDY

IDENTITY AND IMPURITY OF GLYCIDOL IN THE 2-YEAR INHALATION STUDY

Test Substance : Glycidol (Wako Pure Chemical Industries, Ltd.)

A. Lot No. : WTK5337

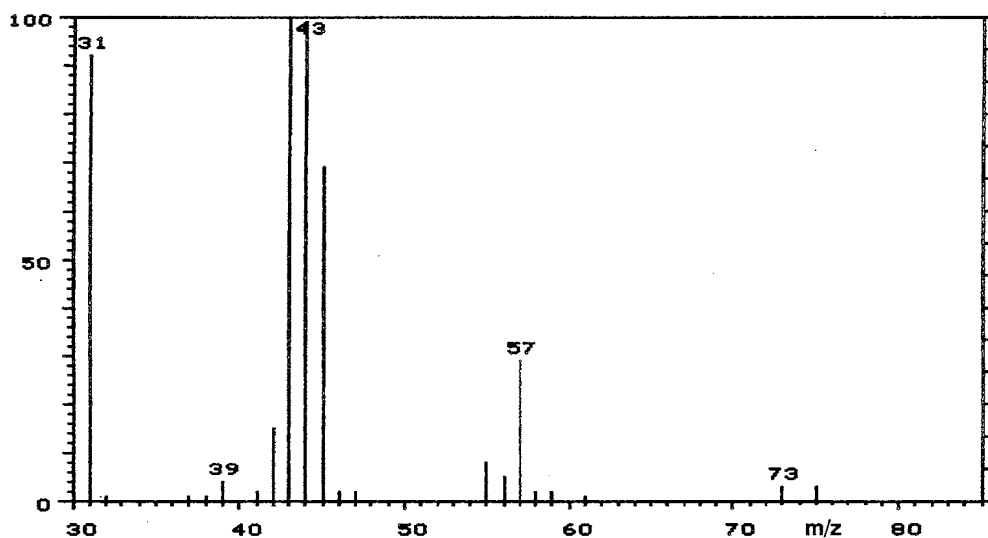
1. Spectral Data

Mass Spectrometry

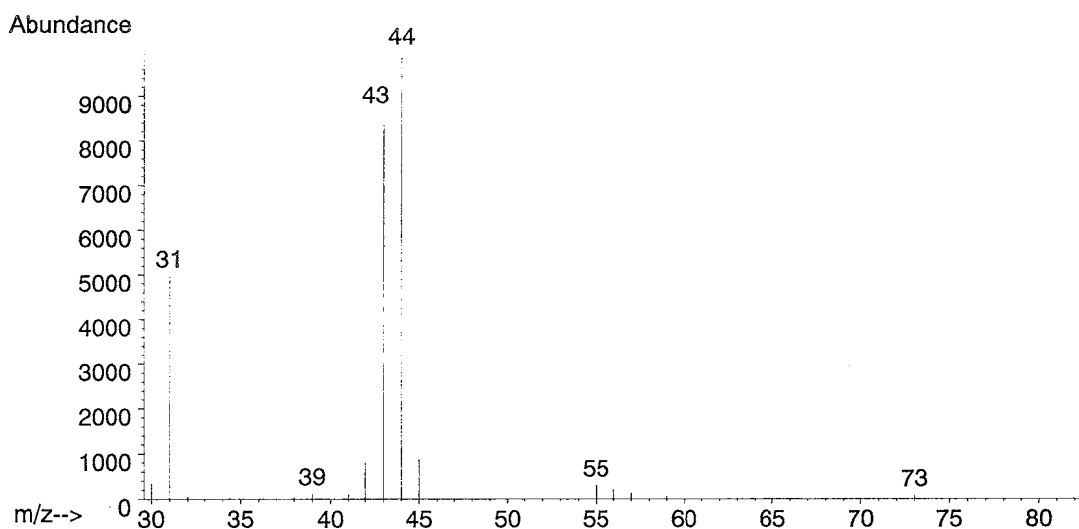
Instrument : Hitachi M-80B Mass Spectrometer

Ionization : EI (Electron Ionization)

Ionization Voltage : 70eV



Mass Spectrum of Test Substance



Mass Spectrum of Literature Data*

Results: The mass spectrum was consistent with literature spectrum.

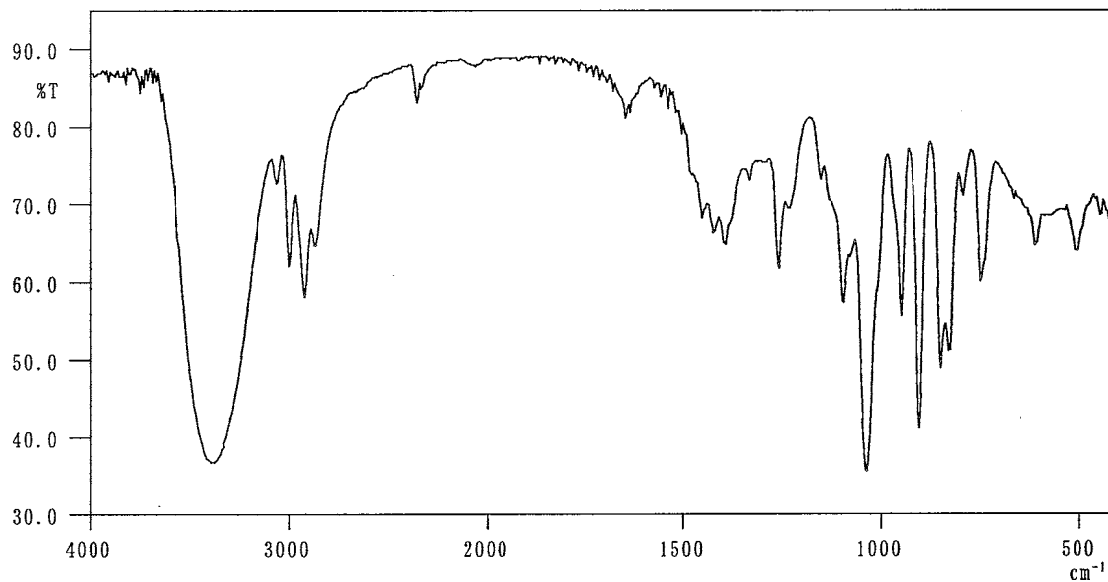
(*Fred W. McLafferty (1994) Wiley Registry of Mass Spectral Data, 6th edition.
John Wiley and Sons, Inc. (U.S.), Entry Number 1733)

Infrared Spectrometry

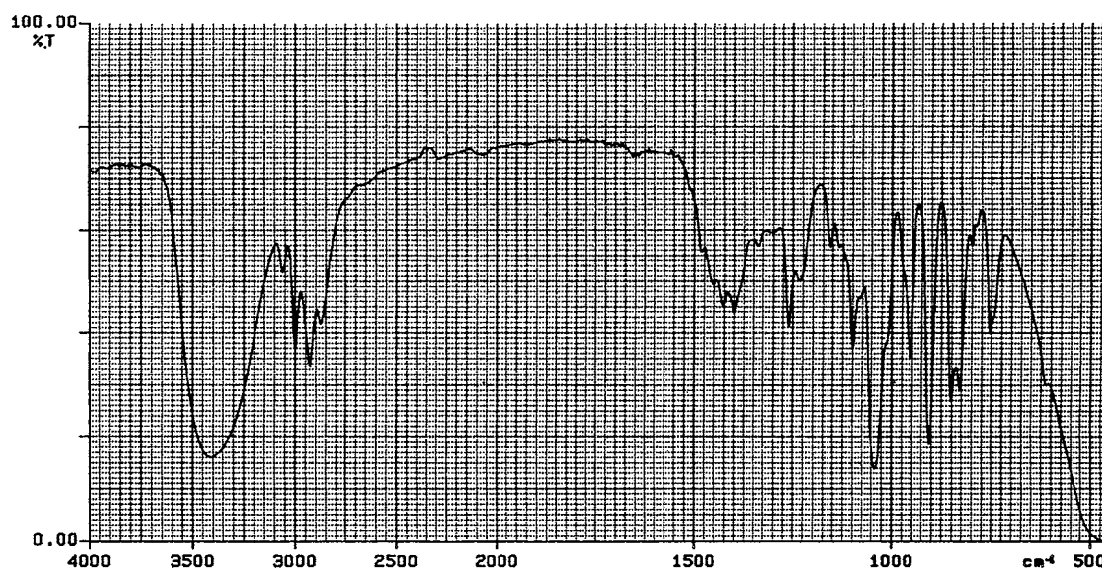
Instrument : Shimadzu FTIR-8200PC Infrared Spectrometer

Cell : KBr Liquid Cell

Resolution : 4 cm^{-1}



Infrared Spectrum of Test Substance



Infrared Spectrum of Literature Data*

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

2. Impurity

Instrument : Hewlett Packard 5890A Gas Chromatograph
Column : Methyl Silicone (0.53 mm ϕ \times 60 m)
Column Temperature: 150 °C
Flow Rate : 10 mL/min
Detector : FID (Flame Ionization Detector)
Injection Volume : 1 μ L

Sample Name	Peak No.	Area (%)	Peak Name
Test Substance	1	0.207	Material which cannot be identified
	2	0.087	Material which cannot be identified
	3	99.706	glycidol

Results: Gas chromatography indicated one major peak (peak No.3) and two impurity peaks. These two impurity peaks(peaks No.1 and No.2) can not be identified. The amounts in the test substance were 0.207% and 0.087%.

3. Conclusion: The test substance was identified as glycidol by mass spectrum and infrared spectrum. Gas chromatography indicated one major peak(peak No.3) and two impurity peaks. These two impurity peaks(peaks No.1 and No.2) can not be identified. The amounts in the test substance were 0.207% and 0.087%.

B. Lot No. : PAL5331

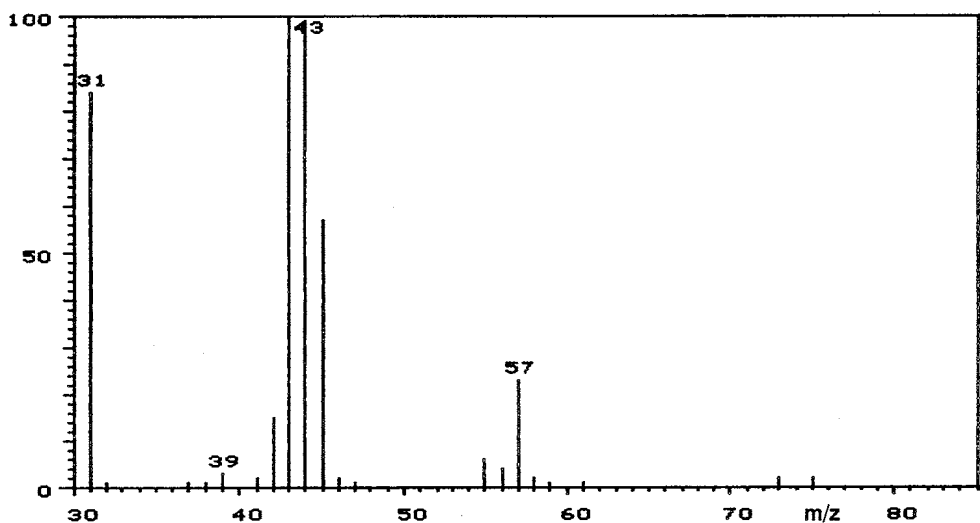
1. Spectral Data

Mass Spectrometry

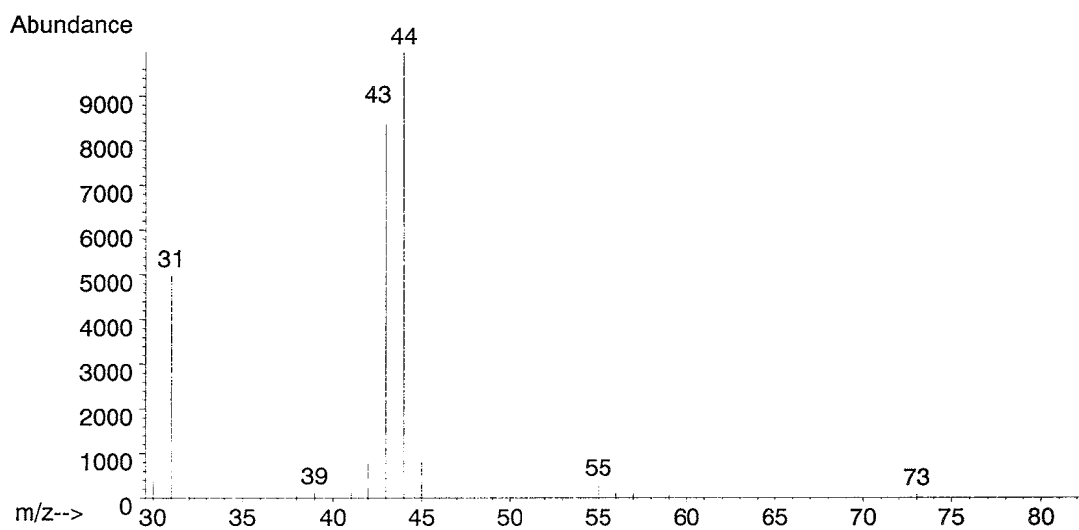
Instrument : Hitachi M-80B Mass Spectrometer

Ionization : EI (Electron Ionization)

Ionization Voltage : 70eV



Mass Spectrum of Test Substance



Mass Spectrum of Literature Data*

Results: The mass spectrum was consistent with literature spectrum.

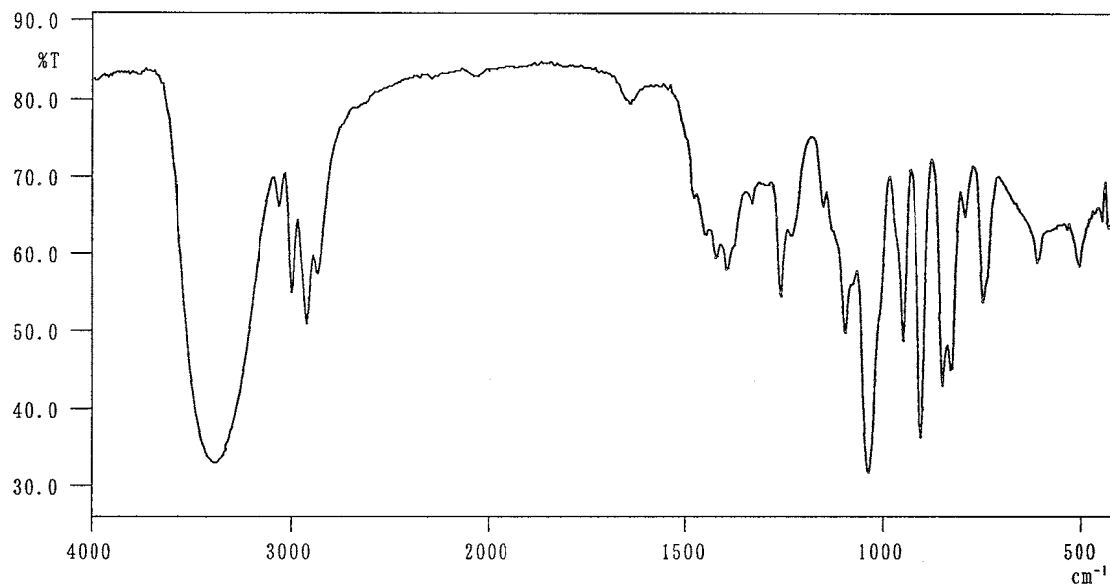
(*Fred W. McLafferty (1994) Wiley Registry of Mass Spectral Data, 6th edition.
John Wiley and Sons, Inc. (U.S.), Entry Number 1733)

Infrared Spectrometry

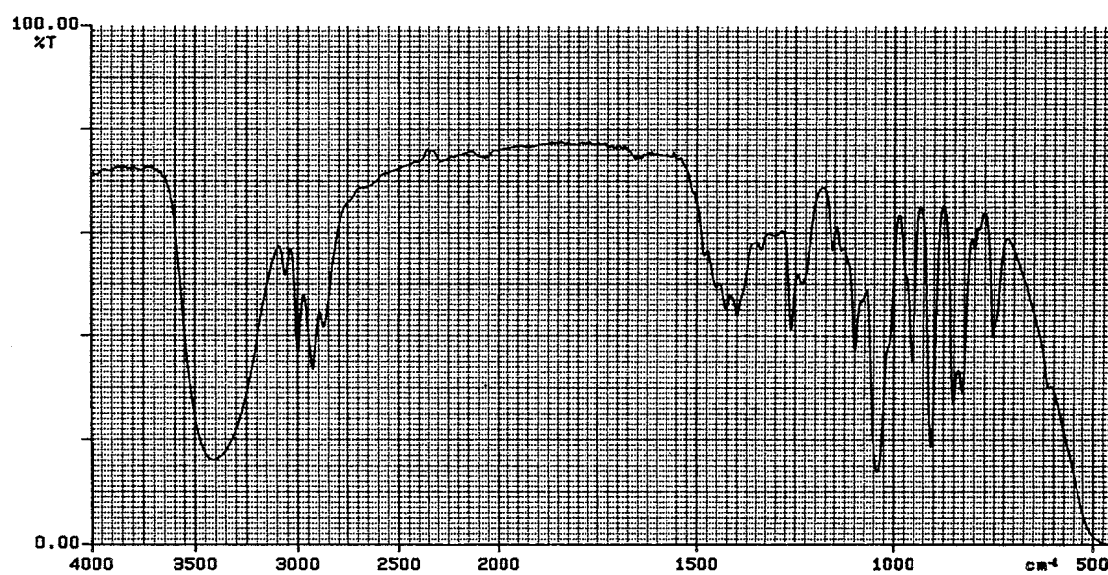
Instrument : Shimadzu FTIR-8200PC Infrared Spectrometer

Cell : KBr Liquid Cell

Resolution : 4 cm^{-1}



Infrared Spectrum of Test Substance



Infrared Spectrum of Literature Data*

Results: The infrared spectrum was consistent with literature spectrum.

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

2. Impurity

Instrument : Hewlett Packard 5890A Gas Chromatograph
Column : Methyl Silicone (0.53 mm ϕ \times 60 m)
Column Temperature: 150 °C
Flow Rate : 10 mL/min
Detector : FID (Flame Ionization Detector)
Injection Volume : 1 μ L

Sample Name	Peak No.	Area (%)	Peak Name
Test Substance	1	0.215	Material which cannot be identified
	2	0.083	Material which cannot be identified
	3	99.702	glycidol

Results: Gas chromatography indicated one major peak (peak No.3) and two impurity peaks. These two impurity peaks(peaks No.1 and No.2) can not be identified. The amounts in the test substance were 0.215% and 0.083%.

3. Conclusion: The test substance was identified as glycidol by mass spectrum and infrared spectrum. Gas chromatography indicated one major peak(peak No.3) and two impurity peaks. These two impurity peaks(peaks No.1 and No.2) can not be identified. The amounts in the test substance were 0.215% and 0.083%.

C. Lot No. : CKP4929

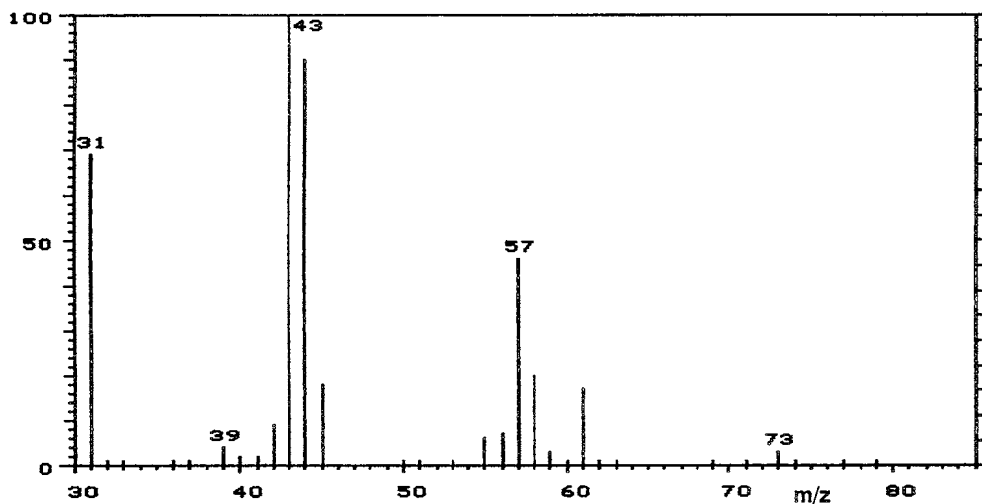
1. Spectral Data

Mass Spectrometry

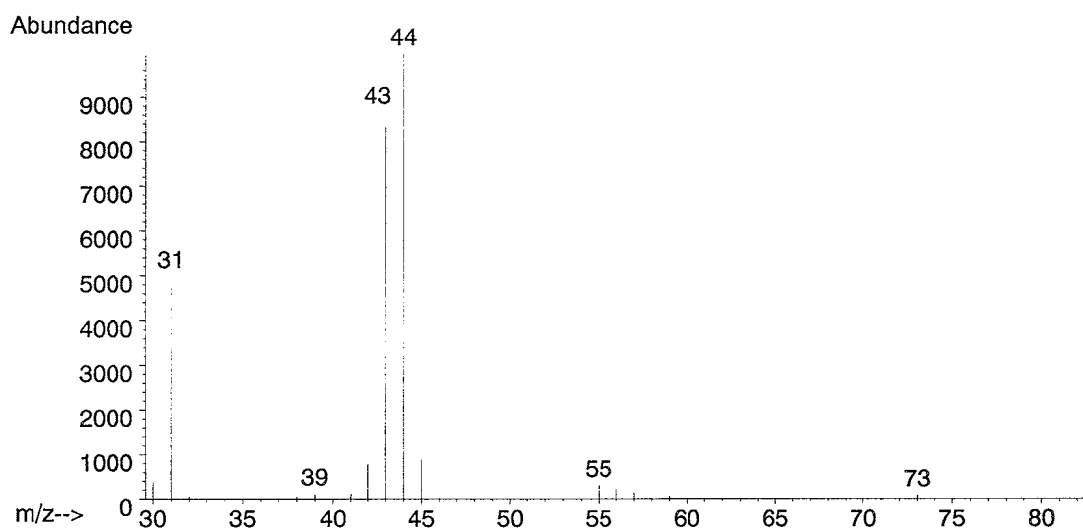
Instrument : Hitachi M-80B Mass Spectrometer

Ionization : EI (Electron Ionization)

Ionization Voltage : 70eV



Mass Spectrum of Test Substance



Mass Spectrum of Literature Data*

Results: The mass spectrum was consistent with literature spectrum.

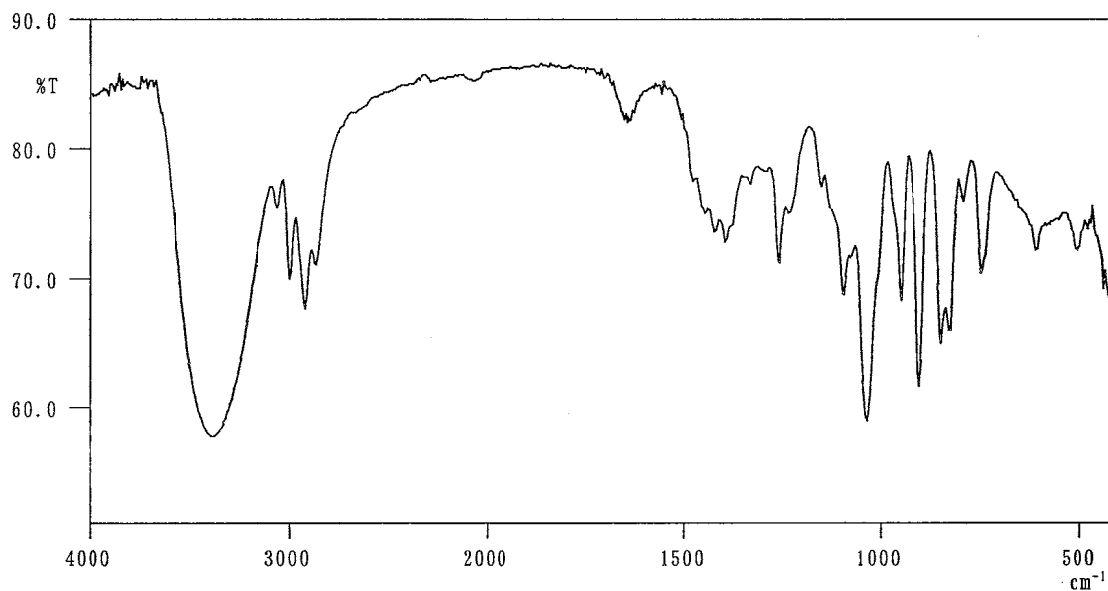
(*Fred W. McLafferty (1994) Wiley Registry of Mass Spectral Data, 6th edition.
John Wiley and Sons, Inc. (U.S.), Entry Number 1733)

Infrared Spectrometry

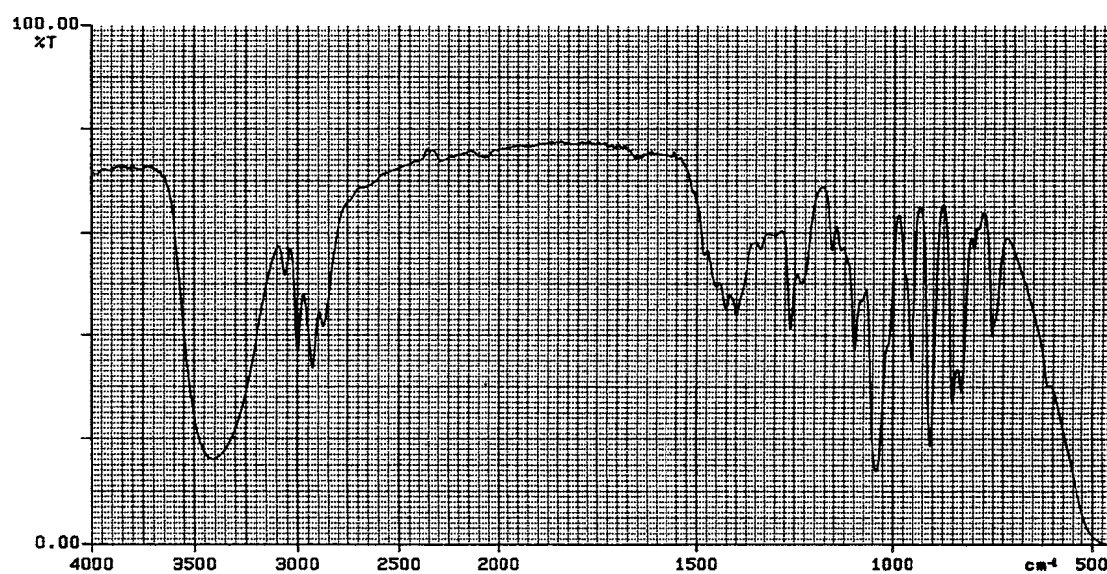
Instrument : Shimadzu FTIR-8200PC Infrared Spectrometer

Cell : KBr Liquid Cell

Resolution : 4 cm^{-1}



Infrared Spectrum of Test Substance



Infrared Spectrum of Literature Data*

Results: The infrared spectrum was consistent with literature spectrum.

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

2. Impurity

Instrument : Hewlett Packard 5890A Gas Chromatograph
Column : Methyl Silicone (0.53 mm ϕ \times 60 m)
Column Temperature: 150 ° C
Flow Rate : 10 mL/min
Detector : FID (Flame Ionization Detector)
Injection Volume : 1 μ L

Sample Name	Peak No.	Area (%)	Peak Name
Test Substance	1	0.220	Material which cannot be identified
	2	0.087	Material which cannot be identified
	3	99.693	glycidol

Results: Gas chromatography indicated one major peak (peak No.3) and two impurity peaks. These two impurity peaks(peaks No.1 and No.2) can not be identified. The amounts in the test substance were 0.220% and 0.087%.

3. Conclusion: The test substance was identified as glycidol by mass spectrum and infrared spectrum. Gas chromatography indicated one major peak(peak No.3) and two impurity peaks. These two impurity peaks(peaks No.1 and No.2) can not be identified. The amounts in the test substance were 0.220% and 0.087%.

APPENDIX O 2

STABILITY OF GLYCIDOL IN THE 2-YEAR INHALATION STUDY

STABILITY OF GLYCIDOL IN THE 2-YEAR INHALATION STUDY

Test Substance : Glycidol (Wako Pure Chemical Industries, Ltd.)

A. Lot No. : WTK5337

1. Sample : This lot was used from 1997.10.24 to 1998.8.5. Test substance was stored at a temperature below 20°C.

2. Gas Chromatography

Instrument : Hewlett Packard 5890A Gas Chromatograph

Column : Methyl Silicone (0.53 mm ϕ \times 60 m)

Column Temperature: 150°C

Flow Rate : 10 mL/min

Detector : FID (Flame Ionization Detector)

Injection Volume : 1 μ L

Date (date analyzed)	Peak No.	Retention Time (min)	Area (%)
1997.09.26	1	1.914	0.207
	2	2.217	0.087
	3	2.560	99.706
1998.08.06	1	1.901	0.217
	2	2.205	0.088
	3	2.549	99.695

Results: Gas chromatography indicated one major peak (peak No.3) and two impurities (peaks No.1 and No.2 < 0.4% of total area) analyzed on 1997.9.26 and one major peak (peak No.3) and two impurities (peaks No.1 and No.2 < 0.4% of total area) analyzed on 1998.8.6. No new trace impurity peak in the test substance analyzed on 1998.8.6 was detected.

3. Conclusions: The test substance was stable for about 1 year at a temperature below 20°C.

B. Lot No. : PAL5331

1. Sample : This lot was used from 1998.8.6 to 1999.4.6. Test substance was stored at a temperature below 20°C.

2. Gas Chromatography

Instrument : Hewlett Packard 5890A Gas Chromatograph

Column : Methyl Silicone (0.53 mm ϕ \times 60 m)

Column Temperature: 150° C

Flow Rate : 10 mL/min

Detector : FID (Flame Ionization Detector)

Injection Volume : 1 μ L

Date (date analyzed)	Peak No.	Retention Time (min)	Area (%)
1998.07.27	1	1.908	0.215
	2	2.210	0.083
	3	2.554	99.702
1999.04.07	1	1.902	0.218
	2	2.203	0.086
	3	2.545	99.696

Results: Gas chromatography indicated one major peak (peak No.3) and two impurities (peaks No.1 and No.2 < 0.4% of total area) analyzed on 1998.7.27 and one major peak (peak No.3) and two impurities (peaks No.1 and No.2 < 0.4% of total area) analyzed on 1999.4.7. No new trace impurity peak in the test substance analyzed on 1999.4.7 was detected.

3. Conclusions: The test substance was stable for about 8 months at a temperature below 20°C.

C. Lot No. : CKP4929

1. Sample : This lot was used from 1999.4.7 to 1999.10.21. Test substance was stored at a temperature below 20°C.

2. Gas Chromatography

Instrument : Hewlett Packard 5890A Gas Chromatograph

Column : Methyl Silicone (0.53 mm ϕ \times 60 m)

Column Temperature: 150°C

Flow Rate : 10 mL/min

Detector : FID (Flame Ionization Detector)

Injection Volume : 1 μ L

Date (date analyzed)	Peak No.	Retention Time (min)	Area (%)
1999.04.06	1	1.900	0.220
	2	2.205	0.087
	3	2.547	99.693
1999.10.28	1	1.897	0.220
	2	2.203	0.081
	3	2.544	99.699

Results: Gas chromatography indicated one major peak (peak No.3) and two impurities (peaks No.1 and No.2 < 0.4% of total area) analyzed on 1999.4.6 and one major peak (peak No.3) and two impurities (peaks No.1 and No.2 < 0.4% of total area) analyzed on 1999.10.28. No new trace impurity peak in the test substance analyzed on 1999.10.28 was detected.

3. Conclusions: The test substance was stable for about 7 months at a temperature below 20°C.

APPENDIX P 1

CONCENTRATION OF GLYCIDL IN THE INHALATION CHAMBER
OF THE 2-YEAR INHALATION STUDY

CONCENTRATION OF GLYCIDOL IN THE INHALATION CHAMBER
OF THE 2-YEAR INHALATION STUDY

Group Name	Concentration (ppm)	
	Mean	\pm S.D.
0ppm	0.0	\pm 0.0
4ppm	4.0	\pm 0.1
13ppm	13.0	\pm 0.2
40ppm	40.0	\pm 0.6

APPENDIX P 2

ENVIRONMENTAL CONDITIONS OF INHALATION CHAMBER IN THE 2-YEAR INHALATION STUDY OF GLYCIDOL

ENVIRONMENTAL CONDITIONS OF INHALATION CHAMBER
IN THE 2-YEAR INHALATION STUDY OF GLYCIDOL

Group Name	Temperature(°C)			Humidity(%)			Ventilation Rate (L/min)			Air Changes (time/h)	
	Mean	±	S.D.	Mean	±	S.D.	Mean	±	S.D.	Mean	
0ppm	21.9	±	0.2	55.1	±	1.7	742.6	±	6.3	12.0	
4ppm	21.9	±	0.2	52.1	±	1.6	741.2	±	5.1	12.0	
13ppm	22.0	±	0.2	53.3	±	2.0	743.0	±	5.5	12.0	
40ppm	22.1	±	0.2	52.9	±	3.1	738.1	±	5.6	12.0	

APPENDIX Q

METHODS, UNITS AND DECIMAL PLACE FOR HEMATOLOGY
AND BIOCHEMISTRY IN THE 2-YEAR INHALATION STUDY OF GLYCIDOL

METHODS, UNITS AND DECIMAL PLACE FOR HEMATOLOGY AND BIOCHEMISTRY
IN THE 2-YEAR INHALATION STUDY OF GLYCIDOL

Item	Method	Unit	Decimal place
Hematology			
Red blood cell (RBC)	Light scattering method ¹⁾	$\times 10^6/\mu\text{L}$	2
Hemoglobin(Hgb)	Cyanmethemoglobin method ¹⁾	g/dL	1
Hematocrit(Hct)	Calculated as $\text{RBC} \times \text{MCV}/10$ ¹⁾	%	1
Mean corpuscular volume(MCV)	Light scattering method ¹⁾	fL	1
Mean corpuscular hemoglobin(MCH)	Calculated as $\text{Hgb}/\text{RBC} \times 10$ ¹⁾	pg	1
Mean corpuscular hemoglobin concentration (MCHC)	Calculated as $\text{Hgb}/\text{Hct} \times 100$ ¹⁾	g/dL	1
Platelet	Light scattering method ¹⁾	$\times 10^3/\mu\text{L}$	0
White blood cell(WBC)	Light scattering method ¹⁾	$\times 10^3/\mu\text{L}$	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 $\text{Alb}/(\text{TP} - \text{Alb})$ 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 (Technicon H•1 : Bayer Corporation)

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

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