

2,4-ペンタンジオンのラットを用いた
吸入によるがん原性試験報告書

試験番号：0675

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TABLE A

CONCENTRATIONS OF 2,4-PENTANEDIONE
IN THE INHALATION CHAMBER
OF THE 2-YEAR INHALATION STUDY

CONCENTRATIONS OF 2,4-PENTANEDIONE IN THE INHALATION
CHAMBER OF THE 2-YEAR INHALATION STUDY

Group Name	Concentration(ppm) Mean \pm S.D.
Control	0.0 \pm 0.0
100 ppm	100.8 \pm 0.9
200 ppm	200.9 \pm 1.4
400 ppm	400.7 \pm 2.3

TABLE B1

SURVIVAL ANIMAL NUMBERS : MALE

STUDY NO. : 0675

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

SEX : MALE

SURVIVAL ANIMAL NUMBERS

PAGE : 1

Group Name	Animals At start	Administration (Weeks)													
		0	1	2	3	4	5	6	7	8	9	10	11	12	13
Control	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
100 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
200 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
400 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of survival/ Number of effective animals Survival rate(%)															

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BAIS4

STUDY NO. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104
SEX : MALE

SURVIVAL ANIMAL NUMBERS

PAGE : 2

Group Name	Animals At start	Administration (Weeks)													
		14	15	16	17	18	19	20	21	22	23	24	25	26	27
Control	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
100 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
200 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
400 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of survival/ Number of effective animals															
Survival rate(%)															

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BAIS4

STUDY NO. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104
SEX : MALE

SURVIVAL ANIMAL NUMBERS

PAGE : 3

Group Name	Animals At start	Administration (Weeks)													
		28	29	30	31	32	33	34	35	36	37	38	39	40	41
Control	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
100 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	49/50
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.0
200 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
400 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of survival/ Number of effective animals															
Survival rate(%)															

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BAIS4

STUDY NO. : 0675

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

SEX : MALE

SURVIVAL ANIMAL NUMBERS

PAGE : 4

Group Name	Animals At start	Administration (Weeks)													
		42	43	44	45	46	47	48	49	50	51	52	53	54	55
Control	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
100 ppm	50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50
		98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
200 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	49/50	49/50	49/50	49/50
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.0	98.0	98.0	98.0
400 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of survival/ Number of effective animals Survival rate(%)															

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BAIS4

STUDY NO. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104
SEX : MALE

SURVIVAL ANIMAL NUMBERS

PAGE : 5

Group	Name	Animals At start	Administration (Weeks)													
			56	57	58	59	60	61	62	63	64	65	66	67	68	69
	Control	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
			100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	100 ppm	50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50
			98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
	200 ppm	50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50
			98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
	400 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
			100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of survival/ Number of effective animals																
Survival rate(%)																

(HAN360)

BAIS4

STUDY NO. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104
SEX : MALE

SURVIVAL ANIMAL NUMBERS

PAGE : 6

Group Name	Animals At start	Administration (Weeks)													
		70	71	72	73	74	75	76	77	78	79	80	81	82	83
Control	50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	48/50
		98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	96.0
100 ppm	50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50
		98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
200 ppm	50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	48/50	48/50
		98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	96.0	96.0
400 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	49/50	49/50	49/50	49/50	49/50	48/50	47/50	47/50
		100.0	100.0	100.0	100.0	100.0	100.0	98.0	98.0	98.0	98.0	98.0	96.0	94.0	94.0
Number of survival/ Number of effective animals															
Survival rate(%)															

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BAIS4

STUDY NO. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104
SEX : MALE

SURVIVAL ANIMAL NUMBERS

PAGE : 7

Group	Name	Animals At start	Administration (Weeks)													
			84	85	86	87	88	89	90	91	92	93	94	95	96	97
	Control	50	48/50	48/50	48/50	48/50	48/50	48/50	47/50	47/50	46/50	46/50	45/50	45/50	45/50	44/50
			96.0	96.0	96.0	96.0	96.0	96.0	94.0	94.0	92.0	92.0	90.0	90.0	90.0	88.0
	100 ppm	50	48/50	48/50	48/50	48/50	48/50	47/50	46/50	46/50	46/50	46/50	44/50	44/50	44/50	44/50
			96.0	96.0	96.0	96.0	96.0	94.0	92.0	92.0	92.0	92.0	88.0	88.0	88.0	88.0
	200 ppm	50	48/50	48/50	48/50	48/50	48/50	47/50	47/50	47/50	46/50	46/50	46/50	46/50	44/50	44/50
			96.0	96.0	96.0	96.0	96.0	94.0	94.0	94.0	92.0	92.0	92.0	92.0	88.0	88.0
	400 ppm	50	45/50	45/50	45/50	45/50	45/50	45/50	45/50	45/50	45/50	45/50	45/50	45/50	44/50	43/50
			90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	88.0	86.0
Number of survival/			Number of effective animals													
Survival rate(%)																

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BAIS4

STUDY NO. : 0675

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

SEX : MALE

SURVIVAL ANIMAL NUMBERS

PAGE : 8

Group Name	Animals At start	Administration (Weeks)						
		98	99	100	101	102	103	104
Control	50	43/50	43/50	43/50	43/50	43/50	41/50	41/50
		86.0	86.0	86.0	86.0	86.0	82.0	82.0
100 ppm	50	43/50	43/50	42/50	40/50	40/50	40/50	40/50
		86.0	86.0	84.0	80.0	80.0	80.0	80.0
200 ppm	50	43/50	42/50	42/50	41/50	41/50	41/50	40/50
		86.0	84.0	84.0	82.0	82.0	82.0	80.0
400 ppm	50	43/50	42/50	42/50	42/50	42/50	42/50	42/50
		86.0	84.0	84.0	84.0	84.0	84.0	84.0
Number of survival/ Number of effective animals								
Survival rate(%)								

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TABLE B2

SURVIVAL ANIMAL NUMBERS : FEMALE

STUDY NO. : 0675

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

SEX : FEMALE

SURVIVAL ANIMAL NUMBERS

PAGE : 9

Group Name	Animals At start	Administration (Weeks)													
		0	1	2	3	4	5	6	7	8	9	10	11	12	13
Control	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
100 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
200 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
400 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of survival/ Number of effective animals Survival rate(%)															

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BAIS4

STUDY NO. : 0675

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

SEX : FEMALE

SURVIVAL ANIMAL NUMBERS

PAGE : 10

Group Name	Animals At start	Administration (Weeks)													
		14	15	16	17	18	19	20	21	22	23	24	25	26	27
Control	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
100 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
200 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
400 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	49/50	49/50
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.0	98.0
Number of survival/ Number of effective animals Survival rate(%)															

(HAN360)

BAIS4

STUDY NO. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104
SEX : FEMALE

SURVIVAL ANIMAL NUMBERS

PAGE : 11

Group Name	Animals At start	Administration (Weeks)													
		28	29	30	31	32	33	34	35	36	37	38	39	40	41
Control	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
100 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
200 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
400 ppm	50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50
		98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
Number of survival/ Number of effective animals															
Survival rate(%)															

(HAN360)

BAIS4

STUDY NO. : 0675

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

SEX : FEMALE

SURVIVAL ANIMAL NUMBERS

PAGE : 12

Group Name	Animals At start	Administration (Weeks)													
		42	43	44	45	46	47	48	49	50	51	52	53	54	55
Control	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
100 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
200 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
400 ppm	50	49/50	49/50	49/50	49/50	49/50	49/50	48/50	48/50	48/50	48/50	48/50	48/50	48/50	48/50
		98.0	98.0	98.0	98.0	98.0	98.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
Number of survival/ Number of effective animals															
Survival rate(%)															

(HAN360)

BAIS4

STUDY NO. : 0675

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

SEX : FEMALE

SURVIVAL ANIMAL NUMBERS

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Group Name	Animals At start	Administration (Weeks)													
		56	57	58	59	60	61	62	63	64	65	66	67	68	69
Control	50	50/50	50/50	50/50	50/50	50/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	48/50
		100.0	100.0	100.0	100.0	100.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	96.0
100 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
200 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
400 ppm	50	48/50	48/50	48/50	48/50	48/50	48/50	48/50	48/50	48/50	48/50	48/50	48/50	48/50	48/50
		96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0
Number of survival/ Number of effective animals															
Survival rate(%)															

(HAN360)

BAIS4

STUDY NO. : 0675

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

SEX : FEMALE

SURVIVAL ANIMAL NUMBERS

PAGE : 14

Group Name	Animals At start	Administration (Weeks)													
		70	71	72	73	74	75	76	77	78	79	80	81	82	83
Control	50	48/50	48/50	48/50	48/50	48/50	48/50	47/50	46/50	46/50	46/50	46/50	46/50	46/50	45/50
		96.0	96.0	96.0	96.0	96.0	96.0	94.0	92.0	92.0	92.0	92.0	92.0	92.0	90.0
100 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	49/50	48/50	48/50	47/50	47/50	47/50	47/50	47/50
		100.0	100.0	100.0	100.0	100.0	100.0	98.0	96.0	96.0	94.0	94.0	94.0	94.0	94.0
200 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	49/50	49/50	49/50
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.0	98.0	98.0
400 ppm	50	48/50	48/50	48/50	48/50	48/50	48/50	48/50	48/50	48/50	48/50	48/50	48/50	47/50	46/50
		96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	94.0	92.0
Number of survival/ Number of effective animals Survival rate(%)															

(HAN360)

BAIS4

STUDY NO. : 0675

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

SEX : FEMALE

SURVIVAL ANIMAL NUMBERS

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Group Name	Animals At start	Administration (Weeks)													
		84	85	86	87	88	89	90	91	92	93	94	95	96	97
Control	50	45/50	45/50	45/50	45/50	45/50	44/50	44/50	44/50	44/50	44/50	43/50	42/50	42/50	42/50
		90.0	90.0	90.0	90.0	90.0	88.0	88.0	88.0	88.0	88.0	86.0	84.0	84.0	84.0
100 ppm	50	47/50	47/50	46/50	45/50	43/50	43/50	42/50	41/50	41/50	40/50	40/50	40/50	40/50	40/50
		94.0	94.0	92.0	90.0	86.0	86.0	84.0	82.0	82.0	80.0	80.0	80.0	80.0	80.0
200 ppm	50	49/50	48/50	48/50	48/50	47/50	47/50	47/50	47/50	46/50	46/50	46/50	46/50	46/50	45/50
		98.0	96.0	96.0	96.0	94.0	94.0	94.0	94.0	92.0	92.0	92.0	92.0	92.0	90.0
400 ppm	50	46/50	44/50	44/50	44/50	44/50	44/50	44/50	44/50	44/50	44/50	44/50	44/50	44/50	43/50
		92.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	86.0
Number of survival/ Number of effective animals Survival rate(%)															

(HAN360)

BAIS4

STUDY NO. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104
SEX : FEMALE

SURVIVAL ANIMAL NUMBERS

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Group Name	Animals At start	Administration (Weeks)						
		98	99	100	101	102	103	104
Control	50	42/50	41/50	40/50	39/50	39/50	39/50	38/50
		84.0	82.0	80.0	78.0	78.0	78.0	76.0
100 ppm	50	39/50	39/50	39/50	39/50	38/50	38/50	36/50
		78.0	78.0	78.0	78.0	76.0	76.0	72.0
200 ppm	50	45/50	44/50	44/50	43/50	43/50	43/50	43/50
		90.0	88.0	88.0	86.0	86.0	86.0	86.0
400 ppm	50	41/50	41/50	41/50	40/50	39/50	39/50	36/50
		82.0	82.0	82.0	80.0	78.0	78.0	72.0
Number of survival/ Number of effective animals Survival rate(%)								

(HAN360)

BAIS4

TABLE C1

CLINICAL OBSERVATION : MALE

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

PAGE : 1

[illegible]

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

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[illegible]

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

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[illegible]

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

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[illegible]

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

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CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

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[illegible]

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

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[illegible]

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

PAGE : 8

Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
DEATH	Control	4	4	4	4	5	5
	100 ppm	4	4	5	5	5	5
	200 ppm	5	5	5	5	5	6
	400 ppm	7	7	7	7	7	7
MORIBUND SACRIFICE	Control	3	3	3	3	4	4
	100 ppm	3	4	5	5	5	5
	200 ppm	3	3	4	4	4	4
	400 ppm	1	1	1	1	1	1
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0
ATAXIC GAIT	Control	0	0	0	0	0	0
	100 ppm	1	1	1	1	0	0
	200 ppm	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	1	1
	100 ppm	0	0	0	1	0	0
	200 ppm	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0
ABNORMAL GAIT	Control	0	0	0	0	0	0
	100 ppm	0	0	0	0	1	1
	200 ppm	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0
WASTING	Control	0	0	1	1	0	0
	100 ppm	0	0	2	2	2	2
	200 ppm	0	0	0	1	1	1
	400 ppm	0	0	0	0	0	0
SOILED	Control	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0
TRAUMA	Control	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

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[illegible]

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

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[illegible]

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

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[illegible]

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[illegible]

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ALL ANIMALS

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[illegible]

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

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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
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	200 ppm	0	0	1	1	1	1	1	1	1	1	1	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CLOSED EYELID	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	100 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	200 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	1	1	1	1	0
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	1	1	1	1	1	1	1	1	1	1	1	2	2	2
	100 ppm	1	1	2	2	2	2	2	2	2	2	2	4	4	4
	200 ppm	1	1	1	1	1	2	3	3	3	3	3	3	3	3
	400 ppm	4	4	4	4	4	3	4	4	4	4	3	3	3	1
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

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[illegible]

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

PAGE : 16

Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
FROG BELLY	Control	0	0	0	0	1	1
	100 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0
EXOPHTHALMOS	Control	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0
	200 ppm	0	1	1	1	1	1
	400 ppm	0	1	1	1	1	1
CLOSED EYELID	Control	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0
CATARACT	Control	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0
	200 ppm	1	2	2	2	2	2
	400 ppm	0	0	0	0	0	0
CORNEAL OPACITY	Control	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0
EXTERNAL MASS	Control	10	10	11	12	12	12
	100 ppm	5	4	4	4	5	5
	200 ppm	5	6	5	5	7	7
	400 ppm	4	4	5	6	6	7
INTERNAL MASS	Control	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

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[illegible]

CLINICAL OBSERVATION (SUMMARY)

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[illegible]

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[illegible]

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[illegible]

CLINICAL OBSERVATION (SUMMARY)

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[illegible]

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

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[illegible]

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 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
M. EAR	Control	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0
M. HEAD	Control	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	400 ppm	0	0	0	1	1	1
M. BREAST	Control	1	1	1	1	1	1
	100 ppm	1	1	1	1	1	1
	200 ppm	0	0	0	0	0	0
	400 ppm	2	2	2	2	2	2
M. ABDOMEN	Control	4	4	4	5	5	5
	100 ppm	0	0	0	0	0	0
	200 ppm	3	3	3	3	4	4
	400 ppm	1	1	1	1	1	1
M. ANTERIOR. DORSUM	Control	5	5	5	5	5	5
	100 ppm	2	2	2	2	3	3
	200 ppm	2	2	2	2	2	2
	400 ppm	0	0	0	0	0	1
M. POSTERIOR DORSUM	Control	1	1	2	2	2	2
	100 ppm	1	0	0	0	0	0
	200 ppm	0	0	0	0	1	1
	400 ppm	1	1	2	2	2	2
M. HINDLIMB	Control	0	0	0	0	0	0
	100 ppm	1	1	0	0	1	1
	200 ppm	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0
M. GENITALIA	Control	1	1	1	1	1	1
	100 ppm	0	0	1	1	1	1
	200 ppm	0	1	0	0	0	0
	400 ppm	0	0	0	0	0	0

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

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ALL ANIMALS

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[illegible]

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 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
M. ANUS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. SCROTUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1
ULCER	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SWELLING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHAGE	Control	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0
	100 ppm	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0
ABNORMAL TESTIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0
PROLAPSE OF PENIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
	400 ppm	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 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
M. ANUS	Control	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	1
M. SCROTUM	Control	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0
ULCER	Control	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
	200 ppm	1	1	1	1	0	0
	400 ppm	0	0	0	0	0	0
SWELLING	Control	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0
HEMORRHIAGE	Control	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0
ABNORMAL TESTIS	Control	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	1
	200 ppm	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0
PROLAPSE OF PENIS	Control	0	0	0	0	2	1
	100 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 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
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	50	50	50	50	50	50	50	49	49	49	49	49	49	49
	100 ppm	50	50	50	50	50	50	50	50	50	50	50	50	49	50
	200 ppm	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	400 ppm	50	50	50	50	50	50	50	50	50	50	50	50	50	50

(HAN190)

BAIS 4

STUDY NO. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
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
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	49	49	49	49	49	49	49	49	49	49	49	49	49	49
	100 ppm	50	50	50	50	50	50	50	50	50	49	49	49	49	49
	200 ppm	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	400 ppm	50	50	50	50	50	50	50	50	50	50	50	50	50	50

(HAN190)

BAIS 4

STUDY NO. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
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
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	1	1	1	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	49	48	48	48	48	48	48	48	48	48	48	48	48	48
	100 ppm	49	49	49	49	49	49	49	49	49	49	49	49	49	49
	200 ppm	50	50	50	50	49	49	49	49	49	49	49	49	49	49
	400 ppm	50	50	50	50	50	50	50	50	50	50	50	50	50	50

(HAN190)

BAIS 4

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 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
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	48	48	48	48	48	48	47	47	47	47	47	47	47	47
	100 ppm	49	48	48	48	48	48	48	48	48	48	48	48	48	48
	200 ppm	49	49	49	49	49	49	49	49	48	47	47	47	47	47
	400 ppm	50	50	50	50	50	50	50	49	49	49	49	49	49	49

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BAIS 4

STUDY NO. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
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
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	1	1	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	47	47	47	46	46	46	46	46	47	46	46	46	46	46
	100 ppm	48	48	48	48	48	48	48	48	48	46	47	47	47	47
	200 ppm	47	47	47	46	46	46	46	46	46	45	45	46	46	46
	400 ppm	49	48	48	48	48	48	48	47	46	46	46	46	46	46

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BAIS 4

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 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
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	200 ppm	0	0	0	0	0	1	1	1	1	0	0	0	0	0
	400 ppm	1	1	1	1	1	1	1	1	1	0	0	1	1	0
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	46	46	46	46	46	46	45	46	46	46	46	44	44	44
	100 ppm	46	46	45	45	45	45	45	44	44	44	44	42	41	41
	200 ppm	46	46	46	46	46	45	44	44	44	44	44	43	43	43
	400 ppm	46	46	46	46	46	46	45	45	45	45	45	44	44	44

(HAN190)

BAIS 4

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day			88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
		85-7	86-7	87-7											
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	1	1	1	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	1	1	0	0	0
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	43	42	41	41	41	41	40	35	33	33	32	32	32	31
	100 ppm	41	41	41	41	40	40	40	40	40	40	39	39	39	37
	200 ppm	43	43	43	43	43	41	41	41	40	40	37	35	36	36
	400 ppm	44	43	43	43	43	42	41	42	40	39	39	39	39	39

(HAN190)

BAIS 4

STUDY NO. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
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
IRREGULAR BREATHING	Control	0	0	1	1	0	0
	100 ppm	1	0	0	0	0	0
	200 ppm	0	1	0	0	0	0
	400 ppm	0	0	0	0	0	1
RESPIRATORY SOUND ABNOR	Control	0	0	1	1	0	0
	100 ppm	1	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	1
DEEP BREATHING	Control	0	0	0	0	0	0
	100 ppm	1	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0
NON REMARKABLE	Control	30	30	28	27	25	25
	100 ppm	37	37	35	34	34	33
	200 ppm	35	33	33	32	31	30
	400 ppm	38	37	36	35	35	33

(HAN190)

BAIS 4

TABLE C2

CLINICAL OBSERVATION : FEMALE

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

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[illegible]

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

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[illegible]

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

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[illegible]

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

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[illegible]

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

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[illegible]

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

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[illegible]

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

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[illegible]

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

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
DEATH	Control	8	9	10	10	10	11
	100 ppm	8	8	8	9	9	9
	200 ppm	2	2	2	2	2	2
	400 ppm	6	6	6	7	7	8
MORIBUND SACRIFICE	Control	1	1	1	1	1	1
	100 ppm	3	3	3	3	3	5
	200 ppm	4	4	5	5	5	5
	400 ppm	3	3	4	4	4	6
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	400 ppm	0	0	0	1	1	0
ATAXIC GAIT	Control	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	1
PARALYTIC GAIT	Control	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	400 ppm	0	0	0	0	1	0
WASTING	Control	0	0	0	0	1	1
	100 ppm	1	1	2	2	2	0
	200 ppm	1	1	0	0	0	0
	400 ppm	0	0	0	0	0	0
SOILED	Control	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	400 ppm	0	0	0	1	1	0
PILOERECTION	Control	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	1	0
	100 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	400 ppm	0	0	0	1	1	0

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

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[illegible]

CLINICAL OBSERVATION (SUMMARY)

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[illegible]

CLINICAL OBSERVATION (SUMMARY)

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[illegible]

CLINICAL OBSERVATION (SUMMARY)

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[illegible]

CLINICAL OBSERVATION (SUMMARY)

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[illegible]

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ALL ANIMALS

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[illegible]

STUDY NO. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

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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
SOILED PERI-GENITALIA	Control	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	1	0	0	0	0	0	1
	200 ppm	0	0	0	0	0	0	1	0	0	0	1	1	1	1
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	100 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	100 ppm	2	2	1	1	1	1	1	1	1	1	1	1	1	1
	200 ppm	2	2	2	2	2	2	2	2	2	2	3	3	3	3
	400 ppm	2	2	2	2	2	2	2	3	3	3	3	3	3	3
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	1	1	2	3	3	3	3	3	4	3	2	3	3	3
	100 ppm	2	2	2	2	2	2	1	1	1	1	1	2	2	3
	200 ppm	1	1	1	1	1	1	1	0	0	0	2	2	2	2
	400 ppm	0	0	0	1	2	2	2	3	3	3	4	4	4	3
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. HEAD	Control	0	0	0	1	1	1	1	1	1	1	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	0

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
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Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0
	100 ppm	1	1	0	0	0	0
	200 ppm	1	1	1	1	1	1
	400 ppm	0	1	1	1	1	1
EXOPHTHALMOS	Control	1	0	0	0	0	0
	100 ppm	1	1	1	1	1	1
	200 ppm	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0
CATARACT	Control	2	2	2	2	2	1
	100 ppm	1	1	1	1	1	1
	200 ppm	3	3	3	3	3	3
	400 ppm	3	3	3	3	3	3
CORNEAL OPACITY	Control	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0
EXTERNAL MASS	Control	3	3	3	4	4	4
	100 ppm	3	3	3	3	5	3
	200 ppm	2	5	5	6	6	6
	400 ppm	3	3	3	3	3	3
M. NOSE	Control	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
	200 ppm	0	1	1	1	1	1
	400 ppm	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0
M. HEAD	Control	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0
M. NECK	Control	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0

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[illegible]

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[illegible]

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[illegible]

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[illegible]

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[illegible]

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[illegible]

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[illegible]

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

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Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
M. FORELIMB	Control	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0
M. BREAST	Control	2	2	2	3	3	3
	100 ppm	2	2	2	2	2	0
	200 ppm	1	1	1	2	2	2
	400 ppm	0	0	1	1	1	3
M. ABDOMEN	Control	0	0	0	0	0	0
	100 ppm	1	1	1	1	2	2
	200 ppm	0	2	2	2	2	2
	400 ppm	1	1	1	1	1	0
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0
	100 ppm	0	0	0	0	1	1
	200 ppm	0	0	0	0	0	0
	400 ppm	2	2	1	1	1	1
M. GENITALIA	Control	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0
	200 ppm	1	1	1	1	1	1
	400 ppm	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0
ULCER	Control	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0
CICATRIX	Control	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0

STUDY NO. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

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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
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAGINAL PROLAPSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	50	50	50	50	50	50	50	50	50	50	50	49	49	49
	100 ppm	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	200 ppm	50	50	50	50	49	49	49	49	50	50	50	50	50	50
	400 ppm	50	50	50	50	50	50	50	50	50	50	50	50	50	50

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STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

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 ALL ANIMALS

SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day													
		15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAGINAL PROLAPSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	49	49	49	49	49	49	49	49	49	49	49	49	49	49
	100 ppm	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	200 ppm	49	49	49	49	50	50	50	50	50	50	50	50	50	50
	400 ppm	50	50	50	50	50	50	50	50	50	50	50	49	49	49

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STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

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 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
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAGINAL PROLAPSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
NON REMARKABLE	Control	49	49	49	49	49	49	49	49	48	48	48	48	48	48
	100 ppm	50	50	50	50	50	50	50	50	50	49	49	49	49	49
	200 ppm	50	50	49	49	49	50	50	50	50	50	50	50	50	50
	400 ppm	49	49	49	49	48	48	48	47	47	46	46	46	46	46

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STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
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 ALL ANIMALS

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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
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAGINAL PROLAPSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	1	1	1	1	1	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	48	48	48	48	48	48	48	48	48	48	48	48	48	48
	100 ppm	50	49	49	49	49	49	49	49	49	49	49	49	48	48
	200 ppm	50	50	50	50	50	50	50	50	50	50	48	49	49	49
	400 ppm	46	46	46	46	46	46	46	46	46	46	46	46	46	46

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STUDY NO. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
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CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

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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
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAGINAL PROLAPSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	48	48	48	48	47	47	47	47	47	46	45	45	45	45
	100 ppm	46	46	45	45	45	45	45	45	45	44	45	45	45	45
	200 ppm	49	49	49	49	49	49	49	49	49	48	48	48	48	48
	400 ppm	46	46	46	45	45	46	46	46	46	46	46	46	46	46

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STUDY NO. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
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ALL ANIMALS

SEX : FEMALE

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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
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	1	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAGINAL PROLAPSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	1	1	0	0
NON REMARKABLE	Control	45	45	46	45	45	44	43	43	43	43	43	42	42	42
	100 ppm	45	45	45	45	45	44	44	43	43	42	42	42	42	42
	200 ppm	48	48	48	48	48	47	48	48	48	47	47	47	47	46
	400 ppm	46	45	45	45	45	45	45	45	45	43	44	43	43	43

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STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day			88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
		85-7	86-7	87-7											
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	1	1	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAGINAL PROLAPSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	200 ppm	0	0	1	0	0	0	0	0	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	41	41	40	38	38	38	38	38	36	36	36	35	36	36
	100 ppm	42	41	41	39	39	38	38	38	36	36	36	35	35	33
	200 ppm	45	45	44	44	44	44	44	44	44	44	40	39	38	37
	400 ppm	42	42	42	40	39	39	39	37	37	37	37	37	36	35

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STUDY NO. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
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Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
HEMORRHAGE	Control	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0
VAGINAL PROLAPSE	Control	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
	200 ppm	0	0	0	0	0	0
	400 ppm	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0
	100 ppm	0	0	1	1	1	0
	200 ppm	0	1	0	0	0	0
	400 ppm	0	0	1	1	1	0
NON REMARKABLE	Control	35	35	34	33	32	32
	100 ppm	34	34	34	33	31	31
	200 ppm	37	34	34	33	33	33
	400 ppm	35	34	32	31	30	29

(HAN190)

BAIS 4

TABLE D1

BODY WEIGHT CHANGES AND SURVIVAL ANIMAL
NUMBERS : MALE

STUDY NO. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

MEAN BODY WEIGHTS AND SURVIVAL

PAGE : 1

Week on Study	Control		100 ppm			200 ppm			400 ppm		
	Av. Wt.	No. of Surviv. <50>	Av. Wt.	% of cont. <50>	No. of Surviv.	Av. Wt.	% of cont. <50>	No. of Surviv.	Av. Wt.	% of cont. <50>	No. of Surviv.
0	123 (50)	50/50	123 (50)	100	50/50	123 (50)	100	50/50	123 (50)	100	50/50
1	153 (50)	50/50	152 (50)	99	50/50	150 (50)	98	50/50	143 (50)	93	50/50
2	184 (50)	50/50	185 (50)	101	50/50	184 (50)	100	50/50	178 (50)	97	50/50
3	212 (50)	50/50	211 (50)	100	50/50	209 (50)	99	50/50	199 (50)	94	50/50
4	235 (50)	50/50	232 (50)	99	50/50	230 (50)	98	50/50	217 (50)	92	50/50
5	252 (50)	50/50	250 (50)	99	50/50	246 (50)	98	50/50	231 (50)	92	50/50
6	268 (50)	50/50	265 (50)	99	50/50	261 (50)	97	50/50	243 (50)	91	50/50
7	281 (50)	50/50	279 (50)	99	50/50	272 (50)	97	50/50	255 (50)	91	50/50
8	294 (50)	50/50	293 (50)	100	50/50	284 (50)	97	50/50	267 (50)	91	50/50
9	305 (50)	50/50	303 (50)	99	50/50	295 (50)	97	50/50	276 (50)	90	50/50
10	314 (50)	50/50	311 (50)	99	50/50	302 (50)	96	50/50	283 (50)	90	50/50
11	320 (50)	50/50	317 (50)	99	50/50	308 (50)	96	50/50	287 (50)	90	50/50
12	328 (50)	50/50	324 (50)	99	50/50	315 (50)	96	50/50	294 (50)	90	50/50
13	334 (50)	50/50	330 (50)	99	50/50	321 (50)	96	50/50	302 (50)	90	50/50
14	339 (50)	50/50	335 (50)	99	50/50	326 (50)	96	50/50	305 (50)	90	50/50
18	355 (50)	50/50	350 (50)	99	50/50	341 (50)	96	50/50	321 (50)	90	50/50
22	370 (50)	50/50	364 (50)	98	50/50	356 (50)	96	50/50	334 (50)	90	50/50
26	383 (50)	50/50	375 (50)	98	50/50	368 (50)	96	50/50	347 (50)	91	50/50
30	394 (50)	50/50	385 (50)	98	50/50	378 (50)	96	50/50	354 (50)	90	50/50
34	404 (50)	50/50	395 (50)	98	50/50	389 (50)	96	50/50	364 (50)	90	50/50
38	414 (50)	50/50	403 (50)	97	50/50	398 (50)	96	50/50	371 (50)	90	50/50
42	422 (50)	50/50	416 (49)	99	49/50	405 (50)	96	50/50	376 (50)	89	50/50
46	427 (50)	50/50	420 (49)	98	49/50	409 (50)	96	50/50	379 (50)	89	50/50
50	434 (50)	50/50	425 (49)	98	49/50	411 (50)	95	50/50	384 (50)	88	50/50
54	440 (50)	50/50	431 (49)	98	49/50	418 (49)	95	49/50	389 (50)	88	50/50
58	442 (50)	50/50	435 (49)	98	49/50	419 (49)	95	49/50	390 (50)	88	50/50
62	447 (50)	50/50	439 (49)	98	49/50	423 (49)	95	49/50	395 (50)	88	50/50
66	448 (50)	50/50	441 (49)	98	49/50	425 (49)	95	49/50	399 (50)	89	50/50
70	451 (49)	49/50	443 (49)	98	49/50	426 (49)	94	49/50	400 (50)	89	50/50
74	453 (49)	49/50	445 (49)	98	49/50	428 (49)	94	49/50	402 (50)	89	50/50
78	452 (49)	49/50	445 (49)	98	49/50	427 (49)	94	49/50	399 (49)	88	49/50
82	449 (49)	49/50	443 (49)	99	49/50	430 (48)	96	48/50	398 (47)	89	47/50
86	449 (48)	48/50	442 (48)	98	48/50	430 (48)	96	48/50	402 (45)	90	45/50
90	447 (47)	47/50	439 (46)	98	46/50	430 (47)	96	47/50	400 (45)	89	45/50
94	439 (45)	45/50	428 (44)	97	44/50	414 (46)	94	46/50	387 (45)	88	45/50
98	426 (43)	43/50	419 (43)	98	43/50	410 (43)	96	43/50	382 (43)	90	43/50
102	412 (43)	43/50	413 (40)	100	40/50	406 (41)	99	41/50	375 (42)	91	42/50
104	416 (41)	41/50	413 (40)	99	40/50	406 (40)	98	40/50	374 (42)	90	42/50

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

TABLE D2

BODY WEIGHT CHANGES AND SURVIVAL ANIMAL
NUMBERS : FEMALE

STUDY NO. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

MEAN BODY WEIGHTS AND SURVIVAL

PAGE : 2

Week on Study	Control			100 ppm			200 ppm			400 ppm		
	Av. Wt.	No. of Surviv. <50>		Av. Wt.	% of cont. <50>	No. of Surviv.	Av. Wt.	% of cont. <50>	No. of Surviv.	Av. Wt.	% of cont. <50>	No. of Surviv.
0	99 (50)	50/50		99 (50)	100	50/50	99 (50)	100	50/50	99 (50)	100	50/50
1	113 (50)	50/50		112 (50)	99	50/50	112 (50)	99	50/50	107 (50)	95	50/50
2	127 (50)	50/50		126 (50)	99	50/50	127 (50)	100	50/50	123 (50)	97	50/50
3	138 (50)	50/50		136 (50)	99	50/50	136 (50)	99	50/50	131 (50)	95	50/50
4	147 (50)	50/50		145 (50)	99	50/50	145 (50)	99	50/50	139 (50)	95	50/50
5	155 (50)	50/50		153 (50)	99	50/50	152 (50)	98	50/50	146 (50)	94	50/50
6	161 (50)	50/50		158 (50)	98	50/50	159 (50)	99	50/50	153 (50)	95	50/50
7	166 (50)	50/50		164 (50)	99	50/50	163 (50)	98	50/50	157 (50)	95	50/50
8	171 (50)	50/50		170 (50)	99	50/50	168 (50)	98	50/50	162 (50)	95	50/50
9	175 (50)	50/50		172 (50)	98	50/50	173 (50)	99	50/50	166 (50)	95	50/50
10	179 (50)	50/50		177 (50)	99	50/50	177 (50)	99	50/50	170 (50)	95	50/50
11	182 (50)	50/50		180 (50)	99	50/50	179 (50)	98	50/50	172 (50)	95	50/50
12	186 (50)	50/50		183 (50)	98	50/50	182 (50)	98	50/50	175 (50)	94	50/50
13	188 (50)	50/50		185 (50)	98	50/50	183 (50)	97	50/50	177 (50)	94	50/50
14	191 (50)	50/50		187 (50)	98	50/50	185 (50)	97	50/50	178 (50)	93	50/50
18	197 (50)	50/50		193 (50)	98	50/50	191 (50)	97	50/50	184 (50)	93	50/50
22	201 (50)	50/50		198 (50)	99	50/50	197 (50)	98	50/50	189 (50)	94	50/50
26	208 (50)	50/50		204 (50)	98	50/50	202 (50)	97	50/50	193 (49)	93	49/50
30	211 (50)	50/50		209 (50)	99	50/50	206 (50)	98	50/50	198 (49)	94	49/50
34	218 (50)	50/50		217 (50)	100	50/50	213 (50)	98	50/50	203 (49)	93	49/50
38	223 (50)	50/50		221 (50)	99	50/50	217 (50)	97	50/50	207 (49)	93	49/50
42	227 (50)	50/50		226 (50)	100	50/50	222 (50)	98	50/50	212 (49)	93	49/50
46	231 (50)	50/50		229 (50)	99	50/50	224 (50)	97	50/50	211 (49)	91	49/50
50	235 (50)	50/50		234 (50)	100	50/50	228 (50)	97	50/50	217 (48)	92	48/50
54	239 (50)	50/50		239 (50)	100	50/50	234 (50)	98	50/50	222 (48)	93	48/50
58	243 (50)	50/50		244 (50)	100	50/50	238 (50)	98	50/50	222 (48)	91	48/50
62	251 (49)	49/50		252 (50)	100	50/50	244 (50)	97	50/50	227 (48)	90	48/50
66	254 (49)	49/50		258 (50)	102	50/50	248 (50)	98	50/50	232 (48)	91	48/50
70	262 (48)	48/50		265 (50)	101	50/50	254 (50)	97	50/50	237 (48)	90	48/50
74	266 (48)	48/50		269 (50)	101	50/50	262 (50)	98	50/50	244 (48)	92	48/50
78	270 (46)	46/50		275 (48)	102	48/50	265 (50)	98	50/50	249 (48)	92	48/50
82	271 (46)	46/50		281 (47)	104	47/50	269 (49)	99	49/50	250 (47)	92	47/50
86	277 (45)	45/50		284 (46)	103	46/50	274 (48)	99	48/50	251 (44)	91	44/50
90	281 (44)	44/50		291 (42)	104	42/50	278 (47)	99	47/50	254 (44)	90	44/50
94	277 (43)	43/50		279 (40)	101	40/50	273 (46)	99	46/50	246 (44)	89	44/50
98	282 (42)	42/50		282 (39)	100	39/50	274 (45)	97	45/50	248 (41)	88	41/50
102	283 (39)	39/50		283 (38)	100	38/50	281 (43)	99	43/50	249 (39)	88	39/50
104	284 (38)	38/50		288 (36)	101	36/50	280 (43)	99	43/50	249 (36)	88	36/50

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

TABLE D3

BODY WEIGHT CHANGES : MALE

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 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	
Control	123±	5	153±	8	184±	9	212±	10	235±	11	252±	11
100 ppm	123±	5	152±	7	185±	8	211±	9	232±	10	250±	10
200 ppm	123±	5	150±	8	184±	10	209±	10	230±	10*	246±	11*
400 ppm	123±	5	143±	6**	178±	7**	199±	8**	217±	9**	231±	9**

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

Test of Dunnett

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 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							
Control	281± 12	294± 13	305± 14	314± 14	320± 14	328± 15	334± 15							
100 ppm	279± 12	293± 12	303± 13	311± 13	317± 14	324± 15	330± 15							
200 ppm	272± 12**	284± 13**	295± 13**	302± 14**	308± 15**	315± 15**	321± 15**							
400 ppm	255± 11**	267± 12**	276± 12**	283± 13**	287± 13**	294± 13**	302± 13**							

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 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	
Control	339±	15	355±	17	370±	18	383±	19	394±	19	404±	22	414±	23		
100 ppm	335±	16	350±	17	364±	22	375±	28	385±	33	395±	37	403±	41		
200 ppm	326±	15**	341±	16**	356±	17**	368±	18**	378±	18**	389±	19**	398±	21**		
400 ppm	305±	14**	321±	16**	334±	17**	347±	19**	354±	19**	364±	20**	371±	21**		

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 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	
Control	422±	23	427±	24	434±	23	440±	24	442±	24	447±	24	448±	23
100 ppm	416±	19	420±	19	425±	18	431±	18	435±	18	439±	19	441±	21
200 ppm	405±	21**	409±	22**	411±	23**	418±	24**	419±	26**	423±	28**	425±	25**
400 ppm	376±	21**	379±	21**	384±	22**	389±	22**	390±	23**	395±	24**	399±	23**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 5

Group Name	Administration week		74		78		82		86		90		94	
	70													
Control	451±	23	453±	22	452±	23	449±	26	449±	23	447±	26	439±	36
100 ppm	443±	23	445±	22	445±	22	443±	25	442±	23	439±	25	428±	35
200 ppm	426±	30**	428±	36**	427±	40**	430±	27**	430±	27**	430±	25**	414±	42**
400 ppm	400±	27**	402±	32**	399±	29**	398±	32**	402±	19**	400±	20**	387±	23**

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

Test of Dunnett

STUDY NO. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

PAGE : 6

Group Name	Administration		week			
	98		102		104	
Control	426±	30	412±	45	416±	50
100 ppm	419±	44	413±	45	413±	52
200 ppm	410±	36**	406±	46	406±	50
400 ppm	382±	18**	375±	16**	374±	20**

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

Test of Dunnett

TABLE D4

BODY WEIGHT CHANGES : FEMALE

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 7

Group Name	Administration week		1		2		3		4		5		6	
	0													
Control	99±	3	113±	4	127±	5	138±	6	147±	6	155±	7	161±	7
100 ppm	99±	3	112±	5	126±	5	136±	5	145±	6	153±	6	158±	7
200 ppm	99±	3	112±	5	127±	6	136±	6	145±	7	152±	8	159±	8
400 ppm	99±	3	107±	4**	123±	6**	131±	5**	139±	6**	146±	6**	153±	6**

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

Test of Dunnett

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 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					
Control	166± 8	171± 8	175± 9	179± 10	182± 9	186± 10	188± 10					
100 ppm	164± 7	170± 8	172± 8	177± 8	180± 8	183± 8	185± 8					
200 ppm	163± 9	168± 9	173± 10	177± 10	179± 9	182± 10*	183± 9*					
400 ppm	157± 7**	162± 8**	166± 8**	170± 8**	172± 8**	175± 8**	177± 8**					

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

Test of Dunnett

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
 ALL ANIMALS

PAGE : 9

Group Name	Administration week		18		22		26		30		34		38	
	14													
Control	191±	10	197±	11	201±	12	208±	11	211±	12	218±	12	223±	13
100 ppm	187±	9	193±	10	198±	11	204±	12	209±	12	217±	13	221±	13
200 ppm	185±	10*	191±	11*	197±	11	202±	12*	206±	11	213±	12	217±	13*
400 ppm	178±	9**	184±	9**	189±	9**	193±	10**	198±	11**	203±	12**	207±	12**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 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	
Control	227±	14	231±	15	235±	15	239±	16	243±	16	251±	18	254±	19
100 ppm	226±	13	229±	13	234±	15	239±	15	244±	16	252±	17	258±	18
200 ppm	222±	13	224±	15*	228±	15	234±	15	238±	17	244±	18	248±	20
400 ppm	212±	12**	211±	14**	217±	13**	222±	14**	222±	14**	227±	15**	232±	16**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 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	
Control	262±	20	266±	21	270±	22	271±	25	277±	24	281±	27	277±	30
100 ppm	265±	20	269±	21	275±	25	281±	26	284±	37	291±	47	279±	27
200 ppm	254±	21	262±	21	265±	22	269±	22	274±	22	278±	21	273±	22
400 ppm	237±	16**	244±	17**	249±	19**	250±	27**	251±	16**	254±	16**	246±	16**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

PAGE : 12

Group Name	Administration week					
	98		102		104	
Control	282±	31	283±	31	284±	34
100 ppm	282±	31	283±	31	288±	24
200 ppm	274±	29	281±	23	280±	23
400 ppm	248±	18**	249±	21**	249±	19**

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

Test of Dunnett

(HAN260)

BAIS 4

TABLE E1

FOOD CONSUMPTION CHANGES AND SURVIVAL ANIMAL
NUMBERS : MALE

STUDY NO. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

MEAN FOOD CONSUMPTION(FC) AND SURVIVAL

PAGE : 1

Week on Study	Control		100 ppm		200 ppm		400 ppm				
	Av. FC.	No. of Surviv. <50>	Av. FC.	% of cont. <50>	No. of Surviv.	Av. FC.	% of cont. <50>	No. of Surviv.	Av. FC.	% of cont. <50>	No. of Surviv.
1	14.5 (50)	50/50	14.4 (50)	99	50/50	14.1 (50)	97	50/50	13.1 (50)	90	50/50
2	16.2 (50)	50/50	16.5 (50)	102	50/50	16.3 (50)	101	50/50	15.5 (50)	96	50/50
3	16.7 (50)	50/50	16.9 (50)	101	50/50	16.4 (50)	98	50/50	15.0 (50)	90	50/50
4	17.1 (50)	50/50	16.8 (50)	98	50/50	16.5 (50)	96	50/50	15.1 (50)	88	50/50
5	17.3 (50)	50/50	17.2 (50)	99	50/50	16.7 (50)	97	50/50	15.7 (50)	91	50/50
6	16.9 (50)	50/50	16.7 (50)	99	50/50	16.5 (50)	98	50/50	15.4 (50)	91	50/50
7	17.4 (50)	50/50	17.3 (50)	99	50/50	16.7 (50)	96	50/50	16.0 (50)	92	50/50
8	17.1 (50)	50/50	17.0 (50)	99	50/50	16.4 (50)	96	50/50	15.9 (50)	93	50/50
9	17.6 (50)	50/50	17.1 (50)	97	50/50	17.0 (50)	97	50/50	15.9 (50)	90	50/50
10	17.0 (50)	50/50	16.5 (47)	97	50/50	16.2 (50)	95	50/50	15.5 (50)	91	50/50
11	17.0 (50)	50/50	16.7 (50)	98	50/50	16.5 (50)	97	50/50	15.6 (50)	92	50/50
12	16.4 (50)	50/50	16.2 (50)	99	50/50	15.8 (45)	96	50/50	15.1 (50)	92	50/50
13	16.7 (50)	50/50	16.4 (50)	98	50/50	16.1 (50)	96	50/50	15.5 (50)	93	50/50
14	16.2 (50)	50/50	15.8 (50)	98	50/50	15.2 (50)	94	50/50	14.8 (50)	91	50/50
18	16.4 (50)	50/50	16.3 (50)	99	50/50	15.6 (50)	95	50/50	15.3 (50)	93	50/50
22	16.6 (50)	50/50	16.7 (50)	101	50/50	16.0 (50)	96	50/50	15.5 (50)	93	50/50
26	16.2 (50)	50/50	16.2 (50)	100	50/50	15.9 (50)	98	50/50	15.2 (50)	94	50/50
30	16.5 (50)	50/50	16.5 (50)	100	50/50	16.2 (50)	98	50/50	15.4 (50)	93	50/50
34	16.6 (50)	50/50	16.5 (50)	99	50/50	16.3 (50)	98	50/50	15.8 (50)	95	50/50
38	17.3 (50)	50/50	16.8 (50)	97	50/50	16.6 (50)	96	50/50	15.9 (50)	92	50/50
42	17.2 (50)	50/50	17.0 (49)	99	49/50	16.4 (50)	95	50/50	15.9 (50)	92	50/50
46	16.9 (50)	50/50	16.7 (49)	99	49/50	16.4 (50)	97	50/50	15.7 (50)	93	50/50
50	17.0 (50)	50/50	17.1 (49)	101	49/50	16.4 (50)	96	50/50	15.9 (50)	94	50/50
54	17.0 (50)	50/50	16.9 (49)	99	49/50	16.7 (49)	98	49/50	16.1 (50)	95	50/50
58	17.0 (50)	50/50	17.2 (49)	101	49/50	16.4 (49)	96	49/50	15.9 (50)	94	50/50
62	17.3 (50)	50/50	17.2 (49)	99	49/50	16.6 (49)	96	49/50	16.0 (50)	92	50/50
66	17.0 (50)	50/50	17.0 (49)	100	49/50	16.8 (49)	99	49/50	16.1 (50)	95	50/50
70	17.1 (49)	49/50	17.0 (49)	99	49/50	16.5 (48)	96	49/50	15.8 (50)	92	50/50
74	17.2 (49)	49/50	16.9 (49)	98	49/50	16.6 (49)	97	49/50	15.8 (50)	92	50/50
78	16.8 (49)	49/50	17.0 (49)	101	49/50	16.5 (49)	98	49/50	16.0 (49)	95	49/50
82	16.6 (49)	49/50	16.6 (49)	100	49/50	16.4 (48)	99	48/50	15.4 (47)	93	47/50
86	16.9 (48)	48/50	16.8 (48)	99	48/50	16.5 (48)	98	48/50	15.9 (45)	94	45/50
90	17.3 (47)	47/50	17.1 (46)	99	46/50	16.5 (47)	95	47/50	16.3 (45)	94	45/50
94	17.0 (45)	45/50	16.7 (44)	98	44/50	15.9 (46)	94	46/50	15.1 (45)	89	45/50
98	16.2 (43)	43/50	15.7 (43)	97	43/50	15.7 (43)	97	43/50	15.4 (43)	95	43/50
102	16.6 (43)	43/50	16.4 (40)	99	40/50	16.9 (41)	102	41/50	15.6 (42)	94	42/50
104	16.4 (41)	41/50	16.5 (40)	101	40/50	16.8 (40)	102	40/50	15.5 (42)	95	42/50
< >:No. of effective animals. ():No. of measured animals											
Av. FC. : g											

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

Av. FC. : g

TABLE E2

FOOD CONSUMPTION CHANGES AND SURVIVAL ANIMAL
NUMBERS : FEMALE

STUDY NO. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

MEAN FOOD CONSUMPTION(FC) AND SURVIVAL

PAGE : 2

Week on Study	Control		100 ppm		200 ppm		400 ppm				
	Av. FC.	No. of Surviv. <50>	Av. FC.	% of cont. <50>	No. of Surviv.	Av. FC.	% of cont. <50>	No. of Surviv.	Av. FC.	% of cont. <50>	No. of Surviv.
1	10.9 (50)	50/50	10.7 (50)	98	50/50	10.6 (50)	97	50/50	10.0 (50)	92	50/50
2	12.1 (50)	50/50	11.8 (50)	98	50/50	12.1 (50)	100	50/50	11.8 (50)	98	50/50
3	11.4 (50)	50/50	11.2 (50)	98	50/50	11.3 (50)	99	50/50	10.4 (50)	91	50/50
4	11.7 (50)	50/50	11.2 (50)	96	50/50	11.3 (50)	97	50/50	10.5 (50)	90	50/50
5	11.7 (50)	50/50	11.6 (50)	99	50/50	11.3 (50)	97	50/50	11.0 (50)	94	50/50
6	11.7 (50)	50/50	11.3 (50)	97	50/50	11.6 (50)	99	50/50	10.8 (50)	92	50/50
7	11.3 (50)	50/50	11.1 (50)	98	50/50	11.1 (50)	98	50/50	10.8 (50)	96	50/50
8	11.4 (50)	50/50	11.4 (50)	100	50/50	11.1 (50)	97	50/50	11.0 (50)	96	50/50
9	11.4 (50)	50/50	11.0 (50)	96	50/50	10.9 (50)	96	50/50	10.6 (50)	93	50/50
10	11.4 (50)	50/50	11.0 (50)	96	50/50	11.2 (50)	98	50/50	10.7 (50)	94	50/50
11	11.3 (50)	50/50	11.1 (50)	98	50/50	10.7 (50)	95	50/50	10.5 (50)	93	50/50
12	11.6 (50)	50/50	10.8 (50)	93	50/50	10.6 (50)	91	50/50	10.4 (50)	90	50/50
13	11.2 (50)	50/50	11.0 (50)	98	50/50	10.7 (50)	96	50/50	10.4 (50)	93	50/50
14	11.6 (50)	50/50	10.6 (50)	91	50/50	10.5 (50)	91	50/50	10.1 (50)	87	50/50
18	10.8 (50)	50/50	10.8 (50)	100	50/50	10.5 (50)	97	50/50	10.3 (50)	95	50/50
22	11.1 (50)	50/50	10.9 (50)	98	50/50	10.6 (50)	95	50/50	10.5 (50)	95	50/50
26	10.8 (50)	50/50	10.9 (50)	101	50/50	10.5 (50)	97	50/50	10.2 (49)	94	49/50
30	11.1 (50)	50/50	11.0 (50)	99	50/50	10.8 (50)	97	50/50	10.8 (49)	97	49/50
34	11.4 (50)	50/50	11.5 (50)	101	50/50	11.1 (50)	97	50/50	10.8 (49)	95	49/50
38	11.9 (50)	50/50	11.5 (50)	97	50/50	11.0 (50)	92	50/50	11.2 (49)	94	49/50
42	11.6 (50)	50/50	11.8 (50)	102	50/50	11.3 (50)	97	50/50	11.0 (49)	95	49/50
46	11.7 (50)	50/50	11.5 (50)	98	50/50	11.3 (50)	97	50/50	10.8 (49)	92	49/50
50	11.9 (50)	50/50	11.7 (50)	98	50/50	11.4 (50)	96	50/50	11.3 (48)	95	48/50
54	11.4 (50)	50/50	11.3 (50)	99	50/50	11.3 (50)	99	50/50	11.6 (48)	102	48/50
58	11.7 (50)	50/50	12.0 (50)	103	50/50	11.5 (50)	98	50/50	10.8 (48)	92	48/50
62	12.3 (49)	49/50	12.3 (50)	100	50/50	11.7 (50)	95	50/50	11.2 (48)	91	48/50
66	11.7 (49)	49/50	12.2 (50)	104	50/50	11.8 (50)	101	50/50	11.7 (48)	100	48/50
70	12.3 (48)	48/50	12.5 (50)	102	50/50	11.8 (50)	96	50/50	11.7 (48)	95	48/50
74	12.2 (48)	48/50	12.2 (50)	100	50/50	12.1 (50)	99	50/50	11.6 (48)	95	48/50
78	12.1 (46)	46/50	12.3 (48)	102	48/50	11.8 (50)	98	50/50	11.6 (48)	96	48/50
82	12.1 (46)	46/50	12.2 (47)	101	47/50	12.0 (49)	99	49/50	11.2 (47)	93	47/50
86	12.4 (45)	45/50	12.5 (46)	101	46/50	12.4 (48)	100	48/50	11.4 (44)	92	44/50
90	13.1 (44)	44/50	13.1 (41)	100	42/50	12.7 (47)	97	47/50	12.0 (44)	92	44/50
94	12.1 (43)	43/50	12.0 (40)	99	40/50	11.6 (46)	96	46/50	10.6 (44)	88	44/50
98	13.4 (42)	42/50	13.4 (39)	100	39/50	12.6 (45)	94	45/50	11.9 (41)	89	41/50
102	13.1 (39)	39/50	13.2 (38)	101	38/50	13.0 (43)	99	43/50	11.6 (39)	89	39/50
104	13.2 (38)	38/50	13.1 (36)	99	36/50	12.4 (43)	94	43/50	11.6 (36)	88	36/50
< >:No. of effective animals, ():No. of measured animals											
Av. FC. : g											

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

Av. FC. : g

TABLE E3

FOOD CONSUMPTION CHANGES : MALE

STUDY NO. : 0675

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

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
Control	14.5± 0.8	16.2± 1.1	16.7± 1.0	17.1± 1.1	17.3± 1.0	16.9± 1.0	17.4± 1.0
100 ppm	14.4± 0.7	16.5± 1.0	16.9± 0.8	16.8± 0.9	17.2± 0.9	16.7± 0.9	17.3± 1.0
200 ppm	14.1± 0.9	16.3± 1.2	16.4± 1.0	16.5± 1.1*	16.7± 0.9**	16.5± 1.0	16.7± 0.9**
400 ppm	13.1± 0.7**	15.5± 1.1**	15.0± 0.8**	15.1± 1.0**	15.7± 0.9**	15.4± 0.9**	16.0± 0.8**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 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
Control	17.1± 1.0	17.6± 0.9	17.0± 1.0	17.0± 0.9	16.4± 1.0	16.7± 0.9	16.2± 0.8
100 ppm	17.0± 1.0	17.1± 0.9*	16.5± 0.9*	16.7± 1.0	16.2± 1.0	16.4± 0.9	15.8± 0.9
200 ppm	16.4± 1.0**	17.0± 1.0**	16.2± 0.9**	16.5± 1.0*	15.8± 0.9**	16.1± 1.0**	15.2± 1.1**
400 ppm	15.9± 0.8**	15.9± 0.8**	15.5± 0.9**	15.6± 0.9**	15.1± 1.0**	15.5± 0.8**	14.8± 0.9**

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

Test of Dunnett

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 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
Control	16.4± 1.1	16.6± 1.1	16.2± 0.9	16.5± 1.0	16.6± 1.0	17.3± 1.1	17.2± 1.1
100 ppm	16.3± 1.3	16.7± 1.9	16.2± 1.0	16.5± 1.0	16.5± 1.0	16.8± 1.0	17.0± 0.8
200 ppm	15.6± 0.8**	16.0± 1.0*	15.9± 1.0	16.2± 0.9	16.3± 1.0	16.6± 1.1**	16.4± 1.1**
400 ppm	15.3± 1.0**	15.5± 1.1**	15.2± 1.0**	15.4± 1.2**	15.8± 1.0**	15.9± 1.0**	15.9± 1.0**

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

Test of Dunnett

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 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
Control	16.9± 1.0	17.0± 0.8	17.0± 1.0	17.0± 1.1	17.3± 0.9	17.0± 1.0	17.1± 1.0
100 ppm	16.7± 1.0	17.1± 0.8	16.9± 0.9	17.2± 1.6	17.2± 0.8	17.0± 0.9	17.0± 1.1
200 ppm	16.4± 0.9*	16.4± 0.9**	16.7± 0.9	16.4± 1.0*	16.6± 0.9**	16.8± 1.4	16.5± 0.9*
400 ppm	15.7± 1.0**	15.9± 1.1**	16.1± 0.9**	15.9± 1.0**	16.0± 1.2**	16.1± 0.9**	15.8± 1.1**

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

Test of Dunnett

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 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
Control	17.2± 0.8	16.8± 1.3	16.6± 1.1	16.9± 1.5	17.3± 1.4	17.0± 2.0	16.2± 1.7
100 ppm	16.9± 0.8	17.0± 0.9	16.6± 1.7	16.8± 1.1	17.1± 1.2	16.7± 1.4	15.7± 1.9
200 ppm	16.6± 1.2*	16.5± 1.0	16.4± 1.0	16.5± 1.0	16.5± 1.9*	15.9± 1.8**	15.7± 2.2
400 ppm	15.8± 1.3**	16.0± 1.4**	15.4± 1.5**	15.9± 1.3**	16.3± 1.7**	15.1± 1.3**	15.4± 1.2

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

Test of Dunnett

STUDY NO. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

PAGE : 6

Group Name	Administration week	
	102	104
Control	16.6± 3.2	16.4± 2.9
100 ppm	16.4± 2.7	16.5± 1.7
200 ppm	16.9± 1.8	16.8± 2.0
400 ppm	15.6± 1.1**	15.5± 1.7**

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

Test of Dunnett

(HAN260)

BAIS 4

TABLE E4

FOOD CONSUMPTION CHANGES : FEMALE

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 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
Control	10.9± 0.6	12.1± 1.1	11.4± 0.8	11.7± 1.2	11.7± 0.7	11.7± 1.1	11.3± 1.1
100 ppm	10.7± 0.5	11.8± 0.8	11.2± 0.7	11.2± 0.8*	11.6± 0.8	11.3± 1.0*	11.1± 0.9
200 ppm	10.6± 0.5*	12.1± 1.1	11.3± 0.8	11.3± 0.9	11.3± 0.7*	11.6± 1.0	11.1± 0.8
400 ppm	10.0± 0.5**	11.8± 1.0	10.4± 0.7**	10.5± 0.7**	11.0± 0.8**	10.8± 0.8**	10.8± 0.8**

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

Test of Dunnett

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 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
Control	11.4± 1.1	11.4± 1.0	11.4± 1.1	11.3± 0.8	11.6± 1.1	11.2± 0.9	11.6± 1.3
100 ppm	11.4± 1.1	11.0± 0.8	11.0± 0.9	11.1± 0.7	10.8± 0.9**	11.0± 0.6	10.6± 0.8**
200 ppm	11.1± 1.2	10.9± 0.8**	11.2± 1.1	10.7± 0.8**	10.6± 0.9**	10.7± 0.7**	10.5± 0.9**
400 ppm	11.0± 1.0	10.6± 0.8**	10.7± 1.1**	10.5± 0.8**	10.4± 0.8**	10.4± 0.9**	10.1± 1.1**

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

Test of Dunnett

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 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
Control	10.8± 1.2	11.1± 1.2	10.8± 0.7	11.1± 1.1	11.4± 1.0	11.9± 1.1	11.6± 1.2
100 ppm	10.8± 0.9	10.9± 1.0	10.9± 1.0	11.0± 0.9	11.5± 0.9	11.5± 1.1	11.8± 1.0
200 ppm	10.5± 0.9	10.6± 0.9	10.5± 0.9	10.8± 0.8	11.1± 0.9	11.0± 0.8**	11.3± 1.0
400 ppm	10.3± 1.0	10.5± 1.0*	10.2± 0.7**	10.8± 1.1	10.8± 0.9**	11.2± 1.0**	11.0± 1.0*

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 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
Control	11.7± 0.9	11.9± 1.1	11.4± 1.0	11.7± 1.0	12.3± 1.1	11.7± 1.2	12.3± 1.1
100 ppm	11.5± 1.0	11.7± 0.7	11.3± 1.1	12.0± 0.9	12.3± 1.0	12.2± 1.0	12.5± 1.1
200 ppm	11.3± 1.1	11.4± 0.7*	11.3± 0.8	11.5± 0.8	11.7± 0.8**	11.8± 1.2	11.8± 0.9*
400 ppm	10.8± 0.7**	11.3± 1.0**	11.6± 1.5	10.8± 0.8**	11.2± 0.9**	11.7± 1.2	11.7± 0.8**

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

Test of Dunnett

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 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
Control	12.2± 1.2	12.1± 1.0	12.1± 1.1	12.4± 1.2	13.1± 1.7	12.1± 1.6	13.4± 1.4
100 ppm	12.2± 0.8	12.3± 1.8	12.2± 1.3	12.5± 2.2	13.1± 1.0	12.0± 1.1	13.4± 1.4
200 ppm	12.1± 0.9	11.8± 1.0	12.0± 1.0	12.4± 1.1	12.7± 1.2	11.6± 1.2	12.6± 2.2
400 ppm	11.6± 0.9**	11.6± 1.2*	11.2± 0.9**	11.4± 0.8**	12.0± 1.0**	10.6± 1.0**	11.9± 1.6**

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

Test of Dunnett

STUDY NO. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

PAGE : 12

Group Name	Administration week	
	102	104
Control	13.1± 1.7	13.2± 1.1
100 ppm	13.2± 1.5	13.1± 1.3
200 ppm	13.0± 1.3	12.4± 1.2*
400 ppm	11.6± 1.2**	11.6± 1.2**

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

Test of Dunnett

TABLE F1

HEMATOLOGY : MALE

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 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	
Control	40	7.59±	1.26	12.7±	2.5	36.2±	6.1	47.7±	3.1	16.7±	1.6	34.9±	1.7	1170±	413
100 ppm	39	7.78±	1.43	13.0±	2.6	37.0±	6.0	48.3±	6.3	16.8±	2.3	34.8±	2.0	1101±	421
200 ppm	39	7.99±	0.99	13.6±	1.9	37.9±	4.5	47.5±	2.0	17.0±	1.1	35.7±	1.2*	1048±	288
400 ppm	42	8.05±	1.26	13.6±	2.6	38.2±	6.0	47.5±	2.8	16.9±	1.5	35.4±	1.8*	1078±	319

Significant difference ; * : $P \leq 0.05$

** : $P \leq 0.01$

Test of Dunnett

(HCL070)

BAIS 4

STUDY NO. : 0675

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME : 1

SEX : MALE

REPORT TYPE : A1

HEMATOLOGY (SUMMARY)

ALL ANIMALS (105W)

PAGE : 2

Group Name	NO. of Animals	RETICULOCYTE %	
Control	40	5.0±	2.7
100 ppm	39	5.5±	5.6
200 ppm	39	3.9±	1.7
400 ppm	42	4.7±	2.6

Significant difference ; * : $P \leq 0.05$

** : $P \leq 0.01$

Test of Dunnett

(HCL070)

BAIS 4

STUDY NO. : 0675

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME : 1

SEX : MALE

REPORT TYPE : A1

HEMATOLOGY (SUMMARY)

ALL ANIMALS (105W)

PAGE : 3

Group Name	NO. of Animals	WBC 10 ³ /μl		Differential		WBC (%)		MONO		EOSINO		BASO		OTHER	
				NEUTRO		LYMPHO									
Control	40	6.57±	2.28	50±	9	41±	8	6±	2	1±	1	0±	0	2±	1
100 ppm	39	6.83±	1.88	48±	7	43±	6	6±	1	1±	1	0±	0	1±	1
200 ppm	39	11.45±	20.74	50±	11	39±	12	6±	1	1±	1	0±	0	4±	14
400 ppm	42	10.34±	20.57	50±	11	40±	10	5±	2	1±	0*	0±	1	4±	14

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

Test of Dunnett

(HCL070)

BAIS 4

TABLE F2

HEMATOLOGY : FEMALE

STUDY NO. : 0675

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME : 1

SEX : FEMALE

REPORT TYPE : A1

HEMATOLOGY (SUMMARY)

ALL ANIMALS (105W)

PAGE : 4

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	
Control	37	7.80±	1.28	14.5±	2.0	39.1±	4.7	50.9±	5.6	18.8±	1.6	37.0±	1.5	728±	168
100 ppm	36	8.04±	0.66	14.9±	1.2	39.9±	2.9	49.7±	2.0	18.6±	0.7	37.4±	0.7	688±	108
200 ppm	42	8.13±	0.56	15.0±	1.0	40.0±	2.6	49.2±	1.4	18.5±	0.7	37.5±	0.8	725±	137
400 ppm	36	8.09±	0.75	15.2±	1.1	40.6±	2.4	50.5±	3.8	18.8±	1.0	37.3±	0.8	765±	169

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

Test of Dunnett

(HCL070)

BAIS 4

STUDY NO. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
MEASURE TIME : 1
SEX : FEMALE

HEMATOLOGY (SUMMARY)
ALL ANIMALS (105W)

REPORT TYPE : A1

PAGE : 5

Group Name	NO. of Animals	RETICULOCYTE %	
Control	37	4.0±	5.6
100 ppm	36	2.6±	1.4
200 ppm	42	2.6±	1.6
400 ppm	36	3.3±	3.9

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

Test of Dunnett

(HCL070)

BAIS 4

STUDY NO. : 0675

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME : 1

SEX : FEMALE

REPORT TYPE : A1

HEMATOLOGY (SUMMARY)

ALL ANIMALS (105W)

PAGE : 6

Group Name	NO. of Animals	WBC 10 ³ /μl		Differential NEUTRO		WBC (%) LYMPHO		MONO		EOSINO		BASO		OTHER	
Control	37	4.49±	5.41	38±	11	53±	12	5±	2	2±	1	0±	0	1±	1
100 ppm	36	4.01±	2.88	38±	9	52±	10	5±	2	2±	1	0±	1	2±	5
200 ppm	42	3.88±	1.75	39±	7	52±	7	5±	2	2±	1	0±	0	1±	1
400 ppm	36	3.24±	0.98	42±	7	51±	7	5±	1	2±	1	0±	0	1±	0

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

Test of Dunnett

(HCL070)

BAIS 4

TABLE G1

BIOCHEMISTRY : MALE

STUDY NO. : 0675

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME : 1

SEX : MALE

REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)

ALL ANIMALS (105W)

PAGE : 1

Group Name	NO. of Animals	TOTAL PROTEIN g /dl		ALBUMIN g /dl		A/G RATIO		T-BILIRUBIN mg/dl		GLUCOSE mg/dl		T-CHOLESTEROL mg/dl		TRIGLYCERIDE mg/dl	
Control	40	6.8±	0.4	2.8±	0.3	0.7±	0.1	0.14±	0.03	147±	30	192±	52	131±	88
100 ppm	39	6.8±	0.4	2.9±	0.2	0.7±	0.1	0.48±	2.06	160±	19	186±	66	140±	99
200 ppm	40	6.8±	0.3	2.8±	0.3	0.7±	0.1	0.14±	0.03	152±	25	194±	76	139±	94
400 ppm	42	6.8±	0.3	2.8±	0.2	0.7±	0.1	0.16±	0.04	155±	15	193±	64	135±	92

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

Test of Dunnett

(HCL074)

BAIS 4

STUDY NO. : 0675

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME : 1

SEX : MALE

REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)

ALL ANIMALS (105W)

PAGE : 2

Group Name	NO. of Animals	PHOSPHOLIPID mg/dl		AST IU/l		ALT IU/l		LDH IU/l		ALP IU/l		G-GTP IU/l		CK IU/l	
Control	40	279±	69	91±	88	37±	19	140±	44	335±	131	8±	10	111±	45
100 ppm	39	272±	86	116±	251	40±	42	148±	90	351±	175	8±	5	108±	31
200 ppm	40	275±	96	78±	26	35±	12	155±	149	321±	81	7±	4	113±	52
400 ppm	42	274±	84	73±	27	34±	9	157±	150	332±	58	9±	4**	108±	40

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

Test of Dunnett

(HCL074)

BAIS 4

STUDY NO. : 0675

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME : 1

SEX : MALE

REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)

ALL ANIMALS (105W)

PAGE : 3

Group Name	NO. of Animals	UREA NITROGEN mg/dl		CREATININE mg/dl		SODIUM mEq/l		POTASSIUM mEq/l		CHLORIDE mEq/l		CALCIUM mg/dl		INORGANIC PHOSPHORUS mg/dl	
Control	40	21.1±	7.3	0.6±	0.1	142±	1	3.8±	0.4	106±	2	10.5±	0.6	4.3±	1.0
100 ppm	39	20.6±	5.8	0.6±	0.2	143±	2	3.8±	0.3	106±	2	10.4±	0.5	4.4±	0.9
200 ppm	40	20.6±	6.0	0.6±	0.1	142±	1	3.7±	0.5	106±	2	10.5±	0.4	4.3±	0.8
400 ppm	42	20.1±	3.9	0.6±	0.1	142±	1	3.9±	0.3	106±	2	10.4±	0.4	4.5±	0.6

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

Test of Dunnett

(HCL074)

BAIS 4

TABLE G2

BIOCHEMISTRY : FEMALE

STUDY NO. : 0675

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME : 1

SEX : FEMALE

REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)

ALL ANIMALS (105W)

PAGE : 4

Group Name	NO. of Animals	TOTAL PROTEIN g /dl		ALBUMIN g /dl		A/G RATIO		T-BILIRUBIN mg/dl		GLUCOSE mg/dl		T-CHOLESTEROL mg/dl		TRIGLYCERIDE mg/dl	
Control	38	7.2±	0.5	3.6±	0.3	1.0±	0.1	0.15±	0.20	142±	21	156±	41	123±	101
100 ppm	36	7.3±	0.4	3.5±	0.3	1.0±	0.1	0.15±	0.08	140±	15	165±	49	142±	115
200 ppm	42	7.2±	0.4	3.5±	0.3	0.9±	0.1	0.13±	0.02	142±	14	161±	49	107±	88
400 ppm	36	7.2±	0.4	3.6±	0.3	1.0±	0.1	0.13±	0.01	144±	15	155±	39	63±	58**

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

Test of Dunnett

(HCL074)

BAIS 4

STUDY NO. : 0675

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME : 1

SEX : FEMALE

REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)

ALL ANIMALS (105W)

PAGE : 5

Group Name	NO. of Animals	PHOSPHOLIPID mg/dl		AST IU/l		ALT IU/l		LDH IU/l		ALP IU/l		G-GTP IU/l		CK IU/l	
Control	38	290±	74	118±	59	51±	35	155±	71	189±	65	2±	1	96±	22
100 ppm	36	299±	87	192±	256	64±	45	167±	119	238±	169	3±	3	102±	68
200 ppm	42	286±	83	134±	90	59±	28	147±	49	221±	84	3±	2	91±	21
400 ppm	36	275±	68	108±	42	52±	23	138±	50	185±	55	3±	1	91±	25

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

Test of Dunnett

(HCL074)

BAIS 4

STUDY NO. : 0675

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME : 1

SEX : FEMALE

REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)

ALL ANIMALS (105W)

PAGE : 6

Group Name	NO. of Animals	UREA NITROGEN mg/dl		CREATININE mg/dl		SODIUM mEq/l		POTASSIUM mEq/l		CHLORIDE mEq/l		CALCIUM mg/dl		INORGANIC PHOSPHORUS mg/dl	
Control	38	17.3±	2.4	0.6±	0.1	141±	2	3.3±	0.3	103±	3	10.6±	0.5	4.0±	0.8
100 ppm	36	17.4±	1.8	0.6±	0.1	141±	1	3.4±	0.4	104±	2	10.7±	0.4	4.0±	0.7
200 ppm	42	17.4±	1.9	0.6±	0.1	140±	1	3.4±	0.4	104±	2	10.6±	0.4	3.9±	0.7
400 ppm	36	19.2±	1.8**	0.6±	0.1	140±	1	3.5±	0.4	104±	2	10.5±	0.4	4.1±	0.7

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

Test of Dunnett

(HCL074)

BAIS 4

TABLE H1

URINALYSIS : MALE

STUDY NO. : 0675

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME : 1

SEX : MALE

REPORT TYPE : A1

URINALYSIS

PAGE : 1

Group Name	NO. of Animals	pH							CHI	Protein					CHI	Glucose					CHI	Ketone body					CHI	Bilirubin				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+
Control	43	0	1	3	3	15	21	0		0	0	0	3	24	16		43	0	0	0	0	0	0		42	1	0	0	0	0		42	1	0	0
100 ppm	43	0	1	4	7	17	14	0		0	0	0	1	27	15		43	0	0	0	0	0	0		41	2	0	0	0	0		40	2	0	1
200 ppm	42	0	0	1	7	22	12	0		0	0	1	3	25	13		42	0	0	0	0	0	0		40	2	0	0	0	0		42	0	0	0
400 ppm	42	0	0	1	5	14	22	0		0	0	0	4	20	18		42	0	0	0	0	0	0		39	3	0	0	0	0		42	0	0	0

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

Test of CHI SQUARE

(HCL101)

BAIS 4

STUDY NO. : 0675

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME : 1

SEX : MALE

REPORT TYPE : A1

URINALYSIS

PAGE : 2

Group Name	NO. of Animals	Occult blood					CHI	Urobilinogen					CHI
		-	±	+	2+	3+		±	+	2+	3+	4+	
Control	43	43	0	0	0	0	0	43	0	0	0	0	0
100 ppm	43	39	1	0	3	0	0	43	0	0	0	0	0
200 ppm	42	42	0	0	0	0	0	42	0	0	0	0	0
400 ppm	42	38	1	1	1	1	1	42	0	0	0	0	0

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

Test of CHI SQUARE

(HCL101)

BAIS 4

TABLE H2

URINALYSIS : FEMALE

STUDY NO. : 0675

ANIMAL : RAT F344/DuCr1j[F344/DuCrj]

MEASURE. TIME : 1

SEX : FEMALE

REPORT TYPE : A1

URINALYSIS

PAGE : 3

Group Name	NO. of Animals	pH							CHI	Protein						CHI	Glucose						CHI	Ketone body						CHI	Bilirubin				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+		
Control	41	0	3	2	4	11	13	8		0	1	6	11	20	3		41	0	0	0	0	0	0		36	5	0	0	0	0		41	0	0	0	
100 ppm	39	0	0	2	6	17	8	6		0	0	1	9	26	3		39	0	0	0	0	0	0		32	7	0	0	0	0		39	0	0	0	
200 ppm	44	0	0	1	12	14	8	9		0	1	4	12	21	6		44	0	0	0	0	0	0		42	1	1	0	0	0		44	0	0	0	
400 ppm	41	0	0	3	7	11	11	9		0	1	6	11	17	6		41	0	0	0	0	0	0		32	6	3	0	0	0		41	0	0	0	

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

Test of CHI SQUARE

(HCL101)

BATS 4

STUDY NO. : 0675

URINALYSIS

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME : 1

SEX : FEMALE

REPORT TYPE : A1

PAGE : 4

Group Name	NO. of Animals	Occult blood					CHI	Urobilinogen					CHI
		-	±	+	2+	3+		±	+	2+	3+	4+	
Control	41	41	0	0	0	0	0	41	0	0	0	0	0
100 ppm	39	36	0	0	1	2		39	0	0	0	0	
200 ppm	44	42	0	0	0	2		44	0	0	0	0	
400 ppm	41	39	0	1	1	0		41	0	0	0	0	

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

Test of CHI SQUARE

(HCL101)

BAIS 4

TABLE I 1

GROSS FINDINGS : MALE

ALL ANIMALS

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 1

Organ	Findings	Group Name NO. of Animals	Control		100 ppm		200 ppm		400 ppm	
			50	(%)	50	(%)	50	(%)	50	(%)
skin/app	nodule		4	(8)	1	(2)	4	(8)	4	(8)
subcutis	jaundice		0	(0)	1	(2)	0	(0)	0	(0)
	nodule		1	(2)	0	(0)	0	(0)	0	(0)
	mass		8	(16)	9	(18)	6	(12)	10	(20)
lung	red		0	(0)	0	(0)	1	(2)	1	(2)
	white zone		1	(2)	2	(4)	2	(4)	1	(2)
	red zone		0	(0)	2	(4)	1	(2)	0	(0)
	nodule		3	(6)	2	(4)	0	(0)	1	(2)
lymph node	enlarged		3	(6)	0	(0)	1	(2)	1	(2)
spleen	enlarged		6	(12)	3	(6)	2	(4)	6	(12)
	white zone		1	(2)	0	(0)	0	(0)	0	(0)
	nodule		1	(2)	0	(0)	2	(4)	0	(0)
heart	white zone		0	(0)	2	(4)	0	(0)	0	(0)
forestomach	ulcer		0	(0)	1	(2)	1	(2)	0	(0)
gl stomach	nodule		0	(0)	1	(2)	0	(0)	0	(0)
	ulcer		1	(2)	0	(0)	0	(0)	0	(0)
small intes	nodule		1	(2)	0	(0)	0	(0)	0	(0)
	gas		0	(0)	1	(2)	0	(0)	0	(0)
cecum	nodule		0	(0)	0	(0)	1	(2)	0	(0)
large intes	gas		0	(0)	1	(2)	0	(0)	0	(0)
liver	enlarged		0	(0)	0	(0)	0	(0)	1	(2)
	nodule		1	(2)	2	(4)	1	(2)	1	(2)

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 2

Organ	Findings	Group Name NO. of Animals	Control		100 ppm		200 ppm		400 ppm	
			50	(%)	50	(%)	50	(%)	50	(%)
liver	rough		0	(0)	1	(2)	0	(0)	0	(0)
	herniation		4	(8)	7	(14)	6	(12)	12	(24)
kidney	enlarged		0	(0)	0	(0)	2	(4)	1	(2)
	white zone		0	(0)	1	(2)	0	(0)	0	(0)
	nodule		0	(0)	3	(6)	0	(0)	0	(0)
	granular		2	(4)	3	(6)	2	(4)	3	(6)
urin bladd	urine:marked retention		0	(0)	0	(0)	3	(6)	0	(0)
	urine:red		1	(2)	0	(0)	0	(0)	0	(0)
pituitary	enlarged		4	(8)	2	(4)	4	(8)	2	(4)
	red zone		1	(2)	1	(2)	4	(8)	2	(4)
	nodule		1	(2)	1	(2)	3	(6)	2	(4)
thyroid	enlarged		3	(6)	2	(4)	3	(6)	1	(2)
	nodule		1	(2)	1	(2)	1	(2)	0	(0)
adrenal	enlarged		1	(2)	2	(4)	0	(0)	2	(4)
	nodule		1	(2)	1	(2)	0	(0)	0	(0)
testis	enlarged		1	(2)	0	(0)	0	(0)	0	(0)
	nodule		40	(80)	43	(86)	34	(68)	39	(78)
	adhesion		0	(0)	0	(0)	1	(2)	0	(0)
semin ves	nodule		1	(2)	0	(0)	0	(0)	0	(0)
brain	deformed		0	(0)	1	(2)	0	(0)	0	(0)
periph nerv	nodule		1	(2)	0	(0)	0	(0)	0	(0)
eye	turbid		1	(2)	0	(0)	0	(0)	1	(2)

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 3

Organ	Findings	Group Name NO. of Animals	Control		100 ppm		200 ppm		400 ppm	
			50	(%)	50	(%)	50	(%)	50	(%)
eye	white		3	(6)	1	(2)	2	(4)	0	(0)
Zymbal gl	nodule		1	(2)	0	(0)	0	(0)	1	(2)
bone	nodule		0	(0)	1	(2)	0	(0)	0	(0)
pleura	thick		0	(0)	0	(0)	1	(2)	0	(0)
peritoneum	nodule		3	(6)	2	(4)	1	(2)	3	(6)
retroperit	mass		0	(0)	1	(2)	1	(2)	0	(0)
abdominal c	ascites		1	(2)	1	(2)	0	(0)	0	(0)
thoracic ca	hemorrhage		1	(2)	1	(2)	0	(0)	0	(0)
	pleural fluid		0	(0)	1	(2)	1	(2)	0	(0)
other	hindlimb:nodule		0	(0)	0	(0)	1	(2)	0	(0)
	forelimb:swollen		0	(0)	0	(0)	1	(2)	0	(0)
	hindlimb:swollen		0	(0)	0	(0)	1	(2)	0	(0)

TABLE I 2

GROSS FINDINGS : MALE
DEAD AND MORIBUND ANIMALS

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 1

Organ	Findings	Group Name NO. of Animals	Control	100 ppm	200 ppm	400 ppm
			9 (%)	10 (%)	10 (%)	8 (%)
skin/app	nodule		0 (0)	0 (0)	1 (10)	1 (13)
subcutis	mass		1 (11)	4 (40)	2 (20)	4 (50)
lung	red		0 (0)	0 (0)	1 (10)	1 (13)
	white zone		0 (0)	0 (0)	0 (0)	1 (13)
	red zone		0 (0)	2 (20)	1 (10)	0 (0)
	nodule		0 (0)	2 (20)	0 (0)	0 (0)
lymph node	enlarged		2 (22)	0 (0)	0 (0)	0 (0)
spleen	enlarged		3 (33)	2 (20)	1 (10)	3 (38)
forestomach	ulcer		0 (0)	1 (10)	1 (10)	0 (0)
gl stomach	ulcer		1 (11)	0 (0)	0 (0)	0 (0)
small intes	gas		0 (0)	1 (10)	0 (0)	0 (0)
large intes	gas		0 (0)	1 (10)	0 (0)	0 (0)
liver	enlarged		0 (0)	0 (0)	0 (0)	1 (13)
	nodule		1 (11)	0 (0)	0 (0)	1 (13)
	herniation		2 (22)	2 (20)	3 (30)	2 (25)
kidney	enlarged		0 (0)	0 (0)	2 (20)	1 (13)
	white zone		0 (0)	1 (10)	0 (0)	0 (0)
	nodule		0 (0)	2 (20)	0 (0)	0 (0)
	granular		0 (0)	1 (10)	0 (0)	0 (0)
urin bladd	urine:marked retention		0 (0)	0 (0)	3 (30)	0 (0)
	urine:red		1 (11)	0 (0)	0 (0)	0 (0)
pituitary	enlarged		1 (11)	1 (10)	2 (20)	2 (25)

STUDY NO. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

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

PAGE : 2

Organ	Findings	Group Name NO. of Animals	Control	100 ppm	200 ppm	400 ppm
			9 (%)	10 (%)	10 (%)	8 (%)
thyroid	enlarged		1 (11)	1 (10)	2 (20)	0 (0)
adrenal	enlarged		1 (11)	0 (0)	0 (0)	0 (0)
	nodule		0 (0)	1 (10)	0 (0)	0 (0)
testis	enlarged		1 (11)	0 (0)	0 (0)	0 (0)
	nodule		2 (22)	6 (60)	3 (30)	1 (13)
	adhesion		0 (0)	0 (0)	1 (10)	0 (0)
brain	deformed		0 (0)	1 (10)	0 (0)	0 (0)
eye	turbid		0 (0)	0 (0)	0 (0)	1 (13)
	white		2 (22)	1 (10)	0 (0)	0 (0)
Zymbal gl	nodule		1 (11)	0 (0)	0 (0)	1 (13)
bone	nodule		0 (0)	1 (10)	0 (0)	0 (0)
pleura	thick		0 (0)	0 (0)	1 (10)	0 (0)
retroperit	mass		0 (0)	1 (10)	1 (10)	0 (0)
thoracic ca	hemorrhage		0 (0)	1 (10)	0 (0)	0 (0)
	pleural fluid		0 (0)	0 (0)	1 (10)	0 (0)
other	forelimb:swollen		0 (0)	0 (0)	1 (10)	0 (0)
	hindlimb:swollen		0 (0)	0 (0)	1 (10)	0 (0)

TABLE I 3

GROSS FINDINGS : MALE
SACRIFICED ANIMALS

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

GROSS FINDINGS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 1

Organ	Findings	Group Name NO. of Animals	Control		100 ppm		200 ppm		400 ppm	
			41	(%)	40	(%)	40	(%)	42	(%)
skin/app	nodule		4	(10)	1	(3)	3	(8)	3	(7)
subcutis	jaundice		0	(0)	1	(3)	0	(0)	0	(0)
	nodule		1	(2)	0	(0)	0	(0)	0	(0)
	mass		7	(17)	5	(13)	4	(10)	6	(14)
lung	white zone		1	(2)	2	(5)	2	(5)	0	(0)
	nodule		3	(7)	0	(0)	0	(0)	1	(2)
lymph node	enlarged		1	(2)	0	(0)	1	(3)	1	(2)
spleen	enlarged		3	(7)	1	(3)	1	(3)	3	(7)
	white zone		1	(2)	0	(0)	0	(0)	0	(0)
	nodule		1	(2)	0	(0)	2	(5)	0	(0)
heart	white zone		0	(0)	2	(5)	0	(0)	0	(0)
gl stomach	nodule		0	(0)	1	(3)	0	(0)	0	(0)
small intes	nodule		1	(2)	0	(0)	0	(0)	0	(0)
cecum	nodule		0	(0)	0	(0)	1	(3)	0	(0)
liver	nodule		0	(0)	2	(5)	1	(3)	0	(0)
	rough		0	(0)	1	(3)	0	(0)	0	(0)
	herniation		2	(5)	5	(13)	3	(8)	10	(24)
kidney	nodule		0	(0)	1	(3)	0	(0)	0	(0)
	granular		2	(5)	2	(5)	2	(5)	3	(7)
pituitary	enlarged		3	(7)	1	(3)	2	(5)	0	(0)
	red zone		1	(2)	1	(3)	4	(10)	2	(5)
	nodule		1	(2)	1	(3)	3	(8)	2	(5)

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

GROSS FINDINGS (SUMMARY)
 SACRIFICED ANIMALS (105W)

PAGE : 2

Organ	Findings	Group Name NO. of Animals	Control	100 ppm	200 ppm	400 ppm
			41 (%)	40 (%)	40 (%)	42 (%)
thyroid	enlarged		2 (5)	1 (3)	1 (3)	1 (2)
	nodule		1 (2)	1 (3)	1 (3)	0 (0)
adrenal	enlarged		0 (0)	2 (5)	0 (0)	2 (5)
	nodule		1 (2)	0 (0)	0 (0)	0 (0)
testis	nodule		38 (93)	37 (93)	31 (78)	38 (90)
semin ves	nodule		1 (2)	0 (0)	0 (0)	0 (0)
periph nerv	nodule		1 (2)	0 (0)	0 (0)	0 (0)
eye	turbid		1 (2)	0 (0)	0 (0)	0 (0)
	white		1 (2)	0 (0)	2 (5)	0 (0)
peritoneum	nodule		3 (7)	2 (5)	1 (3)	3 (7)
abdominal c	ascites		1 (2)	1 (3)	0 (0)	0 (0)
thoracic ca	hemorrhage		1 (2)	0 (0)	0 (0)	0 (0)
	pleural fluid		0 (0)	1 (3)	0 (0)	0 (0)
other	hindlimb:nodule		0 (0)	0 (0)	1 (3)	0 (0)

(HPT080)

BAIS 4

TABLE I 4

GROSS FINDINGS : FEMALE

ALL ANIMALS

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 4

Organ	Findings	Group Name NO. of Animals	Control		100 ppm		200 ppm		400 ppm	
			50	(%)	50	(%)	50	(%)	50	(%)
skin/app	nodule		1	(2)	1	(2)	1	(2)	0	(0)
subcutis	jaundice		0	(0)	2	(4)	0	(0)	0	(0)
	mass		6	(12)	6	(12)	6	(12)	7	(14)
lung	red zone		0	(0)	1	(2)	0	(0)	1	(2)
	yellow zone		1	(2)	0	(0)	0	(0)	0	(0)
	nodule		2	(4)	1	(2)	0	(0)	0	(0)
lymph node	enlarged		0	(0)	1	(2)	0	(0)	1	(2)
spleen	enlarged		3	(6)	7	(14)	0	(0)	1	(2)
	nodule		0	(0)	1	(2)	0	(0)	0	(0)
heart	white zone		0	(0)	1	(2)	0	(0)	0	(0)
tongue	nodule		0	(0)	0	(0)	1	(2)	0	(0)
salivary gl	nodule		0	(0)	1	(2)	0	(0)	0	(0)
forestomach	nodule		1	(2)	0	(0)	0	(0)	0	(0)
	ulcer		1	(2)	0	(0)	0	(0)	2	(4)
gl stomach	nodule		1	(2)	0	(0)	0	(0)	0	(0)
	ulcer		0	(0)	0	(0)	0	(0)	1	(2)
small intes	nodule		0	(0)	1	(2)	0	(0)	2	(4)
large intes	dilated		0	(0)	0	(0)	0	(0)	1	(2)
liver	white zone		0	(0)	2	(4)	1	(2)	0	(0)
	nodule		0	(0)	0	(0)	1	(2)	0	(0)
	rough		0	(0)	2	(4)	0	(0)	0	(0)
	herniation		5	(10)	5	(10)	10	(20)	13	(26)

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 5

Organ	Findings	Group Name NO. of Animals	Control		100 ppm		200 ppm		400 ppm	
			50	(%)	50	(%)	50	(%)	50	(%)
kidney	white zone		0	(0)	1	(2)	0	(0)	1	(2)
	granular		0	(0)	0	(0)	0	(0)	1	(2)
urin bladd	urine:marked retention		0	(0)	0	(0)	0	(0)	1	(2)
pituitary	enlarged		5	(10)	5	(10)	7	(14)	9	(18)
	red zone		7	(14)	9	(18)	6	(12)	3	(6)
	black zone		1	(2)	0	(0)	0	(0)	0	(0)
	nodule		7	(14)	7	(14)	7	(14)	5	(10)
thyroid	enlarged		2	(4)	2	(4)	0	(0)	0	(0)
	nodule		2	(4)	0	(0)	0	(0)	0	(0)
adrenal	enlarged		1	(2)	1	(2)	0	(0)	1	(2)
ovary	enlarged		3	(6)	0	(0)	1	(2)	1	(2)
	cyst		1	(2)	4	(8)	1	(2)	0	(0)
uterus	nodule		9	(18)	2	(4)	5	(10)	3	(6)
	cyst		0	(0)	0	(0)	0	(0)	1	(2)
brain	nodule		0	(0)	0	(0)	1	(2)	0	(0)
periph nerv	nodule		0	(0)	0	(0)	1	(2)	0	(0)
eye	turbid		0	(0)	0	(0)	0	(0)	1	(2)
	white		1	(2)	2	(4)	3	(6)	3	(6)
Zymbal gl	nodule		1	(2)	0	(0)	0	(0)	0	(0)
abdominal c	ascites		1	(2)	0	(0)	0	(0)	0	(0)
thoracic ca	pleural fluid		0	(0)	1	(2)	1	(2)	0	(0)
other	forelimb:nodule		1	(2)	0	(0)	0	(0)	0	(0)

STUDY NO. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 6

Organ	Findings	Group Name NO. of Animals	Control		100 ppm		200 ppm		400 ppm	
			50	(%)	50	(%)	50	(%)	50	(%)
other	hindlimb:nodule		0	(0)	1	(2)	0	(0)	0	(0)
	nose:nodule		0	(0)	0	(0)	1	(2)	0	(0)
whole body	anemic		1	(2)	1	(2)	0	(0)	0	(0)

(HPT080)

BAIS 4

TABLE I 5

GROSS FINDINGS : FEMALE
DEAD AND MORIBUND ANIMALS

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 3

Organ	Findings	Group Name NO. of Animals	Control	100 ppm	200 ppm	400 ppm
			12 (%)	14 (%)	7 (%)	14 (%)
skin/app	nodule		1 (8)	1 (7)	0 (0)	0 (0)
subcutis	jaundice		0 (0)	2 (14)	0 (0)	0 (0)
	mass		0 (0)	4 (29)	1 (14)	4 (29)
lung	red zone		0 (0)	1 (7)	0 (0)	1 (7)
	yellow zone		1 (8)	0 (0)	0 (0)	0 (0)
lymph node	enlarged		0 (0)	0 (0)	0 (0)	1 (7)
spleen	enlarged		2 (17)	5 (36)	0 (0)	1 (7)
heart	white zone		0 (0)	1 (7)	0 (0)	0 (0)
forestomach	nodule		1 (8)	0 (0)	0 (0)	0 (0)
	ulcer		1 (8)	0 (0)	0 (0)	2 (14)
gl stomach	nodule		1 (8)	0 (0)	0 (0)	0 (0)
	ulcer		0 (0)	0 (0)	0 (0)	1 (7)
small intes	nodule		0 (0)	0 (0)	0 (0)	1 (7)
large intes	dilated		0 (0)	0 (0)	0 (0)	1 (7)
liver	white zone		0 (0)	1 (7)	1 (14)	0 (0)
	herniation		2 (17)	1 (7)	0 (0)	4 (29)
kidney	white zone		0 (0)	1 (7)	0 (0)	1 (7)
	granular		0 (0)	0 (0)	0 (0)	1 (7)
urin bladd	urine:marked retention		0 (0)	0 (0)	0 (0)	1 (7)
pituitary	enlarged		4 (33)	3 (21)	4 (57)	6 (43)
	red zone		0 (0)	2 (14)	1 (14)	0 (0)
	black zone		1 (8)	0 (0)	0 (0)	0 (0)

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 4

Organ	Findings	Group Name NO. of Animals	Control		100 ppm		200 ppm		400 ppm	
			12	(%)	14	(%)	7	(%)	14	(%)
pituitary	nodule		0	(0)	1	(7)	0	(0)	0	(0)
thyroid	enlarged		0	(0)	1	(7)	0	(0)	0	(0)
adrenal	enlarged		0	(0)	1	(7)	0	(0)	0	(0)
ovary	enlarged		1	(8)	0	(0)	0	(0)	0	(0)
	cyst		0	(0)	2	(14)	0	(0)	0	(0)
uterus	nodule		2	(17)	0	(0)	1	(14)	1	(7)
brain	nodule		0	(0)	0	(0)	1	(14)	0	(0)
periph nerv	nodule		0	(0)	0	(0)	1	(14)	0	(0)
eye	turbid		0	(0)	0	(0)	0	(0)	1	(7)
	white		0	(0)	1	(7)	0	(0)	0	(0)
Zymbal gl	nodule		1	(8)	0	(0)	0	(0)	0	(0)
abdominal c	ascites		1	(8)	0	(0)	0	(0)	0	(0)
thoracic ca	pleural fluid		0	(0)	1	(7)	0	(0)	0	(0)
other	forelimb:nodule		1	(8)	0	(0)	0	(0)	0	(0)
whole body	anemic		1	(8)	1	(7)	0	(0)	0	(0)

TABLE I 6

GROSS FINDINGS : FEMALE
SACRIFICED ANIMALS

STUDY NO. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

GROSS FINDINGS (SUMMARY)
SACRIFICED ANIMALS (105W)

PAGE : 3

Organ	Findings	Group Name NO. of Animals	Control		100 ppm		200 ppm		400 ppm	
			38	(%)	36	(%)	43	(%)	36	(%)
skin/app	nodule		0	(0)	0	(0)	1	(2)	0	(0)
subcutis	mass		6	(16)	2	(6)	5	(12)	3	(8)
lung	nodule		2	(5)	1	(3)	0	(0)	0	(0)
lymph node	enlarged		0	(0)	1	(3)	0	(0)	0	(0)
spleen	enlarged		1	(3)	2	(6)	0	(0)	0	(0)
	nodule		0	(0)	1	(3)	0	(0)	0	(0)
tongue	nodule		0	(0)	0	(0)	1	(2)	0	(0)
salivary gl	nodule		0	(0)	1	(3)	0	(0)	0	(0)
small intes	nodule		0	(0)	1	(3)	0	(0)	1	(3)
liver	white zone		0	(0)	1	(3)	0	(0)	0	(0)
	nodule		0	(0)	0	(0)	1	(2)	0	(0)
	rough		0	(0)	2	(6)	0	(0)	0	(0)
	herniation		3	(8)	4	(11)	10	(23)	9	(25)
pituitary	enlarged		1	(3)	2	(6)	3	(7)	3	(8)
	red zone		7	(18)	7	(19)	5	(12)	3	(8)
	nodule		7	(18)	6	(17)	7	(16)	5	(14)
thyroid	enlarged		2	(5)	1	(3)	0	(0)	0	(0)
	nodule		2	(5)	0	(0)	0	(0)	0	(0)
adrenal	enlarged		1	(3)	0	(0)	0	(0)	1	(3)
ovary	enlarged		2	(5)	0	(0)	1	(2)	1	(3)
	cyst		1	(3)	2	(6)	1	(2)	0	(0)
uterus	nodule		7	(18)	2	(6)	4	(9)	2	(6)

STUDY NO. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

GROSS FINDINGS (SUMMARY)
SACRIFICED ANIMALS (105W)

PAGE : 4

Organ	Findings	Group Name NO. of Animals	Control		100 ppm		200 ppm		400 ppm	
			38	(%)	36	(%)	43	(%)	36	(%)
uterus	cyst		0	(0)	0	(0)	0	(0)	1	(3)
eye	white		1	(3)	1	(3)	3	(7)	3	(8)
thoracic ca	pleural fluid		0	(0)	0	(0)	1	(2)	0	(0)
other	hindlimb:nodule		0	(0)	1	(3)	0	(0)	0	(0)
	nose:nodule		0	(0)	0	(0)	1	(2)	0	(0)

(HPT080)

BAIS 4

TABLE J1

ORGAN WEIGHT, ABSOLUTE : MALE

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE
 UNIT: g

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

PAGE : 1

Group Name	NO. of Animals	Body Weight		ADRENALS		TESTES		HEART		LUNGS		KIDNEYS	
Control	41	391±	52	0.115±	0.243	3.608±	1.279	1.228±	0.116	1.378±	0.120	2.765±	0.348
100 ppm	39	390±	54	0.091±	0.115	3.517±	1.402	1.245±	0.112	1.416±	0.244	2.860±	0.401
200 ppm	40	381±	51	0.073±	0.014	3.101±	1.306	1.209±	0.104	1.363±	0.115	2.799±	0.350
400 ppm	42	352±	19**	0.079±	0.059*	3.673±	1.362	1.184±	0.080	1.339±	0.179**	2.730±	0.243

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

Test of Dunnett

(HCL040)

BAIS 4

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE
 UNIT: g

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

PAGE : 2

Group Name	NO. of Animals	SPLEEN		LIVER		BRAIN	
Control	41	1.052±	0.463	11.071±	2.073	2.093±	0.060
100 ppm	39	1.328±	1.926	11.407±	1.609	2.108±	0.063
200 ppm	40	1.028±	0.371	11.114±	1.844	2.091±	0.046
400 ppm	42	1.138±	0.843	10.576±	1.088	2.061±	0.045*

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

Test of Dunnett

(HCL040)

BAIS 4

TABLE J2

ORGAN WEIGHT, ABSOLUTE : FEMALE

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE
 UNIT: g

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

PAGE : 3

Group Name	NO. of Animals	Body Weight	ADRENALS	OVARIES	HEART	LUNGS	KIDNEYS
Control	38	263± 33	0.089± 0.076	0.142± 0.141	0.889± 0.077	0.970± 0.131	1.875± 0.165
100 ppm	36	269± 23	0.072± 0.009	0.123± 0.032	0.894± 0.074	0.965± 0.111	1.876± 0.169
200 ppm	42	262± 21	0.071± 0.010**	0.178± 0.443	0.869± 0.052	0.939± 0.057	1.851± 0.196
400 ppm	36	234± 18**	0.073± 0.017**	0.136± 0.151	0.843± 0.066*	0.926± 0.060	1.773± 0.132*

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

Test of Dunnett

(HCL040)

BAIS 4

STUDY NO. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE
UNIT: g

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

PAGE : 4

Group Name	NO. of Animals	SPLEEN		LIVER		BRAIN	
Control	38	0.771±	1.049	6.844±	1.014	1.908±	0.037
100 ppm	36	0.749±	0.673	7.089±	1.214	1.889±	0.048
200 ppm	42	0.567±	0.153	6.896±	0.911	1.889±	0.041
400 ppm	36	0.523±	0.089	6.162±	0.545**	1.863±	0.037**

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

Test of Dunnett

(HCL040)

BAIS 4

TABLE K1

ORGAN WEIGHT, RELATIVE : MALE

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE
 UNIT: %

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

PAGE : 1

Group Name	NO. of Animals	Body Weight (g)	ADRENALS	TESTES	HEART	LUNGS	KIDNEYS
Control	41	391± 52	0.030± 0.064	0.917± 0.304	0.319± 0.046	0.358± 0.053	0.723± 0.166
100 ppm	39	390± 54	0.024± 0.032	0.907± 0.351	0.325± 0.050	0.372± 0.099	0.748± 0.157
200 ppm	40	381± 51	0.019± 0.004	0.819± 0.341	0.321± 0.039	0.364± 0.060	0.745± 0.119
400 ppm	42	352± 19**	0.023± 0.017	1.043± 0.382	0.338± 0.026**	0.383± 0.065*	0.778± 0.073**

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

Test of Dunnett

(HCL042)

BAIS 4

STUDY NO. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE
UNIT: %

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

PAGE : 2

Group Name	NO. of Animals	SPLEEN	LIVER	BRAIN
Control	41	0.272± 0.126	2.856± 0.548	0.545± 0.080
100 ppm	39	0.362± 0.603	2.966± 0.555	0.549± 0.063
200 ppm	40	0.274± 0.104	2.929± 0.404	0.558± 0.072
400 ppm	42	0.331± 0.290	3.014± 0.323*	0.588± 0.033**

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

Test of Dunnett

(HCL042)

BAIS 4

TABLE K2

ORGAN WEIGHT, RELATIVE : FEMALE

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE
 UNIT: %

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

PAGE : 3

Group Name	NO. of Animals	Body Weight (g)	ADRENALS	OVARIES	HEART	LUNGS	KIDNEYS
Control	38	263± 33	0.035± 0.032	0.055± 0.058	0.343± 0.053	0.377± 0.083	0.726± 0.118
100 ppm	36	269± 23	0.027± 0.003	0.046± 0.012	0.333± 0.027	0.360± 0.047	0.700± 0.070
200 ppm	42	262± 21	0.027± 0.004	0.068± 0.167	0.333± 0.025	0.360± 0.035	0.709± 0.088
400 ppm	36	234± 18**	0.031± 0.008	0.058± 0.063**	0.362± 0.029**	0.398± 0.035**	0.762± 0.066**

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

Test of Dunnett

(HCL042)

BAIS 4

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE
 UNIT: %

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

PAGE : 4

Group Name	NO. of Animals	SPLEEN	LIVER	BRAIN
Control	38	0.311± 0.479	2.628± 0.414	0.739± 0.104
100 ppm	36	0.280± 0.256	2.639± 0.431	0.706± 0.058
200 ppm	42	0.217± 0.061	2.633± 0.314	0.725± 0.060
400 ppm	36	0.225± 0.038	2.645± 0.215	0.803± 0.067**

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

Test of Dunnett

(HCL042)

BAIS 4

TABLE L1

HISTOPATHOLOGICAL FINDINGS :
NON-NEOPLASTIC LESIONS : MALE
ALL ANIMALS

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 1

Organ	Findings	Group Name No. of Animals on Study				Control				100 ppm				200 ppm				400 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
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Integumentary system/appandage}																					
skin/app	epidermal cyst	<50>				0	0	0	0	<50>				0	0	1	0	<50>			
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)
{Respiratory system}																					
nasal cavit	thrombus	<50>				2	0	0	0	<50>				1	0	0	0	<50>			
		(4)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	mineralization	38	0	0	0	43	0	0	0	41	0	0	0	39	1	0	0	(78)	(2)	(0)	(0)
		(76)	(0)	(0)	(0)	(86)	(0)	(0)	(0)	(82)	(0)	(0)	(0)	(78)	(2)	(0)	(0)				
	eosinophilic change:olfactory epithelium	36	11	0	0	44	3	0	0	41	2	0	0 *	41	1	0	0 **	(82)	(2)	(0)	(0)
		(72)	(22)	(0)	(0)	(88)	(6)	(0)	(0)	(82)	(4)	(0)	(0)	(82)	(2)	(0)	(0)				
	eosinophilic change:respiratory epithelium	12	0	0	0	16	0	0	0	11	0	0	0	10	0	0	0	(20)	(0)	(0)	(0)
		(24)	(0)	(0)	(0)	(32)	(0)	(0)	(0)	(22)	(0)	(0)	(0)	(20)	(0)	(0)	(0)				
	inflammation:foreign body	10	0	0	0	18	2	0	0	14	1	0	0	10	2	0	0	(20)	(4)	(0)	(0)
		(20)	(0)	(0)	(0)	(36)	(4)	(0)	(0)	(28)	(2)	(0)	(0)	(20)	(4)	(0)	(0)				
	inflammation:respiratory epithelium	3	1	0	0	7	2	0	0	14	2	0	0 **	22	2	0	0 **	(44)	(4)	(0)	(0)
		(6)	(2)	(0)	(0)	(14)	(4)	(0)	(0)	(28)	(4)	(0)	(0)	(44)	(4)	(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. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 2

Organ	Findings	Group Name No. of Animals on Study				Control 50				100 ppm 50				200 ppm 50				400 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)																					
nasal cavit		<50>				<50>				<50>				<50>				<50>			
	respiratory metaplasia:olfactory epithelium	15	0	0	0	13	0	0	0	16	0	0	0	17	0	0	0	17	0	0	0
		(30)	(0)	(0)	(0)	(26)	(0)	(0)	(0)	(32)	(0)	(0)	(0)	(34)	(0)	(0)	(0)	(34)	(0)	(0)	(0)
	respiratory metaplasia:gland	50	0	0	0	48	0	0	0	50	0	0	0	49	0	0	0	49	0	0	0
		(100)	(0)	(0)	(0)	(96)	(0)	(0)	(0)	(100)	(0)	(0)	(0)	(98)	(0)	(0)	(0)	(98)	(0)	(0)	(0)
	squamous cell metaplasia:respiratory epithelium	2	0	0	0	4	0	0	0	20	0	0	0 **	37	1	0	0 **	37	1	0	0 **
		(4)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(40)	(0)	(0)	(0)	(74)	(2)	(0)	(0)	(74)	(2)	(0)	(0)
	hyperplasia:transitional epithelium	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0 *	7	0	0	0 *
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(14)	(0)	(0)	(0)
	atrophy:olfactory epithelium	0	0	0	0	1	0	0	0	2	0	0	0	21	0	0	0 **	21	0	0	0 **
		(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(42)	(0)	(0)	(0)	(42)	(0)	(0)	(0)
nasopharynx		<50>				<50>				<50>				<50>				<50>			
	inflammation	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)	(0)	(0)	(0)	(0)
larynx		<50>				<50>				<50>				<50>				<50>			
	inflammation	1	0	0	0	1	0	0	0	0	0	0	0	3	0	0	0	3	0	0	0
		(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(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. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
REPORT TYPE : A1
SEX : MALE

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

PAGE : 3

Organ	Findings	Group Name No. of Animals on Study				Control 50				100 ppm 50				200 ppm 50				400 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)																					
larynx		<50>				<50>				<50>				<50>				<50>			
	inflammation:foreign body	0	0	0	0	2	0	0	0	3	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)	(6)	(0)	(0)	(0)
lung		<50>				<50>				<50>				<50>				<50>			
	hemorrhage	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)	(0)
	edema	2	0	0	0	2	0	0	0	2	0	0	0	2	0	0	0	2	0	0	0
		(4)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(4)	(0)	(0)	(0)
	inflammatory infiltration	6	2	0	0	3	2	0	0	4	1	0	0	5	0	0	0	10	0	0	0
		(12)	(4)	(0)	(0)	(6)	(4)	(0)	(0)	(8)	(2)	(0)	(0)	(10)	(0)	(0)	(0)	(10)	(0)	(0)	(0)
	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)
	accumulation of foamy cells	4	0	0	0	3	0	0	0	1	0	0	0	2	0	0	0	4	0	0	0
		(8)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(4)	(0)	(0)	(0)
	bronchiolar-alveolar cell hyperplasia	1	0	1	0	1	1	0	0	2	1	0	0	0	3	0	0	0	6	0	0
		(2)	(0)	(2)	(0)	(2)	(2)	(0)	(0)	(4)	(2)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(6)	(0)	(0)
	inflammation:foreign body	0	0	0	0	0	0	1	0	1	0	0	0	1	0	0	0	2	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(2)	(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. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 4

Organ	Findings	Group Name No. of Animals on Study				Control				100 ppm				200 ppm				400 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
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Hematopoietic system}																					
bone marrow		<50>				<50>				<50>				<50>				<50>			
	congestion	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
	deposit of hemosiderin	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)	0 (0)	0 (0)	0 (0)	0 (0)
	granulation	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
	increased hematopoiesis	6 (12)	0 (0)	0 (0)	0 (0)	6 (12)	0 (0)	0 (0)	0 (0)	6 (12)	0 (0)	0 (0)	0 (0)	5 (10)	0 (0)	0 (0)	0 (0)	8 (16)	0 (0)	0 (0)	0 (0)
	decreased hematopoiesis	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
spleen		<50>				<50>				<50>				<50>				<50>			
	congestion	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
	fatty change	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	deposit of hemosiderin	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)	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. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 5

Organ	Findings	Group Name No. of Animals on Study Grade	Control 50				100 ppm 50				200 ppm 50				400 ppm 50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Hematopoietic system}																		
spleen			<50>				<50>				<50>				<50>			
	fibrosis:focal		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		9	2	1	0	3	2	2	0	3	3	2	0	9	3	3	0
			(18)	(4)	(2)	(0)	(6)	(4)	(4)	(0)	(6)	(6)	(4)	(0)	(18)	(6)	(6)	(0)
	lymph-follicular 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)
{Circulatory system}																		
heart			<50>				<50>				<50>				<50>			
	thrombus		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	myocardial fibrosis		14	2	0	0	10	1	0	0	8	0	0	0	13	0	0	0
			(28)	(4)	(0)	(0)	(20)	(2)	(0)	(0)	(16)	(0)	(0)	(0)	(26)	(0)	(0)	(0)
{Digestive system}																		
stomach			<50>				<50>				<50>				<50>			
	ulcer:forestomach		2	2	1	0	1	1	3	0	0	0	1	0	1	0	0	0
			(4)	(4)	(2)	(0)	(2)	(2)	(6)	(0)	(0)	(0)	(2)	(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. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 6

Organ	Findings	Group Name No. of Animals on Study				Control				100 ppm				200 ppm				400 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>			
	hyperplasia:forestomach	1 (2)	2 (4)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	1 (2)	2 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)
	erosion:glandular stomach	3 (6)	1 (2)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	4 (8)	0 (0)	0 (0)	0 (0)
	ulcer:glandular stomach	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	hyperplasia:glandular stomach	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)	0 (0)	0 (0)	0 (0)	0 (0)
	mineralization:glandular stomach	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)	0 (0)	0 (0)	0 (0)	0 (0)
liver		<50>				<50>				<50>				<50>				<50>			
	herniation	4 (8)	0 (0)	0 (0)	0 (0)	7 (14)	0 (0)	0 (0)	0 (0)	6 (12)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	12 (24)	0 (0)	0 (0)	0 (0)
	necrosis:central	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	1 (2)	1 (2)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	1 (2)	0 (0)
	fatty change:peripheral	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)	0 (0)	1 (2)	0 (0)	0 (0)

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

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 7

Organ	Findings	Group Name	Control				100 ppm				200 ppm				400 ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Digestive system)																		
liver			<50>				<50>				<50>				<50>			
	granulation	37	1	0	0	41	0	0	0	42	0	0	0	33	0	0	0	
		(74)	(2)	(0)	(0)	(82)	(0)	(0)	(0)	(84)	(0)	(0)	(0)	(66)	(0)	(0)	(0)	
	increased extramedullary hematopoiesis	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)	
	clear cell focus	4	1	0	0	3	0	0	0	3	1	1	0	3	1	0	0	
		(8)	(2)	(0)	(0)	(6)	(0)	(0)	(0)	(6)	(2)	(2)	(0)	(6)	(2)	(0)	(0)	
	acidophilic cell focus	11	3	0	0	12	4	0	0	7	5	0	0	6	4	1	0	
	(22)	(6)	(0)	(0)	(24)	(8)	(0)	(0)	(14)	(10)	(0)	(0)	(12)	(8)	(2)	(0)		
	basophilic cell focus	5	1	0	0	2	1	0	0	3	1	0	0	6	2	0	0	
		(10)	(2)	(0)	(0)	(4)	(2)	(0)	(0)	(6)	(2)	(0)	(0)	(12)	(4)	(0)	(0)	
	spongiosis hepatis	5	0	0	0	7	0	0	0	3	0	0	0	3	0	0	0	
		(10)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	
	bile duct hyperplasia	6	44	0	0	4	45	0	0	9	40	0	0	10	38	0	0	
		(12)	(88)	(0)	(0)	(8)	(90)	(0)	(0)	(18)	(80)	(0)	(0)	(20)	(76)	(0)	(0)	
	pancreas		<50>				<50>				<50>				<50>			
		atrophy	10	2	0	0	7	1	0	0	7	1	0	0	7	0	0	0
		(20)	(4)	(0)	(0)	(14)	(2)	(0)	(0)	(14)	(2)	(0)	(0)	(14)	(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. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

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

PAGE : 8

Organ	Findings	Group Name No. of Animals on Study Grade				Control 50				100 ppm 50				200 ppm 50				400 ppm 50			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)				
{Digestive system}																					
pancreas		<50>				<50>				<50>				<50>							
	islet cell hyperplasia	4 (8)	2 (4)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 * (0)			
{Urinary system}																					
kidney		<50>				<50>				<50>				<50>							
	necrosis:focal	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)			
	hyaline droplet	3 (6)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	1 (2)	0 (0)			
	chronic nephropathy	22 (44)	21 (42)	5 (10)	0 (0)	17 (34)	22 (44)	7 (14)	2 (4)	19 (38)	25 (50)	5 (10)	0 (0)	21 (42)	22 (44)	5 (10)	1 (2)				
	mineralization:cortex	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)				
	urothelial hyperplasia:pelvis	1 (2)	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)				
urin bladd		<50>				<50>				<50>				<50>							
	dilatation	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)			

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. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 9

Organ	Findings	Group Name No. of Animals on Study				Control				100 ppm				200 ppm				400 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
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																					
urin bladd		<50>				<50>				<50>				<50>				<50>			
	papillomatosis	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
		(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)
{Endocrine system}																					
pituitary		<50>				<50>				<50>				<50>				<50>			
	angiectasis	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)
	cyst	1	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
		(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia	18	5	0	0	9	9	2	0	8	5	3	0	19	2	1	0	19	2	1	0
		(36)	(10)	(0)	(0)	(18)	(18)	(4)	(0)	(16)	(10)	(6)	(0)	(38)	(4)	(2)	(0)	(38)	(4)	(2)	(0)
	Rathke pouch	2	0	0	0	6	0	0	0	4	0	0	0	3	0	0	0	3	0	0	0
		(4)	(0)	(0)	(0)	(12)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
thyroid		<50>				<50>				<50>				<50>				<50>			
	follicular hyperplasia	1	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0
		(2)	(0)	(0)	(0)	(4)	(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
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STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
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HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 10

Organ_____	Findings_____	Group Name	Control				100 ppm				200 ppm				400 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}																		
thyroid			<50>				<50>				<50>				<50>			
	C-cell hyperplasia		8	1	2	0	12	3	1	0	12	0	1	0	6	3	1	0
		(16)	(2)	(4)	(0)	(24)	(6)	(2)	(0)	(24)	(0)	(2)	(0)	(12)	(6)	(2)	(0)	
	cystic thyroid follicle		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)
parathyroid			<50>				<50>				<50>				<50>			
	hyperplasia		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)
adrenal			<50>				<50>				<50>				<50>			
	thrombus		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)
	cyst		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)
	hyperplasia:cortical cell		0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia:medulla		3	3	0	0	2	3	0	0	0	4	1	0	0	2	2	0
			(6)	(6)	(0)	(0)	(4)	(6)	(0)	(0)	(0)	(8)	(2)	(0)	(0)	(4)	(4)	(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. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 11

Organ	Findings	Group Name No. of Animals on Study Grade	Control				100 ppm				200 ppm				400 ppm			
			50				50				50				50			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Endocrine system}																		
adrenal			<50>				<50>				<50>				<50>			
	focal fatty change:cortex		3 (6)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	
{Reproductive system}																		
testis			<50>				<50>				<50>				<50>			
	mineralization		1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	
	interstitial cell hyperplasia		3 (6)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	6 (12)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	
semin ves			<50>				<50>				<50>				<50>			
	inflammation		0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	
	hyperplasia		0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	
prostate			<50>				<50>				<50>				<50>			
	inflammation		9 (18)	3 (6)	0 (0)	0 (0)	10 (20)	1 (2)	0 (0)	0 (0)	7 (14)	0 (0)	0 (0)	0 (0)	5 (10)	1 (2)	1 (2)	

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. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 12

Organ	Findings	Group Name No. of Animals on Study Grade	Control				100 ppm				200 ppm				400 ppm			
			50				50				50				50			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Reproductive system}																		
prostate	hyperplasia		10 (20)	0 (0)	0 (0)	0 (0)	9 (18)	0 (0)	0 (0)	0 (0)	11 (22)	3 (6)	0 (0)	0 (0)	5 (10)	0 (0)	0 (0)	0 (0)
{Nervous system}																		
spinal cord	gliosis		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)
{Special sense organs/appendage}																		
eye	cataract		1 (2)	2 (4)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	retinal atrophy		1 (2)	0 (0)	3 (6)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	keratitis		3 (6)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)

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

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 13

		Group Name	Control				100 ppm				200 ppm				400 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
<hr/>																		
{Special sense organs/appendage}																		
eye			<50>				<50>				<50>				<50>			
	iritis		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)
	ulcer:cornea		1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)
Harder gl			<50>				<50>				<50>				<50>			
	inflammation		3	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
			(6)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	epidermal cyst		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)
{Musculoskeletal system}																		
bone			<50>				<50>				<50>				<50>			
	dysplasia		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)
	osteosclerosis		1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

TABLE L2

HISTOPATHOLOGICAL FINDINGS :
NON-NEOPLASTIC LESIONS : MALE
DEAD AND MORIBUND ANIMALS

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 1

Organ	Findings	Group Name No. of Animals on Study Grade	Control 9				100 ppm 10				200 ppm 10				400 ppm 8			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Integumentary system/appandage}																		
skin/app	epidermal cyst		< 9>				<10>				<10>				< 8>			
			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)
{Respiratory system}																		
nasal cavit	thrombus		< 9>				<10>				<10>				< 8>			
			2	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
			(22)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	mineralization		8	0	0	0	9	0	0	0	8	0	0	0	6	0	0	0
			(89)	(0)	(0)	(0)	(90)	(0)	(0)	(0)	(80)	(0)	(0)	(0)	(75)	(0)	(0)	(0)
	eosinophilic change:olfactory epithelium		5	2	0	0	8	0	0	0	5	0	0	0	5	0	0	0
			(56)	(22)	(0)	(0)	(80)	(0)	(0)	(0)	(50)	(0)	(0)	(0)	(63)	(0)	(0)	(0)
	eosinophilic change:respiratory epithelium		1	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0
			(11)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	inflammation:foreign body		0	0	0	0	3	1	0	0	3	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(30)	(10)	(0)	(0)	(30)	(0)	(0)	(0)	(13)	(0)	(0)	(0)
	inflammation:respiratory epithelium		0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(25)	(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. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 2

Organ	Findings	Group Name No. of Animals on Study Grade	Control 9				100 ppm 10				200 ppm 10				400 ppm 8			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
nasal cavit	respiratory metaplasia:olfactory epithelium		< 9>				<10>				<10>				< 8>			
			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)	(13)	(0)	(0)	(0)
	respiratory metaplasia:gland		9	0	0	0	8	0	0	0	10	0	0	0	8	0	0	0
			(100)	(0)	(0)	(0)	(80)	(0)	(0)	(0)	(100)	(0)	(0)	(0)	(100)	(0)	(0)	(0)
	squamous cell metaplasia:respiratory epithelium		1	0	0	0	1	0	0	0	6	0	0	0	7	1	0	0 **
			(11)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(60)	(0)	(0)	(0)	(88)	(13)	(0)	(0)
	hyperplasia:transitional 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)	(25)	(0)	(0)	(0)
	atrophy:olfactory epithelium		0	0	0	0	1	0	0	0	0	0	0	0	5	0	0	0 *
			(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(63)	(0)	(0)	(0)
nasopharynx	inflammation		< 9>				<10>				<10>				< 8>			
			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)
larynx	inflammation		< 9>				<10>				<10>				< 8>			
			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(11)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(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. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

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

PAGE : 3

Organ	Findings	Group Name No. of Animals on Study Grade				Control 9				100 ppm 10				200 ppm 10				400 ppm 8			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																					
larynx		< 9>				<10>				<10>				< 8>							
	inflammation:foreign body	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)	(25)	(0)	(0)	(0)	(25)	(0)	(0)	(0)
lung		< 9>				<10>				<10>				< 8>							
	hemorrhage	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)	(13)	(0)	(0)	(0)	(13)	(0)	(0)	(0)
	edema	2	0	0	0	1	0	0	0	2	0	0	0	2	0	0	0	2	0	0	0
		(22)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(25)	(0)	(0)	(0)	(25)	(0)	(0)	(0)
	inflammatory infiltration	3	1	0	0	1	2	0	0	2	0	0	0	2	0	0	0	2	0	0	0
		(33)	(11)	(0)	(0)	(10)	(20)	(0)	(0)	(20)	(0)	(0)	(0)	(25)	(0)	(0)	(0)	(25)	(0)	(0)	(0)
	accumulation of foamy cells	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)	(10)	(0)	(0)	(0)	(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	1	0	0	0	1	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(13)	(0)	(0)
	inflammation:foreign body	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)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Hematopoietic system}																					
bone marrow		< 9>				<10>				<10>				< 8>							
	congestion	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)	(13)	(0)	(0)	(0)	(13)	(0)	(0)	(0)

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

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 4

Organ	Findings	Group Name No. of Animals on Study Grade				Control 9				100 ppm 10				200 ppm 10				400 ppm 8			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Hematopoietic system}																					
bone marrow		< 9>				<10>				<10>				< 8>							
	deposit of hemosiderin	1 (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)	0 (0)	0 (0)	0 (0)	0 (0)
	increased hematopoiesis	2 (22)	0 (0)	0 (0)	0 (0)	2 (20)	0 (0)	0 (0)	0 (0)	4 (40)	0 (0)	0 (0)	0 (0)	6 (75)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	decreased hematopoiesis	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (10)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
spleen		< 9>				<10>				<10>				< 8>							
	deposit of hemosiderin	1 (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)	1 (13)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	extramedullary hematopoiesis	0 (0)	1 (11)	1 (11)	0 (0)	2 (20)	1 (10)	1 (10)	0 (0)	0 (0)	2 (20)	2 (20)	0 (0)	1 (13)	2 (25)	3 (38)	0 (0)				
{Circulatory system}																					
heart		< 9>				<10>				<10>				< 8>							
	thrombus	1 (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)	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. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 5

		Group Name	Control				100 ppm				200 ppm				400 ppm				
		No. of Animals on Study	9				10				10				8				
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
{Circulatory system}																			
heart	myocardial fibrosis		< 9>				<10>				<10>				< 8>				
		4	1	0	0	2	0	0	0	2	0	0	0	2	0	0	0		
			(44)	(11)	(0)	(0)	(20)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(25)	(0)	(0)	(0)	
{Digestive system}																			
stomach	ulcer:forestomach		< 9>				<10>				<10>				< 8>				
		1	1	1	0	1	1	3	0	0	0	1	0	0	0	0	0	0	
			(11)	(11)	(11)	(0)	(10)	(10)	(30)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	
	hyperplasia:forestomach		0	1	0	0	0	3	0	0	0	2	0	0	0	0	0	0	0
			(0)	(11)	(0)	(0)	(0)	(30)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	erosion:glandular stomach		1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
			(11)	(11)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(0)
	ulcer:glandular stomach		1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
			(11)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	mineralization:glandular stomach		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(11)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Respiratory system}																			
liver	herniation		< 9>				<10>				<10>				< 8>				
		2	0	0	0	2	0	0	0	3	0	0	0	2	0	0	0	0	
			(22)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(30)	(0)	(0)	(0)	(25)	(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. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 6

Organ	Findings	Group Name No. of Animals on Study				Control				100 ppm				200 ppm				400 ppm			
		Grade				9				10				10				8			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Digestive system)																					
liver		< 9>				<10>				<10>				< 8>							
	necrosis:central	0	1	0	0	0	1	1	0	0	1	0	0	0	1	0	0	0	1	1	0
		(0)	(11)	(0)	(0)	(0)	(10)	(10)	(0)	(0)	(10)	(0)	(0)	(0)	(13)	(13)	(0)	(0)	(13)	(0)	(0)
	fatty change:peripheral	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)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	granulation	2	1	0	0	7	0	0	0	7	0	0	0	5	0	0	0	5	0	0	0
		(22)	(11)	(0)	(0)	(70)	(0)	(0)	(0)	(70)	(0)	(0)	(0)	(63)	(0)	(0)	(0)	(63)	(0)	(0)	(0)
	clear cell focus	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)	(13)	(0)	(0)	(0)	(13)	(0)	(0)	(0)
	basophilic cell focus	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)	(13)	(0)	(0)	(0)	(13)	(0)	(0)
	spongiosis hepatis	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(11)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	bile duct hyperplasia	4	5	0	0	3	6	0	0	7	3	0	0	5	1	0	0	5	1	0	0
		(44)	(56)	(0)	(0)	(30)	(60)	(0)	(0)	(70)	(30)	(0)	(0)	(63)	(13)	(0)	(0)	(63)	(13)	(0)	(0)
pancreas		< 9>				<10>				<10>				< 8>							
	atrophy	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(11)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(10)	(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. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 7

Organ	Findings	Group Name No. of Animals on Study Grade	Control 9				100 ppm 10				200 ppm 10				400 ppm 8			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
pancreas	islet cell hyperplasia		< 9>				<10>				<10>				< 8>			
			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)
{Urinary system}																		
kidney	necrosis:focal		< 9>				<10>				<10>				< 8>			
			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)
	chronic nephropathy		8	0	0	0	5	2	0	1	6	2	1	0	6	0	0	1
			(89)	(0)	(0)	(0)	(50)	(20)	(0)	(10)	(60)	(20)	(10)	(0)	(75)	(0)	(0)	(13)
	mineralization:cortex		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(11)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	urothelial hyperplasia:pelvis		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)
urin bladd	dilatation		< 9>				<10>				<10>				< 8>			
			1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
			(11)	(0)	(0)	(0)	(0)	(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 ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 8

		Group Name	Control				100 ppm				200 ppm				400 ppm			
		No. of Animals on Study	9				10				10				8			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																		
urin bladd			< 9>				<10>				<10>				< 8>			
	papillomatosis		0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0
			(0)	(0)	(11)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)
{Endocrine system}																		
pituitary			< 9>				<10>				<10>				< 8>			
	cyst		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(11)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia		2	2	0	0	3	2	0	0	3	1	0	0	1	0	0	0
			(22)	(22)	(0)	(0)	(30)	(20)	(0)	(0)	(30)	(10)	(0)	(0)	(13)	(0)	(0)	(0)
	Rathke pouch		1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
			(11)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
thyroid			< 9>				<10>				<10>				< 8>			
	C-cell hyperplasia		0	0	0	0	0	1	0	0	3	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(30)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
adrenal			< 9>				<10>				<10>				< 8>			
	hyperplasia:cortical cell		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)

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. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 9

Organ	Findings	Group Name No. of Animals on Study				Control				100 ppm				200 ppm				400 ppm			
		Grade				9				10				10				8			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																					
adrenal	hyperplasia:medulla	< 9>				1	0	0	0	<10>				<10>				< 8>			
		(11)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(10)	(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)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Reproductive system}																					
testis	mineralization	< 9>				1	0	0	0	<10>				<10>				< 8>			
		(11)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(38)	(0)	(0)	(0)
	interstitial cell hyperplasia					2	0	0	0												
		(22)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(25)	(0)	(0)	(0)
prostate	inflammation	< 9>				0	0	0	0	<10>				<10>				< 8>			
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(10)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia					1	0	0	0												
		(11)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(10)	(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. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

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

PAGE : 10

Organ	Findings	Group Name No. of Animals on Study Grade	Control 9				100 ppm 10				200 ppm 10				400 ppm 8			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Special sense organs/appendage)																		
eye	cataract		< 9>				<10>				<10>				< 8>			
			1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(11)	(11)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	retinal atrophy		0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(22)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	keratitis		2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(22)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	iritis		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(11)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	ulcer:cornea		1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Harder gl			(11)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(13)	(0)	(0)
	epidermal cyst		< 9>				<10>				<10>				< 8>			
			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(11)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
(Musculoskeletal system)																		
bone	dysplasia		< 9>				<10>				<10>				< 8>			
			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)

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

TABLE L3

HISTOPATHOLOGICAL FINDINGS :
NON-NEOPLASTIC LESIONS : MALE
SACRIFICED ANIMALS

STUDY NO. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

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

PAGE : 1

Organ	Findings	Group Name No. of Animals on Study Grade	Control				100 ppm				200 ppm				400 ppm			
			41				40				40				42			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Respiratory system}																		
nasal cavit																		
mineralization			<41>				<40>				<40>				<42>			
			30 (73)	0 (0)	0 (0)	0 (0)	34 (85)	0 (0)	0 (0)	0 (0)	33 (83)	0 (0)	0 (0)	0 (0)	33 (79)	1 (2)	0 (0)	0 (0)
eosinophilic change:olfactory epithelium			31 (76)	9 (22)	0 (0)	0 (0)	36 (90)	3 (8)	0 (0)	0 (0)	36 (90)	2 (5)	0 (0)	0 (0)	36 (86)	1 (2)	0 (0)	0 ** (0)
eosinophilic change:respiratory epithelium			11 (27)	0 (0)	0 (0)	0 (0)	14 (35)	0 (0)	0 (0)	0 (0)	10 (25)	0 (0)	0 (0)	0 (0)	10 (24)	0 (0)	0 (0)	0 (0)
inflammation:foreign body			10 (24)	0 (0)	0 (0)	0 (0)	15 (38)	1 (3)	0 (0)	0 (0)	11 (28)	1 (3)	0 (0)	0 (0)	9 (21)	2 (5)	0 (0)	0 (0)
inflammation:respiratory epithelium			3 (7)	1 (2)	0 (0)	0 (0)	7 (18)	2 (5)	0 (0)	0 (0)	12 (30)	2 (5)	0 (0)	0 * (0)	20 (48)	2 (5)	0 (0)	0 ** (0)
respiratory metaplasia:olfactory epithelium			15 (37)	0 (0)	0 (0)	0 (0)	13 (33)	0 (0)	0 (0)	0 (0)	16 (40)	0 (0)	0 (0)	0 (0)	16 (38)	0 (0)	0 (0)	0 (0)
respiratory metaplasia:gland			41 (100)	0 (0)	0 (0)	0 (0)	40 (100)	0 (0)	0 (0)	0 (0)	40 (100)	0 (0)	0 (0)	0 (0)	41 (98)	0 (0)	0 (0)	0 (0)
squamous cell metaplasia:respiratory epithelium			1 (2)	0 (0)	0 (0)	0 (0)	3 (8)	0 (0)	0 (0)	0 (0)	14 (35)	0 (0)	0 (0)	0 ** (0)	30 (71)	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. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

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

PAGE : 2

		Group Name	Control				100 ppm				200 ppm				400 ppm			
		No. of Animals on Study	41				40				40				42			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
nasal cavit			<41>				<40>				<40>				<42>			
	hyperplasia:transitional epithelium		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)	(12)	(0)	(0)	(0)
			<41>				<40>				<40>				<42>			
	atrophy:olfactory epithelium		0	0	0	0	0	0	0	0	2	0	0	0	16	0	0	0 **
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(38)	(0)	(0)	(0)
larynx			<41>				<40>				<40>				<42>			
	inflammation		0	0	0	0	1	0	0	0	0	0	0	0	3	0	0	0
			(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)
			<41>				<40>				<40>				<42>			
	inflammation:foreign body		0	0	0	0	2	0	0	0	3	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
lung			<41>				<40>				<40>				<42>			
	edema		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)
			<41>				<40>				<40>				<42>			
	inflammatory infiltration		3	1	0	0	2	0	0	0	2	1	0	0	3	0	0	0
			(7)	(2)	(0)	(0)	(5)	(0)	(0)	(0)	(5)	(3)	(0)	(0)	(7)	(0)	(0)	(0)
			<41>				<40>				<40>				<42>			
	fibrosis:focal		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 3

		Group Name	Control				100 ppm				200 ppm				400 ppm			
		No. of Animals on Study	41				40				40				42			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
lung			<41>				<40>				<40>				<42>			
	accumulation of foamy cells		4 (10)	0 (0)	0 (0)	0 (0)	3 (8)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (5)	0 (0)	0 (0)	0 (0)
	bronchiolar-alveolar cell hyperplasia		1 (2)	0 (0)	1 (2)	0 (0)	1 (3)	1 (3)	0 (0)	0 (0)	2 (5)	1 (3)	0 (0)	0 (0)	0 (0)	2 (5)	0 (0)	0 (0)
	inflammation:foreign body		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)
{Hematopoietic system}																		
bone marrow			<41>				<40>				<40>				<42>			
	congestion		1 (2)	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)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
	increased hematopoiesis		4 (10)	0 (0)	0 (0)	0 (0)	4 (10)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	2 (5)	0 (0)	0 (0)	0 (0)
spleen			<41>				<40>				<40>				<42>			
	congestion		1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	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. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 4

Organ	Findings	Group Name No. of Animals on Study Grade	Control 41				100 ppm 40				200 ppm 40				400 ppm 42			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Hematopoietic system)																		
spleen			<41>				<40>				<40>				<42>			
	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)
	fibrosis:focal		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		9	1	0	0	1	1	1	0 *	3	1	0	0	8	1	0	0
			(22)	(2)	(0)	(0)	(3)	(3)	(3)	(0)	(8)	(3)	(0)	(0)	(19)	(2)	(0)	(0)
	lymph-follicular 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)
(Circulatory system)																		
heart			<41>				<40>				<40>				<42>			
	myocardial fibrosis		10	1	0	0	8	1	0	0	6	0	0	0	11	0	0	0
			(24)	(2)	(0)	(0)	(20)	(3)	(0)	(0)	(15)	(0)	(0)	(0)	(26)	(0)	(0)	(0)
(Digestive system)																		
stomach			<41>				<40>				<40>				<42>			
	ulcer:forestomach		1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(2)	(2)	(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. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

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

PAGE : 5

Organ	Findings	Group Name No. of Animals on Study Grade	Control 41				100 ppm 40				200 ppm 40				400 ppm 42			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Digestive system)																		
stomach			<41>				<40>				<40>				<42>			
	hyperplasia:forestomach		1	1	0	0	0	0	0	0	1	0	0	0	0	3	0	0
			(2)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(7)	(0)	(0)
	erosion:glandular stomach		2	0	0	0	3	0	0	0	1	0	0	0	3	0	0	0
			(5)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(7)	(0)	(0)	(0)
	hyperplasia:glandular stomach		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
liver			<41>				<40>				<40>				<42>			
	herniation		2	0	0	0	5	0	0	0	3	0	0	0	10	0	0	0 *
			(5)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(24)	(0)	(0)	(0)
	fatty change:peripheral		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)
	granulation		35	0	0	0	34	0	0	0	35	0	0	0	28	0	0	0
			(85)	(0)	(0)	(0)	(85)	(0)	(0)	(0)	(88)	(0)	(0)	(0)	(67)	(0)	(0)	(0)
	increased extramedullary hematopoiesis		1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	clear cell focus		4	1	0	0	3	0	0	0	3	1	1	0	2	1	0	0
			(10)	(2)	(0)	(0)	(8)	(0)	(0)	(0)	(8)	(3)	(3)	(0)	(5)	(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. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 6

		Group Name	Control				100 ppm				200 ppm				400 ppm			
		No. of Animals on Study	41				40				40				42			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
liver			<41>				<40>				<40>				<42>			
	acidophilic cell focus		11	3	0	0	12	4	0	0	7	5	0	0	6	4	1	0
			(27)	(7)	(0)	(0)	(30)	(10)	(0)	(0)	(18)	(13)	(0)	(0)	(14)	(10)	(2)	(0)
	basophilic cell focus		5	1	0	0	2	1	0	0	3	1	0	0	6	1	0	0
			(12)	(2)	(0)	(0)	(5)	(3)	(0)	(0)	(8)	(3)	(0)	(0)	(14)	(2)	(0)	(0)
	spongiosis hepatitis		4	0	0	0	7	0	0	0	2	0	0	0	3	0	0	0
			(10)	(0)	(0)	(0)	(18)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(7)	(0)	(0)	(0)
	bile duct hyperplasia		2	39	0	0	1	39	0	0	2	37	0	0	5	37	0	0
			(5)	(95)	(0)	(0)	(3)	(98)	(0)	(0)	(5)	(93)	(0)	(0)	(12)	(88)	(0)	(0)
pancreas			<41>				<40>				<40>				<42>			
	atrophy		9	2	0	0	6	1	0	0	6	1	0	0	7	0	0	0
			(22)	(5)	(0)	(0)	(15)	(3)	(0)	(0)	(15)	(3)	(0)	(0)	(17)	(0)	(0)	(0)
	islet cell hyperplasia		4	2	0	0	2	0	0	0	1	0	0	0	0	0	0	0 *
			(10)	(5)	(0)	(0)	(5)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Urinary system}																		
kidney			<41>				<40>				<40>				<42>			
	hyaline droplet		3	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0
			(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(2)	(0)	(2)	(0)

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

STUDY NO. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

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

PAGE : 7

Organ	Findings	Group Name No. of Animals on Study Grade	Control 41				100 ppm 40				200 ppm 40				400 ppm 42			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																		
kidney			<41>				<40>				<40>				<42>			
	chronic nephropathy		14 (34)	21 (51)	5 (12)	0 (0)	12 (30)	20 (50)	7 (18)	1 (3)	13 (33)	23 (58)	4 (10)	0 (0)	15 (36)	22 (52)	5 (12)	0 (0)
	urothelial hyperplasia:pelvis		1 (2)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
{Endocrine system}																		
pituitary			<41>				<40>				<40>				<42>			
	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		0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	2 (5)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	hyperplasia		16 (39)	3 (7)	0 (0)	0 (0)	6 (15)	7 (18)	2 (5)	0 * (0)	5 (13)	4 (10)	3 (8)	0 * (0)	18 (43)	2 (5)	1 (2)	0 (0)
	Rathke pouch		1 (2)	0 (0)	0 (0)	0 (0)	5 (13)	0 (0)	0 (0)	0 (0)	3 (8)	0 (0)	0 (0)	0 (0)	3 (7)	0 (0)	0 (0)	0 (0)
thyroid			<41>				<40>				<40>				<42>			
	follicular hyperplasia		1 (2)	0 (0)	0 (0)	0 (0)	2 (5)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)

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

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 8

Organ	Findings	Group Name No. of Animals on Study Grade	Control 41				100 ppm 40				200 ppm 40				400 ppm 42			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																		
thyroid	C-cell hyperplasia		<41>				<40>				<40>				<42>			
			8	1	2	0	12	2	1	0	9	0	1	0	6	3	1	0
			(20)	(2)	(5)	(0)	(30)	(5)	(3)	(0)	(23)	(0)	(3)	(0)	(14)	(7)	(2)	(0)
	cystic thyroid follicle		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)
parathyroid	hyperplasia		<41>				<40>				<40>				<42>			
			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)
adrenal	thrombus		<41>				<40>				<40>				<42>			
			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)
	cyst		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)
	hyperplasia:cortical cell		0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia:medulla		2	3	0	0	2	2	0	0	0	3	1	0	0	2	2	0
			(5)	(7)	(0)	(0)	(5)	(5)	(0)	(0)	(0)	(8)	(3)	(0)	(0)	(5)	(5)	(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. : 0675
 ANIMAL : RAT F344/DuCr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 9

Organ_____	Findings_____	Group Name No. of Animals on Study Grade	Control				100 ppm				200 ppm				400 ppm			
			41				40				40				42			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Endocrine system}																		
adrenal			<41>				<40>				<40>				<42>			
	focal fatty change:cortex		3 (7)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	2 (5)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
{Reproductive system}																		
testis			<41>				<40>				<40>				<42>			
	interstitial cell hyperplasia		1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	5 (13)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
semin ves			<41>				<40>				<40>				<42>			
	inflammation		0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
			<41>				<40>				<40>				<42>			
	hyperplasia		0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
			<41>				<40>				<40>				<42>			
prostate	inflammation		9 (22)	3 (7)	0 (0)	0 (0)	9 (23)	0 (0)	0 (0)	0 (0)	7 (18)	0 (0)	0 (0)	0 (0)	5 (12)	1 (2)	1 (2)	0 (0)
			<41>				<40>				<40>				<42>			
	hyperplasia		9 (22)	0 (0)	0 (0)	0 (0)	8 (20)	0 (0)	0 (0)	0 (0)	11 (28)	3 (8)	0 (0)	0 (0)	5 (12)	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. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

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

PAGE : 10

Organ	Findings	Group Name No. of Animals on Study Grade	Control 41				100 ppm 40				200 ppm 40				400 ppm 42			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Nervous system}																		
spinal cord	gliosis		<41>				<40>				<40>				<42>			
			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)
{Special sense organs/appendage}																		
eye	cataract		<41>				<40>				<40>				<42>			
			0	1	0	0	0	0	0	0	2	0	0	0	0	0	0	0
			(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	retinal atrophy		1	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0
			(2)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)
	keratitis		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)
Harder gl	inflammation		<41>				<40>				<40>				<42>			
			3	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
			(7)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Musculoskeletal system}																		
bone	osteosclerosis		<41>				<40>				<40>				<42>			
			1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

TABLE L4

HISTOPATHOLOGICAL FINDINGS :
NON-NEOPLASTIC LESIONS : FEMALE
ALL ANIMALS

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 14

Organ	Findings	Group Name No. of Animals on Study				Control				100 ppm				200 ppm				400 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
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Integumentary system/appandage}																					
skin/app	inflammation	<50>				<50>				<50>				<50>				<50>			
		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)
subcutis	abscess	<50>				<50>				<50>				<50>				<50>			
		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Respiratory system}																					
nasal cavit	adhesion	<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)
	thrombus	2	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		(4)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	mineralization	29	0	0	0	28	0	0	0	34	0	0	0	37	0	0	0	37	0	0	0
		(58)	(0)	(0)	(0)	(56)	(0)	(0)	(0)	(68)	(0)	(0)	(0)	(74)	(0)	(0)	(0)	(74)	(0)	(0)	(0)
	eosinophilic change:olfactory epithelium	13	35	2	0	16	33	1	0	18	30	0	0	37	8	0	0	37	8	0	0 **
		(26)	(70)	(4)	(0)	(32)	(66)	(2)	(0)	(36)	(60)	(0)	(0)	(74)	(16)	(0)	(0)	(74)	(16)	(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. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 15

Organ	Findings	Group Name No. of Animals on Study Grade	Control 50				100 ppm 50				200 ppm 50				400 ppm 50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
nasal cavit																		
	eosinophilic change:respiratory epithelium		40	3	0	0	41	0	0	0	28	0	0	0 **	17	0	0	0 **
			(80)	(6)	(0)	(0)	(82)	(0)	(0)	(0)	(56)	(0)	(0)	(0)	(34)	(0)	(0)	(0)
	inflammation:foreign body		2	0	0	0	0	0	0	0	3	1	0	0	3	0	0	0
			(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(2)	(0)	(0)	(6)	(0)	(0)	(0)
	inflammation:respiratory epithelium		5	0	0	0	9	0	0	0	14	1	0	0 *	27	0	0	0 **
			(10)	(0)	(0)	(0)	(18)	(0)	(0)	(0)	(28)	(2)	(0)	(0)	(54)	(0)	(0)	(0)
	respiratory metaplasia:olfactory epithelium		1	0	0	0	5	0	0	0	2	1	0	0	2	1	0	0
			(2)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(4)	(2)	(0)	(0)	(4)	(2)	(0)	(0)
	respiratory metaplasia:gland		48	0	0	0	50	0	0	0	49	0	0	0	45	1	0	0
			(96)	(0)	(0)	(0)	(100)	(0)	(0)	(0)	(98)	(0)	(0)	(0)	(90)	(2)	(0)	(0)
	desquamation: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)
	squamous cell metaplasia:respiratory epithelium		5	0	0	0	6	0	0	0	17	0	0	0 **	39	4	0	0 **
			(10)	(0)	(0)	(0)	(12)	(0)	(0)	(0)	(34)	(0)	(0)	(0)	(78)	(8)	(0)	(0)
	hyperplasia:transitional epithelium		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)

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. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
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HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 16

Organ	Findings	Group Name No. of Animals on Study Grade	Control 50				100 ppm 50				200 ppm 50				400 ppm 50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Respiratory system)																		
nasal cavit	atrophy:olfactory epithelium		<50>				<50>				<50>				<50>			
			0	0	0	0	0	0	0	0	1	0	0	0	20	0	0	0 **
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(40)	(0)	(0)	(0)
larynx	inflammation		<50>				<50>				<50>				<50>			
			9	0	0	0	14	0	0	0	11	0	0	0	7	0	0	0
			(18)	(0)	(0)	(0)	(28)	(0)	(0)	(0)	(22)	(0)	(0)	(0)	(14)	(0)	(0)	(0)
	inflammation:foreign body		<50>				<50>				<50>				<50>			
			2	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0
			(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
lung	hemorrhage		<50>				<50>				<50>				<50>			
			0	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	edema		<50>				<50>				<50>				<50>			
			4	0	0	0	2	0	0	0	1	0	0	0	1	0	0	0
			(8)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	inflammatory infiltration		<50>				<50>				<50>				<50>			
			4	0	0	0	4	0	0	0	0	0	0	0	1	0	0	0
			(8)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	accumulation of foamy cells		<50>				<50>				<50>				<50>			
			2	0	0	0	2	0	0	0	3	0	0	0	1	0	0	0
			(4)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(2)	(0)	(0)	(0)

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

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 17

Organ	Findings	Group Name No. of Animals on Study				Control 50				100 ppm 50				200 ppm 50				400 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}																					
lung		<50>				<50>				<50>				<50>				<50>			
	bronchiolar-alveolar cell hyperplasia	2	1	0	0	2	1	0	0	3	0	0	0	3	0	0	0	3	0	0	0
		(4)	(2)	(0)	(0)	(4)	(2)	(0)	(0)	(6)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
{Hematopoietic system}																					
bone marrow		<50>				<50>				<50>				<50>				<50>			
	deposit of hemosiderin	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)
	granulation	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		(0)	(2)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	increased hematopoiesis	9	0	0	0	6	0	0	0	3	0	0	0	5	0	0	0	5	0	0	0
		(18)	(0)	(0)	(0)	(12)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(10)	(0)	(0)	(0)
	myelofibrosis	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)	(0)	(0)	(0)
spleen		<50>				<50>				<50>				<50>				<50>			
	congestion	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)

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. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
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HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
ALL ANIMALS (0-105W)

PAGE : 18

Organ	Findings	Group Name No. of Animals on Study Grade	Control				100 ppm				200 ppm				400 ppm			
			50				50				50				50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)

{Hematopoietic system}

spleen			<50>				<50>				<50>				<50>			
	deposit of hemosiderin		11	0	0	0	7	0	0	0	8	0	0	0	15	0	0	0
			(22)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(16)	(0)	(0)	(0)	(30)	(0)	(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)
	fibrosis:focal		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	extramedullary hematopoiesis		10	4	3	0	12	2	2	0	18	1	0	0	16	2	2	0
			(20)	(8)	(6)	(0)	(24)	(4)	(4)	(0)	(36)	(2)	(0)	(0)	(32)	(4)	(4)	(0)

{Circulatory system}

heart			<50>				<50>				<50>				<50>			
	thrombus		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)
	myocardial fibrosis		6	1	0	0	10	1	0	0	7	0	0	0	5	0	0	0
			(12)	(2)	(0)	(0)	(20)	(2)	(0)	(0)	(14)	(0)	(0)	(0)	(10)	(0)	(0)	(0)
	arteritis		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. : 0675
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HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 19

Organ	Findings	Group Name No. of Animals on Study				Control				100 ppm				200 ppm				400 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	ulcer:forestomach	<50>				<50>				<50>				<50>				<50>			
		2	0	1	0	1	1	3	0	1	0	0	0	4	1	0	0	4	1	0	0
		(4)	(0)	(2)	(0)	(2)	(2)	(6)	(0)	(2)	(0)	(0)	(0)	(8)	(2)	(0)	(0)	(8)	(2)	(0)	(0)
	hyperplasia:forestomach	1	0	0	0	4	0	0	0	1	0	1	0	3	1	1	0	6	2	2	0
		(2)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(2)	(0)	(2)	(0)	(6)	(2)	(2)	(0)	(6)	(2)	(2)	(0)
	erosion:glandular stomach	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)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	ulcer:glandular stomach	1	0	0	0	1	1	0	0	1	0	0	0	1	1	0	0	2	2	0	0
		(2)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(2)	(2)	(0)	(0)
	mineralization:glandular stomach	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)
large intes	dilatation	<50>				<50>				<50>				<50>				<50>			
		0	0	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)
	squamous cell metaplasia	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)
liver	herniation	<50>				<50>				<50>				<50>				<50>			
		7	0	0	0	7	0	0	0	10	0	0	0	14	0	0	0	14	0	0	0
		(14)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(28)	(0)	(0)	(0)	(28)	(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. : 0675
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HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
ALL ANIMALS (0-105W)

PAGE : 20

Organ	Findings	Group Name No. of Animals on Study				Control 50				100 ppm 50				200 ppm 50				400 ppm 50			
		Grade																			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																					
liver		<50>				<50>				<50>				<50>				<50>			
	peliosis-like lesion	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)	(0)	(0)	(0)	(0)
	necrosis:central	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(2)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	necrosis:focal	2	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
		(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	fatty change:central	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	1	0
		(0)	(0)	(0)	(0)	(0)	(2)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)
	fatty change:peripheral	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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	mineralization	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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	degeneration:central	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)	(0)	(0)
	inflammatory infiltration	0	0	0	0	1	1	0	0	1	0	0	0	2	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(2)	(2)	(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 : * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Chi Square

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 21

Organ	Findings	Group Name No. of Animals on Study				Control 50				100 ppm 50				200 ppm 50				400 ppm 50			
		Grade																			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																					
liver		<50>				<50>				<50>				<50>				<50>			
	lymphocytic infiltration	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)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	granulation	16	1	0	0	15	1	0	0	19	6	1	0	18	3	0	0	18	3	0	0
		(32)	(2)	(0)	(0)	(30)	(2)	(0)	(0)	(38)	(12)	(2)	(0)	(36)	(6)	(0)	(0)	(36)	(6)	(0)	(0)
	scar	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)
	increased extramedullary hematopoiesis	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)
	clear cell focus	0	0	0	0	3	1	0	0	3	0	0	0	3	1	0	0	3	1	0	0
		(0)	(0)	(0)	(0)	(6)	(2)	(0)	(0)	(6)	(0)	(0)	(0)	(6)	(2)	(0)	(0)	(6)	(2)	(0)	(0)
	acidophilic cell focus	2	0	0	0	2	2	1	0	0	0	0	0	1	2	0	0	2	4	0	0
		(4)	(0)	(0)	(0)	(4)	(4)	(2)	(0)	(0)	(0)	(0)	(0)	(2)	(4)	(0)	(0)	(2)	(4)	(0)	(0)
	basophilic cell focus	15	1	0	0	9	2	0	0	17	0	1	0	20	1	0	0	40	2	0	0
		(30)	(2)	(0)	(0)	(18)	(4)	(0)	(0)	(34)	(0)	(2)	(0)	(40)	(2)	(0)	(0)	(40)	(2)	(0)	(0)
	bile duct hyperplasia	6	0	0	0	15	0	0	0 *	6	0	1	0	5	0	0	0	10	0	0	0
		(12)	(0)	(0)	(0)	(30)	(0)	(0)	(0)	(12)	(0)	(2)	(0)	(10)	(0)	(0)	(0)	(10)	(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
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STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 22

		Group Name	Control				100 ppm				200 ppm				400 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}																		
pancreas			<50>				<50>				<50>				<50>			
	atrophy		2	0	0	0	2	1	0	0	6	0	0	0	3	0	0	0
			(4)	(0)	(0)	(0)	(4)	(2)	(0)	(0)	(12)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
	islet cell hyperplasia		0	0	0	0	0	1	0	0	0	0	0	0	2	1	0	0
			(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(2)	(0)	(0)
{Urinary system}																		
kidney			<50>				<50>				<50>				<50>			
	necrosis:focal		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyaline droplet		0	0	0	0	2	1	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(4)	(2)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	chronic nephropathy		19	11	0	0	18	7	3	0	23	9	0	0	15	9	0	1
		(38)	(22)	(0)	(0)	(36)	(14)	(6)	(0)	(46)	(18)	(0)	(0)	(30)	(18)	(0)	(2)	
	mineralization:cortex		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	urothelial hyperplasia:pelvis		1	1	0	0	0	0	0	1	1	0	0	0	0	0	0	
			(2)	(2)	(0)	(0)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	

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

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 23

Organ	Findings	Group Name No. of Animals on Study				Control 50				100 ppm 50				200 ppm 50				400 ppm 50			
		Grade																			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																					
kidney	atypical tubule hyperplasia	<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)
urin bladd	dilatation	<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)
{Endocrine system}																					
pituitary	angiectasis	<50>				<50>				<50>				<50>				<50>			
		1	0	0	0	7	0	0	0	2	1	0	0	0	0	0	0	0	0	1	0
		(2)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(4)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)
	hemorrhage	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	cyst	14	0	0	0	15	0	0	0	10	0	0	0	10	0	0	0	13	1	0	0
		(28)	(0)	(0)	(0)	(30)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(26)	(2)	(0)	(0)
	hyperplasia	7	2	4	0	8	2	4	0	5	4	5	0	4	4	5	0	4	3	1	0
		(14)	(4)	(8)	(0)	(16)	(4)	(8)	(0)	(10)	(8)	(10)	(0)	(8)	(8)	(10)	(0)	(8)	(6)	(2)	(0)

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

STUDY NO. : 0675
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 REPORT TYPE : A1
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HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 24

Organ	Findings	Group Name No. of Animals on Study				Control				100 ppm				200 ppm				400 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
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Endocrine system)																					
pituitary		<50>				<50>				<50>				<50>				<50>			
	Rathke pouch	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
		(2)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)
thyroid		<50>				<50>				<50>				<50>				<50>			
	inflammatory infiltration	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)
	ultimobranchial body remanet	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)
	follicular hyperplasia	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)
	C-cell hyperplasia	3	2	1	0	3	2	0	0	7	0	0	0	7	0	0	0	7	0	0	0
		(6)	(4)	(2)	(0)	(6)	(4)	(0)	(0)	(14)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(14)	(0)	(0)	(0)
adrenal		<50>				<50>				<50>				<50>				<50>			
	peliosis-like lesion	2	0	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
		(4)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	increased extramedullary hematopoiesis	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)

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. : 0675
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 REPORT TYPE : A1
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HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 25

Organ	Findings	Group Name No. of Animals on Study				Control				100 ppm				200 ppm				400 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
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																					
adrenal		<50>				<50>				<50>				<50>				<50>			
	hyperplasia:cortical cell	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0
		(0)	(2)	(0)	(0)	(2)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(2)	(0)	(0)
	hyperplasia:medulla	0	0	1	0	1	0	0	0	0	1	1	0	0	1	1	0	2	0	0	0
		(0)	(0)	(2)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(2)	(0)	(4)	(0)	(0)	(0)
	focal fatty change:cortex	4	2	0	0	7	0	1	0	5	2	0	0	5	2	0	0	6	1	0	0
		(8)	(4)	(0)	(0)	(14)	(0)	(2)	(0)	(10)	(4)	(0)	(0)	(10)	(4)	(0)	(0)	(12)	(2)	(0)	(0)
	necrosis:cortex	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)	(0)	(0)	(0)
{Reproductive system}																					
ovary		<50>				<50>				<50>				<50>				<50>			
	cyst	1	0	0	0	4	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
		(2)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	mesothelial hyperplasia	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
uterus		<50>				<50>				<50>				<50>				<50>			
	cystic endometrial hyperplasia	6	0	0	0	9	0	0	0	5	0	0	0	5	0	0	0	7	0	0	0
		(12)	(0)	(0)	(0)	(18)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(14)	(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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HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 26

Organ	Findings	Group Name No. of Animals on Study Grade	Control				100 ppm				200 ppm				400 ppm			
			50				50				50				50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Reproductive system}																		
vagina	cyst		<50>				<50>				<50>				<50>			
			0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
mammary gl	hyperplasia		<50>				<50>				<50>				<50>			
			0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	galactoceles		<50>				<50>				<50>				<50>			
			0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Nervous system}																		
brain	vacuolic change		<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)
{Special sense organs/appendage}																		
eye	cataract		<50>				<50>				<50>				<50>			
			1	1	0	0	1	1	0	0	1	2	0	0	2	1	0	0
			(2)	(2)	(0)	(0)	(2)	(2)	(0)	(0)	(2)	(4)	(0)	(0)	(4)	(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
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STUDY NO. : 0675
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SEX : FEMALE

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

PAGE : 27

Organ	Findings	Group Name No. of Animals on Study Grade	Control 50				100 ppm 50				200 ppm 50				400 ppm 50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Special sense organs/appendage)																		
eye	retinal atrophy		<50>				<50>				<50>				<50>			
			0	0	2	0	0	1	0	0	1	2	1	0	0	1	2	0
			(0)	(0)	(4)	(0)	(0)	(2)	(0)	(0)	(2)	(4)	(2)	(0)	(0)	(2)	(4)	(0)
	keratitis		3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(6)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	ulcer:cornea		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)
Harder gl	degeneration		<50>				<50>				<50>				<50>			
			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)	(4)	(0)	(0)	(0)
	inflammation		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)
(Musculoskeletal system)																		
muscle	mineralization		<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)

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. : 0675
 ANIMAL : RAT F344/DuCrIj[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 28

Organ	Findings	Group Name No. of Animals on Study				Control				100 ppm				200 ppm				400 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
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Musculoskeletal system)																					
bone		<50>				<50>				<50>				<50>				<50>			
	osteosclerosis	2	2	0	0	3	1	1	0	4	1	1	0	1	2	0	0	1	2	0	0
		(4)	(4)	(0)	(0)	(6)	(2)	(2)	(0)	(8)	(2)	(2)	(0)	(2)	(4)	(0)	(0)	(2)	(4)	(0)	(0)
(Body cavities)																					
peritoneum		<50>				<50>				<50>				<50>				<50>			
	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)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	peritonitis	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)	(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)

BAIS4

TABLE L5

HISTOPATHOLOGICAL FINDINGS :
NON-NEOPLASTIC LESIONS : FEMALE
DEAD AND MORIBUND ANIMALS

STUDY NO. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 11

		Group Name	Control				100 ppm				200 ppm				400 ppm			
		No. of Animals on Study	12				14				7				14			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Respiratory system)																		
nasal cavit			<12>				<14>				< 7>				<14>			
	thrombus		2	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0
			(17)	(0)	(0)	(0)	(21)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	mineralization		8	0	0	0	7	0	0	0	3	0	0	0	11	0	0	0
			(67)	(0)	(0)	(0)	(50)	(0)	(0)	(0)	(43)	(0)	(0)	(0)	(79)	(0)	(0)	(0)
	eosinophilic change:olfactory epithelium		6	6	0	0	7	7	0	0	3	4	0	0	9	1	0	0 *
			(50)	(50)	(0)	(0)	(50)	(50)	(0)	(0)	(43)	(57)	(0)	(0)	(64)	(7)	(0)	(0)
	eosinophilic change:respiratory epithelium		8	1	0	0	9	0	0	0	5	0	0	0	2	0	0	0 **
			(67)	(8)	(0)	(0)	(64)	(0)	(0)	(0)	(71)	(0)	(0)	(0)	(14)	(0)	(0)	(0)
inflammation:foreign body		1	0	0	0	0	0	0	0	0	1	0	0	2	0	0	0	
		(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(14)	(0)	(0)	(14)	(0)	(0)	(0)	
inflammation:respiratory epithelium		1	0	0	0	1	0	0	0	0	0	0	0	5	0	0	0	
		(8)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(36)	(0)	(0)	(0)	
respiratory metaplasia:olfactory 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)	(14)	(0)	(0)	(0)	
respiratory metaplasia:gland		11	0	0	0	14	0	0	0	7	0	0	0	12	1	0	0	
		(92)	(0)	(0)	(0)	(100)	(0)	(0)	(0)	(100)	(0)	(0)	(0)	(86)	(7)	(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. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 12

Organ	Findings	Group Name	Control				100 ppm				200 ppm				400 ppm				
		No. of Animals on Study	12				14				7				14				
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
{Respiratory system}																			
nasal cavit			<12>				<14>				< 7>				<14>				
	desquamation:olfactory epithelium		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)	(7)	(0)	(0)	(0)
	squamous cell metaplasia:respiratory epithelium		2	0	0	0	4	0	0	0	3	0	0	0	11	3	0	0 **	
			(17)	(0)	(0)	(0)	(29)	(0)	(0)	(0)	(43)	(0)	(0)	(0)	(79)	(21)	(0)	(0)	
	atrophy:olfactory epithelium		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)	(57)	(0)	(0)	(0)	
larynx			<12>				<14>				< 7>				<14>				
	inflammation		0	0	0	0	2	0	0	0	2	0	0	0	3	0	0	0	
			(0)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(29)	(0)	(0)	(0)	(21)	(0)	(0)	(0)	
lung			<12>				<14>				< 7>				<14>				
	hemorrhage		0	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	
			(0)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	
	edema		4	0	0	0	2	0	0	0	1	0	0	0	1	0	0	0	
			(33)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	
	inflammatory infiltration		4	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	
			(33)	(0)	(0)	(0)	(21)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	

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

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 13

Organ	Findings	Group Name No. of Animals on Study				Control				100 ppm				200 ppm				400 ppm			
		Grade				12				14				7				14			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																					
lung		<12>				<14>				< 7>				<14>							
	accumulation of foamy cells	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Hematopoietic system}																					
bone marrow		<12>				<14>				< 7>				<14>							
	deposit of hemosiderin	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)	(7)	(0)	(0)	(0)	(7)	(0)	(0)	(0)
	granulation	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)
	increased hematopoiesis	4	0	0	0	4	0	0	0	1	0	0	0	4	0	0	0	4	0	0	0
		(33)	(0)	(0)	(0)	(29)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(29)	(0)	(0)	(0)	(29)	(0)	(0)	(0)
	myelofibrosis	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)
spleen		<12>				<14>				< 7>				<14>							
	congestion	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)

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. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 14

Organ	Findings	Group Name No. of Animals on Study Grade	Control 12				100 ppm 14				200 ppm 7				400 ppm 14			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Hematopoietic system}																		
spleen			<12>				<14>				< 7>				<14>			
	deposit of hemosiderin		4	0	0	0	1	0	0	0	2	0	0	0	2	0	0	0
			(33)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(29)	(0)	(0)	(0)	(14)	(0)	(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)
	extramedullary hematopoiesis		0	2	2	0	1	2	2	0	3	0	0	0	1	2	1	0
			(0)	(17)	(17)	(0)	(7)	(14)	(14)	(0)	(43)	(0)	(0)	(0)	(7)	(14)	(7)	(0)
{Circulatory system}																		
heart			<12>				<14>				< 7>				<14>			
	thrombus		1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0
			(8)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)
	myocardial fibrosis		2	0	0	0	7	0	0	0	0	0	0	0	3	0	0	0
			(17)	(0)	(0)	(0)	(50)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(21)	(0)	(0)	(0)
{Digestive system}																		
stomach			<12>				<14>				< 7>				<14>			
	ulcer:forestomach		2	0	1	0	1	1	3	0	1	0	0	0	3	1	0	0
			(17)	(0)	(8)	(0)	(7)	(7)	(21)	(0)	(14)	(0)	(0)	(0)	(21)	(7)	(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. : 0675
ANIMAL : RAT F344/DuCr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 15

Organ	Findings	Group Name No. of Animals on Study Grade	Control 12				100 ppm 14				200 ppm 7				400 ppm 14			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
stomach																		
	hyperplasia:forestomach		<12>				<14>				< 7>				<14>			
			1	0	0	0	4	0	0	0	1	0	1	0	1	1	1	0
			(8)	(0)	(0)	(0)	(29)	(0)	(0)	(0)	(14)	(0)	(14)	(0)	(7)	(7)	(7)	(0)
	erosion:glandular stomach		1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(8)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	ulcer:glandular stomach		1	0	0	0	1	1	0	0	1	0	0	0	1	1	0	0
			(8)	(0)	(0)	(0)	(7)	(7)	(0)	(0)	(14)	(0)	(0)	(0)	(7)	(7)	(0)	(0)
	mineralization: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)	(7)	(0)	(0)	(0)
large intes																		
	dilatation		<12>				<14>				< 7>				<14>			
			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)	(7)	(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)	(7)	(0)	(0)	(0)
liver																		
	herniation		<12>				<14>				< 7>				<14>			
			2	0	0	0	1	0	0	0	0	0	0	0	4	0	0	0
			(17)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(29)	(0)	(0)	(0)

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

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 16

Organ_____	Findings_____	Group Name	Control				100 ppm				200 ppm				400 ppm			
		No. of Animals on Study	12				14				7				14			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Digestive system)																		
liver			<12>				<14>				< 7>				<14>			
	necrosis:central	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(8)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	necrosis:focal	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0
		(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(0)
	fatty change:central	0	0	0	0	0	1	2	0	0	0	0	0	0	0	1	0	0
		(0)	(0)	(0)	(0)	(0)	(7)	(14)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)
	mineralization	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)	(14)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	degeneration:central	0	0	1	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)	
inflammatory infiltration	0	0	0	0	0	1	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)	
granulation	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)	(14)	(0)	(0)	(7)	(0)	(0)	(0)	
scar	0	0	0	0	1	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)	

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. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 17

Organ	Findings	Group Name No. of Animals on Study Grade	Control				100 ppm				200 ppm				400 ppm			
			12				14				7				14			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
liver	clear cell focus		<12>				<14>				< 7>				<14>			
			0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)
	acidophilic cell focus		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)	(7)	(0)	(0)
	basophilic cell focus		2	0	0	0	1	1	0	0	1	0	0	0	4	0	0	0
			(17)	(0)	(0)	(0)	(7)	(7)	(0)	(0)	(14)	(0)	(0)	(0)	(29)	(0)	(0)	(0)
	bile duct hyperplasia		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
pancreas																		
atrophy			<12>				<14>				< 7>				<14>			
			1	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0
			(8)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)
{Urinary system}																		
kidney	necrosis:focal		<12>				<14>				< 7>				<14>			
			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 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. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 18

Organ	Findings	Group Name No. of Animals on Study Grade	Control 12				100 ppm 14				200 ppm 7				400 ppm 14			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Urinary system)																		
kidney	hyaline droplet		<12>				<14>				< 7>				<14>			
		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)	
	chronic nephropathy		2	0	0	0	2	0	1	0	3	0	0	0	2	3	0	1
		(17)	(0)	(0)	(0)	(14)	(0)	(7)	(0)	(43)	(0)	(0)	(0)	(14)	(21)	(0)	(7)	
	mineralization:cortex		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)	
urin bladd	dilatation		<12>				<14>				< 7>				<14>			
		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)	(7)	(0)	(0)	(0)	
(Endocrine system)																		
pituitary	hemorrhage		<12>				<14>				< 7>				<14>			
		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	cyst		3	0	0	0	1	0	0	0	0	0	0	0	3	0	0	0
		(25)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(21)	(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)

BAIS4

STUDY NO. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 19

Organ	Findings	Group Name No. of Animals on Study Grade	Control				100 ppm				200 ppm				400 ppm			
			12				14				7				14			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Endocrine system)																		
pituitary	hyperplasia		<12>				<14>				< 7>				<14>			
		0	1	0	0	2	1	0	0	0	0	1	0	0	1	0	0	0
			(0)	(8)	(0)	(0)	(14)	(7)	(0)	(0)	(0)	(0)	(14)	(0)	(0)	(7)	(0)	(0)
thyroid	follicular hyperplasia		<12>				<14>				< 7>				<14>			
		1	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)
	C-cell hyperplasia		1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
			(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
adrenal	increased extramedullary hematopoiesis		<12>				<14>				< 7>				<14>			
		1	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)
	hyperplasia:cortical cell		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)
	hyperplasia:medulla		0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(14)	(0)	(7)	(0)	(0)	(0)
	focal fatty change:cortex		1	0	0	0	1	0	0	0	0	0	0	0	0	2	0	0
			(8)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(14)	(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. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 20

Organ	Findings	Group Name No. of Animals on Study Grade	Control 12				100 ppm 14				200 ppm 7				400 ppm 14			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																		
adrenal	necrosis:cortex		<12>				<14>				< 7>				<14>			
			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)
{Reproductive system}																		
ovary	cyst		<12>				<14>				< 7>				<14>			
			0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	mesothelial hyperplasia		<12>				<14>				< 7>				<14>			
			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)
uterus	cystic endometrial hyperplasia		<12>				<14>				< 7>				<14>			
			2	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0
			(17)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)
vagina	cyst		<12>				<14>				< 7>				<14>			
			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)
mammary gl	galactoceles		<12>				<14>				< 7>				<14>			
			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)

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. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 21

Organ	Findings	Group Name No. of Animals on Study Grade	Control				100 ppm				200 ppm				400 ppm			
			12				14				7				14			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
<hr/>																		
{Nervous system}																		
brain			<12>				<14>				< 7>				<14>			
	vacuolic change		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)
{Special sense organs/appendage}																		
eye			<12>				<14>				< 7>				<14>			
	cataract		1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
			(8)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	retinal atrophy		0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0
			(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(0)	(0)	(0)
	keratitis		2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(17)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	ulcer:cornea		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)	(7)	(0)	(0)
Harder gl			<12>				<14>				< 7>				<14>			
	degeneration		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)	(14)	(0)	(0)	(0)	(7)	(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. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 22

Organ	Findings	Group Name No. of Animals on Study Grade	Control				100 ppm				200 ppm				400 ppm			
			12				14				7				14			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Special sense organs/appendage)																		
Harder gl	inflammation		<12>				<14>				< 7>				<14>			
			1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(8)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
(Musculoskeletal system)																		
muscle	mineralization		<12>				<14>				< 7>				<14>			
			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)
bone	osteosclerosis		<12>				<14>				< 7>				<14>			
			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)	(7)	(0)	(0)
(Body cavities)																		
peritoneum	peritonitis		<12>				<14>				< 7>				<14>			
			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 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

TABLE L6

HISTOPATHOLOGICAL FINDINGS :
NON-NEOPLASTIC LESIONS : FEMALE
SACRIFICED ANIMALS

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 11

Organ	Findings	Group Name No. of Animals on Study Grade	Control 38				100 ppm 36				200 ppm 43				400 ppm 36			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Integumentary system/appandage}																		
skin/app	inflammation		<38>				<36>				<43>				<36>			
			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
subcutis	abscess		<38>				<36>				<43>				<36>			
			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)
{Respiratory system}																		
nasal cavit	adhesion		<38>				<36>				<43>				<36>			
			0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
	thrombus		<38>				<36>				<43>				<36>			
			0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
	mineralization		<38>				<36>				<43>				<36>			
			21	0	0	0	21	0	0	0	31	0	0	0	26	0	0	0
			(55)	(0)	(0)	(0)	(58)	(0)	(0)	(0)	(72)	(0)	(0)	(0)	(72)	(0)	(0)	(0)
	eosinophilic change:olfactory epithelium		<38>				<36>				<43>				<36>			
			7	29	2	0	9	26	1	0	15	26	0	0	28	7	0	0 **
			(18)	(76)	(5)	(0)	(25)	(72)	(3)	(0)	(35)	(60)	(0)	(0)	(78)	(19)	(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. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 12

Organ	Findings	Group Name No. of Animals on Study Grade	Control 38				100 ppm 36				200 ppm 43				400 ppm 36			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Respiratory system)																		
nasal cavit																		
	eosinophilic change:respiratory epithelium		32 (84)	2 (5)	0 (0)	0 (0)	32 (89)	0 (0)	0 (0)	0 (0)	23 (53)	0 (0)	0 (0)	0 (0)	15 (42)	0 (0)	0 (0)	0 (0)
	inflammation:foreign body		1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	3 (7)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)
	inflammation:respiratory epithelium		4 (11)	0 (0)	0 (0)	0 (0)	8 (22)	0 (0)	0 (0)	0 (0)	14 (33)	1 (2)	0 (0)	0 (0)	22 (61)	0 (0)	0 (0)	0 (0)
	respiratory metaplasia:olfactory epithelium		1 (3)	0 (0)	0 (0)	0 (0)	5 (14)	0 (0)	0 (0)	0 (0)	2 (5)	1 (2)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)
	respiratory metaplasia:gland		37 (97)	0 (0)	0 (0)	0 (0)	36 (100)	0 (0)	0 (0)	0 (0)	42 (98)	0 (0)	0 (0)	0 (0)	33 (92)	0 (0)	0 (0)	0 (0)
	squamous cell metaplasia:respiratory epithelium		3 (8)	0 (0)	0 (0)	0 (0)	2 (6)	0 (0)	0 (0)	0 (0)	14 (33)	0 (0)	0 (0)	0 (0)	28 (78)	1 (3)	0 (0)	0 (0)
	hyperplasia:transitional 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)	2 (6)	0 (0)	0 (0)	0 (0)
	atrophy:olfactory epithelium		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	12 (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 ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Chi Square

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 13

		Group Name	Control				100 ppm				200 ppm				400 ppm			
		No. of Animals on Study	38				36				43				36			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Respiratory system)																		
larynx			<38>				<36>				<43>				<36>			
	inflammation		9	0	0	0	12	0	0	0	9	0	0	0	4	0	0	0
			(24)	(0)	(0)	(0)	(33)	(0)	(0)	(0)	(21)	(0)	(0)	(0)	(11)	(0)	(0)	(0)
	inflammation:foreign body		2	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0
			(5)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
lung			<38>				<36>				<43>				<36>			
	inflammatory infiltration		0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
	accumulation of foamy cells		2	0	0	0	0	0	0	0	3	0	0	0	1	0	0	0
			(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
	bronchiolar-alveolar cell hyperplasia		2	1	0	0	2	1	0	0	3	0	0	0	3	0	0	0
			(5)	(3)	(0)	(0)	(6)	(3)	(0)	(0)	(7)	(0)	(0)	(0)	(8)	(0)	(0)	(0)
(Hematopoietic system)																		
bone marrow			<38>				<36>				<43>				<36>			
	granulation		0	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0
		(0)	(3)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	

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

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 14

		Group Name	Control				100 ppm				200 ppm				400 ppm			
		No. of Animals on Study	38				36				43				36			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Hematopoietic system)																		
bone marrow			<38>				<36>				<43>				<36>			
	increased hematopoiesis		5 (13)	0 (0)	0 (0)	0 (0)	2 (6)	0 (0)	0 (0)	0 (0)	2 (5)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)
spleen			<38>				<36>				<43>				<36>			
	deposit of hemosiderin		7 (18)	0 (0)	0 (0)	0 (0)	6 (17)	0 (0)	0 (0)	0 (0)	6 (14)	0 (0)	0 (0)	0 (0)	13 (36)	0 (0)	0 (0)	0 (0)
	fibrosis:focal		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)
	extramedullary hematopoiesis		10 (26)	2 (5)	1 (3)	0 (0)	11 (31)	0 (0)	0 (0)	0 (0)	15 (35)	1 (2)	0 (0)	0 (0)	15 (42)	0 (0)	1 (3)	0 (0)
(Circulatory system)																		
heart			<38>				<36>				<43>				<36>			
	myocardial fibrosis		4 (11)	1 (3)	0 (0)	0 (0)	3 (8)	1 (3)	0 (0)	0 (0)	7 (16)	0 (0)	0 (0)	0 (0)	2 (6)	0 (0)	0 (0)	0 (0)
	arteritis		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)

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. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 15

Organ_____	Findings_____	Group Name	Control				100 ppm				200 ppm				400 ppm			
		No. of Animals on Study	38				36				43				36			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Digestive system)																		
stomach			<38>				<36>				<43>				<36>			
	ulcer:forestomach		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
	hyperplasia:forestomach		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)	(6)	(0)	(0)	(0)	
	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)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	
liver			<38>				<36>				<43>				<36>			
	herniation		5	0	0	0	6	0	0	0	10	0	0	0	10	0	0	0
			(13)	(0)	(0)	(0)	(17)	(0)	(0)	(0)	(23)	(0)	(0)	(0)	(28)	(0)	(0)	(0)
	peliosis-like lesion		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	
	necrosis:focal		2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	
			(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	
	fatty change:peripheral		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)	(0)	
	inflammatory infiltration		0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	
			(0)	(0)	(0)	(0)	(3)	(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 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. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 16

Organ	Findings	Group Name No. of Animals on Study				Control				100 ppm				200 ppm				400 ppm			
		Grade				38				36				43				36			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Digestive system)																					
liver		<38>				<36>				<43>				<36>							
	lymphocytic infiltration	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)	(3)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	granulation	16	1	0	0	15	1	0	0	19	5	1	0	17	3	0	0				
		(42)	(3)	(0)	(0)	(42)	(3)	(0)	(0)	(44)	(12)	(2)	(0)	(47)	(8)	(0)	(0)				
	increased extramedullary hematopoiesis	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0				
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)				
	clear cell focus	0	0	0	0	2	1	0	0	3	0	0	0	2	1	0	0				
		(0)	(0)	(0)	(0)	(6)	(3)	(0)	(0)	(7)	(0)	(0)	(0)	(6)	(3)	(0)	(0)				
	acidophilic cell focus	2	0	0	0	2	2	1	0	0	0	0	0	1	1	0	0				
		(5)	(0)	(0)	(0)	(6)	(6)	(3)	(0)	(0)	(0)	(0)	(0)	(3)	(3)	(0)	(0)				
	basophilic cell focus	13	1	0	0	8	1	0	0	16	0	1	0	16	1	0	0				
		(34)	(3)	(0)	(0)	(22)	(3)	(0)	(0)	(37)	(0)	(2)	(0)	(44)	(3)	(0)	(0)				
	bile duct hyperplasia	6	0	0	0	13	0	0	0	6	0	1	0	5	0	0	0				
		(16)	(0)	(0)	(0)	(36)	(0)	(0)	(0)	(14)	(0)	(2)	(0)	(14)	(0)	(0)	(0)				
pancreas		<38>				<36>				<43>				<36>							
	atrophy	1	0	0	0	2	0	0	0	6	0	0	0	2	0	0	0				
		(3)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(14)	(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. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 17

Organ	Findings	Group Name No. of Animals on Study				Control				100 ppm				200 ppm				400 ppm			
		Grade				38				36				43				36			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Digestive system)																					
pancreas		<38>				<36>				<43>				<36>							
	islet cell hyperplasia	0	0	0	0	0	1	0	0	0	0	0	0	2	1	0	0	(6)	(3)	(0)	(0)
		(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)				
(Urinary system)																					
kidney		<38>				<36>				<43>				<36>							
	hyaline droplet	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	(0)	(0)	(0)	(0)
		(0)	(0)	(0)	(0)	(3)	(3)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)				
	chronic nephropathy	17	11	0	0	16	7	2	0	20	9	0	0	13	6	0	0	(45)	(29)	(0)	(0)
		(45)	(29)	(0)	(0)	(44)	(19)	(6)	(0)	(47)	(21)	(0)	(0)	(36)	(17)	(0)	(0)				
	urothelial hyperplasia:pelvis	1	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	(3)	(3)	(0)	(0)
		(3)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(0)	(0)	(0)	(0)				
	atypical tubule 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)	(3)	(0)	(0)	(0)				
(Endocrine system)																					
pituitary		<38>				<36>				<43>				<36>							
	angiectasis	1	0	0	0	7	0	0	0	2	1	0	0	0	0	1	0	(3)	(0)	(3)	(0)
		(3)	(0)	(0)	(0)	(19)	(0)	(0)	(0)	(5)	(2)	(0)	(0)	(0)	(0)	(3)	(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. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 18

		Group Name	Control				100 ppm				200 ppm				400 ppm			
		No. of Animals on Study	38				36				43				36			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Endocrine system)																		
pituitary			<38>				<36>				<43>				<36>			
	cyst		11	0	0	0	14	0	0	0	10	0	0	0	10	1	0	0
			(29)	(0)	(0)	(0)	(39)	(0)	(0)	(0)	(23)	(0)	(0)	(0)	(28)	(3)	(0)	(0)
	hyperplasia		7	1	4	0	6	1	4	0	5	4	4	0	4	2	1	0
			(18)	(3)	(11)	(0)	(17)	(3)	(11)	(0)	(12)	(9)	(9)	(0)	(11)	(6)	(3)	(0)
	Rathke pouch		1	0	0	0	2	0	0	0	0	0	0	0	2	0	0	0
			(3)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
thyroid			<38>				<36>				<43>				<36>			
	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)	(3)	(0)	(0)	(0)
	ultimobranchial body remanet		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)	(3)	(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)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	C-cell hyperplasia		2	2	1	0	3	2	0	0	6	0	0	0	7	0	0	0
			(5)	(5)	(3)	(0)	(8)	(6)	(0)	(0)	(14)	(0)	(0)	(0)	(19)	(0)	(0)	(0)
adrenal			<38>				<36>				<43>				<36>			
	peliosis-like lesion		2	0	0	0	3	0	0	0	2	0	0	0	0	0	0	0
			(5)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

STUDY NO. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 19

Organ	Findings	Group Name No. of Animals on Study Grade	Control 38				100 ppm 36				200 ppm 43				400 ppm 36			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																		
adrenal			<38>				<36>				<43>				<36>			
	hyperplasia:cortical cell	0 (0)	1 (3)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	1 (3)	0 (0)	0 (0)	
	hyperplasia:medulla	0 (0)	0 (0)	1 (3)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	
	focal fatty change:cortex	3 (8)	2 (5)	0 (0)	0 (0)	6 (17)	0 (0)	1 (3)	0 (0)	5 (12)	2 (5)	0 (0)	0 (0)	4 (11)	1 (3)	0 (0)	0 (0)	
{Reproductive system}																		
ovary			<38>				<36>				<43>				<36>			
	cyst	1 (3)	0 (0)	0 (0)	0 (0)	2 (6)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	
uterus			<38>				<36>				<43>				<36>			
	cystic endometrial hyperplasia	4 (11)	0 (0)	0 (0)	0 (0)	8 (22)	0 (0)	0 (0)	0 (0)	5 (12)	0 (0)	0 (0)	0 (0)	6 (17)	0 (0)	0 (0)	0 (0)	
mammary gl			<38>				<36>				<43>				<36>			
	hyperplasia	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	

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

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 20

Organ	Findings	Group Name No. of Animals on Study				Control				100 ppm				200 ppm				400 ppm			
		Grade				38				36				43				36			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Reproductive system)																					
mammary gl		<38>				<36>				<43>				<36>							
	galactoceles	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)	(0)	(0)	(0)	(0)
(Special sense organs/appendage)																					
eye		<38>				<36>				<43>				<36>							
	cataract	0	1	0	0	1	0	0	0	1	2	0	0	2	1	0	0	6	3	0	0
		(0)	(3)	(0)	(0)	(3)	(0)	(0)	(0)	(2)	(5)	(0)	(0)	(6)	(3)	(0)	(0)	(6)	(3)	(0)	(0)
	retinal atrophy	0	0	1	0	0	1	0	0	0	2	1	0	0	1	2	0	0	3	6	0
		(0)	(0)	(3)	(0)	(0)	(3)	(0)	(0)	(0)	(5)	(2)	(0)	(0)	(3)	(6)	(0)	(0)	(3)	(6)	(0)
	keratitis	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)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Harder gl		<38>				<36>				<43>				<36>							
	degeneration	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	3	0	0	0
		(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(3)	(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)	(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. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 21

		Group Name	Control				100 ppm				200 ppm				400 ppm			
		No. of Animals on Study	38				36				43				36			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Musculoskeletal system}																		
bone			<38>				<36>				<43>				<36>			
	osteosclerosis		2	2	0	0	3	1	1	0	4	1	1	0	1	1	0	0
			(5)	(5)	(0)	(0)	(8)	(3)	(3)	(0)	(9)	(2)	(2)	(0)	(3)	(3)	(0)	(0)
{Body cavities}																		
peritoneum			<38>				<36>				<43>				<36>			
	inflammatory infiltration		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 : * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Chi Square

(HPT150)

BAIS4

TABLE M1

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

STUDY NO. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

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

PAGE : 1

Time-related Weeks	Items	Group Name	Control	100 ppm	200 ppm	400 ppm
0 - 52	NO. OF EXAMINED ANIMALS		0	1	1	0
	NO. OF ANIMALS WITH TUMORS		0	0	0	0
	NO. OF ANIMALS WITH SINGLE TUMORS		0	0	0	0
	NO. OF ANIMALS WITH MULTIPLE TUMORS		0	0	0	0
	NO. OF BENIGN TUMORS		0	0	0	0
	NO. OF MALIGNANT TUMORS		0	0	0	0
	NO. OF TOTAL TUMORS		0	0	0	0
53 - 78	NO. OF EXAMINED ANIMALS		1	0	0	1
	NO. OF ANIMALS WITH TUMORS		1	0	0	1
	NO. OF ANIMALS WITH SINGLE TUMORS		1	0	0	1
	NO. OF ANIMALS WITH MULTIPLE TUMORS		0	0	0	0
	NO. OF BENIGN TUMORS		0	0	0	0
	NO. OF MALIGNANT TUMORS		1	0	0	1
	NO. OF TOTAL TUMORS		1	0	0	1
79 - 104	NO. OF EXAMINED ANIMALS		8	9	9	7
	NO. OF ANIMALS WITH TUMORS		8	9	9	7
	NO. OF ANIMALS WITH SINGLE TUMORS		2	1	4	2
	NO. OF ANIMALS WITH MULTIPLE TUMORS		6	8	5	5
	NO. OF BENIGN TUMORS		8	13	11	8
	NO. OF MALIGNANT TUMORS		7	6	5	7
	NO. OF TOTAL TUMORS		15	19	16	15
105 - 105	NO. OF EXAMINED ANIMALS		41	40	40	42
	NO. OF ANIMALS WITH TUMORS		41	40	40	41
	NO. OF ANIMALS WITH SINGLE TUMORS		10	13	12	23
	NO. OF ANIMALS WITH MULTIPLE TUMORS		31	27	28	18
	NO. OF BENIGN TUMORS		76	73	76	59
	NO. OF MALIGNANT TUMORS		10	7	7	8
	NO. OF TOTAL TUMORS		86	80	83	67

STUDY NO. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

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

PAGE : 2

Time-related Weeks	Items	Group Name	Control	100 ppm	200 ppm	400 ppm
0 - 105	NO. OF EXAMINED ANIMALS		50	50	50	50
	NO. OF ANIMALS WITH TUMORS		50	49	49	49
	NO. OF ANIMALS WITH SINGLE TUMORS		13	14	16	26
	NO. OF ANIMALS WITH MULTIPLE TUMORS		37	35	33	23
	NO. OF BENIGN TUMORS		84	86	87	67
	NO. OF MALIGNANT TUMORS		18	13	12	16
	NO. OF TOTAL TUMORS		102	99	99	83

(HPT070)

BAIS4

TABLE M2

**NUMBER OF ANIMALS WITH TUMORS
AND NUMBER OF TUMORS-TIME RELATED : FEMALE**

STUDY NO. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 3

Time-related Weeks	Items	Group Name	Control	100 ppm	200 ppm	400 ppm
0 - 52	NO. OF EXAMINED ANIMALS		0	0	0	2
	NO. OF ANIMALS WITH TUMORS		0	0	0	2
	NO. OF ANIMALS WITH SINGLE TUMORS		0	0	0	2
	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	2
	NO. OF TOTAL TUMORS		0	0	0	2
53 - 78	NO. OF EXAMINED ANIMALS		4	2	0	0
	NO. OF ANIMALS WITH TUMORS		3	2	0	0
	NO. OF ANIMALS WITH SINGLE TUMORS		3	1	0	0
	NO. OF ANIMALS WITH MULTIPLE TUMORS		0	1	0	0
	NO. OF BENIGN TUMORS		3	2	0	0
	NO. OF MALIGNANT TUMORS		0	1	0	0
	NO. OF TOTAL TUMORS		3	3	0	0
79 - 104	NO. OF EXAMINED ANIMALS		8	12	7	12
	NO. OF ANIMALS WITH TUMORS		8	9	6	11
	NO. OF ANIMALS WITH SINGLE TUMORS		5	8	6	8
	NO. OF ANIMALS WITH MULTIPLE TUMORS		3	1	0	3
	NO. OF BENIGN TUMORS		4	7	4	11
	NO. OF MALIGNANT TUMORS		7	3	2	4
	NO. OF TOTAL TUMORS		11	10	6	15
105 - 105	NO. OF EXAMINED ANIMALS		38	36	43	36
	NO. OF ANIMALS WITH TUMORS		31	22	25	17
	NO. OF ANIMALS WITH SINGLE TUMORS		18	12	10	8
	NO. OF ANIMALS WITH MULTIPLE TUMORS		13	10	15	9
	NO. OF BENIGN TUMORS		45	25	43	23
	NO. OF MALIGNANT TUMORS		6	9	3	4
	NO. OF TOTAL TUMORS		51	34	46	27

STUDY NO. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 4

Time-related Weeks	Items	Group Name	Control	100 ppm	200 ppm	400 ppm
0 - 105	NO. OF EXAMINED ANIMALS		50	50	50	50
	NO. OF ANIMALS WITH TUMORS		42	33	31	30
	NO. OF ANIMALS WITH SINGLE TUMORS		26	21	16	18
	NO. OF ANIMALS WITH MULTIPLE TUMORS		16	12	15	12
	NO. OF BENIGN TUMORS		52	34	47	34
	NO. OF MALIGNANT TUMORS		13	13	5	10
	NO. OF TOTAL TUMORS		65	47	52	44

(HPT070)

BAIS4

TABLE N1

HISTOPATHOLOGICAL FINDINGS :
NEOPLASTIC LESIONS : MALE

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 1

Organ	Findings	Group Name No. of animals on Study	Control 50	100 ppm 50	200 ppm 50	400 ppm 50
{Integumentary system/appandage}						
skin/app	keratoacanthoma		<50> 4 (8%)	<50> 2 (4%)	<50> 2 (4%)	<50> 1 (2%)
	sebaceous adenoma		0 (0%)	0 (0%)	1 (2%)	0 (0%)
	squamous cell carcinoma		0 (0%)	0 (0%)	1 (2%)	1 (2%)
subcutis	fibroma		<50> 8 (16%)	<50> 6 (12%)	<50> 3 (6%)	<50> 5 (10%)
	lipoma		1 (2%)	0 (0%)	1 (2%)	0 (0%)
	leiomyosarcoma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
	histiocytic sarcoma		0 (0%)	0 (0%)	1 (2%)	2 (4%)
	sarcoma:NOS		0 (0%)	0 (0%)	0 (0%)	1 (2%)
{Respiratory system}						
lung	bronchiolar-alveolar adenoma		<50> 3 (6%)	<50> 4 (8%)	<50> 3 (6%)	<50> 0 (0%)
	squamous cell carcinoma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
	bronchiolar-alveolar carcinoma		2 (4%)	0 (0%)	0 (0%)	0 (0%)
{Hematopoietic system}						
spleen	mononuclear cell leukemia		<50> 4 (8%)	<50> 3 (6%)	<50> 2 (4%)	<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. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 2

Organ	Findings	Group Name No. of animals on Study	Control 50	100 ppm 50	200 ppm 50	400 ppm 50
(Hematopoietic system)						
spleen	hemangiosarcoma		<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)
(Digestive system)						
stomach	squamous cell papilloma		<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)
large intes	leiomyosarcoma		<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)
liver	hepatocellular adenoma		<50> 0 (0%)	<50> 4 (8%)	<50> 0 (0%)	<50> 1 (2%)
	hemangiosarcoma		<50> 0 (0%)	<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)
pancreas	islet cell adenoma		<50> 3 (6%)	<50> 2 (4%)	<50> 7 (14%)	<50> 2 (4%)
	islet cell adenocarcinoma		<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)	<50> 0 (0%)
(Urinary system)						
kidney	renal cell carcinoma		<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)
	nephroblastoma		<50> 1 (2%)	<50> 0 (0%)	<50> 2 (4%)	<50> 0 (0%)
urin bladd	squamous cell papilloma		<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)
(Endocrine system)						
pituitary	adenoma		<50> 13 (26%)	<50> 5 (10%)	<50> 16 (32%)	<50> 6 (12%)

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

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 3

Organ	Findings	Group Name No. of animals on Study	Control 50	100 ppm 50	200 ppm 50	400 ppm 50
(Endocrine system)						
thyroid	C-cell adenoma		<50> 3 (6%)	<50> 8 (16%)	<50> 9 (18%)	<50> 3 (6%)
	follicular adenoma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
	C-cell carcinoma		3 (6%)	1 (2%)	1 (2%)	1 (2%)
	follicular adenocarcinoma		0 (0%)	1 (2%)	1 (2%)	1 (2%)
parathyroid	adenoma		<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)
adrenal	pheochromocytoma		<50> 2 (4%)	<50> 4 (8%)	<50> 2 (4%)	<50> 4 (8%)
	pheochromocytoma:malignant		2 (4%)	1 (2%)	0 (0%)	0 (0%)
(Reproductive system)						
testis	interstitial cell tumor		<50> 44 (88%)	<50> 46 (92%)	<50> 40 (80%)	<50> 42 (84%)
prostate	adenoma		<50> 1 (2%)	<50> 1 (2%)	<50> 0 (0%)	<50> 1 (2%)
mammary gl	fibroadenoma		<50> 0 (0%)	<50> 3 (6%)	<50> 0 (0%)	<50> 1 (2%)
prep/cli gl	adenoma		<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)
(Nervous system)						
brain	glioma		<50> 0 (0%)	<50> 2 (4%)	<50> 0 (0%)	<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. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 4

Organ	Findings	Group Name No. of animals on Study	Control 50	100 ppm 50	200 ppm 50	400 ppm 50
{Nervous system}						
spinal cord	glioma		<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)	<50> 0 (0%)
{Special sense organs/appendage}						
Harder gl	adenoma		<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)	<50> 0 (0%)
Zymbal gl	Zymbal gland tumor:malignant		<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)	<50> 2 (4%)
{Musculoskeletal system}						
bone	osteoma		<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)	<50> 0 (0%)
	osteosarcoma		0 (0%)	1 (2%)	0 (0%)	0 (0%)
vertebra	chordoma:malignant		<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)
{Body cavities}						
peritoneum	mesothelioma		<50> 3 (6%)	<50> 2 (4%)	<50> 0 (0%)	<50> 3 (6%)
retroperit	histiocytic sarcoma		<50> 0 (0%)	<50> 1 (2%)	<50> 1 (2%)	<50> 0 (0%)

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

TABLE N2

**HISTOPATHOLOGICAL FINDINGS :
NEOPLASTIC LESIONS : FEMALE**

STUDY NO. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 5

Organ	Findings	Group Name No. of animals on Study	Control 50	100 ppm 50	200 ppm 50	400 ppm 50
{Integumentary system/appandage}						
skin/app	squamous cell papilloma		<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)
{Respiratory system}						
lung	bronchiolar-alveolar adenoma		<50> 2 (4%)	<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)
	bronchiolar-alveolar carcinoma		0 (0%)	1 (2%)	0 (0%)	0 (0%)
{Hematopoietic system}						
lymph node	histiocytic sarcoma		<50> 0 (0%)	<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)
spleen	mononuclear cell leukemia		<50> 2 (4%)	<50> 7 (14%)	<50> 0 (0%)	<50> 1 (2%)
{Digestive system}						
tongue	squamous cell papilloma		<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)
stomach	fibrosarcoma		<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)	<50> 0 (0%)
	leiomyosarcoma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
small intes	leiomyosarcoma		<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)	<50> 2 (4%)
liver	hepatocellular carcinoma		<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)	<50> 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. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 6

Organ	Findings	Group Name No. of animals on Study	Control 50	100 ppm 50	200 ppm 50	400 ppm 50
{Digestive system}						
pancreas	islet cell adenoma		<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)
{Urinary system}						
kidney	transitional cell papilloma		<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)
urin bladd	transitional cell carcinoma		<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)
{Endocrine system}						
pituitary	adenoma		<50> 21 (42%)	<50> 18 (36%)	<50> 19 (38%)	<50> 15 (30%)
	adenocarcinoma		0 (0%)	0 (0%)	0 (0%)	2 (4%)
thyroid	C-cell adenoma		<50> 7 (14%)	<50> 6 (12%)	<50> 4 (8%)	<50> 0 (0%)
	C-cell carcinoma		2 (4%)	1 (2%)	0 (0%)	1 (2%)
adrenal	pheochromocytoma		<50> 0 (0%)	<50> 1 (2%)	<50> 3 (6%)	<50> 2 (4%)
	cortical adenoma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
	pheochromocytoma:malignant		1 (2%)	0 (0%)	0 (0%)	1 (2%)
{Reproductive system}						
ovary	fibroadenoma		<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)	<50> 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. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 7

Organ	Findings	Group Name No. of animals on Study	Control 50	100 ppm 50	200 ppm 50	400 ppm 50
{Reproductive system}						
ovary	granulosa-theca cell tumor		<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)
	granulosa cell tumor:benign		0 (0%)	0 (0%)	1 (2%)	0 (0%)
	cystadenocarcinoma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
uterus	endometrial stromal polyp		<50> 13 (26%)	<50> 3 (6%)	<50> 12 (24%)	<50> 7 (14%)
	adenocarcinoma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
	endometrial stromal sarcoma		1 (2%)	0 (0%)	1 (2%)	1 (2%)
mammary gl	adenoma		<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)	<50> 2 (4%)
	fibroadenoma		5 (10%)	4 (8%)	3 (6%)	5 (10%)
	adenocarcinoma		1 (2%)	1 (2%)	1 (2%)	0 (0%)
prep/cli gl	adenoma		<50> 0 (0%)	<50> 1 (2%)	<50> 1 (2%)	<50> 1 (2%)
{Nervous system}						
brain	glioma		<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)	<50> 1 (2%)
periph nerv	schwannoma:malignant		<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)	<50> 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. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 8

Organ	Findings	Group Name No. of animals on Study	Control 50	100 ppm 50	200 ppm 50	400 ppm 50
{Special sense organs/appendage}						
Zymbal gl	Zymbal gland tumor:malignant		<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)	<50> 0 (0%)
{Musculoskeletal system}						
muscle	rhabdomyosarcoma		<50> 1 (2%)	<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)

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

(HPT085)

BAIS4

TABLE O1

NEOPLASTIC LESIONS-INCIDENCE
AND STATISTICAL ANALYSIS : MALE

STUDY No. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 1

Group Name	Control	100 ppm	200 ppm	400 ppm
SITE : skin/appendage TUMOR : keratoacanthoma				
Tumor rate				
Overall rates(a)	4/50(8.0)	2/50(4.0)	2/50(4.0)	1/50(2.0)
Adjusted rates(b)	9.76	5.00	4.26	2.38
Terminal rates(c)	4/41(9.8)	2/40(5.0)	1/40(2.5)	1/42(2.4)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.9034			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.1848			
Fisher Exact test(e)		P = 0.3389	P = 0.3389	P = 0.1811
SITE : subcutis TUMOR : fibroma				
Tumor rate				
Overall rates(a)	8/50(16.0)	6/50(12.0)	3/50(6.0)	5/50(10.0)
Adjusted rates(b)	17.07	11.63	6.67	10.87
Terminal rates(c)	7/41(17.1)	4/40(10.0)	2/40(5.0)	4/42(9.5)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.8798			
Prevalence method(d)	P = 0.7255			
Combined analysis(d)	P = 0.8299			
Cochran-Armitage test(e)	P = 0.3206			
Fisher Exact test(e)		P = 0.3871	P = 0.0999	P = 0.2768
SITE : lung TUMOR : bronchiolar-alveolar adenoma				
Tumor rate				
Overall rates(a)	3/50(6.0)	4/50(8.0)	3/50(6.0)	0/50(0.0)
Adjusted rates(b)	7.32	10.00	7.50	0.0
Terminal rates(c)	3/41(7.3)	4/40(10.0)	3/40(7.5)	0/42(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.9567			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.0999			
Fisher Exact test(e)		P = 0.5000	P = 0.6611	P = 0.1212

STUDY No. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 2

Group Name	Control	100 ppm	200 ppm	400 ppm
SITE : lung TUMOR : bronchiolar-alveolar adenoma, bronchiolar-alveolar carcinoma				
Tumor rate				
Overall rates(a)	5/50(10.0)	4/50(8.0)	3/50(6.0)	0/50(0.0)
Adjusted rates(b)	12.20	10.00	7.50	0.0
Terminal rates(c)	5/41(12.2)	4/40(10.0)	3/40(7.5)	0/42(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.9908			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.0268*			
Fisher Exact test(e)		P = 0.5000	P = 0.3575	P = 0.0281*
SITE : spleen TUMOR : mononuclear cell leukemia				
Tumor rate				
Overall rates(a)	4/50(8.0)	3/50(6.0)	2/50(4.0)	1/50(2.0)
Adjusted rates(b)	2.44	2.50	2.50	2.38
Terminal rates(c)	1/41(2.4)	1/40(2.5)	1/40(2.5)	1/42(2.4)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.9694			
Prevalence method(d)	P = 0.4932			
Combined analysis(d)	P = 0.9198			
Cochran-Armitage test(e)	P = 0.1539			
Fisher Exact test(e)		P = 0.5000	P = 0.3389	P = 0.1811
SITE : liver TUMOR : hepatocellular adenoma				
Tumor rate				
Overall rates(a)	0/50(0.0)	4/50(8.0)	0/50(0.0)	1/50(2.0)
Adjusted rates(b)	0.0	10.00	0.0	2.22
Terminal rates(c)	0/41(0.0)	4/40(10.0)	0/40(0.0)	0/42(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.5767			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.8183			
Fisher Exact test(e)		P = 0.0587	P = N. C.	P = 0.5000

STUDY No. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 3

Group Name	Control	100 ppm	200 ppm	400 ppm
SITE : pancreas TUMOR : islet cell adenoma				
Tumor rate				
Overall rates(a)	3/50(6.0)	2/50(4.0)	7/50(14.0)	2/50(4.0)
Adjusted rates(b)	7.32	5.00	16.28	4.76
Terminal rates(c)	3/41(7.3)	2/40(5.0)	6/40(15.0)	2/42(4.8)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.5300			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.9254			
Fisher Exact test(e)		P = 0.5000	P = 0.1589	P = 0.5000
SITE : pancreas TUMOR : islet cell adenoma, islet cell adenocarcinoma				
Tumor rate				
Overall rates(a)	4/50(8.0)	2/50(4.0)	7/50(14.0)	2/50(4.0)
Adjusted rates(b)	9.76	5.00	16.28	4.76
Terminal rates(c)	4/41(9.8)	2/40(5.0)	6/40(15.0)	2/42(4.8)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.6522			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.6830			
Fisher Exact test(e)		P = 0.3389	P = 0.2623	P = 0.3389
SITE : pituitary gland TUMOR : adenoma				
Tumor rate				
Overall rates(a)	13/50(26.0)	5/50(10.0)	16/50(32.0)	6/50(12.0)
Adjusted rates(b)	29.27	10.00	35.00	11.11
Terminal rates(c)	12/41(29.3)	4/40(10.0)	14/40(35.0)	4/42(9.5)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.4521			
Prevalence method(d)	P = 0.8900			
Combined analysis(d)	P = 0.8634			
Cochran-Armitage test(e)	P = 0.2821			
Fisher Exact test(e)		P = 0.0332*	P = 0.3299	P = 0.0624

STUDY No. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 4

Group Name	Control	100 ppm	200 ppm	400 ppm
SITE : pituitary gland TUMOR : adenoma, adenocarcinoma				
Tumor rate				
Overall rates(a)	13/50(26.0)	5/50(10.0)	16/50(32.0)	6/50(12.0)
Adjusted rates(b)	29.27	10.00	35.00	11.11
Terminal rates(c)	12/41(29.3)	4/40(10.0)	14/40(35.0)	4/42(9.5)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.4521			
Prevalence method(d)	P = 0.8900			
Combined analysis(d)	P = 0.8634			
Cochran-Armitage test(e)	P = 0.2821			
Fisher Exact test(e)		P = 0.0332*	P = 0.3299	P = 0.0624
SITE : thyroid TUMOR : C-cell adenoma				
Tumor rate				
Overall rates(a)	3/50(6.0)	8/50(16.0)	9/50(18.0)	3/50(6.0)
Adjusted rates(b)	7.32	17.50	20.00	7.14
Terminal rates(c)	3/41(7.3)	7/40(17.5)	8/40(20.0)	3/42(7.1)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.3948			
Prevalence method(d)	P = 0.6421			
Combined analysis(d)	P = 0.6233			
Cochran-Armitage test(e)	P = 0.7360			
Fisher Exact test(e)		P = 0.0999	P = 0.0606	P = 0.6611
SITE : thyroid TUMOR : C-cell carcinoma				
Tumor rate				
Overall rates(a)	3/50(6.0)	1/50(2.0)	1/50(2.0)	1/50(2.0)
Adjusted rates(b)	4.76	0.0	2.50	0.0
Terminal rates(c)	1/41(2.4)	0/40(0.0)	1/40(2.5)	0/42(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.5139			
Prevalence method(d)	P = 0.8995			
Combined analysis(d)	P = 0.8273			
Cochran-Armitage test(e)	P = 0.3266			
Fisher Exact test(e)		P = 0.3087	P = 0.3087	P = 0.3087

STUDY No. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 5

Group Name	Control	100 ppm	200 ppm	400 ppm
SITE : thyroid TUMOR : C-cell adenoma,C-cell carcinoma				
Tumor rate				
Overall rates(a)	6/50(12.0)	9/50(18.0)	10/50(20.0)	4/50(8.0)
Adjusted rates(b)	11.90	17.50	22.50	7.14
Terminal rates(c)	4/41(9.8)	7/40(17.5)	9/40(22.5)	3/42(7.1)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.4785			
Prevalence method(d)	P = 0.7874			
Combined analysis(d)	P = 0.7662			
Cochran-Armitage test(e)	P = 0.4349			
Fisher Exact test(e)		P = 0.2883	P = 0.2070	P = 0.3703
SITE : adrenal gland TUMOR : pheochromocytoma				
Tumor rate				
Overall rates(a)	2/50(4.0)	4/50(8.0)	2/50(4.0)	4/50(8.0)
Adjusted rates(b)	4.88	10.00	5.00	9.52
Terminal rates(c)	2/41(4.9)	4/40(10.0)	2/40(5.0)	4/42(9.5)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.2859			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.5459			
Fisher Exact test(e)		P = 0.3389	P = 0.6913	P = 0.3389
SITE : adrenal gland TUMOR : pheochromocytoma,pheochromocytoma:malignant				
Tumor rate				
Overall rates(a)	4/50(8.0)	5/50(10.0)	2/50(4.0)	4/50(8.0)
Adjusted rates(b)	7.32	12.50	5.00	9.52
Terminal rates(c)	3/41(7.3)	5/40(12.5)	2/40(5.0)	4/42(9.5)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.9139 ?			
Prevalence method(d)	P = 0.4740			
Combined analysis(d)	P = 0.5966			
Cochran-Armitage test(e)	P = 0.8205			
Fisher Exact test(e)		P = 0.5000	P = 0.3389	P = 0.6425

STUDY No. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 6

Group Name	Control	100 ppm	200 ppm	400 ppm
SITE : testis TUMOR : interstitial cell tumor				
Tumor rate				
Overall rates(a)	44/50(88.0)	46/50(92.0)	40/50(80.0)	42/50(84.0)
Adjusted rates(b)	95.56	97.62	88.37	93.02
Terminal rates(c)	39/41(95.1)	39/40(97.5)	35/40(87.5)	39/42(92.9)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.8073			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.3348			
Fisher Exact test(e)		P = 0.3703	P = 0.2070	P = 0.3871
SITE : mammary gland TUMOR : fibroadenoma				
Tumor rate				
Overall rates(a)	0/50(0.0)	3/50(6.0)	0/50(0.0)	1/50(2.0)
Adjusted rates(b)	0.0	6.52	0.0	2.38
Terminal rates(c)	0/41(0.0)	1/40(2.5)	0/40(0.0)	1/42(2.4)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.4770			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 1.0000			
Fisher Exact test(e)		P = 0.1212	P = N. C.	P = 0.5000
SITE : mammary gland TUMOR : adenoma, fibroadenoma, adenocarcinoma				
Tumor rate				
Overall rates(a)	0/50(0.0)	3/50(6.0)	0/50(0.0)	1/50(2.0)
Adjusted rates(b)	0.0	6.52	0.0	2.38
Terminal rates(c)	0/41(0.0)	1/40(2.5)	0/40(0.0)	1/42(2.4)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.4770			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 1.0000			
Fisher Exact test(e)		P = 0.1212	P = N. C.	P = 0.5000

STUDY No. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 SEX : MALE

NEOPLASTIC LESIONS—INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 7

Group Name	Control	100 ppm	200 ppm	400 ppm
SITE : peritoneum TUMOR : mesothelioma				
Tumor rate				
Overall rates(a)	3/50(6.0)	2/50(4.0)	0/50(0.0)	3/50(6.0)
Adjusted rates(b)	7.32	5.00	0.0	7.14
Terminal rates(c)	3/41(7.3)	2/40(5.0)	0/40(0.0)	3/42(7.1)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.5030			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 1.0000			
Fisher Exact test(e)		P = 0.5000	P = 0.1212	P = 0.6611

(HPT360A)

BAIS4

- (a): Number of tumor-bearing animals/number of animals examined at the site.
 (b): Kaplan-Meier 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.

TABLE O2

**NEOPLASTIC LESIONS-INCIDENCE
AND STATISTICAL ANALYSIS : FEMALE**

STUDY No. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 8

Group Name	Control	100 ppm	200 ppm	400 ppm
SITE : spleen TUMOR : mononuclear cell leukemia				
Tumor rate				
Overall rates(a)	2/50(4.0)	7/50(14.0)	0/50(0.0)	1/50(2.0)
Adjusted rates(b)	2.63	13.89	0.0	0.0
Terminal rates(c)	1/38(2.6)	5/36(13.9)	0/43(0.0)	0/36(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.6189			
Prevalence method(d)	P = 0.9453			
Combined analysis(d)	P = 0.9247			
Cochran-Armitage test(e)	P = 0.1539			
Fisher Exact test(e)		P = 0.0798	P = 0.2475	P = 0.5000
SITE : pituitary gland TUMOR : adenoma				
Tumor rate				
Overall rates(a)	21/50(42.0)	18/50(36.0)	19/50(38.0)	15/50(30.0)
Adjusted rates(b)	43.59	38.89	34.88	29.73
Terminal rates(c)	16/38(42.1)	14/36(38.9)	15/43(34.9)	10/36(27.8)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.5041			
Prevalence method(d)	P = 0.8953			
Combined analysis(d)	P = 0.8551			
Cochran-Armitage test(e)	P = 0.2433			
Fisher Exact test(e)		P = 0.3410	P = 0.4192	P = 0.1488
SITE : pituitary gland TUMOR : adenoma, adenocarcinoma				
Tumor rate				
Overall rates(a)	21/50(42.0)	18/50(36.0)	19/50(38.0)	17/50(34.0)
Adjusted rates(b)	43.59	38.89	34.88	29.73
Terminal rates(c)	16/38(42.1)	14/36(38.9)	15/43(34.9)	10/36(27.8)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.2436			
Prevalence method(d)	P = 0.8953			
Combined analysis(d)	P = 0.7322			
Cochran-Armitage test(e)	P = 0.4740			
Fisher Exact test(e)		P = 0.3410	P = 0.4192	P = 0.2684

STUDY No. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 9

Group Name	Control	100 ppm	200 ppm	400 ppm
SITE : thyroid TUMOR : C-cell adenoma				
Tumor rate				
Overall rates(a)	7/50(14.0)	6/50(12.0)	4/50(8.0)	0/50(0.0)
Adjusted rates(b)	18.42	13.95	9.30	0.0
Terminal rates(c)	7/38(18.4)	5/36(13.9)	4/43(9.3)	0/36(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.9982			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.0069**			
Fisher Exact test(e)		P = 0.5000	P = 0.2623	P = 0.0062**
SITE : thyroid TUMOR : C-cell adenoma, C-cell carcinoma				
Tumor rate				
Overall rates(a)	9/50(18.0)	7/50(14.0)	4/50(8.0)	1/50(2.0)
Adjusted rates(b)	23.68	16.67	9.30	2.78
Terminal rates(c)	9/38(23.7)	6/36(16.7)	4/43(9.3)	1/36(2.8)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.9985			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.0056**			
Fisher Exact test(e)		P = 0.3929	P = 0.1168	P = 0.0078**
SITE : adrenal gland TUMOR : pheochromocytoma				
Tumor rate				
Overall rates(a)	0/50(0.0)	1/50(2.0)	3/50(6.0)	2/50(4.0)
Adjusted rates(b)	0.0	2.78	6.98	5.56
Terminal rates(c)	0/38(0.0)	1/36(2.8)	3/43(7.0)	2/36(5.6)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.1018			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.2072			
Fisher Exact test(e)		P = 0.5000	P = 0.1212	P = 0.2475

STUDY No. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 10

Group Name	Control	100 ppm	200 ppm	400 ppm
SITE : adrenal gland TUMOR : pheochromocytoma, pheochromocytoma:malignant				
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	2.78	6.98	8.33
Terminal rates(c)	1/38(2.6)	1/36(2.8)	3/43(7.0)	3/36(8.3)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.1068			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.2225			
Fisher Exact test(e)		P = 0.7525	P = 0.3087	P = 0.3087
SITE : uterus TUMOR : endometrial stromal polyp				
Tumor rate				
Overall rates(a)	13/50(26.0)	3/50(6.0)	12/50(24.0)	7/50(14.0)
Adjusted rates(b)	28.95	8.33	27.91	16.67
Terminal rates(c)	11/38(28.9)	3/36(8.3)	12/43(27.9)	6/36(16.7)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.9104 ?			
Prevalence method(d)	P = 0.7048			
Combined analysis(d)	P = 0.7751			
Cochran-Armitage test(e)	P = 0.4316			
Fisher Exact test(e)		P = 0.0061**	P = 0.5000	P = 0.1054
SITE : mammary gland TUMOR : fibroadenoma				
Tumor rate				
Overall rates(a)	5/50(10.0)	4/50(8.0)	3/50(6.0)	5/50(10.0)
Adjusted rates(b)	13.16	4.26	6.98	7.14
Terminal rates(c)	5/38(13.2)	1/36(2.8)	3/43(7.0)	1/36(2.8)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.1652			
Prevalence method(d)	P = 0.7003			
Combined analysis(d)	P = 0.4832			
Cochran-Armitage test(e)	P = 0.9658			
Fisher Exact test(e)		P = 0.5000	P = 0.3575	P = 0.6297

STUDY No. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 11

Group Name	Control	100 ppm	200 ppm	400 ppm
SITE : mammary gland				
TUMOR : adenoma, fibroadenoma, adenocarcinoma				
Tumor rate				
Overall rates(a)	6/50(12.0)	4/50(8.0)	5/50(10.0)	7/50(14.0)
Adjusted rates(b)	13.16	2.78	11.63	11.90
Terminal rates(c)	5/38(13.2)	1/36(2.8)	5/43(11.6)	3/36(8.3)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.4431			
Prevalence method(d)	P = 0.3175			
Combined analysis(d)	P = 0.3213			
Cochran-Armitage test(e)	P = 0.5928			
Fisher Exact test(e)		P = 0.3703	P = 0.5000	P = 0.5000

(HPT360A)

BAIS4

- (a): Number of tumor-bearing animals/number of animals examined at the site.
 (b): Kaplan-Meier 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.

TABLE P1

HISTOPATHOLOGICAL FINDINGS :

METASTASIS OF TUMOR :

MALE

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 1

		Group Name No. of Animals on Study	Control 50	100 ppm 50	200 ppm 50	400 ppm 50
Organ	Findings					
{Respiratory system}						
nasal cavit	leukemic cell infiltration		<50> 1	<50> 0	<50> 0	<50> 0
larynx	leukemic cell infiltration		<50> 0	<50> 0	<50> 1	<50> 0
	metastasis:thyroid tumor		0	1	0	0
lung	leukemic cell infiltration		<50> 3	<50> 1	<50> 1	<50> 0
	metastasis:adrenal tumor		1	0	0	0
	metastasis:thyroid tumor		2	0	0	0
	metastasis:bone tumor		0	1	0	0
	metastasis:zymlal gland tumor		0	0	0	1
	metastasis:vertebra tumor		0	0	1	0
	metastasis:retroperitoneum tumor		0	1	0	0
	metastasis:kidney tumor		0	0	1	0
{Hematopoietic system}						
bone marrow	leukemic cell infiltration		<50> 3	<50> 0	<50> 1	<50> 0
lymph node	leukemic cell infiltration		<50> 3	<50> 0	<50> 0	<50> 1
spleen	metastasis:liver tumor		<50> 0	<50> 0	<50> 0	<50> 1

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

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 2

Group Name No. of Animals on Study		Control 50	100 ppm 50	200 ppm 50	400 ppm 50
Organ	Findings				
(Hematopoietic system)					
spleen	metastasis:adrenal tumor	<50> 1	<50> 0	<50> 0	<50> 0
(Circulatory system)					
heart	leukemic cell infiltration	<50> 0	<50> 0	<50> 1	<50> 0
	metastasis:bone tumor	0	1	0	0
(Digestive system)					
liver	leukemic cell infiltration	<50> 4	<50> 2	<50> 0	<50> 1
	metastasis:thyroid tumor	1	0	0	0
	metastasis:subcutis tumor	0	0	1	0
pancreas	leukemic cell infiltration	<50> 1	<50> 0	<50> 1	<50> 1
	metastasis:retroperitoneum tumor	0	1	0	0
(Urinary system)					
kidney	leukemic cell infiltration	<50> 2	<50> 0	<50> 0	<50> 0
	metastasis:bone tumor	0	1	0	0
	metastasis:retroperitoneum tumor	0	1	0	0
< a >	a : Number of animals examined at the site				
b	b : Number of animals with lesion				

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 3

Organ	Findings	Group Name No. of Animals on Study	Control 50	100 ppm 50	200 ppm 50	400 ppm 50
(Urinary system)						
urin bladd	metastasis:retroperitoneum tumor		<50> 0	<50> 1	<50> 0	<50> 0
(Endocrine system)						
pituitary	leukemic cell infiltration		<50> 1	<50> 0	<50> 0	<50> 0
thyroid	leukemic cell infiltration		<50> 2	<50> 0	<50> 0	<50> 0
adrenal	leukemic cell infiltration		<50> 1	<50> 0	<50> 0	<50> 1
	metastasis:bone tumor		0	1	0	0
(Reproductive system)						
prostate	leukemic cell infiltration		<50> 1	<50> 0	<50> 0	<50> 0
	metastasis:retroperitoneum tumor		0	1	0	0
(Nervous system)						
brain	leukemic cell infiltration		<50> 2	<50> 1	<50> 0	<50> 0
	metastasis:zymbal gland tumor		0	0	0	1
	metastasis:retroperitoneum tumor		0	1	0	0
spinal cord	leukemic cell infiltration		<50> 1	<50> 1	<50> 0	<50> 0

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

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 4

Group Name No. of Animals on Study		Control 50	100 ppm 50	200 ppm 50	400 ppm 50
Organ	Findings				
(Special sense organs/appendage)					
Harder gl		<50>	<50>	<50>	<50>
	leukemic cell infiltration	1	0	0	0
(Musculoskeletal system)					
muscle		<50>	<50>	<50>	<50>
	metastasis:subcutis tumor	0	0	1	0
(Body cavities)					
pleura		<50>	<50>	<50>	<50>
	leukemic cell infiltration	0	0	1	0
peritoneum		<50>	<50>	<50>	<50>
	leukemic cell infiltration	0	0	1	0
	metastasis:subcutis tumor	0	0	1	0
< a >	a : Number of animals examined at the site				
b	b : Number of animals with lesion				

(JPT150)

BAIS4

TABLE P2

HISTOPATHOLOGICAL FINDINGS :

METASTASIS OF TUMOR :

FEMALE

STUDY NO. : 0675
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 5

		Group Name	Control	100 ppm	200 ppm	400 ppm
		No. of Animals on Study	50	50	50	50
Organ	Findings					
(Respiratory system)						
nasal cavit	leukemic cell infiltration		<50> 0	<50> 1	<50> 0	<50> 0
	metastasis:lymph node tumor		0	0	0	1
lung	leukemic cell infiltration		<50> 2	<50> 5	<50> 0	<50> 1
	metastasis:uterus tumor		1	0	0	0
	metastasis:thyroid tumor		1	1	0	0
(Hematopoietic system)						
bone marrow	leukemic cell infiltration		<50> 0	<50> 1	<50> 0	<50> 0
	leukemic cell infiltration		<50> 0	<50> 2	<50> 0	<50> 1
spleen	metastasis:lymph node tumor		<50> 0	<50> 0	<50> 0	<50> 1
(Digestive system)						
liver	leukemic cell infiltration		<50> 2	<50> 7	<50> 0	<50> 1
	metastasis:lymph node tumor		0	0	0	1
(Urinary system)						
kidney	leukemic cell infiltration		<50> 1	<50> 1	<50> 0	<50> 0

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

STUDY NO. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 6

Group Name No. of Animals on Study		Control 50	100 ppm 50	200 ppm 50	400 ppm 50
Organ	Findings				
{Urinary system}					
kidney	metastasis:lymph node tumor	<50> 0	<50> 0	<50> 0	<50> 1
{Endocrine system}					
pituitary	metastasis:lymph node tumor	<50> 0	<50> 0	<50> 0	<50> 1
{Reproductive system}					
ovary	metastasis:lymph node tumor	<50> 0	<50> 0	<50> 0	<50> 1
uterus	leukemic cell infiltration	<50> 0	<50> 1	<50> 0	<50> 0
vagina	metastasis:uterus tumor	<50> 0	<50> 0	<50> 1	<50> 0
{Nervous system}					
brain	leukemic cell infiltration	<50> 0	<50> 1	<50> 0	<50> 1
	metastasis:pituitary tumor	0	0	0	2
	metastasis:peripheral nerve tumor	0	0	1	0
spinal cord	leukemic cell infiltration	<50> 0	<50> 1	<50> 0	<50> 1
{Special sense organs/appendage}					
eye	metastasis:lymph node tumor	<50> 0	<50> 0	<50> 0	<50> 1
< a > b : Number of animals with lesion					

STUDY NO. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 7

Organ	Findings	Group Name No. of Animals on Study	Control 50	100 ppm 50	200 ppm 50	400 ppm 50
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{Special sense organs/appendage}

Harder gl	metastasis:lymph node tumor	<50> 0	<50> 0	<50> 0	<50> 1
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< a > a : Number of animals examined at the site
b b : Number of animals with lesion

(JPT150)

BAIS4

TABLE Q1

CAUSE OF DEATH : MALE

STUDY NO. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
SEX : MALE

COUSE OF DEATH (SUMMARY)
(0-105W)

PAGE : 1

Group Name	Control	100 ppm	200 ppm	400 ppm
Number of Dead and Moribund Animal	9	10	10	8
no microscop confirm	0	1	2	0
pneumonia	0	1	0	0
urinary retention	0	0	1	0
tumor d:leukemia	3	2	1	0
tumor d:skin/app	0	0	0	1
tumor d:subcutis	1	1	0	2
tumor d:liver	0	0	0	1
tumor d:kidney	0	0	2	0
tumor d:pituitary	1	1	2	1
tumor d:thyroid	1	1	1	1
tumor d:adrenal	1	0	0	0
tumor d:brain	0	1	0	0
tumor d:spinal cord	1	0	0	0
tumor d:Zymbal gl	1	0	0	2
tumor d:bone	0	1	0	0
tumor d:retroperit	0	1	1	0

(BI0120)

BAIS4

TABLE Q2

CAUSE OF DEATH : FEMALE

STUDY NO. : 0675
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
SEX : FEMALE

COUSE OF DEATH (SUMMARY)
(0-105W)

PAGE : 2

Group Name	Control	100 ppm	200 ppm	400 ppm
Number of Dead and Moribund Animal	12	14	7	14
no microscop confirm	2	2	1	2
peritonitis	0	1	0	0
tumor d:leukemia	0	2	0	1
tumor d:lymph node	0	0	0	1
tumor d:stomach	1	0	0	0
tumor d:small intes	0	0	0	1
tumor d:pituitary	4	4	4	6
tumor d:uterus	2	0	1	1
tumor d:mammary gl	1	3	0	2
tumor d:prep/cli gl	0	1	0	0
tumor d:brain	0	1	0	0
tumor d:periph nerv	0	0	1	0
tumor d:Zymbal gl	1	0	0	0
tumor d:muscle	1	0	0	0

(BIO120)

BAIS4