

酢酸イソプロピルのラットを用いた
吸入によるがん原性試験報告書

試験番号：0610

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TABLE A

CONCENTRATIONS OF ISOPROPYL ACETATE
IN THE INHALATION CHAMBER
OF THE 2-YEAR INHALATION STUDY

CONCENTRATIONS OF ISOPROPYL ACETATE IN THE INHALATION
CHAMBER OF THE 2-YEAR INHALATION STUDY

Group Name	Concentration(ppm) Mean \pm S.D.
Control	0.0 \pm 0.0
1000 ppm	1000.6 \pm 7.8
2000 ppm	2003.2 \pm 12.5
4000 ppm	4001.9 \pm 30.2

TABLE B1

SURVIVAL ANIMAL NUMBERS : MALE

STUDY NO. : 0610

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
1000 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
2000 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
4000 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. : 0610

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	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
1000 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
2000 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
4000 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. : 0610

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	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
1000 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
2000 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
4000 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. : 0610

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	49/50	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
		98.0	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
1000 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
2000 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
4000 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	49/50	48/50	48/50	48/50	48/50	48/50	48/50
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.0	96.0	96.0	96.0	96.0	96.0
Number of survival/ Number of effective animals Survival rate(%)															

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BAIS4

STUDY NO. : 0610

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	48/50	48/50	48/50	48/50	48/50	48/50	48/50	48/50	48/50	47/50	47/50	47/50	47/50	47/50
		96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	94.0	94.0	94.0	94.0	94.0
1000 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
2000 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
4000 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(%)															

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BAIS4

STUDY NO. : 0610

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	47/50	46/50	46/50	46/50	46/50	46/50	46/50	46/50	44/50	44/50	44/50	44/50	44/50	44/50
		94.0	92.0	92.0	92.0	92.0	92.0	92.0	92.0	88.0	88.0	88.0	88.0	88.0	88.0
1000 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	49/50	49/50	49/50	48/50	48/50	47/50	47/50
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.0	98.0	98.0	96.0	96.0	94.0	94.0
2000 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
4000 ppm	50	48/50	48/50	48/50	48/50	48/50	48/50	48/50	48/50	47/50	47/50	47/50	46/50	46/50	46/50
		96.0	96.0	96.0	96.0	96.0	96.0	96.0	96.0	94.0	94.0	94.0	92.0	92.0	92.0
Number of survival/ Number of effective animals Survival rate(%)															

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STUDY NO. : 0610

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	44/50	44/50	44/50	44/50	44/50	41/50	41/50	41/50	39/50	39/50	39/50	39/50	39/50	39/50
		88.0	88.0	88.0	88.0	88.0	82.0	82.0	82.0	78.0	78.0	78.0	78.0	78.0	78.0
1000 ppm	50	47/50	47/50	46/50	46/50	46/50	45/50	45/50	45/50	44/50	44/50	44/50	44/50	44/50	44/50
		94.0	94.0	92.0	92.0	92.0	90.0	90.0	90.0	88.0	88.0	88.0	88.0	88.0	88.0
2000 ppm	50	49/50	49/50	49/50	49/50	49/50	49/50	48/50	48/50	47/50	47/50	47/50	45/50	45/50	44/50
		98.0	98.0	98.0	98.0	98.0	98.0	96.0	96.0	94.0	94.0	94.0	90.0	90.0	88.0
4000 ppm	50	46/50	46/50	46/50	46/50	46/50	46/50	46/50	45/50	45/50	45/50	45/50	45/50	45/50	45/50
		92.0	92.0	92.0	92.0	92.0	92.0	92.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
Number of survival/ Number of effective animals															
Survival rate(%)															

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STUDY NO. : 0610

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	38/50	38/50	38/50	37/50	36/50	34/50	33/50
		76.0	76.0	76.0	74.0	72.0	68.0	66.0
1000 ppm	50	44/50	44/50	43/50	42/50	42/50	42/50	42/50
		88.0	88.0	86.0	84.0	84.0	84.0	84.0
2000 ppm	50	44/50	43/50	42/50	42/50	41/50	38/50	38/50
		88.0	86.0	84.0	84.0	82.0	76.0	76.0
4000 ppm	50	44/50	44/50	44/50	43/50	42/50	42/50	42/50
		88.0	88.0	88.0	86.0	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. : 0610

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
1000 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
2000 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
4000 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. : 0610

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
1000 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
2000 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
4000 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. : 0610

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
1000 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
2000 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
4000 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. : 0610

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
1000 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
2000 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
4000 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. : 0610

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

SEX : FEMALE

SURVIVAL ANIMAL NUMBERS

PAGE : 13

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
1000 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
2000 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
4000 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. : 0610

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	49/50	49/50	49/50	49/50	48/50	47/50	47/50	47/50	47/50	47/50	46/50	46/50	46/50	44/50
		98.0	98.0	98.0	98.0	96.0	94.0	94.0	94.0	94.0	94.0	92.0	92.0	92.0	88.0
1000 ppm	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	49/50
		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	98.0
2000 ppm	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	49/50
		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	98.0
4000 ppm	50	50/50	50/50	50/50	48/50	48/50	48/50	48/50	47/50	47/50	47/50	46/50	46/50	46/50	46/50
		100.0	100.0	100.0	96.0	96.0	96.0	96.0	94.0	94.0	94.0	92.0	92.0	92.0	92.0
Number of survival/ Number of effective animals Survival rate(%)															

(HAN360)

BAIS4

STUDY NO. : 0610

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

SEX : FEMALE

SURVIVAL ANIMAL NUMBERS

PAGE : 15

Group Name	Animals At start	Administration (Weeks)													
		84	85	86	87	88	89	90	91	92	93	94	95	96	97
Control	50	44/50	44/50	43/50	43/50	43/50	43/50	43/50	43/50	43/50	41/50	41/50	40/50	40/50	39/50
		88.0	88.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	82.0	82.0	80.0	80.0	78.0
1000 ppm	50	49/50	49/50	48/50	48/50	47/50	47/50	46/50	45/50	45/50	43/50	42/50	40/50	40/50	38/50
		98.0	98.0	96.0	96.0	94.0	94.0	92.0	90.0	90.0	86.0	84.0	80.0	80.0	76.0
2000 ppm	50	49/50	49/50	49/50	48/50	48/50	48/50	47/50	47/50	47/50	47/50	47/50	46/50	45/50	44/50
		98.0	98.0	98.0	96.0	96.0	96.0	94.0	94.0	94.0	94.0	94.0	92.0	90.0	88.0
4000 ppm	50	46/50	46/50	46/50	46/50	46/50	46/50	45/50	45/50	45/50	45/50	45/50	45/50	45/50	45/50
		92.0	92.0	92.0	92.0	92.0	92.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0
Number of survival/ Number of effective animals															
Survival rate(%)															

(HAN360)

BAIS4

STUDY NO. : 0610

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

SEX : FEMALE

SURVIVAL ANIMAL NUMBERS

PAGE : 16

Group Name	Animals At start	Administration (Weeks)						
		98	99	100	101	102	103	104
Control	50	38/50	37/50	37/50	37/50	37/50	35/50	34/50
		76.0	74.0	74.0	74.0	74.0	70.0	68.0
1000 ppm	50	38/50	38/50	38/50	37/50	37/50	36/50	35/50
		76.0	76.0	76.0	74.0	74.0	72.0	70.0
2000 ppm	50	44/50	44/50	44/50	44/50	44/50	44/50	43/50
		88.0	88.0	88.0	88.0	88.0	88.0	86.0
4000 ppm	50	45/50	45/50	45/50	45/50	45/50	45/50	44/50
		90.0	90.0	90.0	90.0	90.0	90.0	88.0
Number of survival/ Number of effective animals								
Survival rate(%)								

(HAN360)

BAIS4

TABLE C1

CLINICAL OBSERVATION : MALE

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

PAGE : 1

[illegible]

REPORT TYPE : A1 104

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

PAGE : 7

[illegible]

STUDY NO. : 0610
 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	11	11	12	12	13	13
	1000 ppm	4	4	5	5	5	5
	2000 ppm	5	6	6	7	8	8
	4000 ppm	4	4	5	5	5	5
MORIBUND SACRIFICE	Control	1	1	1	2	3	4
	1000 ppm	2	3	3	3	3	3
	2000 ppm	2	2	2	2	4	4
	4000 ppm	2	2	2	3	3	3
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	1
	2000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
LATERAL	Control	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0
	1000 ppm	0	0	0	1	2	2
	2000 ppm	1	1	1	1	0	0
	4000 ppm	0	0	0	0	0	0
ABNORMAL GAIT	Control	0	0	0	0	0	0
	1000 ppm	2	2	2	2	1	1
	2000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
WASTING	Control	0	0	0	1	0	0
	1000 ppm	0	0	0	0	1	1
	2000 ppm	2	2	2	2	1	1
	4000 ppm	0	0	0	0	0	1
SOILED	Control	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
TRAUMA	Control	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	2000 ppm	0	1	1	1	1	1
	4000 ppm	0	0	0	0	0	0

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

PAGE : 9

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
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

PAGE : 10

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
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	1
CATARACT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	1	1	1	1	1
	4000 ppm	0	0	0	0	0	0	0	0	1	1	1	1	1	1
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	1
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	1	1	1	0	0	0	0	1	1	1
EXTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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

PAGE : 13

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
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	4000 ppm	1	1	1	1	1	1	1	1	1	1	0	0	0	0
CATARACT	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1000 ppm	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2000 ppm	1	1	2	2	2	2	3	3	3	3	3	3	3	3
	4000 ppm	0	0	0	0	0	0	0	1	1	1	2	3	3	3
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	0
	4000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	1	1	1	1	1	1	1	1	1	1	0	0	0	0
EXTERNAL MASS	Control	1	1	1	1	1	1	1	1	1	1	2	2	2	2
	1000 ppm	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	2000 ppm	1	1	1	1	1	1	1	1	2	2	2	2	2	2
	4000 ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	1
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

CLINICAL OBSERVATION (SUMMARY)

ALL ANIMALS

PAGE : 14

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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	1	1	1	1	1	1	1	1	1	1	1	2	2	2
	1000 ppm	2	2	2	2	3	3	3	3	3	3	3	4	4	4
	2000 ppm	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	4000 ppm	3	3	3	3	3	3	3	2	2	2	3	3	3	3
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	1	1	1	1	1	1	1	1	1	1	1	0	0	0
	2000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	4000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	1	2	2	3	3	5	5	4	4	5	5	5	5	6
	1000 ppm	2	2	2	2	2	2	1	1	1	1	1	1	2	2
	2000 ppm	2	2	2	2	4	4	4	4	4	4	4	4	4	4
	4000 ppm	1	1	1	1	1	1	1	2	2	2	2	2	3	3
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	1	1	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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[illegible]

STUDY NO. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

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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
FROG BELLY	Control	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0
	4000 ppm	0	1	0	0	0	0
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0
	1000 ppm	1	0	0	0	0	0
	2000 ppm	0	1	1	2	0	0
	4000 ppm	0	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	2000 ppm	1	1	1	1	1	1
	4000 ppm	0	0	0	0	1	1
CATARACT	Control	1	1	1	0	0	0
	1000 ppm	4	4	4	4	4	4
	2000 ppm	4	4	4	4	4	4
	4000 ppm	4	4	4	4	4	4
CORNEAL OPACITY	Control	0	0	0	0	0	0
	1000 ppm	0	0	0	1	1	1
	2000 ppm	0	0	0	0	0	0
	4000 ppm	1	1	1	1	1	1
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	1	1
EXTERNAL MASS	Control	8	8	8	8	8	7
	1000 ppm	6	8	8	9	10	10
	2000 ppm	4	4	4	4	6	8
	4000 ppm	5	4	4	4	4	6
INTERNAL MASS	Control	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
M. NOSE	Control	1	1	1	1	1	1
	1000 ppm	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0

CLINICAL OBSERVATION (SUMMARY)

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[illegible]

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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
M. EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. MANDIBULAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. FORELIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	1	1	1	1	1	1
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
M. EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. MANDIBULAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. FORELIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
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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
M. EYE	Control	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. MANDIBULAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. FORELIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	1	1	1	1	1	1	1	1	2	2	2	2	2	2
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	1

STUDY NO. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

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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
M. EYE	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. MANDIBULAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	1	1	1	1	1	1	1	1	1	1
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. FORELIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	1	1	1	1	1	1	1	1	1	1	1	1
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	Control	0	0	0	0	0	1	1	1	1	2	2	2	2	2
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	2	2	2	2	3	3	3	3	3	3	3	3	3	3
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	Control	0	1	1	1	1	1	1	1	1	1	1	1	1	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	1	1	1	1	1	1	1	2	2	2	2	2	3	3

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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. EYE	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. MANDIBULAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. FORELIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	1	1	1	1	1	1	1	1	1	1	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	Control	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	1000 ppm	0	0	1	1	1	1	1	1	1	1	1	1	1	1
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	2	2	2	2	2	2
	1000 ppm	0	0	0	0	1	1	1	1	1	1	1	1	1	1
	2000 ppm	3	3	3	2	2	1	1	1	1	1	1	1	1	1
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
M. ANTERIOR. DORSUM	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	2
	1000 ppm	0	0	0	0	0	0	0	0	0	1	1	1	1	1
	2000 ppm	0	0	0	0	0	1	1	2	2	2	2	2	2	2
	4000 ppm	3	3	3	3	3	4	4	4	4	4	4	4	4	3

STUDY NO. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
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Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
M. EYE	Control	1	1	1	1	1	0
	1000 ppm	1	1	1	1	1	1
	2000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	0	0	0	0	0
	1000 ppm	0	1	1	1	1	1
	2000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
M. MANDIBULAR	Control	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	2000 ppm	1	1	1	1	1	1
	4000 ppm	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0
	4000 ppm	1	1	0	0	0	0
M. NECK	Control	0	0	0	0	0	0
	1000 ppm	1	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
M. FORELIMB	Control	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
M. BREAST	Control	2	2	2	2	3	2
	1000 ppm	1	2	2	3	3	3
	2000 ppm	0	0	0	0	0	0
	4000 ppm	1	1	1	1	1	1
M. ABDOMEN	Control	2	2	2	2	2	2
	1000 ppm	1	1	1	1	2	2
	2000 ppm	1	1	0	0	2	3
	4000 ppm	1	1	1	1	1	2
M. ANTERIOR. DORSUM	Control	2	2	2	2	2	2
	1000 ppm	1	2	2	2	2	2
	2000 ppm	1	1	1	1	1	2
	4000 ppm	3	2	2	2	2	2

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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. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
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Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0
	1000 ppm	1	1	1	1	1	1
	2000 ppm	1	1	1	1	1	1
	4000 ppm	0	0	0	0	0	0
M. HINDLIMB	Control	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	2000 ppm	1	1	1	1	1	1
	4000 ppm	0	0	0	0	0	0
M. GENITALIA	Control	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	1
M. ANUS	Control	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	1	1	1	1
ANEMIA	Control	0	0	0	0	1	0
	1000 ppm	0	0	1	1	2	2
	2000 ppm	2	2	2	1	0	0
	4000 ppm	2	2	3	2	2	3
JAUNDICE	Control	0	0	2	3	0	0
	1000 ppm	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	1
ULCER	Control	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0
	4000 ppm	2	1	1	1	1	1
CRUSTA	Control	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	2000 ppm	0	0	1	1	0	1
	4000 ppm	0	0	0	0	0	0
CICATRIX	Control	1	1	1	1	0	0
	1000 ppm	0	0	0	0	0	0
	2000 ppm	0	0	1	1	1	1
	4000 ppm	0	1	1	1	1	1

STUDY NO. : 0610
 ANIMAL : RAT F344/DuCr1j[F344/DuCrj]
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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
PROLAPSE OF PENIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
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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
PROLAPSE OF PENIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
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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
PROLAPSE OF PENIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
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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
PROLAPSE OF PENIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0610
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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
PROLAPSE OF PENIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0610
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
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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
PROLAPSE OF PENIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0610
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
PROLAPSE OF PENIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	1000 ppm	1	0	0	0	0	0	1	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	1	1	2	1	1	1	1	1	1	3
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	1	1	1	1	1	1	1	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED URINE	Control	0	0	1	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
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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
PROLAPSE OF PENIS	Control	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	1
	2000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	1	0
	1000 ppm	0	0	0	1	1	2
	2000 ppm	2	3	3	2	1	1
	4000 ppm	0	0	1	0	0	0
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	1	1
DEEP BREATHING	Control	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
RED URINE	Control	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
YELLOW URINE	Control	0	0	0	1	0	0
	1000 ppm	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	1
	2000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0

TABLE C2

CLINICAL OBSERVATION : FEMALE

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]

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[illegible]

CLINICAL OBSERVATION (SUMMARY)

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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
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	2
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	1	1	1	1	1	1	1	1	1	1	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

CLINICAL OBSERVATION (SUMMARY)
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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
DEATH	Control	1	1	1	2	3	3	3	3	3	4	4	4	6	6
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	1	1	1	1	1	1	1	2	2	2	2	2
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	1	1	1	1	1	1	1	1	1	1
	2000 ppm	0	0	0	0	0	0	0	0	1	1	1	1	1	1
	4000 ppm	0	0	1	1	1	1	2	2	2	2	2	2	2	2
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	1	1	1	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	1	1	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED	Control	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERRECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	1	1	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	2	2	0	0	0	0	0	0	0	0	0	0	0	0
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	1	0	1
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		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
DEATH	Control	6	7	7	7	7	7	7	7	9	9	10	10	11	11
	1000 ppm	0	0	0	0	0	1	1	1	2	3	4	4	5	5
	2000 ppm	0	0	0	0	0	1	1	1	1	1	2	2	3	3
	4000 ppm	2	2	2	2	2	2	2	2	2	2	2	2	2	2
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	1000 ppm	1	2	2	3	3	3	4	4	5	5	6	6	7	7
	2000 ppm	1	1	2	2	2	2	2	2	2	2	2	3	3	3
	4000 ppm	2	2	2	2	2	3	3	3	3	3	3	3	3	3
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	1	1	1	0	1	0	1	0	0	0	0
	2000 ppm	0	0	1	1	1	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERRECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	1	1	1	1	0
	1000 ppm	0	0	1	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	1000 ppm	1	0	2	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
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SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
DEATH	Control	12	12	12	12	13	13
	1000 ppm	5	5	5	5	6	7
	2000 ppm	3	3	3	3	3	3
	4000 ppm	2	2	2	2	2	2
MORIBUND SACRIFICE	Control	1	1	1	1	2	3
	1000 ppm	7	7	8	8	8	8
	2000 ppm	3	3	3	3	3	4
	4000 ppm	3	3	3	3	3	4
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
WASTING	Control	0	1	1	3	1	1
	1000 ppm	0	0	0	0	0	0
	2000 ppm	0	0	0	0	1	0
	4000 ppm	0	0	1	1	2	1
SOILED	Control	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	2	0	0
	1000 ppm	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
SOILED PERI-GENITALIA	Control	1	1	1	2	0	0
	1000 ppm	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0

CLINICAL OBSERVATION (SUMMARY)

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[illegible]

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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
CLOSED EYELID	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	2000 ppm	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GROWTH OF TEETH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MALOCCLUSION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1

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CLINICAL OBSERVATION (SUMMARY)

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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
CLOSED EYELID	Control	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	2000 ppm	5	5	5	5	5	5	5	5	6	6	6	6	6	6
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GROWTH OF TEETH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MALOCCLUSION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	0	0	0	1	1	1	1	1	1	1	1	1	1	1
	1000 ppm	2	2	2	2	1	2	2	2	2	2	2	2	3	3
	2000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	2
	4000 ppm	1	1	0	0	1	1	1	1	1	1	1	1	1	1
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	1	1	0	0	1	1	0	0	0	0	0	0	0	0
M. EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	1	1	0	0	1	1	1	1	1	1	1	1	1	1

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Clinical sign	Group Name	Administration Week-day													
		85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
CLOSED EYELID	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	2000 ppm	6	6	6	6	6	6	6	6	6	6	7	7	7	7
	4000 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
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GROWTH OF TEETH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MALOCCLUSION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1000 ppm	4	4	4	5	5	6	5	5	7	7	7	7	7	6
	2000 ppm	2	2	3	3	3	3	3	3	3	3	3	3	3	4
	4000 ppm	1	1	1	1	1	1	1	1	1	1	2	4	5	4
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	1	1	1	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	1	1	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	1	0	0	0	0	0	0	0	0	0
M. EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1

STUDY NO. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
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SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
CLOSED EYELID	Control	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
CATARACT	Control	0	0	0	0	0	0
	1000 ppm	4	4	4	5	5	5
	2000 ppm	7	7	7	6	6	6
	4000 ppm	0	0	0	0	0	0
CORNEAL OPACITY	Control	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	2000 ppm	0	0	1	1	2	1
	4000 ppm	0	0	0	0	0	0
ABNORMAL GROWTH OF TEETH	Control	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
MALOCCLUSION	Control	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	2000 ppm	0	0	0	0	1	0
	4000 ppm	0	0	0	0	0	0
EXTERNAL MASS	Control	2	2	2	3	3	3
	1000 ppm	6	7	8	8	9	9
	2000 ppm	4	5	6	6	8	7
	4000 ppm	4	5	6	6	6	5
INTERNAL MASS	Control	0	0	0	2	0	0
	1000 ppm	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
M. EAR	Control	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0
	4000 ppm	1	1	1	1	1	1

CLINICAL OBSERVATION (SUMMARY)

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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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STUDY NO. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
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SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
M. PERI EAR	Control	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	2000 ppm	1	1	1	1	2	1
	4000 ppm	0	0	0	0	0	0
M. NECK	Control	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
M. BREAST	Control	0	0	0	1	1	1
	1000 ppm	2	2	2	2	2	3
	2000 ppm	2	2	3	3	3	3
	4000 ppm	2	3	3	3	3	3
M. ABDOMEN	Control	2	2	2	2	2	2
	1000 ppm	3	3	4	4	4	3
	2000 ppm	0	0	0	0	2	2
	4000 ppm	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0
	1000 ppm	0	0	0	0	1	1
	2000 ppm	0	0	0	0	0	0
	4000 ppm	1	1	1	1	1	1
M. GENITALIA	Control	0	0	0	0	0	0
	1000 ppm	1	2	2	2	2	2
	2000 ppm	3	4	4	4	4	4
	4000 ppm	0	0	1	1	1	0
ANEMIA	Control	1	2	2	3	1	1
	1000 ppm	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0
	4000 ppm	1	1	1	1	1	1
JAUNDICE	Control	0	0	0	1	0	0
	1000 ppm	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
ULCER	Control	1	1	1	1	1	1
	1000 ppm	1	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0
	4000 ppm	0	1	1	1	1	1

STUDY NO. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
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SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAGINAL PROLAPSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NOISY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
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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
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAGINAL PROLAPSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NOISY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0610
 ANIMAL : RAT F344/DuCr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAGINAL PROLAPSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NOISY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0610
 ANIMAL : RAT F344/DuCr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 ALL ANIMALS

SEX : FEMALE

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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
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAGINAL PROLAPSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NOISY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0610
 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													
		57-7	58-7	59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	0
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAGINAL PROLAPSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NOISY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0610
 ANIMAL : RAT F344/DuCr1j[F344/DuCrj]
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
 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
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	1	1	1	1	1	1	1	1	1	1
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	1	1	1	1	1
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	1	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAGINAL PROLAPSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	4000 ppm	1	1	0	0	0	0	0	0	0	0	0	0	0	0
NOISY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0610
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
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	0
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	1	1	1	1	1	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VAGINAL PROLAPSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	1	1	1	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	1	0	0	0	0	0	0	0	0	0
NOISY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0610
 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
CRUSTA	Control	0	0	0	0	0	0
	1000 ppm	1	2	1	2	1	1
	2000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
HEMORRHAGE	Control	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	2000 ppm	0	0	0	0	1	0
	4000 ppm	0	0	0	0	0	0
VAGINAL PROLAPSE	Control	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	2000 ppm	0	0	0	0	1	0
	4000 ppm	0	0	0	0	1	0
NOISY	Control	1	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
DEEP BREATHING	Control	0	1	1	1	0	0
	1000 ppm	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0
RED URINE	Control	0	0	0	0	0	0
	1000 ppm	0	0	0	0	0	0
	2000 ppm	0	0	0	0	0	0
	4000 ppm	0	0	0	0	0	0

TABLE D1

BODY WEIGHT CHANGES AND SURVIVAL ANIMAL
NUMBERS : MALE

STUDY NO. : 0610
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

MEAN BODY WEIGHTS AND SURVIVAL

PAGE : 1

Week-Day on Study	Control		1000 ppm			2000 ppm			4000 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.
0-0	125 (50)	50/50	125 (50)	100	50/50	125 (50)	100	50/50	125 (50)	100	50/50
1-7	153 (50)	50/50	155 (50)	101	50/50	156 (50)	102	50/50	153 (50)	100	50/50
2-7	183 (50)	50/50	187 (50)	102	50/50	189 (50)	103	50/50	186 (50)	102	50/50
3-7	209 (50)	50/50	214 (50)	102	50/50	216 (50)	103	50/50	214 (50)	102	50/50
4-7	232 (50)	50/50	236 (50)	102	50/50	237 (50)	102	50/50	235 (50)	101	50/50
5-7	248 (50)	50/50	252 (50)	102	50/50	254 (50)	102	50/50	253 (50)	102	50/50
6-7	264 (50)	50/50	269 (50)	102	50/50	269 (50)	102	50/50	268 (50)	102	50/50
7-7	278 (50)	50/50	282 (50)	101	50/50	283 (50)	102	50/50	283 (50)	102	50/50
8-7	290 (50)	50/50	295 (50)	102	50/50	297 (50)	102	50/50	297 (50)	102	50/50
9-7	300 (50)	50/50	306 (50)	102	50/50	307 (50)	102	50/50	307 (50)	102	50/50
10-7	309 (50)	50/50	315 (50)	102	50/50	316 (50)	102	50/50	315 (50)	102	50/50
11-7	316 (50)	50/50	322 (50)	102	50/50	323 (50)	102	50/50	323 (50)	102	50/50
12-7	324 (50)	50/50	328 (50)	101	50/50	330 (50)	102	50/50	329 (50)	102	50/50
13-7	329 (50)	50/50	334 (50)	102	50/50	336 (50)	102	50/50	335 (50)	102	50/50
14-7	335 (50)	50/50	339 (50)	101	50/50	341 (50)	102	50/50	341 (50)	102	50/50
18-7	353 (50)	50/50	358 (50)	101	50/50	361 (50)	102	50/50	359 (50)	102	50/50
22-7	366 (50)	50/50	373 (50)	102	50/50	374 (50)	102	50/50	372 (50)	102	50/50
26-7	380 (49)	49/50	386 (50)	102	50/50	390 (50)	103	50/50	387 (50)	102	50/50
30-7	389 (49)	49/50	396 (50)	102	50/50	399 (50)	103	50/50	396 (50)	102	50/50
34-7	399 (49)	49/50	407 (50)	102	50/50	409 (50)	103	50/50	403 (50)	101	50/50
38-7	408 (49)	49/50	416 (50)	102	50/50	419 (50)	103	50/50	413 (50)	101	50/50
42-7	413 (49)	49/50	424 (50)	103	50/50	426 (50)	103	50/50	419 (50)	101	50/50
46-7	419 (49)	49/50	430 (50)	103	50/50	431 (50)	103	50/50	424 (50)	101	50/50
50-7	423 (48)	48/50	435 (50)	103	50/50	434 (50)	103	50/50	430 (48)	102	48/50
54-7	429 (48)	48/50	440 (50)	103	50/50	439 (50)	102	50/50	435 (48)	101	48/50
58-7	434 (48)	48/50	443 (50)	102	50/50	441 (50)	102	50/50	435 (48)	100	48/50
62-7	437 (48)	48/50	447 (50)	102	50/50	443 (50)	101	50/50	440 (48)	101	48/50
66-7	440 (47)	47/50	448 (50)	102	50/50	446 (50)	101	50/50	442 (48)	100	48/50
70-7	442 (47)	47/50	450 (50)	102	50/50	447 (50)	101	50/50	443 (48)	100	48/50
74-7	442 (46)	46/50	454 (50)	103	50/50	446 (50)	101	50/50	441 (48)	100	48/50
78-7	444 (44)	44/50	443 (49)	100	49/50	443 (50)	100	50/50	439 (47)	99	47/50
82-7	442 (44)	44/50	449 (47)	102	47/50	439 (49)	99	49/50	436 (46)	99	46/50
86-7	439 (44)	44/50	448 (46)	102	46/50	435 (49)	99	49/50	432 (46)	98	46/50
90-7	435 (41)	41/50	443 (45)	102	45/50	430 (48)	99	48/50	428 (46)	98	46/50
94-7	435 (39)	39/50	437 (44)	100	44/50	422 (47)	97	47/50	422 (45)	97	45/50
98-7	431 (38)	38/50	426 (44)	99	44/50	412 (44)	96	44/50	412 (44)	96	44/50
102-7	417 (36)	36/50	413 (42)	99	42/50	401 (41)	96	41/50	402 (42)	96	42/50
104-7	420 (33)	33/50	407 (42)	97	42/50	403 (38)	96	38/50	394 (42)	94	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. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

MEAN BODY WEIGHTS AND SURVIVAL

PAGE : 2

Week-Day on Study	Control			1000 ppm			2000 ppm			4000 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.
0-0	98 (50)	50/50		98 (50)	100	50/50	98 (50)	100	50/50	98 (50)	100	50/50
1-7	111 (50)	50/50		111 (50)	100	50/50	112 (50)	101	50/50	110 (50)	99	50/50
2-7	122 (50)	50/50		123 (50)	101	50/50	125 (50)	102	50/50	124 (50)	102	50/50
3-7	132 (50)	50/50		134 (50)	102	50/50	135 (50)	102	50/50	136 (50)	103	50/50
4-7	141 (50)	50/50		142 (50)	101	50/50	143 (50)	101	50/50	144 (50)	102	50/50
5-7	146 (50)	50/50		148 (50)	101	50/50	150 (50)	103	50/50	151 (50)	103	50/50
6-7	153 (50)	50/50		155 (50)	101	50/50	156 (50)	102	50/50	157 (50)	103	50/50
7-7	158 (50)	50/50		160 (50)	101	50/50	161 (50)	102	50/50	162 (50)	103	50/50
8-7	161 (50)	50/50		165 (50)	102	50/50	166 (50)	103	50/50	167 (50)	104	50/50
9-7	166 (50)	50/50		170 (50)	102	50/50	170 (50)	102	50/50	171 (50)	103	50/50
10-7	169 (50)	50/50		174 (50)	103	50/50	175 (50)	104	50/50	175 (50)	104	50/50
11-7	171 (50)	50/50		178 (50)	104	50/50	178 (50)	104	50/50	177 (50)	104	50/50
12-7	175 (50)	50/50		180 (50)	103	50/50	180 (50)	103	50/50	180 (50)	103	50/50
13-7	177 (50)	50/50		183 (50)	103	50/50	183 (50)	103	50/50	182 (50)	103	50/50
14-7	178 (50)	50/50		185 (50)	104	50/50	185 (50)	104	50/50	184 (50)	103	50/50
18-7	186 (50)	50/50		193 (50)	104	50/50	193 (50)	104	50/50	190 (50)	102	50/50
22-7	192 (50)	50/50		200 (50)	104	50/50	198 (50)	103	50/50	196 (50)	102	50/50
26-7	197 (50)	50/50		203 (50)	103	50/50	204 (50)	104	50/50	201 (50)	102	50/50
30-7	202 (50)	50/50		208 (50)	103	50/50	208 (50)	103	50/50	205 (50)	101	50/50
34-7	208 (50)	50/50		214 (50)	103	50/50	213 (50)	102	50/50	208 (50)	100	50/50
38-7	212 (50)	50/50		219 (50)	103	50/50	218 (50)	103	50/50	213 (50)	100	50/50
42-7	215 (50)	50/50		225 (50)	105	50/50	223 (50)	104	50/50	218 (50)	101	50/50
46-7	219 (50)	50/50		228 (50)	104	50/50	226 (50)	103	50/50	220 (50)	100	50/50
50-7	222 (50)	50/50		233 (50)	105	50/50	230 (50)	104	50/50	223 (50)	100	50/50
54-7	227 (50)	50/50		238 (50)	105	50/50	235 (50)	104	50/50	227 (50)	100	50/50
58-7	234 (50)	50/50		244 (50)	104	50/50	239 (50)	102	50/50	231 (50)	99	50/50
62-7	240 (50)	50/50		250 (50)	104	50/50	245 (50)	102	50/50	236 (50)	98	50/50
66-7	246 (50)	50/50		255 (50)	104	50/50	250 (50)	102	50/50	239 (50)	97	50/50
70-7	252 (49)	49/50		259 (50)	103	50/50	255 (50)	101	50/50	243 (50)	96	50/50
74-7	257 (48)	48/50		262 (50)	102	50/50	260 (50)	101	50/50	245 (48)	95	48/50
78-7	261 (47)	47/50		270 (49)	103	49/50	267 (50)	102	50/50	248 (47)	95	47/50
82-7	266 (46)	46/50		275 (49)	103	49/50	269 (49)	101	49/50	249 (46)	94	46/50
86-7	274 (43)	43/50		279 (48)	102	48/50	273 (49)	100	49/50	252 (46)	92	46/50
90-7	280 (43)	43/50		283 (46)	101	46/50	276 (47)	99	47/50	255 (45)	91	45/50
94-7	279 (41)	41/50		293 (42)	105	42/50	277 (47)	99	47/50	257 (45)	92	45/50
98-7	278 (38)	38/50		290 (38)	104	38/50	280 (44)	101	44/50	256 (45)	92	45/50
102-7	271 (37)	37/50		289 (37)	107	37/50	279 (44)	103	44/50	254 (45)	94	45/50
104-7	275 (34)	34/50		289 (35)	105	35/50	278 (43)	101	43/50	253 (44)	92	44/50

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

Av. Wt.: g

TABLE D3

BODY WEIGHT CHANGES : MALE

STUDY NO. : 0610
 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-day									
	0-0		1-7		2-7		3-7		4-7		5-7	
Control	125±	5	153±	8	183±	10	209±	10	232±	11	248±	12
1000 ppm	125±	5	155±	8	187±	9*	214±	9*	236±	10	252±	11
2000 ppm	125±	5	156±	7	189±	8**	216±	8**	237±	9	254±	10*
4000 ppm	125±	5	153±	6	186±	8	214±	9*	235±	10	253±	10

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

Test of Dunnett

STUDY NO. : 0610
 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-day		7-7		8-7		9-7		10-7		11-7		12-7		13-7	
Control	278±	13	290±	14	300±	15	309±	16	316±	17	324±	16	329±	16		
1000 ppm	282±	12	295±	13	306±	13	315±	14	322±	15	328±	16	334±	17		
2000 ppm	283±	11	297±	11*	307±	11*	316±	12*	323±	11	330±	12	336±	12		
4000 ppm	283±	13	297±	13*	307±	14*	315±	15	323±	16	329±	16	335±	16		

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0610
 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-day											
	14-7		18-7		22-7		26-7		30-7		34-7		38-7	
Control	335±	17	353±	19	366±	20	380±	21	389±	21	399±	23	408±	25
1000 ppm	339±	17	358±	18	373±	19	386±	21	396±	23	407±	23	416±	24
2000 ppm	341±	12	361±	13	374±	14	390±	15	399±	15	409±	16	419±	17
4000 ppm	341±	16	359±	19	372±	20	387±	22	396±	24	403±	25	413±	27

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0610
 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-day									
	42-7		46-7		50-7		54-7		58-7		62-7	
Control	413±	25	419±	28	423±	26	429±	27	434±	28	437±	29
1000 ppm	424±	24	430±	25	435±	25	440±	24	443±	26	447±	28
2000 ppm	426±	16*	431±	18	434±	21	439±	21	441±	22	443±	22
4000 ppm	419±	29	424±	32	430±	26	435±	27	435±	27	440±	27

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0610
 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-day									
	70-7		74-7		78-7		82-7		86-7		90-7	
Control	442±	30	442±	31	444±	30	442±	29	439±	29	435±	37
1000 ppm	450±	29	454±	54	443±	41	449±	27	448±	26	443±	26
2000 ppm	447±	24	446±	25	443±	29	439±	28	435±	32	430±	39
4000 ppm	443±	26	441±	25	439±	25	436±	24	432±	24	428±	25

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

Test of Dunnett

STUDY NO. : 0610
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-day					
	98-7		102-7		104-7	
Control	431±	33	417±	46	420±	34
1000 ppm	426±	29	413±	30	407±	34
2000 ppm	412±	43	401±	45	403±	41
4000 ppm	412±	27**	402±	28*	394±	31**

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

Test of Dunnett

TABLE D4

BODY WEIGHT CHANGES : FEMALE

STUDY NO. : 0610
 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-day									
	0-0		1-7		2-7		3-7		4-7		5-7	
Control	98±	3	111±	5	122±	4	132±	5	141±	6	146±	7
1000 ppm	98±	3	111±	4	123±	5	134±	7	142±	8	148±	8
2000 ppm	98±	3	112±	5	125±	7*	135±	8*	143±	9	150±	10
4000 ppm	98±	3	110±	5	124±	6*	136±	6**	144±	7	151±	7*

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

Test of Dunnett

STUDY NO. : 0610
 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-day									
	7-7		8-7		9-7		10-7		11-7		12-7	
Control	158±	8	161±	10	166±	10	169±	11	171±	12	175±	12
1000 ppm	160±	9	165±	10	170±	11	174±	11	178±	11*	180±	12
2000 ppm	161±	12	166±	12	170±	13*	175±	14*	178±	14*	180±	15
4000 ppm	162±	8	167±	8*	171±	9*	175±	9*	177±	9*	180±	9

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

Test of Dunnett

STUDY NO. : 0610
 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-day									
	14-7		18-7		22-7		26-7		30-7		34-7	
Control	178±	13	186±	13	192±	14	197±	13	202±	14	208±	15
1000 ppm	185±	13**	193±	13**	200±	14*	203±	13	208±	14	214±	15
2000 ppm	185±	15*	193±	15*	198±	16	204±	17	208±	17	213±	18
4000 ppm	184±	9*	190±	10	196±	11	201±	11	205±	11	208±	12

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

Test of Dunnett

STUDY NO. : 0610
 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-day									
	42-7		46-7		50-7		54-7		58-7		62-7	
Control	215±	17	219±	18	222±	18	227±	19	234±	21	240±	22
1000 ppm	225±	15**	228±	17**	233±	17**	238±	18**	244±	19*	250±	20*
2000 ppm	223±	19	226±	20	230±	20	235±	22	239±	23	245±	24
4000 ppm	218±	12	220±	13	223±	14	227±	15	231±	15	236±	17

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

Test of Dunnett

STUDY NO. : 0610
 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-day									
	70-7		74-7		78-7		82-7		86-7		90-7	
Control	252±	27	257±	27	261±	24	266±	26	274±	24	280±	25
1000 ppm	259±	23	262±	28	270±	21	275±	24	279±	25	283±	32
2000 ppm	255±	27	260±	27	267±	29	269±	28	273±	28	276±	29
4000 ppm	243±	19	245±	19**	248±	19**	249±	19**	252±	20**	255±	18**

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

Test of Dunnett

STUDY NO. : 0610
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-day			
	98-7		102-7		104-7	
Control	278±	27	271±	34	275±	31
1000 ppm	290±	23	289±	25*	289±	26
2000 ppm	280±	28	279±	28	278±	28
4000 ppm	256±	20**	254±	25*	253±	25**

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. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : MALE

MEAN FOOD CONSUMPTION(FC) AND SURVIVAL

PAGE : 1

Week-Day on Study	Control		1000 ppm		2000 ppm		4000 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.
1-7	15.4 (50)	50/50	15.4 (50)	100	50/50	15.1 (50)	98	50/50	14.8 (50)	96	50/50
2-7	16.3 (50)	50/50	16.5 (50)	101	50/50	16.3 (50)	100	50/50	15.9 (50)	98	50/50
3-7	17.1 (50)	50/50	17.3 (50)	101	50/50	17.5 (50)	102	50/50	17.3 (50)	101	50/50
4-7	16.9 (50)	50/50	16.8 (50)	99	50/50	16.7 (50)	99	50/50	16.3 (50)	96	50/50
5-7	16.7 (50)	50/50	16.5 (50)	99	50/50	16.3 (50)	98	50/50	16.4 (50)	98	50/50
6-7	17.2 (50)	50/50	17.0 (50)	99	50/50	17.0 (50)	99	50/50	17.2 (50)	100	50/50
7-7	16.6 (50)	50/50	16.8 (50)	101	50/50	16.6 (50)	100	50/50	16.9 (50)	102	50/50
8-7	17.0 (49)	50/50	17.2 (50)	101	50/50	17.0 (50)	100	50/50	17.0 (50)	100	50/50
9-7	16.6 (50)	50/50	16.9 (50)	102	50/50	16.7 (50)	101	50/50	16.6 (50)	100	50/50
10-7	16.6 (50)	50/50	17.0 (50)	102	50/50	16.6 (50)	100	50/50	16.5 (50)	99	50/50
11-7	16.6 (50)	50/50	16.7 (50)	101	50/50	16.4 (50)	99	50/50	16.3 (50)	98	50/50
12-7	16.7 (50)	50/50	16.8 (50)	101	50/50	16.5 (50)	99	50/50	16.5 (50)	99	50/50
13-7	16.5 (50)	50/50	16.7 (50)	101	50/50	16.1 (50)	98	50/50	16.3 (50)	99	50/50
14-7	16.4 (50)	50/50	16.6 (50)	101	50/50	16.4 (50)	100	50/50	16.5 (50)	101	50/50
18-7	16.3 (50)	50/50	16.4 (50)	101	50/50	16.3 (50)	100	50/50	16.1 (50)	99	50/50
22-7	16.2 (50)	50/50	16.6 (50)	102	50/50	16.3 (50)	101	50/50	16.1 (50)	99	50/50
26-7	16.7 (49)	49/50	17.0 (50)	102	50/50	16.8 (50)	101	50/50	16.6 (50)	99	50/50
30-7	16.9 (49)	49/50	17.1 (50)	101	50/50	16.6 (50)	98	50/50	16.5 (50)	98	50/50
34-7	17.2 (49)	49/50	17.3 (50)	101	50/50	17.0 (50)	99	50/50	16.1 (50)	94	50/50
38-7	17.0 (49)	49/50	17.3 (50)	102	50/50	17.1 (50)	101	50/50	16.7 (50)	98	50/50
42-7	17.2 (49)	49/50	17.4 (50)	101	50/50	17.1 (50)	99	50/50	16.7 (50)	97	50/50
46-7	17.5 (49)	49/50	17.7 (50)	101	50/50	17.2 (50)	98	50/50	16.9 (50)	97	50/50
50-7	17.3 (48)	48/50	17.5 (50)	101	50/50	16.7 (50)	97	50/50	16.6 (48)	96	48/50
54-7	17.1 (48)	48/50	17.4 (50)	102	50/50	17.1 (50)	100	50/50	16.7 (48)	98	48/50
58-7	17.1 (48)	48/50	17.3 (50)	101	50/50	16.8 (50)	98	50/50	16.5 (48)	96	48/50
62-7	17.2 (48)	48/50	17.2 (50)	100	50/50	16.9 (50)	98	50/50	16.4 (48)	95	48/50
66-7	17.2 (47)	47/50	17.2 (50)	100	50/50	17.1 (50)	99	50/50	16.5 (48)	96	48/50
70-7	17.1 (47)	47/50	17.2 (50)	101	50/50	17.1 (50)	100	50/50	16.8 (48)	98	48/50
74-7	17.3 (46)	46/50	17.2 (50)	99	50/50	16.9 (50)	98	50/50	16.6 (48)	96	48/50
78-7	17.0 (44)	44/50	16.7 (49)	98	49/50	16.7 (50)	98	50/50	16.4 (47)	96	47/50
82-7	17.0 (44)	44/50	17.0 (47)	100	47/50	16.6 (49)	98	49/50	16.2 (46)	95	46/50
86-7	17.1 (44)	44/50	17.2 (46)	101	46/50	16.6 (49)	97	49/50	16.4 (46)	96	46/50
90-7	17.0 (41)	41/50	17.3 (45)	102	45/50	16.6 (48)	98	48/50	16.4 (46)	96	46/50
94-7	17.2 (39)	39/50	17.0 (44)	99	44/50	16.1 (47)	94	47/50	15.9 (45)	92	45/50
98-7	17.0 (38)	38/50	16.5 (44)	97	44/50	15.7 (44)	92	44/50	16.2 (44)	95	44/50
102-7	15.9 (36)	36/50	16.6 (42)	104	42/50	16.0 (41)	101	41/50	16.6 (42)	104	42/50
104-7	17.2 (33)	33/50	16.8 (42)	98	42/50	16.8 (38)	98	38/50	16.7 (42)	97	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. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 UNIT : g
 REPORT TYPE : A1 104
 SEX : FEMALE

MEAN FOOD CONSUMPTION(FC) AND SURVIVAL

PAGE : 2

Week-Day on Study	Control		1000 ppm			2000 ppm			4000 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.
1-7	11.0 (50)	50/50	11.0 (50)	100	50/50	11.2 (50)	102	50/50	10.9 (50)	99	50/50
2-7	11.1 (50)	50/50	11.3 (50)	102	50/50	11.1 (50)	100	50/50	11.0 (50)	99	50/50
3-7	11.3 (50)	50/50	11.4 (50)	101	50/50	11.5 (50)	102	50/50	11.4 (50)	101	50/50
4-7	11.0 (50)	50/50	11.0 (50)	100	50/50	10.8 (50)	98	50/50	10.5 (50)	95	50/50
5-7	10.7 (50)	50/50	10.9 (50)	102	50/50	10.7 (50)	100	50/50	10.4 (50)	97	50/50
6-7	11.0 (50)	50/50	11.2 (50)	102	50/50	11.1 (50)	101	50/50	11.0 (50)	100	50/50
7-7	10.6 (50)	50/50	10.9 (50)	103	50/50	10.5 (50)	99	50/50	10.5 (50)	99	50/50
8-7	10.6 (50)	50/50	11.0 (50)	104	50/50	10.6 (50)	100	50/50	10.4 (50)	98	50/50
9-7	10.6 (50)	50/50	11.0 (50)	104	50/50	10.3 (50)	97	50/50	10.4 (50)	98	50/50
10-7	10.5 (50)	50/50	10.9 (50)	104	50/50	10.5 (50)	100	50/50	10.4 (50)	99	50/50
11-7	10.5 (50)	50/50	11.0 (50)	105	50/50	10.6 (50)	101	50/50	10.5 (50)	100	50/50
12-7	10.6 (50)	50/50	11.1 (50)	105	50/50	10.5 (50)	99	50/50	10.5 (50)	99	50/50
13-7	10.5 (50)	50/50	11.0 (50)	105	50/50	10.5 (50)	100	50/50	10.4 (50)	99	50/50
14-7	10.5 (50)	50/50	11.2 (50)	107	50/50	10.7 (50)	102	50/50	10.6 (50)	101	50/50
18-7	10.6 (50)	50/50	10.9 (50)	103	50/50	10.4 (50)	98	50/50	10.3 (50)	97	50/50
22-7	10.7 (50)	50/50	11.1 (50)	104	50/50	10.6 (50)	99	50/50	10.3 (50)	96	50/50
26-7	10.6 (50)	50/50	10.8 (50)	102	50/50	10.8 (50)	102	50/50	10.4 (50)	98	50/50
30-7	10.8 (50)	50/50	11.1 (50)	103	50/50	10.8 (50)	100	50/50	10.5 (50)	97	50/50
34-7	11.6 (50)	50/50	11.7 (50)	101	50/50	11.2 (50)	97	50/50	10.5 (50)	91	50/50
38-7	11.0 (50)	50/50	11.6 (50)	105	50/50	11.2 (50)	102	50/50	10.6 (50)	96	50/50
42-7	11.0 (50)	50/50	11.5 (50)	105	50/50	11.2 (50)	102	50/50	10.8 (50)	98	50/50
46-7	11.1 (50)	50/50	11.7 (50)	105	50/50	11.4 (50)	103	50/50	10.7 (50)	96	50/50
50-7	11.1 (50)	50/50	11.5 (50)	104	50/50	11.1 (50)	100	50/50	10.6 (50)	95	50/50
54-7	11.2 (50)	50/50	11.7 (50)	104	50/50	11.2 (50)	100	50/50	10.8 (50)	96	50/50
58-7	11.5 (50)	50/50	11.7 (50)	102	50/50	11.4 (50)	99	50/50	10.8 (50)	94	50/50
62-7	11.6 (50)	50/50	12.0 (50)	103	50/50	11.3 (50)	97	50/50	10.7 (50)	92	50/50
66-7	11.8 (50)	50/50	12.0 (50)	102	50/50	11.7 (50)	99	50/50	10.9 (50)	92	50/50
70-7	12.0 (49)	49/50	12.2 (50)	102	50/50	11.8 (50)	98	50/50	11.1 (50)	93	50/50
74-7	12.0 (48)	48/50	12.2 (50)	102	50/50	12.0 (50)	100	50/50	11.3 (48)	94	48/50
78-7	11.7 (47)	47/50	12.3 (49)	105	49/50	12.1 (50)	103	50/50	11.3 (47)	97	47/50
82-7	12.2 (46)	46/50	12.7 (49)	104	49/50	12.2 (49)	100	49/50	11.4 (46)	93	46/50
86-7	12.4 (43)	43/50	13.0 (48)	105	48/50	12.2 (49)	98	49/50	11.5 (46)	93	46/50
90-7	12.7 (43)	43/50	12.8 (46)	101	46/50	12.5 (47)	98	47/50	11.8 (45)	93	45/50
94-7	12.3 (41)	41/50	13.4 (40)	109	42/50	12.2 (47)	99	47/50	11.6 (45)	94	45/50
98-7	12.2 (38)	38/50	13.4 (38)	110	38/50	12.7 (44)	104	44/50	11.7 (45)	96	45/50
102-7	12.1 (37)	37/50	13.1 (37)	108	37/50	12.6 (44)	104	44/50	12.1 (45)	100	45/50
104-7	12.8 (34)	34/50	13.4 (35)	105	35/50	12.9 (43)	101	43/50	12.3 (44)	96	44/50
< >:No. of effective animals, () :No. of measured animals Av. FC. : g											

TABLE E3

FOOD CONSUMPTION CHANGES : MALE

STUDY NO. : 0610
 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-day(effective)						
	1-7(7)	2-7(7)	3-7(7)	4-7(7)	5-7(7)	6-7(7)	7-7(7)
Control	15.4± 1.2	16.3± 1.5	17.1± 1.3	16.9± 1.0	16.7± 1.1	17.2± 1.1	16.6± 0.9
1000 ppm	15.4± 0.9	16.5± 1.2	17.3± 1.1	16.8± 1.0	16.5± 0.9	17.0± 0.9	16.8± 0.8
2000 ppm	15.1± 0.9	16.3± 0.8	17.5± 1.0	16.7± 0.9	16.3± 0.8	17.0± 0.9	16.6± 0.8
4000 ppm	14.8± 0.8**	15.9± 0.8	17.3± 1.0	16.3± 0.9**	16.4± 0.9	17.2± 0.9	16.9± 1.0

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

Test of Dunnett

STUDY NO. : 0610
 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 8-7(7)	week-day(effective) 9-7(7)	10-7(7)	11-7(7)	12-7(7)	13-7(7)	14-7(7)
Control	17.0± 1.1	16.6± 1.1	16.6± 1.1	16.6± 0.9	16.7± 0.8	16.5± 0.9	16.4± 0.9
1000 ppm	17.2± 0.9	16.9± 1.0	17.0± 1.1	16.7± 1.0	16.8± 1.0	16.7± 1.1	16.6± 1.0
2000 ppm	17.0± 0.9	16.7± 0.8	16.6± 0.8	16.4± 0.7	16.5± 0.7	16.1± 0.7*	16.4± 0.8
4000 ppm	17.0± 0.9	16.6± 1.0	16.5± 1.1	16.3± 1.1	16.5± 1.1	16.3± 1.1	16.5± 1.1

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

Test of Dunnett

STUDY NO. : 0610
 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-day(effective)						
	18-7(7)	22-7(7)	26-7(7)	30-7(7)	34-7(7)	38-7(7)	42-7(7)
Control	16.3± 1.0	16.2± 0.9	16.7± 1.0	16.9± 0.9	17.2± 1.1	17.0± 1.2	17.2± 1.1
1000 ppm	16.4± 1.0	16.6± 1.1	17.0± 1.1	17.1± 1.2	17.3± 1.0	17.3± 1.1	17.4± 1.0
2000 ppm	16.3± 0.9	16.3± 0.9	16.8± 0.8	16.6± 0.9	17.0± 0.9	17.1± 0.9	17.1± 1.0
4000 ppm	16.1± 1.1	16.1± 1.1	16.6± 1.2	16.5± 1.3	16.1± 1.1**	16.7± 1.3	16.7± 1.3*

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

Test of Dunnett

STUDY NO. : 0610
 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-day(effective)						
	46-7(7)	50-7(7)	54-7(7)	58-7(7)	62-7(7)	66-7(7)	70-7(7)
Control	17.5± 1.0	17.3± 1.1	17.1± 1.1	17.1± 1.1	17.2± 1.1	17.2± 1.2	17.1± 1.2
1000 ppm	17.7± 1.2	17.5± 1.0	17.4± 0.9	17.3± 1.0	17.2± 1.5	17.2± 1.0	17.2± 1.2
2000 ppm	17.2± 0.9	16.7± 1.2*	17.1± 0.7	16.8± 0.9	16.9± 0.9	17.1± 0.9	17.1± 0.9
4000 ppm	16.9± 1.3*	16.6± 1.1**	16.7± 1.2	16.5± 1.2*	16.4± 1.1**	16.5± 1.5**	16.8± 1.0

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

Test of Dunnett

STUDY NO. : 0610
 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-day(effective)						
	74-7(7)	78-7(7)	82-7(7)	86-7(7)	90-7(7)	94-7(7)	98-7(7)
Control	17.3± 1.0	17.0± 1.1	17.0± 1.1	17.1± 1.2	17.0± 1.6	17.2± 1.4	17.0± 1.2
1000 ppm	17.2± 1.5	16.7± 2.1	17.0± 1.2	17.2± 1.1	17.3± 1.1	17.0± 1.3	16.5± 2.1
2000 ppm	16.9± 1.1	16.7± 1.5	16.6± 1.2	16.6± 1.2	16.6± 1.7	16.1± 2.3*	15.7± 3.2*
4000 ppm	16.6± 1.0**	16.4± 1.2	16.2± 0.9**	16.4± 1.2*	16.4± 1.2*	15.9± 1.4**	16.2± 1.8*

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

Test of Dunnett

STUDY NO. : 0610
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-day(effective)	
	102-7(7)	104-7(7)
Control	15.9± 3.4	17.2± 1.4
1000 ppm	16.6± 1.7	16.8± 2.1
2000 ppm	16.0± 2.9	16.8± 1.8
4000 ppm	16.6± 1.6	16.7± 2.0

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

Test of Dunnett

TABLE E4

FOOD CONSUMPTION CHANGES : FEMALE

STUDY NO. : 0610
 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-day(effective)						
	1-7(7)	2-7(7)	3-7(7)	4-7(7)	5-7(7)	6-7(7)	7-7(7)
Control	11.0± 0.9	11.1± 0.7	11.3± 0.7	11.0± 0.7	10.7± 0.8	11.0± 0.9	10.6± 0.8
1000 ppm	11.0± 0.6	11.3± 0.8	11.4± 0.9	11.0± 0.8	10.9± 0.9	11.2± 1.0	10.9± 0.9
2000 ppm	11.2± 0.6	11.1± 0.9	11.5± 1.0	10.8± 1.2	10.7± 0.9	11.1± 0.9	10.5± 0.9
4000 ppm	10.9± 1.0	11.0± 0.8	11.4± 0.8	10.5± 0.7*	10.4± 0.6	11.0± 0.8	10.5± 0.9

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

Test of Dunnett

STUDY NO. : 0610
 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 8-7(7)	week-day(effective) 9-7(7)	10-7(7)	11-7(7)	12-7(7)	13-7(7)	14-7(7)
Control	10.6± 1.0	10.6± 1.1	10.5± 0.9	10.5± 1.0	10.6± 1.0	10.5± 1.0	10.5± 1.0
1000 ppm	11.0± 1.0	11.0± 1.3	10.9± 1.1	11.0± 1.1	11.1± 1.0*	11.0± 1.1*	11.2± 1.4**
2000 ppm	10.6± 1.2	10.3± 1.1	10.5± 1.2	10.6± 1.3	10.5± 1.1	10.5± 0.9	10.7± 0.9
4000 ppm	10.4± 0.8	10.4± 1.0	10.4± 0.9	10.5± 0.8	10.5± 0.7	10.4± 0.8	10.6± 1.0

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

Test of Dunnett

STUDY NO. : 0610
 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-day(effective)						
	18-7(7)	22-7(7)	26-7(7)	30-7(7)	34-7(7)	38-7(7)	42-7(7)
Control	10.6± 0.9	10.7± 1.1	10.6± 0.8	10.8± 0.9	11.6± 1.1	11.0± 0.8	11.0± 0.9
1000 ppm	10.9± 1.0	11.1± 1.1	10.8± 0.8	11.1± 0.7	11.7± 0.9	11.6± 1.0*	11.5± 0.9*
2000 ppm	10.4± 1.1	10.6± 0.9	10.8± 0.9	10.8± 0.9	11.2± 1.0	11.2± 1.0	11.2± 1.0
4000 ppm	10.3± 0.8	10.3± 0.8	10.4± 0.8	10.5± 0.8	10.5± 0.8**	10.6± 0.8	10.8± 0.9

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

Test of Dunnett

STUDY NO. : 0610
 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-day(effective)						
	46-7(7)	50-7(7)	54-7(7)	58-7(7)	62-7(7)	66-7(7)	70-7(7)
Control	11.1± 0.9	11.1± 0.8	11.2± 1.1	11.5± 0.9	11.6± 0.9	11.8± 1.3	12.0± 1.4
1000 ppm	11.7± 1.0**	11.5± 0.8	11.7± 0.9*	11.7± 1.1	12.0± 1.0	12.0± 1.4	12.2± 1.1
2000 ppm	11.4± 1.1	11.1± 1.1	11.2± 1.0	11.4± 1.2	11.3± 1.0	11.7± 1.2	11.8± 1.2
4000 ppm	10.7± 0.8	10.6± 0.8**	10.8± 0.8	10.8± 0.9**	10.7± 1.2**	10.9± 0.9**	11.1± 1.7**

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

Test of Dunnett

STUDY NO. : 0610
 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 74-7(7)	week-day(effective) 78-7(7)	82-7(7)	86-7(7)	90-7(7)	94-7(7)	98-7(7)
Control	12.0± 1.3	11.7± 0.8	12.2± 1.4	12.4± 1.0	12.7± 1.2	12.3± 1.9	12.2± 1.8
1000 ppm	12.2± 1.2	12.3± 1.1*	12.7± 1.4	13.0± 1.4	12.8± 2.1	13.4± 1.9	13.4± 1.6**
2000 ppm	12.0± 1.2	12.1± 1.2	12.2± 1.2	12.2± 2.0	12.5± 1.2	12.2± 1.7	12.7± 1.2
4000 ppm	11.3± 1.0*	11.3± 1.0	11.4± 0.9**	11.5± 0.8**	11.8± 0.9**	11.6± 0.9**	11.7± 1.1**

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

Test of Dunnett

STUDY NO. : 0610
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-day(effective)	
	102-7(7)	104-7(7)
Control	12.1± 2.2	12.8± 1.3
1000 ppm	13.1± 1.6	13.4± 1.6
2000 ppm	12.6± 1.6	12.9± 1.3
4000 ppm	12.1± 1.4	12.3± 1.8

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

TABLE F1

HEMATOLOGY : MALE

STUDY NO. : 0610

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME : 1

SEX : MALE

REPORT TYPE : A1

HEMATOLOGY (SUMMARY)

ALL ANIMALS (105W)

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	33	8.46±	1.51	14.5±	2.8	43.0±	7.1	51.0±	2.1	17.0±	1.0	33.4±	1.6	1017±	290
1000 ppm	42	8.09±	2.05	13.8±	3.6	41.2±	9.6	52.1±	8.5	17.2±	2.0	33.1±	2.2	1091±	478
2000 ppm	38	8.16±	2.03	13.8±	3.5	41.3±	9.4	51.0±	2.9	17.0±	1.1	33.3±	1.4	1029±	325
4000 ppm	42	8.06±	2.08	13.8±	3.8	41.2±	9.7	52.3±	8.4	17.1±	1.8	33.0±	2.9	1031±	393

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

Test of Dunnett

(HCL070)

BAIS 4

STUDY NO. : 0610

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	33	4.3±	3.6
1000 ppm	42	4.3±	3.8
2000 ppm	38	5.2±	4.5
4000 ppm	42	5.3±	6.0

Significant difference ; * : $P \leq 0.05$

** : $P \leq 0.01$

Test of Dunnett

(HCL070)

BAIS 4

STUDY NO. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 MEASURE. TIME : 1
 SEX : MALE

HEMATOLOGY (SUMMARY)
 ALL ANIMALS (105W)

REPORT TYPE : A1

PAGE : 3

Group Name	NO. of Animals	WBC 10 ³ /μl		Differential N-BAND		WBC (%) N-SEG		EOSINO		BASO		MONO		LYMPHO		OTHER	
Control	33	7.07±	2.23	1±	1	49±	8	2±	1	0±	0	6±	2	42±	8	1±	2
1000 ppm	42	7.97±	9.13	1±	1	48±	12	2±	1	0±	0	6±	2	40±	10	4±	12
2000 ppm	38	10.52±	18.47	1±	1	48±	11	2±	1	0±	0	6±	2	37±	10	6±	18
4000 ppm	42	13.37±	40.73	1±	1	43±	10*	2±	1	0±	0	6±	3	44±	10	5±	17

Significant difference ; * : $P \leq 0.05$

** : $P \leq 0.01$

Test of Dunnett

(HCL070)

BAIS4

TABLE F2

HEMATOLOGY : FEMALE

STUDY NO. : 0610

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 ⁹ /μl	
Control	34	8.14±	1.24	15.2±	2.1	43.2±	5.0	53.7±	5.0	18.8±	1.7	35.0±	2.3	720±	182
1000 ppm	35	8.18±	0.57	15.1±	1.0	43.3±	2.4	53.0±	1.5	18.5±	0.6	35.0±	0.8	730±	120
2000 ppm	43	8.34±	0.72	15.4±	1.2	43.9±	3.0	52.8±	1.9	18.6±	0.8	35.1±	0.7	744±	118
4000 ppm	43	8.16±	1.10	15.0±	2.2	43.2±	5.0	53.3±	4.1	18.4±	1.2	34.6±	1.8	746±	202

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

Test of Dunnett

(HCL070)

BAIS 4

STUDY NO. : 0610
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	34	3.8±	4.8
1000 ppm	35	3.0±	1.3
2000 ppm	43	2.8±	1.7
4000 ppm	43	3.9±	5.2

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

Test of Dunnett

(HCL070)

BAIS 4

STUDY NO. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 MEASURE. TIME : 1
 SEX : FEMALE

HEMATOLOGY (SUMMARY)
 ALL ANIMALS (105W)

REPORT TYPE : A1

PAGE : 6

Group Name	NO. of Animals	WBC 10 ³ /μl		Differential N-BAND		WBC (%) N-SEG		EOSINO		BASO		MONO		LYMPHO		OTHER	
Control	34	4.59±	4.38	1±	1	39±	12	2±	1	0±	0	5±	2	48±	14	6±	19
1000 ppm	35	3.79±	1.87	1±	1	42±	9	2±	1	0±	0	6±	2	50±	9	0±	1
2000 ppm	43	3.64±	1.58	1±	1	39±	8	2±	1	0±	0	6±	2	53±	8	1±	1
4000 ppm	43	4.99±	5.35	0±	1	40±	12	2±	1	0±	0	6±	2	50±	14	3±	14

Significant difference ; * : $P \leq 0.05$

** : $P \leq 0.01$

Test of Dunnett

(HCL070)

BAIS4

TABLE G1

BIOCHEMISTRY : MALE

STUDY NO. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 MEASURE. TIME : 1
 SEX : MALE

BIOCHEMISTRY (SUMMARY)
 ALL ANIMALS (105W)

REPORT TYPE : A1

PAGE : 1

Group Name	NO. of Animals	TOTAL PROTEIN g / dℓ		ALBUMIN g / dℓ		A/G RATIO		T-BILIRUBIN mg / dℓ		GLUCOSE mg / dℓ		T-CHOLESTEROL mg / dℓ		TRIGLYCERIDE mg / dℓ	
Control	33	6.7±	0.3	2.8±	0.3	0.7±	0.1	0.15±	0.02	163±	20	194±	50	132±	77
1000 ppm	42	6.6±	0.4	2.7±	0.2	0.7±	0.1	0.35±	1.30	148±	30	212±	71	137±	107
2000 ppm	38	6.6±	0.4	2.7±	0.3	0.7±	0.1	0.18±	0.13	157±	24	202±	63	159±	109
4000 ppm	42	6.6±	0.4	2.6±	0.3**	0.7±	0.1	0.59±	2.79	156±	21	258±	127*	229±	154*

Significant difference ; * : $P \leq 0.05$

** : $P \leq 0.01$

Test of Dunnett

(HCL074)

BAIS 4

STUDY NO. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 MEASURE. TIME : 1
 SEX : MALE

BIOCHEMISTRY (SUMMARY)
 ALL ANIMALS (105W)

REPORT TYPE : A1

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	33	266±	60	73±	19	32±	8	163±	39	184±	33	6±	3	104±	22
1000 ppm	42	299±	109	138±	301	52±	95	380±	1034	198±	132	7±	4	126±	105
2000 ppm	38	279±	83	97±	89	38±	21	194±	215	196±	67	9±	4*	121±	44
4000 ppm	42	341±	126**	149±	427	58±	123	443±	1747	207±	149	11±	7**	141±	124

Significant difference ; * : $P \leq 0.05$

** : $P \leq 0.01$

Test of Dunnett

(HCL074)

BAIS 4

STUDY NO. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 MEASURE. TIME : 1
 SEX : MALE

BIOCHEMISTRY (SUMMARY)
 ALL ANIMALS (105W)

REPORT TYPE : A1

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	33	20.7±	3.2	0.6±	0.1	143±	1	3.7±	0.3	106±	2	10.7±	0.3	4.2±	0.5
1000 ppm	42	28.2±	16.2*	0.7±	0.2	142±	2	3.7±	0.3	105±	2	10.8±	0.5	4.5±	1.1
2000 ppm	38	23.1±	5.5	0.6±	0.1	142±	1	3.6±	0.3	105±	2	10.8±	0.4	4.3±	0.6
4000 ppm	42	26.1±	8.2**	0.7±	0.2	142±	1	3.7±	0.3	105±	2	11.0±	0.6	4.5±	1.0

Significant difference ; * : $P \leq 0.05$

** : $P \leq 0.01$

Test of Dunnett

(HCL074)

BAIS 4

TABLE G2

BIOCHEMISTRY : FEMALE

STUDY NO. : 0610

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	34	6.9±	0.4	3.4±	0.3	1.0±	0.1	0.16±	0.18	152±	13	154±	36	95±	65
1000 ppm	35	6.9±	0.4	3.4±	0.3	1.0±	0.1	0.13±	0.02	149±	13	173±	55	128±	86
2000 ppm	43	6.9±	0.4	3.3±	0.4	0.9±	0.2	0.13±	0.02	148±	18	187±	101	134±	207
4000 ppm	43	6.8±	0.5	3.3±	0.4	0.9±	0.1	0.14±	0.05	145±	26	175±	77	112±	196

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

Test of Dunnett

(HCL074)

BAIS 4

STUDY NO. : 0610

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	34	264±	52	131±	154	55±	27	207±	148	130±	75	3±	1	92±	27
1000 ppm	35	295±	86	124±	65	56±	25	190±	56	114±	38	3±	2	90±	18
2000 ppm	43	308±	141	109±	63	47±	18	192±	77	132±	118	3±	2	91±	21
4000 ppm	43	291±	117	141±	122	61±	46	232±	138	139±	102	3±	2	125±	184

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

Test of Dunnett

(HCL074)

BAIS 4

STUDY NO. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 MEASURE. TIME : 1
 SEX : FEMALE

BIOCHEMISTRY (SUMMARY)
 ALL ANIMALS (105W)

REPORT TYPE : A1

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	34	18.0±	2.4	0.5±	0.1	142±	1	3.3±	0.3	103±	3	10.6±	0.3	3.8±	0.7
1000 ppm	35	18.2±	2.3	0.5±	0.0	141±	2	3.5±	0.4	103±	2	10.7±	0.4	3.7±	0.8
2000 ppm	43	18.7±	1.8	0.5±	0.0	141±	1	3.5±	0.3	103±	2	10.7±	0.5	4.0±	0.6
4000 ppm	43	19.6±	4.1	0.5±	0.1	141±	2	3.6±	0.3**	104±	2	10.6±	0.5	4.2±	1.3

Significant difference ; * : $P \leq 0.05$

** : $P \leq 0.01$

Test of Dunnett

(HCL074)

BAIS 4

STUDY NO. : 0610

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	35	0	1	0	6	11	8	9		0	0	0	1	27	7		35	0	0	0	0	0	0		33	2	0	0	0	0		34	0	0	1
1000 ppm	42	0	0	1	12	15	7	7		0	0	1	3	33	5		42	0	0	0	0	0	0		41	0	1	0	0	0		42	0	0	0
2000 ppm	41	0	3	0	4	16	6	12		0	0	0	2	33	6		41	0	0	0	0	0	0		40	0	0	1	0	0		41	0	0	0
4000 ppm	42	0	1	4	4	12	8	13		0	0	0	0	32	10		42	0	0	0	0	0	0		41	0	1	0	0	0		42	0	0	0

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

Test of CHI SQUARE

(HCL101)

BAIS 4

TABLE H1

URINALYSIS : MALE

STUDY NO. : 0610

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	35	34	0	1	0	0		35	0	0	0	0	
1000 ppm	42	41	0	0	1	0		42	0	0	0	0	
2000 ppm	41	41	0	0	0	0		41	0	0	0	0	
4000 ppm	42	42	0	0	0	0		42	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. : 0610

ANIMAL : RAT F344/DuCr1Cr1j[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	36	0	0	2	2	8	20	4		0	0	2	8	12	14		36	0	0	0	0	0		19	17	0	0	0	0		35	0	0	1					
1000 ppm	37	0	0	2	4	7	20	4		0	1	4	4	21	7		37	0	0	0	0	0		26	10	1	0	0	0		37	0	0	0					
2000 ppm	44	0	0	1	1	8	25	9		0	0	2	9	17	16		44	0	0	0	0	0		28	16	0	0	0	0		44	0	0	0					
4000 ppm	45	0	0	1	2	5	27	10		0	0	2	8	15	20		45	0	0	0	0	0		22	23	0	0	0	0		45	0	0	0					

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

Test of CHI SQUARE

(HCL101)

BAIS 4

STUDY NO. : 0610

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME : 1

SEX : FEMALE

REPORT TYPE : A1

URINALYSIS

PAGE : 4

Group Name	NO. of Animals	Occult blood					CHI	Urobilinogen					CHI
		-	±	+	2+	3+		±	+	2+	3+	4+	
Control	36	34	1	0	0	1		36	0	0	0	0	
1000 ppm	37	35	0	0	1	1		37	0	0	0	0	
2000 ppm	44	43	0	0	0	1		44	0	0	0	0	
4000 ppm	45	44	0	0	0	1		45	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. : 0610
 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		1000 ppm		2000 ppm		4000 ppm	
			50	(%)	50	(%)	50	(%)	50	(%)
skin/app	nodule		2	(4)	3	(6)	3	(6)	2	(4)
	scab		0	(0)	0	(0)	1	(2)	0	(0)
subcutis	jaundice		2	(4)	1	(2)	1	(2)	2	(4)
	mass		6	(12)	10	(20)	7	(14)	7	(14)
lung	white zone		0	(0)	1	(2)	2	(4)	0	(0)
	red zone		1	(2)	0	(0)	0	(0)	0	(0)
	nodule		2	(4)	0	(0)	2	(4)	0	(0)
lymph node	enlarged		1	(2)	1	(2)	2	(4)	1	(2)
spleen	enlarged		4	(8)	3	(6)	4	(8)	5	(10)
	nodule		0	(0)	1	(2)	0	(0)	0	(0)
	deformed		1	(2)	0	(0)	0	(0)	0	(0)
heart	white zone		0	(0)	0	(0)	1	(2)	0	(0)
	hypertrophy		0	(0)	1	(2)	0	(0)	0	(0)
artery/aort	induration		0	(0)	0	(0)	1	(2)	0	(0)
oral cavity	nodule		0	(0)	0	(0)	1	(2)	0	(0)
tongue	nodule		0	(0)	1	(2)	0	(0)	0	(0)
salivary gl	nodule		0	(0)	0	(0)	0	(0)	1	(2)
forestomach	ulcer		0	(0)	0	(0)	2	(4)	0	(0)
	erosion		0	(0)	1	(2)	0	(0)	0	(0)
gl stomach	nodule		0	(0)	0	(0)	1	(2)	0	(0)
	ulcer		0	(0)	0	(0)	1	(2)	1	(2)
	thick		0	(0)	0	(0)	1	(2)	1	(2)

STUDY NO. : 0610
 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		1000 ppm		2000 ppm		4000 ppm	
			50	(%)	50	(%)	50	(%)	50	(%)
small intes	white zone		0	(0)	0	(0)	1	(2)	0	(0)
	thick		0	(0)	0	(0)	1	(2)	0	(0)
liver	enlarged		1	(2)	1	(2)	1	(2)	0	(0)
	white zone		0	(0)	1	(2)	1	(2)	0	(0)
	nodule		1	(2)	2	(4)	0	(0)	2	(4)
	rough		0	(0)	0	(0)	1	(2)	1	(2)
	herniation		3	(6)	7	(14)	7	(14)	2	(4)
pancreas	nodule		0	(0)	1	(2)	0	(0)	0	(0)
kidney	nodule		0	(0)	0	(0)	0	(0)	2	(4)
	granular		1	(2)	4	(8)	6	(12)	11	(22)
	hydronephrosis		0	(0)	0	(0)	1	(2)	0	(0)
urin bladd	nodule		1	(2)	0	(0)	0	(0)	0	(0)
	urine marked retention		1	(2)	2	(4)	0	(0)	0	(0)
pituitary	enlarged		5	(10)	4	(8)	3	(6)	1	(2)
	red zone		3	(6)	2	(4)	2	(4)	0	(0)
	nodule		1	(2)	6	(12)	0	(0)	2	(4)
thyroid	enlarged		1	(2)	2	(4)	2	(4)	2	(4)
	nodule		2	(4)	2	(4)	2	(4)	1	(2)
adrenal	enlarged		6	(12)	1	(2)	1	(2)	0	(0)
testis	nodule		39	(78)	43	(86)	43	(86)	42	(84)
prostate	nodule		0	(0)	0	(0)	0	(0)	1	(2)
spinal cord	brown zone		0	(0)	1	(2)	0	(0)	0	(0)

STUDY NO. : 0610
 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		1000 ppm		2000 ppm		4000 ppm	
			50	(%)	50	(%)	50	(%)	50	(%)
eye	turbid		0	(0)	1	(2)	1	(2)	2	(4)
	white		2	(4)	4	(8)	4	(8)	5	(10)
	red		0	(0)	0	(0)	1	(2)	0	(0)
Zymbal gl	nodule		0	(0)	0	(0)	0	(0)	1	(2)
muscle	nodule		0	(0)	0	(0)	1	(2)	1	(2)
	adhesion		0	(0)	0	(0)	1	(2)	0	(0)
peritoneum	nodule		2	(4)	1	(2)	2	(4)	7	(14)
retroperit	nodule		0	(0)	0	(0)	1	(2)	0	(0)
	mass		1	(2)	0	(0)	1	(2)	0	(0)
abdominal c	hemorrhage		1	(2)	0	(0)	0	(0)	0	(0)
	ascites		1	(2)	2	(4)	1	(2)	6	(12)
thoracic ca	pleural fluid		2	(4)	0	(0)	3	(6)	0	(0)
other	lip:nodule		0	(0)	1	(2)	0	(0)	0	(0)
	eye lid:nodule		1	(2)	0	(0)	0	(0)	0	(0)
	nose:nodule		1	(2)	0	(0)	0	(0)	1	(2)
whole body	anemic		0	(0)	1	(2)	1	(2)	0	(0)

TABLE I 2

GROSS FINDINGS : MALE
DEAD AND MORIBUND ANIMALS

STUDY NO. : 0610
 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	1000 ppm	2000 ppm	4000 ppm
			17 (%)	8 (%)	12 (%)	8 (%)
subcutis	jaundice		2 (12)	0 (0)	1 (8)	1 (13)
	mass		2 (12)	2 (25)	2 (17)	2 (25)
lung	white zone		0 (0)	0 (0)	2 (17)	0 (0)
	red zone		1 (6)	0 (0)	0 (0)	0 (0)
	nodule		1 (6)	0 (0)	1 (8)	0 (0)
lymph node	enlarged		1 (6)	0 (0)	2 (17)	0 (0)
spleen	enlarged		3 (18)	1 (13)	3 (25)	1 (13)
	deformed		1 (6)	0 (0)	0 (0)	0 (0)
heart	white zone		0 (0)	0 (0)	1 (8)	0 (0)
artery/aort	induration		0 (0)	0 (0)	1 (8)	0 (0)
oral cavity	nodule		0 (0)	0 (0)	1 (8)	0 (0)
tongue	nodule		0 (0)	1 (13)	0 (0)	0 (0)
forestomach	ulcer		0 (0)	0 (0)	2 (17)	0 (0)
	erosion		0 (0)	1 (13)	0 (0)	0 (0)
gl stomach	nodule		0 (0)	0 (0)	1 (8)	0 (0)
	ulcer		0 (0)	0 (0)	1 (8)	1 (13)
	thick		0 (0)	0 (0)	1 (8)	0 (0)
small intes	white zone		0 (0)	0 (0)	1 (8)	0 (0)
	thick		0 (0)	0 (0)	1 (8)	0 (0)
liver	enlarged		1 (6)	1 (13)	1 (8)	0 (0)
	white zone		0 (0)	1 (13)	1 (8)	0 (0)
	nodule		1 (6)	1 (13)	0 (0)	0 (0)

STUDY NO. : 0610
 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	1000 ppm	2000 ppm	4000 ppm
			17 (%)	8 (%)	12 (%)	8 (%)
liver	herniation		1 (6)	3 (38)	0 (0)	0 (0)
kidney	granular		1 (6)	0 (0)	2 (17)	0 (0)
	hydronephrosis		0 (0)	0 (0)	1 (8)	0 (0)
urin bladd	nodule		1 (6)	0 (0)	0 (0)	0 (0)
	urine:marked retention		1 (6)	0 (0)	0 (0)	0 (0)
pituitary	enlarged		5 (29)	4 (50)	1 (8)	1 (13)
	red zone		1 (6)	0 (0)	0 (0)	0 (0)
thyroid	enlarged		1 (6)	2 (25)	0 (0)	0 (0)
adrenal	enlarged		4 (24)	0 (0)	0 (0)	0 (0)
testis	nodule		8 (47)	1 (13)	5 (42)	3 (38)
eye	turbid		0 (0)	0 (0)	1 (8)	0 (0)
	white		2 (12)	0 (0)	0 (0)	1 (13)
	red		0 (0)	0 (0)	1 (8)	0 (0)
Zymbal gl	nodule		0 (0)	0 (0)	0 (0)	1 (13)
muscle	nodule		0 (0)	0 (0)	1 (8)	1 (13)
	adhesion		0 (0)	0 (0)	1 (8)	0 (0)
peritoneum	nodule		1 (6)	1 (13)	2 (17)	4 (50)
retroperit	mass		1 (6)	0 (0)	1 (8)	0 (0)
abdominal c	hemorrhage		1 (6)	0 (0)	0 (0)	0 (0)
	ascites		1 (6)	2 (25)	1 (8)	4 (50)
thoracic ca	pleural fluid		2 (12)	0 (0)	2 (17)	0 (0)
other	eye lid:nodule		1 (6)	0 (0)	0 (0)	0 (0)

STUDY NO. : 0610
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

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

PAGE : 3

Organ	Findings	Group Name		Control		1000 ppm		2000 ppm		4000 ppm	
		NO. of Animals		17	(%)	8	(%)	12	(%)	8	(%)
whole body	anemic			0	(0)	0	(0)	1	(8)	0	(0)

(HPT080)

BAIS 4

TABLE I 3

GROSS FINDINGS : MALE
SACRIFICED ANIMALS

STUDY NO. : 0610
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		1000 ppm		2000 ppm		4000 ppm	
			33	(%)	42	(%)	38	(%)	42	(%)
skin/app	nodule		2	(6)	3	(7)	3	(8)	2	(5)
	scab		0	(0)	0	(0)	1	(3)	0	(0)
subcutis	jaundice		0	(0)	1	(2)	0	(0)	1	(2)
	mass		4	(12)	8	(19)	5	(13)	5	(12)
lung	white zone		0	(0)	1	(2)	0	(0)	0	(0)
	nodule		1	(3)	0	(0)	1	(3)	0	(0)
lymph node	enlarged		0	(0)	1	(2)	0	(0)	1	(2)
spleen	enlarged		1	(3)	2	(5)	1	(3)	4	(10)
	nodule		0	(0)	1	(2)	0	(0)	0	(0)
heart	hypertrophy		0	(0)	1	(2)	0	(0)	0	(0)
salivary gl	nodule		0	(0)	0	(0)	0	(0)	1	(2)
gl stomach	thick		0	(0)	0	(0)	0	(0)	1	(2)
liver	nodule		0	(0)	1	(2)	0	(0)	2	(5)
	rough		0	(0)	0	(0)	1	(3)	1	(2)
	herniation		2	(6)	4	(10)	7	(18)	2	(5)
pancreas	nodule		0	(0)	1	(2)	0	(0)	0	(0)
kidney	nodule		0	(0)	0	(0)	0	(0)	2	(5)
	granular		0	(0)	4	(10)	4	(11)	11	(26)
urin bladd	urine:marked retention		0	(0)	2	(5)	0	(0)	0	(0)
pituitary	enlarged		0	(0)	0	(0)	2	(5)	0	(0)
	red zone		2	(6)	2	(5)	2	(5)	0	(0)
	nodule		1	(3)	6	(14)	0	(0)	2	(5)

STUDY NO. : 0610
 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		1000 ppm		2000 ppm		4000 ppm	
			33	(%)	42	(%)	38	(%)	42	(%)
thyroid	enlarged		0	(0)	0	(0)	2	(5)	2	(5)
	nodule		2	(6)	2	(5)	2	(5)	1	(2)
adrenal	enlarged		2	(6)	1	(2)	1	(3)	0	(0)
testis	nodule		31	(94)	42	(100)	38	(100)	39	(93)
prostate	nodule		0	(0)	0	(0)	0	(0)	1	(2)
spinal cord	brown zone		0	(0)	1	(2)	0	(0)	0	(0)
eye	turbid		0	(0)	1	(2)	0	(0)	2	(5)
	white		0	(0)	4	(10)	4	(11)	4	(10)
peritoneum	nodule		1	(3)	0	(0)	0	(0)	3	(7)
retroperit	nodule		0	(0)	0	(0)	1	(3)	0	(0)
abdominal c	ascites		0	(0)	0	(0)	0	(0)	2	(5)
thoracic ca	pleural fluid		0	(0)	0	(0)	1	(3)	0	(0)
other	lip:nodule		0	(0)	1	(2)	0	(0)	0	(0)
	nose:nodule		1	(3)	0	(0)	0	(0)	1	(2)
whole body	anemic		0	(0)	1	(2)	0	(0)	0	(0)

TABLE I 4

GROSS FINDINGS : FEMALE

ALL ANIMALS

STUDY NO. : 0610
 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		1000 ppm		2000 ppm		4000 ppm	
			50	(%)	50	(%)	50	(%)	50	(%)
skin/app	nodule		0	(0)	1	(2)	0	(0)	0	(0)
subcutis	edema		0	(0)	0	(0)	1	(2)	0	(0)
	jaundice		1	(2)	3	(6)	2	(4)	2	(4)
	mass		8	(16)	11	(22)	10	(20)	7	(14)
lung	white zone		1	(2)	0	(0)	0	(0)	1	(2)
	red zone		0	(0)	0	(0)	1	(2)	0	(0)
	nodule		1	(2)	0	(0)	1	(2)	1	(2)
lymph node	enlarged		1	(2)	0	(0)	1	(2)	0	(0)
spleen	enlarged		6	(12)	7	(14)	2	(4)	5	(10)
oral cavity	nodule		1	(2)	0	(0)	0	(0)	0	(0)
forestomach	nodule		0	(0)	1	(2)	0	(0)	0	(0)
	ulcer		0	(0)	1	(2)	1	(2)	0	(0)
	erosion		0	(0)	1	(2)	0	(0)	0	(0)
gl stomach	red zone		1	(2)	0	(0)	0	(0)	0	(0)
large intes	nodule		0	(0)	0	(0)	0	(0)	1	(2)
liver	white zone		4	(8)	0	(0)	3	(6)	2	(4)
	red zone		0	(0)	1	(2)	0	(0)	1	(2)
	nodule		0	(0)	0	(0)	1	(2)	2	(4)
	deformed		1	(2)	0	(0)	0	(0)	0	(0)
	rough		1	(2)	1	(2)	2	(4)	2	(4)
	herniation		6	(12)	6	(12)	10	(20)	11	(22)
kidney	white zone		0	(0)	1	(2)	0	(0)	0	(0)

STUDY NO. : 0610
 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		1000 ppm		2000 ppm		4000 ppm	
			50	(%)	50	(%)	50	(%)	50	(%)
kidney	cyst		0	(0)	0	(0)	1	(2)	0	(0)
	granular		1	(2)	0	(0)	0	(0)	0	(0)
urin bladd	urine marked retention		0	(0)	0	(0)	2	(4)	0	(0)
pituitary	enlarged		6	(12)	5	(10)	4	(8)	3	(6)
	white zone		0	(0)	0	(0)	1	(2)	0	(0)
	red zone		4	(8)	5	(10)	7	(14)	6	(12)
	black zone		0	(0)	2	(4)	0	(0)	0	(0)
	nodule		6	(12)	5	(10)	3	(6)	4	(8)
thyroid	nodule		1	(2)	0	(0)	0	(0)	2	(4)
adrenal	enlarged		0	(0)	1	(2)	1	(2)	1	(2)
ovary	enlarged		0	(0)	1	(2)	1	(2)	1	(2)
	cyst		1	(2)	0	(0)	0	(0)	1	(2)
uterus	nodule		7	(14)	7	(14)	2	(4)	6	(12)
	cyst		0	(0)	0	(0)	1	(2)	1	(2)
vagina	nodule		0	(0)	1	(2)	0	(0)	0	(0)
brain	red zone		1	(2)	0	(0)	0	(0)	0	(0)
spinal cord	red zone		1	(2)	1	(2)	0	(0)	0	(0)
periph nerv	nodule		0	(0)	1	(2)	0	(0)	0	(0)
eye	white		0	(0)	5	(10)	6	(12)	0	(0)
	red		0	(0)	0	(0)	1	(2)	0	(0)
Harder gl	nodule		0	(0)	1	(2)	0	(0)	0	(0)
Zymbal gl	nodule		0	(0)	1	(2)	1	(2)	0	(0)

STUDY NO. : 0610
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		1000 ppm		2000 ppm		4000 ppm	
			50	(%)	50	(%)	50	(%)	50	(%)
retroperit	mass		0	(0)	0	(0)	0	(0)	1	(2)
abdominal c	hemorrhage		2	(4)	1	(2)	0	(0)	0	(0)
	ascites		0	(0)	0	(0)	1	(2)	1	(2)
thoracic ca	pleural fluid		0	(0)	1	(2)	2	(4)	0	(0)
other	ear:nodule		0	(0)	0	(0)	0	(0)	1	(2)
whole body	anemic		0	(0)	3	(6)	0	(0)	2	(4)

(HPT080)

BAIS 4

TABLE I 5

GROSS FINDINGS : FEMALE
DEAD AND MORIBUND ANIMALS

STUDY NO. : 0610
 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		1000 ppm		2000 ppm		4000 ppm	
			16	(%)	15	(%)	7	(%)	6	(%)
subcutis	edema		0	(0)	0	(0)	1	(14)	0	(0)
	jaundice		1	(6)	3	(20)	2	(29)	2	(33)
	mass		1	(6)	2	(13)	1	(14)	1	(17)
lung	red zone		0	(0)	0	(0)	1	(14)	0	(0)
	nodule		0	(0)	0	(0)	1	(14)	0	(0)
lymph node	enlarged		1	(6)	0	(0)	1	(14)	0	(0)
spleen	enlarged		5	(31)	7	(47)	2	(29)	3	(50)
oral cavity	nodule		1	(6)	0	(0)	0	(0)	0	(0)
forestomach	nodule		0	(0)	1	(7)	0	(0)	0	(0)
	ulcer		0	(0)	1	(7)	1	(14)	0	(0)
	erosion		0	(0)	1	(7)	0	(0)	0	(0)
gl stomach	red zone		1	(6)	0	(0)	0	(0)	0	(0)
liver	white zone		0	(0)	0	(0)	1	(14)	0	(0)
	red zone		0	(0)	1	(7)	0	(0)	0	(0)
	nodule		0	(0)	0	(0)	0	(0)	1	(17)
	deformed		1	(6)	0	(0)	0	(0)	0	(0)
	rough		0	(0)	0	(0)	1	(14)	0	(0)
	herniation		3	(19)	4	(27)	1	(14)	2	(33)
kidney	white zone		0	(0)	1	(7)	0	(0)	0	(0)
	granular		1	(6)	0	(0)	0	(0)	0	(0)
urin bladd	urine:marked retention		0	(0)	0	(0)	2	(29)	0	(0)
pituitary	enlarged		6	(38)	2	(13)	3	(43)	1	(17)

STUDY NO. : 0610
 ANIMAL : RAT F344/DuCrIj[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 5

Organ	Findings	Group Name NO. of Animals	Control		1000 ppm		2000 ppm		4000 ppm	
			16	(%)	15	(%)	7	(%)	6	(%)
pituitary	red zone		4	(25)	3	(20)	1	(14)	1	(17)
	black zone		0	(0)	1	(7)	0	(0)	0	(0)
adrenal	enlarged		0	(0)	1	(7)	0	(0)	0	(0)
ovary	enlarged		0	(0)	1	(7)	0	(0)	1	(17)
uterus	nodule		5	(31)	4	(27)	1	(14)	2	(33)
vagina	nodule		0	(0)	1	(7)	0	(0)	0	(0)
brain	red zone		1	(6)	0	(0)	0	(0)	0	(0)
spinal cord	red zone		1	(6)	1	(7)	0	(0)	0	(0)
periph nerv	nodule		0	(0)	1	(7)	0	(0)	0	(0)
Harder gl	nodule		0	(0)	1	(7)	0	(0)	0	(0)
Zymbal gl	nodule		0	(0)	1	(7)	1	(14)	0	(0)
abdominal c	hemorrhage		2	(13)	1	(7)	0	(0)	0	(0)
	ascites		0	(0)	0	(0)	1	(14)	0	(0)
thoracic ca	pleural fluid		0	(0)	1	(7)	2	(29)	0	(0)
whole body	anemic		0	(0)	3	(20)	0	(0)	2	(33)

TABLE I 6

GROSS FINDINGS : FEMALE
SACRIFICED ANIMALS

STUDY NO. : 0610
 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		1000 ppm		2000 ppm		4000 ppm	
			34	(%)	35	(%)	43	(%)	44	(%)
skin/app	nodule		0	(0)	1	(3)	0	(0)	0	(0)
subcutis	mass		7	(21)	9	(26)	9	(21)	6	(14)
lung	white zone		1	(3)	0	(0)	0	(0)	1	(2)
	nodule		1	(3)	0	(0)	0	(0)	1	(2)
spleen	enlarged		1	(3)	0	(0)	0	(0)	2	(5)
large intes	nodule		0	(0)	0	(0)	0	(0)	1	(2)
liver	white zone		4	(12)	0	(0)	2	(5)	2	(5)
	red zone		0	(0)	0	(0)	0	(0)	1	(2)
	nodule		0	(0)	0	(0)	1	(2)	1	(2)
	rough		1	(3)	1	(3)	1	(2)	2	(5)
	herniation		3	(9)	2	(6)	9	(21)	9	(20)
kidney	cyst		0	(0)	0	(0)	1	(2)	0	(0)
pituitary	enlarged		0	(0)	3	(9)	1	(2)	2	(5)
	white zone		0	(0)	0	(0)	1	(2)	0	(0)
	red zone		0	(0)	2	(6)	6	(14)	5	(11)
	black zone		0	(0)	1	(3)	0	(0)	0	(0)
	nodule		6	(18)	5	(14)	3	(7)	4	(9)
thyroid	nodule		1	(3)	0	(0)	0	(0)	2	(5)
adrenal	enlarged		0	(0)	0	(0)	1	(2)	1	(2)
ovary	enlarged		0	(0)	0	(0)	1	(2)	0	(0)
	cyst		1	(3)	0	(0)	0	(0)	1	(2)
uterus	nodule		2	(6)	3	(9)	1	(2)	4	(9)

STUDY NO. : 0610
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		1000 ppm		2000 ppm		4000 ppm	
			34	(%)	35	(%)	43	(%)	44	(%)
uterus	cyst		0	(0)	0	(0)	1	(2)	1	(2)
eye	white		0	(0)	5	(14)	6	(14)	0	(0)
	red		0	(0)	0	(0)	1	(2)	0	(0)
retroperit	mass		0	(0)	0	(0)	0	(0)	1	(2)
abdominal c	ascites		0	(0)	0	(0)	0	(0)	1	(2)
other	ear:nodule		0	(0)	0	(0)	0	(0)	1	(2)

(HPT080)

BAIS 4

TABLE J1

ORGAN WEIGHT, ABSOLUTE : MALE

STUDY NO. : 0610
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	33	394± 34	0.080± 0.036	4.292± 1.454	1.225± 0.091	1.385± 0.079	2.774± 0.226
1000 ppm	42	379± 37	0.102± 0.185	3.793± 0.967	1.238± 0.173	1.422± 0.173	2.904± 0.476
2000 ppm	38	377± 39	0.075± 0.037	4.511± 1.177	1.190± 0.073	1.501± 0.230*	2.845± 0.282
4000 ppm	42	368± 33**	0.069± 0.009	5.362± 2.889	1.200± 0.110	1.500± 0.229**	3.087± 0.748**

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

Test of Dunnett

(HCL040)

BAIS 4

STUDY NO. : 0610
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	33	1.035±	0.219	11.452±	1.325	2.107±	0.047
1000 ppm	42	1.476±	1.965	11.920±	1.450	2.101±	0.048
2000 ppm	38	1.212±	0.406	11.993±	1.796	2.104±	0.049
4000 ppm	42	1.455±	1.529	12.577±	2.009	2.086±	0.037

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

Test of Dunnett

(HCL040)

BAIS 4

TABLE J2

ORGAN WEIGHT, ABSOLUTE : FEMALE

STUDY NO. : 0610
 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	34	257± 30	0.071± 0.025	0.122± 0.023	0.875± 0.069	0.997± 0.227	1.836± 0.168
1000 ppm	35	272± 26	0.071± 0.022	0.120± 0.016	0.882± 0.062	0.968± 0.063	1.906± 0.159
2000 ppm	43	260± 26	0.101± 0.237	0.144± 0.115	0.862± 0.082	0.983± 0.080	1.873± 0.211
4000 ppm	43	238± 24**	0.075± 0.050	0.141± 0.079	0.841± 0.079	1.058± 0.389	1.856± 0.143

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

Test of Dunnett

(HCL040)

BAIS 4

STUDY NO. : 0610
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	34	0.874±	1.613	6.976±	1.552	1.914±	0.046
1000 ppm	35	0.591±	0.250	7.350±	1.121	1.906±	0.040
2000 ppm	43	0.596±	0.238	7.038±	1.400	1.908±	0.040
4000 ppm	43	0.675±	0.478	6.982±	1.209	1.890±	0.035

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

Test of Dunnett

(HCL040)

BAIS 4

TABLE K1

ORGAN WEIGHT, RELATIVE : MALE

STUDY NO. : 0610
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	33	394± 34	0.021± 0.011	1.108± 0.442	0.312± 0.025	0.353± 0.023	0.708± 0.070
1000 ppm	42	379± 37	0.027± 0.051	1.004± 0.254	0.330± 0.059	0.379± 0.071	0.782± 0.236
2000 ppm	38	377± 39	0.020± 0.010	1.202± 0.305	0.319± 0.041	0.404± 0.090**	0.764± 0.130*
4000 ppm	42	368± 33**	0.019± 0.004	1.433± 0.728**	0.328± 0.039	0.411± 0.083**	0.845± 0.218**

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

Test of Dunnett

(HCL042)

BAIS 4

STUDY NO. : 0610
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	33	0.263± 0.050	2.909± 0.234	0.539± 0.044
1000 ppm	42	0.408± 0.615	3.173± 0.522*	0.560± 0.063
2000 ppm	38	0.324± 0.107*	3.193± 0.459**	0.565± 0.073
4000 ppm	42	0.403± 0.466**	3.425± 0.525**	0.571± 0.056*

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

Test of Dunnett

(HCL042)

BAIS 4

TABLE K2

ORGAN WEIGHT, RELATIVE : FEMALE

STUDY NO. : 0610
 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	34	257± 30	0.029± 0.019	0.048± 0.010	0.345± 0.051	0.394± 0.111	0.728± 0.150
1000 ppm	35	272± 26	0.026± 0.007	0.045± 0.008	0.327± 0.030	0.359± 0.036	0.706± 0.071
2000 ppm	43	260± 26	0.040± 0.099	0.056± 0.046	0.332± 0.024	0.380± 0.033	0.721± 0.052
4000 ppm	43	238± 24**	0.034± 0.037	0.059± 0.030**	0.356± 0.029**	0.450± 0.174**	0.788± 0.096**

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

Test of Dunnett

(HCL042)

BAIS 4

STUDY NO. : 0610
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	34	0.353± 0.693	2.755± 0.743	0.756± 0.100
1000 ppm	35	0.219± 0.091	2.719± 0.430	0.708± 0.065
2000 ppm	43	0.228± 0.083	2.697± 0.391	0.741± 0.078
4000 ppm	43	0.286± 0.204	2.950± 0.486**	0.805± 0.097**

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. : 0610
 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				1000 ppm				2000 ppm				4000 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		<50>				<50>				<50>				<50>				<50>			
	basal cell 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)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	fibrosis:focal	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
		(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)
	sebaceous hyperplasia	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)
{Respiratory system}																					
nasal cavit		<50>				<50>				<50>				<50>				<50>			
	thrombus	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0
		(0)	(2)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(4)	(0)	(0)
	eosinophilic change:olfactory epithelium	25	17	0	0	22	24	1	0	21	27	0	0 *	25	24	0	0 *	25	24	0	0 *
		(50)	(34)	(0)	(0)	(44)	(48)	(2)	(0)	(42)	(54)	(0)	(0)	(50)	(48)	(0)	(0)	(50)	(48)	(0)	(0)
	eosinophilic change:respiratory epithelium	19	0	0	0	18	0	0	0	29	1	0	0	30	3	0	0 **	19	0	0	0
		(38)	(0)	(0)	(0)	(36)	(0)	(0)	(0)	(58)	(2)	(0)	(0)	(60)	(6)	(0)	(0)	(38)	(0)	(0)	(0)
	inflammation:foreign body	15	1	0	0	15	1	0	0	13	1	0	0	8	1	0	0	15	1	0	0
		(30)	(2)	(0)	(0)	(30)	(2)	(0)	(0)	(26)	(2)	(0)	(0)	(16)	(2)	(0)	(0)	(30)	(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. : 0610
 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				1000 ppm				2000 ppm				4000 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
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Respiratory system)																					
nasal cavit	inflammation:respiratory epithelium	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
	respiratory metaplasia:olfactory epithelium	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	respiratory metaplasia:gland	9	0	0	0	8	0	0	0	12	0	0	0	13	0	0	0	13	1	0	0
		(18)	(0)	(0)	(0)	(16)	(0)	(0)	(0)	(24)	(0)	(0)	(0)	(26)	(0)	(0)	(0)	(26)	(2)	(0)	(0)
	squamous cell metaplasia:respiratory epithelium	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)
larynx	inflammatory infiltration	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
trachea	inflammatory infiltration	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
lung	hemorrhage	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)	(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. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 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				1000 ppm				2000 ppm				4000 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
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																					
lung		<50>				<50>				<50>				<50>				<50>			
	edema	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)	(0)
	inflammatory infiltration	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	bronchiolar-alveolar cell hyperplasia	4	0	0	0	4	0	0	0	2	0	0	0	1	1	0	0	1	1	0	0
		(8)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(2)	(2)	(0)	(0)
{Hematopoietic system}																					
bone marrow		<50>				<50>				<50>				<50>				<50>			
	granulation	1	0	0	0	0	0	0	0	0	1	0	0	3	1	0	0	3	1	0	0
		(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(6)	(2)	(0)	(0)	(6)	(2)	(0)	(0)
	increased hematopoiesis	0	1	0	0	3	2	0	0	3	2	0	0	3	3	0	0	3	3	0	0
		(0)	(2)	(0)	(0)	(6)	(4)	(0)	(0)	(6)	(4)	(0)	(0)	(6)	(6)	(0)	(0)	(6)	(6)	(0)	(0)
	granulopoiesis:increased	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
lymph node		<50>				<50>				<50>				<50>				<50>			
	lymphadenitis	0	0	0	0	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)	(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. : 0610
 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				1000 ppm				2000 ppm				4000 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)																					
spleen		<50>				<50>				<50>				<50>				<50>			
	atrophy	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	congestion	0	1	0	0	0	2	0	0	0	3	0	0	0	1	3	0	0			
		(0)	(2)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(2)	(6)	(0)	(0)			
	deposit of hemosiderin	3	0	0	0	2	1	0	0	1	0	0	0	4	1	0	0				
		(6)	(0)	(0)	(0)	(4)	(2)	(0)	(0)	(2)	(0)	(0)	(0)	(8)	(2)	(0)	(0)				
	fibrosis	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)				
	extramedullary hematopoiesis	0	3	0	0	3	1	0	0	5	1	0	0 *	4	4	0	0				
		(0)	(6)	(0)	(0)	(6)	(2)	(0)	(0)	(10)	(2)	(0)	(0)	(8)	(8)	(0)	(0)				
(Circulatory system)																					
heart		<50>				<50>				<50>				<50>				<50>			
	thrombus	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0				
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(0)	(0)	(0)	(0)				
	mineralization	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0				
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(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. : 0610
 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				Control				1000 ppm				2000 ppm				4000 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
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Circulatory system)																					
heart	myocardial fibrosis	15	0	0	0	16	0	0	0	19	0	0	0	15	0	0	0	15	0	0	0
		(30)	(0)	(0)	(0)	(32)	(0)	(0)	(0)	(38)	(0)	(0)	(0)	(30)	(0)	(0)	(0)	(30)	(0)	(0)	(0)
	subendocardial fibrosis	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
artery/aort	mineralization	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
(Digestive system)																					
tooth	cyst	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
tongue	squamous cell hyperplasia	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)
	arteritis	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(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. : 0610
 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	Control				1000 ppm				2000 ppm				4000 ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
stomach			<50>				<50>				<50>				<50>			
	mineralization		0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)
	ulcer:forestomach		0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia:forestomach		0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	erosion:glandular stomach		2	0	0	0	1	0	0	0	3	0	0	0	6	0	0	0
			(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(12)	(0)	(0)	(0)
	ulcer:glandular stomach		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:glandular stomach		0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)
small intes			<50>				<50>				<50>				<50>			
	inflammatory infiltration		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

STUDY NO. : 0610
 ANIMAL : RAT F344/DuCr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 7

		Group Name	Control				1000 ppm				2000 ppm				4000 ppm				
		No. of Animals on Study	50				50				50				50				
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
(Digestive system)																			
large intes			<50>				<50>				<50>				<50>				
	inflammatory infiltration		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
liver			<50>				<50>				<50>				<50>				
	herniation		3	0	0	0	8	0	0	0	7	0	0	0	2	0	0	0	0
			(6)	(0)	(0)	(0)	(16)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)
	necrosis:central		1	0	0	0	1	0	0	0	0	1	0	0	2	1	0	0	0
			(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(4)	(2)	(0)	(0)	(0)
	necrosis:focal		2	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0
			(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(2)	(0)	(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)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	granulation		7	0	0	0	9	0	0	0	8	0	0	0	11	1	0	0	0
		(14)	(0)	(0)	(0)	(18)	(0)	(0)	(0)	(16)	(0)	(0)	(0)	(22)	(2)	(0)	(0)	(0)	
clear cell focus		5	0	0	0	10	0	0	0	7	0	0	0	9	1	0	0	0	
		(10)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(18)	(2)	(0)	(0)	(0)	
acidophilic cell focus		1	0	0	0	1	0	0	0	0	0	0	0	4	0	0	0	0	
		(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	

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

STUDY NO. : 0610
 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				Control				1000 ppm				2000 ppm				4000 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)																					
liver																					
	basophilic cell focus	5	1	0	0	4	0	0	0	3	0	0	0	6	3	0	0				
		(10)	(2)	(0)	(0)	(8)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(12)	(6)	(0)	(0)				
	mixed cell focus	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)	(2)	(0)	(0)	(2)	(0)	(0)	(0)				
	spongiosis hepatitis	2	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0				
		(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(4)	(0)	(0)	(0)				
	bile duct hyperplasia	3	45	0	0	1	48	0	0	4	45	0	0	0	47	0	0				
		(6)	(90)	(0)	(0)	(2)	(96)	(0)	(0)	(8)	(90)	(0)	(0)	(0)	(94)	(0)	(0)				
	biliary cyst	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0				
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)				
pancreas																					
	atrophy	22	1	0	0	27	1	0	0	19	2	0	0	19	5	1	0				
		(44)	(2)	(0)	(0)	(54)	(2)	(0)	(0)	(38)	(4)	(0)	(0)	(38)	(10)	(2)	(0)				
	inflammatory infiltration	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0				
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)				
	arteritis	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0				
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)				

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
 < a > a : Number of animals examined at the site
 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. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 9

		Group Name	Control				1000 ppm				2000 ppm				4000 ppm				
		No. of Animals on Study	50				50				50				50				
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
{Digestive system}																			
pancreas			<50>				<50>				<50>				<50>				
	islet cell hyperplasia		1	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Urinary system}																			
kidney			<50>				<50>				<50>				<50>				
	deposit of hemosiderin		0	1	0	0	0	0	0	0	0	1	0	0	0	3	1	0	0
			(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(6)	(2)	(0)	(0)	
	scar		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)	
	chronic nephropathy		14	23	8	1	14	23	8	5	12	24	9	5	7	24	14	2	
			(28)	(46)	(16)	(2)	(28)	(46)	(16)	(10)	(24)	(48)	(18)	(10)	(14)	(48)	(28)	(4)	
	tubular necrosis		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)	
	mineralization:papilla		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	
	urothelial hyperplasia:pelvis		0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	

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. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 10

		Group Name	Control				1000 ppm				2000 ppm				4000 ppm			
		No. of Animals on Study	50				50				50				50			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																		
kidney			<50>				<50>				<50>				<50>			
	atypical tubule hyperplasia		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	dilated pelvis		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)
urin bladd			<50>				<50>				<50>				<50>			
	simple hyperplasia:transitional epithelium		0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)
	papillary hyperplasia:transitional epithelium		0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
{Endocrine system}																		
pituitary			<50>				<50>				<50>				<50>			
	angiectasis		1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(2)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia		6	1	0	0	6	5	0	0	5	2	0	0	6	2	0	0
			(12)	(2)	(0)	(0)	(12)	(10)	(0)	(0)	(10)	(4)	(0)	(0)	(12)	(4)	(0)	(0)

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

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

b b : Number of animals with lesion

(c) c : b / a * 100

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

STUDY NO. : 0610
 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	Control				1000 ppm				2000 ppm				4000 ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																		
pituitary			<50>				<50>				<50>				<50>			
	Rathke pouch		4	0	0	0	3	0	0	0	1	0	0	0	2	0	0	0
			(8)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(4)	(0)	(0)	(0)
thyroid			<50>				<50>				<50>				<50>			
	ultimibranchial body remanet		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)
	C-cell hyperplasia		15	4	0	0	7	3	0	0	13	2	0	0	10	1	0	0
			(30)	(8)	(0)	(0)	(14)	(6)	(0)	(0)	(26)	(4)	(0)	(0)	(20)	(2)	(0)	(0)
	focal follicular cell hyperplasia		1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
parathyroid			<50>				<50>				<50>				<50>			
	hyperplasia		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
adrenal			<50>				<50>				<50>				<50>			
	hyperplasia:medulla		0	1	0	0	3	4	0	0	4	0	0	0	0	1	0	0
			(0)	(2)	(0)	(0)	(6)	(8)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(2)	(0)	(0)
	focal fatty change:cortex		1	0	0	0	0	0	0	0	1	0	0	1	0	0	0	
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(2)	(0)	(0)	(0)	

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

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

b b : Number of animals with lesion

(c) c : b / a * 100

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

STUDY NO. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
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HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 12

Organ	Findings	Group Name No. of Animals on Study Grade	Control 50				1000 ppm 50				2000 ppm 50				4000 ppm 50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Reproductive system}																		
testis			<50>				<50>				<50>				<50>			
	mineralization		1	0	0	0	2	0	0	0	0	0	0	0	2	0	0	0
			(2)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)
	arteritis		1	0	0	0	4	0	0	0	1	0	0	0	1	0	0	0
			(2)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	interstitial cell hyperplasia		6	1	0	0	3	0	0	0	10	0	0	0	3	0	0	0
			(12)	(2)	(0)	(0)	(6)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
semin ves			<50>				<50>				<50>				<50>			
	inflammation		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)
prostate			<50>				<50>				<50>				<50>			
	inflammation		0	1	0	0	0	3	0	0	0	3	0	0	0	0	1	0
			(0)	(2)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(0)	(2)	(0)
	hyperplasia		7	0	0	0	13	0	0	0	9	3	0	0	11	0	0	0
			(14)	(0)	(0)	(0)	(26)	(0)	(0)	(0)	(18)	(6)	(0)	(0)	(22)	(0)	(0)	(0)
{Special sense organs/appendage}																		
eye			<50>				<50>				<50>				<50>			
	squamous cell metaplasia		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
 < a > a : Number of animals examined at the site
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 REPORT TYPE : A1
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HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 13

Organ	Findings	Group Name No. of Animals on Study				Control				1000 ppm				2000 ppm				4000 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
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Special sense organs/appendage}																					
eye		<50>				<50>				<50>				<50>				<50>			
	cataract	2	0	0	0	4	0	0	0	5	0	0	0	6	0	0	0	6	0	0	0
		(4)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(12)	(0)	(0)	(0)	(12)	(0)	(0)	(0)
	retinal atrophy	0	2	0	0	0	4	0	0	0	3	1	0	1	6	0	0	2	12	0	0
		(0)	(4)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(6)	(2)	(0)	(2)	(12)	(0)	(0)	(2)	(12)	(0)	(0)
	keratitis	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	mineralization:cornea	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)
nasolacr d		<50>				<50>				<50>				<50>				<50>			
	inflammation	0	0	0	0	0	0	0	0	0	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)	(2)	(0)	(0)
{Musculoskeletal system}																					
bone		<50>				<50>				<50>				<50>				<50>			
	ostitis fibrosa	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 14

Organ	Findings	Group Name No. of Animals on Study				Control				1000 ppm				2000 ppm				4000 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	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)	(0)	(0)
{Body cavities}																					
peritoneum		<50>				<50>				<50>				<50>				<50>			
	inflammation	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)	(0)	(0)
	mesothelial hyperplasia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)

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 L2

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

STUDY NO. : 0610
 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				Control				1000 ppm				2000 ppm				4000 ppm			
		Grade				17				8				12				8			
		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	fibrosis:focal	<17>				< 8>				<12>				< 8>							
		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Respiratory system}																					
nasal cavit	thrombus	<17>				< 8>				<12>				< 8>							
		0	1	0	0	1	0	0	0	0	0	0	0	1	2	0	0				
		(0)	(6)	(0)	(0)	(13)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(13)	(25)	(0)	(0)				
	eosinophilic change:olfactory epithelium	6	3	0	0	3	2	0	0	7	3	0	0	4	3	0	0				
		(35)	(18)	(0)	(0)	(38)	(25)	(0)	(0)	(58)	(25)	(0)	(0)	(50)	(38)	(0)	(0)				
	eosinophilic change:respiratory epithelium	6	0	0	0	2	0	0	0	6	0	0	0	3	0	0	0				
		(35)	(0)	(0)	(0)	(25)	(0)	(0)	(0)	(50)	(0)	(0)	(0)	(38)	(0)	(0)	(0)				
	inflammation:foreign body	5	0	0	0	3	0	0	0	2	1	0	0	2	0	0	0				
		(29)	(0)	(0)	(0)	(38)	(0)	(0)	(0)	(17)	(8)	(0)	(0)	(25)	(0)	(0)	(0)				
	respiratory metaplasia:gland	2	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0				
		(12)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(17)	(0)	(0)	(0)	(13)	(0)	(0)	(0)				
larynx	inflammatory infiltration	<17>				< 8>				<12>				< 8>							
		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0				
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)				

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. : 0610
 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	Control No. of Animals on Study Grade				1000 ppm 8				2000 ppm 12				4000 ppm 8			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																	
trachea	inflammatory infiltration	<17>				< 8>				<12>				< 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)	(8)	(0)	(0)	(0)	(0)	(0)	(0)
lung	hemorrhage	<17>				< 8>				<12>				< 8>			
		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	edema	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	inflammatory infiltration	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)
	bronchiolar-alveolar cell hyperplasia	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Hematopoietic system}																	
bone marrow	granulation	<17>				< 8>				<12>				< 8>			
		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(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. : 0610
 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 17				1000 ppm 8				2000 ppm 12				4000 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	increased hematopoiesis	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (13)	0 (0)	0 (0)	1 (8)	2 (17)	0 (0)	0 (0)	1 (8)	2 (17)	0 (0)	0 (0)	3 (38)	1 (13)	0 (0)	0 (0) **
lymph node	lymphadenitis	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (8)	0 (0)	0 (0)	0 (0)	1 (8)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
spleen	atrophy	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (8)	0 (0)	0 (0)	0 (0)	1 (8)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	congestion	0 (0)	1 (6)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	deposit of hemosiderin	3 (18)	0 (0)	0 (0)	0 (0)	1 (13)	1 (13)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (13)	1 (13)	0 (0)	0 (0)
	extramedullary hematopoiesis	0 (0)	2 (12)	0 (0)	0 (0)	1 (13)	1 (13)	0 (0)	0 (0)	0 (0)	1 (8)	0 (0)	0 (0)	0 (0)	1 (8)	0 (0)	0 (0)	2 (25)	3 (38)	0 (0)	0 (0) *
{Circulatory system}																					
heart	thrombus	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (8)	1 (8)	0 (0)	0 (0)	1 (8)	1 (8)	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. : 0610
 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 17				1000 ppm 8				2000 ppm 12				4000 ppm 8			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Circulatory system)																					
heart	mineralization	<17>				< 8>				<12>				< 8>							
		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)	(17)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	myocardial fibrosis	6	0	0	0	3	0	0	0	4	0	0	0	2	0	0	0	0	0	0	0
		(35)	(0)	(0)	(0)	(38)	(0)	(0)	(0)	(33)	(0)	(0)	(0)	(25)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
artery/aort	mineralization	<17>				< 8>				<12>				< 8>							
		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)	(17)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
(Digestive system)																					
tooth	cyst	<17>				< 8>				<12>				< 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)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
tongue	squamous cell hyperplasia	<17>				< 8>				<12>				< 8>							
		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
stomach	mineralization	<17>				< 8>				<12>				< 8>							
		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)	(17)	(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. : 0610
 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

Organ	Findings	Group Name No. of Animals on Study Grade	Control 17				1000 ppm 8				2000 ppm 12				4000 ppm 8			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Digestive system)																		
stomach			<17>				<8>				<12>				<8>			
	ulcer:forestomach		0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(13)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia:forestomach		0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(17)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	erosion:glandular stomach		1	0	0	0	1	0	0	0	2	0	0	0	3	0	0	0
			(6)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(17)	(0)	(0)	(0)	(38)	(0)	(0)	(0)
	hyperplasia:glandular stomach		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)	(8)	(0)	(0)	(0)	(0)	(0)	(0)
small intes			<17>				<8>				<12>				<8>			
	inflammatory infiltration		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)
large intes			<17>				<8>				<12>				<8>			
	inflammatory infiltration		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)
liver			<17>				<8>				<12>				<8>			
	herniation		1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0
			(6)	(0)	(0)	(0)	(38)	(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. : 0610
 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	Control No. of Animals on Study Grade				1000 ppm 8				2000 ppm 12				4000 ppm 8			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																	
liver		<17>				< 8>				<12>				< 8>			
	necrosis:central	1 (6)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (8)	0 (0)	0 (0)	2 (25)	1 (13)	0 (0)	0 (0)
	necrosis:focal	1 (6)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (13)	0 (0)	0 (0)
	granulation	1 (6)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (17)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	clear cell focus	1 (6)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	basophilic cell focus	0 (0)	1 (6)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	bile duct hyperplasia	1 (6)	14 (82)	0 (0)	0 (0)	1 (13)	7 (88)	0 (0)	0 (0)	2 (17)	9 (75)	0 (0)	0 (0)	0 (0)	6 (75)	0 (0)	0 (0)
pancreas		<17>				< 8>				<12>				< 8>			
	atrophy	2 (12)	0 (0)	0 (0)	0 (0)	3 (38)	0 (0)	0 (0)	0 (0)	2 (17)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	inflammatory infiltration	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (8)	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. : 0610
 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

		Group Name	Control				1000 ppm				2000 ppm				4000 ppm			
		No. of Animals on Study	17				8				12				8			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																		
kidney			<17>				< 8>				<12>				< 8>			
	deposit of hemosiderin		0	1	0	0	0	0	0	0	0	1	0	0	1	1	0	0
			(0)	(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(13)	(13)	(0)	(0)
	chronic nephropathy		5	6	1	1	5	3	0	0	6	3	0	3	4	2	0	0
			(29)	(35)	(6)	(6)	(63)	(38)	(0)	(0)	(50)	(25)	(0)	(25)	(50)	(25)	(0)	(0)
	tubular necrosis		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)	(8)	(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)	(13)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	dilated pelvis		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Endocrine system}																		
pituitary			<17>				< 8>				<12>				< 8>			
	hyperplasia		0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
			(0)	(6)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	Rathke pouch		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(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. : 0610
 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

Organ	Findings	Group Name	Control				1000 ppm				2000 ppm				4000 ppm			
		No. of Animals on Study	17				8				12				8			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																		
thyroid			<17>				< 8>				<12>				< 8>			
	C-cell hyperplasia		4	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
			(24)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(8)	(0)	(0)	(0)	(0)	(0)	(0)
parathyroid			<17>				< 8>				<12>				< 8>			
	hyperplasia		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(17)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
adrenal			<17>				< 8>				<12>				< 8>			
	hyperplasia:medulla		0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	focal fatty change:cortex		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Reproductive system}																		
testis			<17>				< 8>				<12>				< 8>			
	mineralization		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(13)	(0)	(0)	(0)
	interstitial cell hyperplasia		2	1	0	0	1	0	0	0	7	0	0	0 *	0	0	0	0
			(12)	(6)	(0)	(0)	(13)	(0)	(0)	(0)	(58)	(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. : 0610
 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 Grade				Control 17				1000 ppm 8				2000 ppm 12				4000 ppm 8			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Reproductive system}																					
prostate		<17>				< 8>				<12>				< 8>							
	inflammation	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)	(13)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia	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)
{Special sense organs/appendage}																					
eye		<17>				< 8>				<12>				< 8>							
	cataract	2	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
		(12)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(13)	(0)	(0)	(0)
	retinal atrophy	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0
		(0)	(12)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(13)	(0)	(0)
	keratitis	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)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Musculoskeletal system}																					
bone		<17>				< 8>				<12>				< 8>							
	ostitis fibrosa	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)	(8)	(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. : 0610
 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	Control				1000 ppm				2000 ppm				4000 ppm			
		No. of Animals on Study	17				8				12				8			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Musculoskeletal system}																		
bone			<17>				< 8>				<12>				< 8>			
	osteosclerosis		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)	(8)	(0)	(0)	(0)	(0)	(0)
{Body cavities}																		
peritoneum			<17>				< 8>				<12>				< 8>			
	inflammation		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)	(8)	(0)	(0)	(0)	(0)	(0)
	mesothelial 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)	(13)	(0)	(0)	(0)
Grade	1 : Slight 2 : Moderate 3 : Marked 4 : Severe																	
< a >	a : Number of animals examined at the site																	
b	b : Number of animals with lesion																	
(c)	c : b / a * 100																	
Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square																		

(HPT150)

BAIS4

TABLE L3

HISTOPATHOLOGICAL FINDINGS :
NON-NEOPLASTIC LESIONS : MALE
SACRIFICED ANIMALS

STUDY NO. : 0610
 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 33				1000 ppm 42				2000 ppm 38				4000 ppm 42			
		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		<33>				<42>				<38>				<42>							
	basal cell 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)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	fibrosis:focal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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)
	sebaceous hyperplasia	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(3)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Respiratory system}																					
nasal cavit		<33>				<42>				<38>				<42>							
	thrombus	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)
	eosinophilic change:olfactory epithelium	19	14	0	0	19	22	1	0	14	24	0	0	21	21	0	0	0	0	0	0
		(58)	(42)	(0)	(0)	(45)	(52)	(2)	(0)	(37)	(63)	(0)	(0)	(50)	(50)	(0)	(0)	(0)	(0)	(0)	(0)
	eosinophilic change:respiratory epithelium	13	0	0	0	16	0	0	0	23	1	0	0	27	3	0	0 *	0	0	0	0
		(39)	(0)	(0)	(0)	(38)	(0)	(0)	(0)	(61)	(3)	(0)	(0)	(64)	(7)	(0)	(0)	(0)	(0)	(0)	(0)
	inflammation:foreign body	10	1	0	0	12	1	0	0	11	0	0	0	6	1	0	0	0	0	0	0
		(30)	(3)	(0)	(0)	(29)	(2)	(0)	(0)	(29)	(0)	(0)	(0)	(14)	(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 ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Chi Square

STUDY NO. : 0610
 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				1000 ppm				2000 ppm				4000 ppm			
		No. of Animals on Study	33				42				38				42			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
nasal cavit			<33>				<42>				<38>				<42>			
	inflammation:respiratory epithelium		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)	(7)	(0)	(0)	(0)
	respiratory metaplasia:olfactory epithelium		1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	respiratory metaplasia:gland		7	0	0	0	8	0	0	0	10	0	0	0	12	1	0	0
			(21)	(0)	(0)	(0)	(19)	(0)	(0)	(0)	(26)	(0)	(0)	(0)	(29)	(2)	(0)	(0)
	squamous cell metaplasia:respiratory epithelium		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)
lung			<33>				<42>				<38>				<42>			
	bronchiolar-alveolar cell hyperplasia		3	0	0	0	4	0	0	0	1	0	0	0	1	1	0	0
			(9)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(2)	(2)	(0)	(0)
{Hematopoietic system}																		
bone marrow			<33>				<42>				<38>				<42>			
	granulation		0	0	0	0	0	0	0	0	0	1	0	0	3	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(7)	(2)	(0)	(0)

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

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

b b : Number of animals with lesion

(c) c : b / a * 100

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

STUDY NO. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 3

Organ	Findings	Group Name No. of Animals on Study Grade				Control 33				1000 ppm 42				2000 ppm 38				4000 ppm 42			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Hematopoietic system)																					
bone marrow		<33>				<42>				<38>				<42>							
	increased hematopoiesis	0	1	0	0	3	1	0	0	2	0	0	0	0	2	0	0	0	0	0	0
		(0)	(3)	(0)	(0)	(7)	(2)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)
	granulopoiesis:increased	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
lymph node		<33>				<42>				<38>				<42>							
	lymphadenitis	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)
spleen		<33>				<42>				<38>				<42>							
	congestion	0	0	0	0	0	2	0	0	0	3	0	0	1	3	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(8)	(0)	(0)	(2)	(7)	(0)	(0)	(0)	(0)	(0)	(0)
	deposit of hemosiderin	0	0	0	0	1	0	0	0	1	0	0	0	3	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	fibrosis	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)	(0)	(0)	(0)
	extramedullary hematopoiesis	0	1	0	0	2	0	0	0	5	0	0	0	2	1	0	0	0	0	0	0
		(0)	(3)	(0)	(0)	(5)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(5)	(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. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 4

		Group Name	Control				1000 ppm				2000 ppm				4000 ppm			
		No. of Animals on Study	33				42				38				42			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Circulatory system)																		
heart			<33>				<42>				<38>				<42>			
	myocardial fibrosis		9 (27)	0 (0)	0 (0)	0 (0)	13 (31)	0 (0)	0 (0)	0 (0)	15 (39)	0 (0)	0 (0)	0 (0)	13 (31)	0 (0)	0 (0)	0 (0)
	subendocardial fibrosis		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
(Digestive system)																		
tongue			<33>				<42>				<38>				<42>			
	arteritis		0 (0)	0 (0)	0 (0)	0 (0)	2 (5)	0 (0)	0 (0)	0 (0)	2 (5)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
stomach			<33>				<42>				<38>				<42>			
	ulcer:forestomach		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:forestomach		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)
	erosion:glandular stomach		1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	3 (7)	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. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 5

Organ	Findings	Control				1000 ppm				2000 ppm				4000 ppm			
		No. of Animals on Study				No. of Animals on Study				No. of Animals on Study				No. of Animals on Study			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Digestive system)																	
stomach		<33>				<42>				<38>				<42>			
	ulcer:glandular stomach	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:glandular stomach	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)
small intes		<33>				<42>				<38>				<42>			
	hyperplasia	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
liver		<33>				<42>				<38>				<42>			
	herniation	2	0	0	0	5	0	0	0	7	0	0	0	2	0	0	0
		(6)	(0)	(0)	(0)	(12)	(0)	(0)	(0)	(18)	(0)	(0)	(0)	(5)	(0)	(0)	(0)
	necrosis:central	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)
	necrosis:focal	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0
		(3)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	fatty change:peripheral	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

STUDY NO. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 6

Organ	Findings	Group Name No. of Animals on Study Grade				Control 33				1000 ppm 42				2000 ppm 38				4000 ppm 42			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Digestive system)																					
liver																					
	granulation	6 (18)	0 (0)	0 (0)	0 (0)	9 (21)	0 (0)	0 (0)	0 (0)	6 (16)	0 (0)	0 (0)	0 (0)	11 (26)	1 (2)	0 (0)	0 (0)				
	clear cell focus	4 (12)	0 (0)	0 (0)	0 (0)	10 (24)	0 (0)	0 (0)	0 (0)	7 (18)	0 (0)	0 (0)	0 (0)	9 (21)	1 (2)	0 (0)	0 (0)				
	acidophilic cell focus	1 (3)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	4 (10)	0 (0)	0 (0)	0 (0)				
	basophilic cell focus	5 (15)	0 (0)	0 (0)	0 (0)	4 (10)	0 (0)	0 (0)	0 (0)	3 (8)	0 (0)	0 (0)	0 (0)	6 (14)	3 (7)	0 (0)	0 (0)				
	mixed cell focus	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)				
	spongiosis hepatitis	2 (6)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	1 (3)	0 (0)	0 (0)	2 (5)	0 (0)	0 (0)	0 (0)				
	bile duct hyperplasia	2 (6)	31 (94)	0 (0)	0 (0)	0 (0)	41 (98)	0 (0)	0 (0)	2 (5)	36 (95)	0 (0)	0 (0)	0 (0)	41 (98)	0 (0)	0 (0)				
	biliary cyst	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	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 ; * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Chi Square

STUDY NO. : 0610
 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	Control				1000 ppm				2000 ppm				4000 ppm			
		No. of Animals on Study	33				42				38				42			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Digestive system)																		
pancreas			<33>				<42>				<38>				<42>			
	atrophy	20	1	0	0	24	1	0	0	17	2	0	0	19	5	1	0	
		(61)	(3)	(0)	(0)	(57)	(2)	(0)	(0)	(45)	(5)	(0)	(0)	(45)	(12)	(2)	(0)	
	arteritis	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)	
	islet cell hyperplasia	1	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	
		(3)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	
(Urinary system)																		
kidney			<33>				<42>				<38>				<42>			
	deposit of hemosiderin	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	
	scar	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	
	chronic nephropathy	9	17	7	0	9	20	8	5	6	21	9	2	3	22	14	2	
		(27)	(52)	(21)	(0)	(21)	(48)	(19)	(12)	(16)	(55)	(24)	(5)	(7)	(52)	(33)	(5)	
	mineralization:papilla	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	

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. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 8

Organ	Findings	Control No. of Animals on Study Grade				1000 ppm 42				2000 ppm 38				4000 ppm 42			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																	
kidney		<33>				<42>				<38>				<42>			
	urothelial hyperplasia:pelvis	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	atypical tubule hyperplasia	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
urin bladd		<33>				<42>				<38>				<42>			
	simple hyperplasia:transitional epithelium	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)
	papillary hyperplasia:transitional epithelium	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
{Endocrine system}																	
pituitary		<33>				<42>				<38>				<42>			
	angiectasis	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(3)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia	6	0	0	0	6	4	0	0	5	2	0	0	6	2	0	0
		(18)	(0)	(0)	(0)	(14)	(10)	(0)	(0)	(13)	(5)	(0)	(0)	(14)	(5)	(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. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 9

Organ	Findings	Control No. of Animals on Study Grade				1000 ppm 42				2000 ppm 38				4000 ppm 42			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Endocrine system)																	
pituitary																	
	Rathke pouch	<33>				<42>				<38>				<42>			
		3	0	0	0	3	0	0	0	1	0	0	0	2	0	0	0
		(9)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(5)	(0)	(0)	(0)
thyroid																	
	ultimibranhial body remanet	<33>				<42>				<38>				<42>			
		1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(3)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	C-cell hyperplasia	11	4	0	0	7	3	0	0	12	1	0	0	10	1	0	0
		(33)	(12)	(0)	(0)	(17)	(7)	(0)	(0)	(32)	(3)	(0)	(0)	(24)	(2)	(0)	(0)
	focal follicular cell hyperplasia	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)	(0)	(0)	(0)	(0)
adrenal																	
	hyperplasia:medulla	<33>				<42>				<38>				<42>			
		0	1	0	0	2	4	0	0	3	0	0	0	0	1	0	0
		(0)	(3)	(0)	(0)	(5)	(10)	(0)	(0)	(8)	(0)	(0)	(0)	(0)	(2)	(0)	(0)
	focal fatty change:cortex	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)	(3)	(0)	(0)	(2)	(0)	(0)	(0)
(Reproductive system)																	
testis																	
	mineralization	<33>				<42>				<38>				<42>			
		1	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0
		(3)	(0)	(0)	(0)	(5)	(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. : 0610
 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 33				1000 ppm 42				2000 ppm 38				4000 ppm 42			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Reproductive system}																					
testis		<33>				<42>				<38>				<42>							
	arteritis	1	0	0	0	4	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
		(3)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	interstitial cell hyperplasia	4	0	0	0	2	0	0	0	3	0	0	0	3	0	0	0	3	0	0	0
		(12)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(7)	(0)	(0)	(0)
semin ves		<33>				<42>				<38>				<42>							
	inflammation	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)
prostate		<33>				<42>				<38>				<42>							
	inflammation	0	1	0	0	0	2	0	0	0	2	0	0	0	0	0	1	0	0	1	0
		(0)	(3)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(2)	(0)	(0)
	hyperplasia	7	0	0	0	13	0	0	0	9	3	0	0	10	0	0	0	10	0	0	0
		(21)	(0)	(0)	(0)	(31)	(0)	(0)	(0)	(24)	(8)	(0)	(0)	(24)	(0)	(0)	(0)	(24)	(0)	(0)	(0)
{Special sense organs/appendage}																					
eye		<33>				<42>				<38>				<42>							
	squamous cell metaplasia	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)

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. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 11

Organ	Findings	Group Name No. of Animals on Study Grade				Control 33				1000 ppm 42				2000 ppm 38				4000 ppm 42			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Special sense organs/appendage}																					
eye	cataract	0	0	0	0	4	0	0	0	4	0	0	0	5	0	0	0	(0)	(0)	(0)	(0)
		(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(12)	(0)	(0)	(0)				
		<33>				<42>				<38>				<42>							
	retinal atrophy	0	0	0	0	0	4	0	0	0	3	1	0	1	5	0	0	(0)	(0)	(0)	(0)
		(0)	(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(8)	(3)	(0)	(2)	(12)	(0)	(0)				
	mineralization:cornea	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)				
nasolacr d	inflammation	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)	(3)	(0)	(0)	(0)	(2)	(0)	(0)				
{Body cavities}																					
peritoneum	mesothelial hyperplasia	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	(0)	(0)	(0)	(0)
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)				

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

(HPT150)

BAIS4

TABLE L4

HISTOPATHOLOGICAL FINDINGS :
NON-NEOPLASTIC LESIONS : FEMALE
ALL ANIMALS

STUDY NO. : 0610
 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	Control				1000 ppm				2000 ppm				4000 ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Integumentary system/appandage}																		
subcutis			<50>				<50>				<50>				<50>			
	epidermal cyst		0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(2)	(0)	(0)
{Respiratory system}																		
nasal cavit			<50>				<50>				<50>				<50>			
	thrombus		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)
	eosinophilic change:olfactory epithelium		5	43	2	0	2	42	5	0	0	50	0	0 *	4	45	0	0
			(10)	(86)	(4)	(0)	(4)	(84)	(10)	(0)	(0)	(100)	(0)	(0)	(8)	(90)	(0)	(0)
	eosinophilic change:respiratory epithelium		42	2	0	0	49	0	0	0 *	49	1	0	0 *	49	0	0	0 *
			(84)	(4)	(0)	(0)	(98)	(0)	(0)	(0)	(98)	(2)	(0)	(0)	(98)	(0)	(0)	(0)
	inflammation:foreign body		1	1	0	0	3	0	0	0	2	0	0	0	5	0	0	0
			(2)	(2)	(0)	(0)	(6)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(10)	(0)	(0)	(0)
	inflammation:respiratory epithelium		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	respiratory metaplasia:olfactory epithelium		0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 16

Organ	Findings	Group Name No. of Animals on Study				Control				1000 ppm				2000 ppm				4000 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
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																					
nasal cavit	respiratory metaplasia:gland	11	0	0	0	10	0	0	0	13	0	0	0	13	0	0	0	13	0	0	0
		(22)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(26)	(0)	(0)	(0)	(26)	(0)	(0)	(0)	(26)	(0)	(0)	(0)
	atrophy:olfactory epithelium	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)	(0)
lung	mucocoele	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)	(0)
	inflammatory infiltration	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(2)	(0)	(0)	(0)
	bronchiolar-alveolar cell hyperplasia	0	0	0	0	2	0	0	0	3	0	0	0	1	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
{Hematopoietic system}																					
bone marrow	granulation	4	0	0	0	2	0	0	0	2	0	0	0	6	1	0	0	6	1	0	0
		(8)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(12)	(2)	(0)	(0)	(12)	(2)	(0)	(0)

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

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

b : Number of animals with lesion

(c) c : b / a * 100

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

STUDY NO. : 0610
 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	Control				1000 ppm				2000 ppm				4000 ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)

(Hematopoietic system)

bone marrow

increased hematopoiesis

<50>

2
(4)

1
(2)

0
(0)

0
(0)

<50>

5
(10)

0
(0)

0
(0)

0
(0)

<50>

1
(2)

0
(0)

0
(0)

0
(0)

<50>

2
(4)

1
(2)

0
(0)

0
(0)

spleen

congestion

<50>

0
(0)

0
(0)

0
(0)

0
(0)

<50>

0
(0)

0
(0)

0
(0)

0
(0)

<50>

0
(0)

1
(2)

0
(0)

0
(0)

<50>

0
(0)

0
(0)

0
(0)

0
(0)

deposit of hemosiderin

23
(46)

2
(4)

0
(0)

0
(0)

19
(38)

1
(2)

0
(0)

0
(0)

20
(40)

3
(6)

0
(0)

0
(0)

20
(40)

4
(8)

0
(0)

0
(0)

fibrosis

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)

extramedullary hematopoiesis

2
(4)

1
(2)

0
(0)

0
(0)

3
(6)

5
(10)

0
(0)

0
(0)

3
(6)

0
(0)

0
(0)

0
(0)

3
(6)

3
(6)

0
(0)

0
(0)

(Circulatory system)

heart

myocardial fibrosis

<50>

8
(16)

0
(0)

0
(0)

0
(0)

<50>

11
(22)

0
(0)

0
(0)

0
(0)

<50>

7
(14)

0
(0)

0
(0)

0
(0)

<50>

6
(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 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. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 18

Organ	Findings	Group Name No. of Animals on Study				Control				1000 ppm				2000 ppm				4000 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
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Circulatory system}																					
artery/aort		<50>				<50>				<50>				<50>				<50>			
	arteritis	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)	(0)
{Digestive system}																					
oral cavity		<50>				<50>				<50>				<50>				<50>			
	squamous cell hyperplasia	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)	(0)
	epidermal cyst	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)	(0)
tongue		<50>				<50>				<50>				<50>				<50>			
	arteritis	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
stomach		<50>				<50>				<50>				<50>				<50>			
	ulcer:forestomach	2	0	0	0	1	2	0	0	1	1	0	0	0	0	0	0	0	0	0	0
		(4)	(0)	(0)	(0)	(2)	(4)	(0)	(0)	(2)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia:forestomach	2	1	0	0	1	2	0	0	3	0	0	0	1	0	0	0	1	0	0	0
		(4)	(2)	(0)	(0)	(2)	(4)	(0)	(0)	(6)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)

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

STUDY NO. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 19

		Group Name	Control				1000 ppm				2000 ppm				4000 ppm			
		No. of Animals on Study	50				50				50				50			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Digestive system)																		
stomach			<50>				<50>				<50>				<50>			
	erosion:glandular stomach		2	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0
			(4)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)
liver			<50>				<50>				<50>				<50>			
	herniation		6	0	0	0	7	0	0	0	11	0	0	0	11	0	0	0
			(12)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(22)	(0)	(0)	(0)	(22)	(0)	(0)	(0)
	necrosis:central		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)
	necrosis:focal		2	0	0	0	2	0	0	0	1	0	0	0	1	0	0	0
			(4)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	fatty change:central		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	lymphocytic infiltration		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)
granulation		10	4	0	0	9	4	0	0	7	6	0	0	10	9	0	0	
		(20)	(8)	(0)	(0)	(18)	(8)	(0)	(0)	(14)	(12)	(0)	(0)	(20)	(18)	(0)	(0)	
clear cell focus		0	2	0	0	0	0	0	0	0	1	0	0	0	1	0	0	
		(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	

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

STUDY NO. : 0610
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 REPORT TYPE : A1
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HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)
 ALL ANIMALS (0-105W)

PAGE : 20

Organ	Findings	Control				1000 ppm				2000 ppm				4000 ppm			
		No. of Animals on Study				50				50				50			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																	
liver		<50>				<50>				<50>				<50>			
	basophilic cell focus	21	2	0	0	26	1	0	0	19	7	0	0	24	4	0	0
		(42)	(4)	(0)	(0)	(52)	(2)	(0)	(0)	(38)	(14)	(0)	(0)	(48)	(8)	(0)	(0)
	bile duct hyperplasia	9	2	0	0	9	0	0	0	10	2	0	0	10	1	0	0
		(18)	(4)	(0)	(0)	(18)	(0)	(0)	(0)	(20)	(4)	(0)	(0)	(20)	(2)	(0)	(0)
	cholangiofibrosis	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(2)	(0)	(0)
pancreas		<50>				<50>				<50>				<50>			
	atrophy	3	0	0	0	3	0	0	0	4	1	0	0	5	1	1	0
		(6)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(8)	(2)	(0)	(0)	(10)	(2)	(2)	(0)
	islet cell hyperplasia	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Urinary system}																	
kidney		<50>				<50>				<50>				<50>			
	cyst	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)

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. : 0610
 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	Control				1000 ppm				2000 ppm				4000 ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																		
kidney																		
			<50>				<50>				<50>				<50>			
deposit of hemosiderin			0	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0
			(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)
scar			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)
chronic nephropathy			30	4	2	0	27	9	0	0	30	9	3	0	33	5	1	0
			(60)	(8)	(4)	(0)	(54)	(18)	(0)	(0)	(60)	(18)	(6)	(0)	(66)	(10)	(2)	(0)
mineralization:pelvis			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)
desquamation:pelvis			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)
urothelial hyperplasia:pelvis			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
atypical tubule hyperplasia			0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
dilated pelvis			0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(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. : 0610
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 22

Organ	Findings	Group Name	Control				1000 ppm				2000 ppm				4000 ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																		
pituitary			<50>				<50>				<50>				<50>			
	angiectasis		4 (8)	1 (2)	0 (0)	0 (0)	1 (2)	1 (2)	0 (0)	0 (0)	5 (10)	2 (4)	0 (0)	0 (0)	1 (2)	1 (2)	0 (0)	0 (0)
	cyst		5 (10)	2 (4)	0 (0)	0 (0)	5 (10)	3 (6)	0 (0)	0 (0)	6 (12)	2 (4)	0 (0)	0 (0)	5 (10)	2 (4)	0 (0)	0 (0)
	hyperplasia		8 (16)	6 (12)	0 (0)	0 (0)	11 (22)	3 (6)	0 (0)	0 (0)	4 (8)	5 (10)	0 (0)	0 (0)	11 (22)	4 (8)	0 (0)	0 (0)
	Rathke pouch		1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)
thyroid			<50>				<50>				<50>				<50>			
	ultimibranchial body remanet		2 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	C-cell hyperplasia		5 (10)	0 (0)	0 (0)	0 (0)	5 (10)	1 (2)	0 (0)	0 (0)	8 (16)	5 (10)	0 (0)	0 * (0)	6 (12)	3 (6)	0 (0)	0 (0)
	focal follicular cell hyperplasia		0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)
adrenal			<50>				<50>				<50>				<50>			
	peliosis-like lesion		1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

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

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

b : Number of animals with lesion

(c) c : b / a * 100

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

STUDY NO. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 23

		Group Name	Control				1000 ppm				2000 ppm				4000 ppm			
		No. of Animals on Study	50				50				50				50			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
{Endocrine system}																		
adrenal			<50>				<50>				<50>				<50>			
	hyperplasia:cortical cell		0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia:medulla		0	0	0	0	0	0	0	0	1	2	0	0	0	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(4)	(0)	(0)	(0)	(2)	(0)	(0)
	focal fatty change:cortex		4	1	0	0	5	2	0	0	3	1	0	0	1	0	0	0
			(8)	(2)	(0)	(0)	(10)	(4)	(0)	(0)	(6)	(2)	(0)	(0)	(2)	(0)	(0)	(0)
{Reproductive system}																		
ovary			<50>				<50>				<50>				<50>			
	cyst		0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0
			(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)
uterus			<50>				<50>				<50>				<50>			
	cystic endometrial hyperplasia		0	1	0	0	2	1	0	0	2	3	0	0	3	3	0	0
			(0)	(2)	(0)	(0)	(4)	(2)	(0)	(0)	(4)	(6)	(0)	(0)	(6)	(6)	(0)	(0)
{Nervous system}																		
brain			<50>				<50>				<50>				<50>			
	hemorrhage		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(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

STUDY NO. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 24

Organ	Findings	Group Name No. of Animals on Study				Control				1000 ppm				2000 ppm				4000 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
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Special sense organs/appendage}																					
eye																					
	cataract	0	0	0	0	5	0	0	0	7	0	0	0 *	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	retinal atrophy	0	0	0	0	2	4	0	0 *	0	6	1	0 *	1	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(4)	(8)	(0)	(0)	(0)	(12)	(2)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	keratitis	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)
Harder gl																					
	degeneration	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)
	lymphocytic infiltration	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)
nasolacr d																					
	inflammation	10	0	0	0	18	0	0	0	11	0	0	0	6	0	0	0	6	0	0	0
		(20)	(0)	(0)	(0)	(36)	(0)	(0)	(0)	(22)	(0)	(0)	(0)	(12)	(0)	(0)	(0)	(12)	(0)	(0)	(0)
{Musculoskeletal system}																					
bone																					
	osteosclerosis	1	0	0	0	1	1	0	0	2	1	0	0	1	0	0	0	1	0	0	0
		(2)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(4)	(2)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)

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

TABLE L5

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

STUDY NO. : 0610
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

Organ	Findings	Control No. of Animals on Study Grade				1000 ppm 15				2000 ppm 7				4000 ppm 6			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																	
nasal cavit		<16>				<15>				< 7>				< 6>			
	thrombus	0	0	0	0	1	0	0	0	1	0	0	0	2	0	0	0
		(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(33)	(0)	(0)	(0)
	eosinophilic change:olfactory epithelium	4	12	0	0	2	12	1	0	0	7	0	0	1	5	0	0
		(25)	(75)	(0)	(0)	(13)	(80)	(7)	(0)	(0)	(100)	(0)	(0)	(17)	(83)	(0)	(0)
	eosinophilic change:respiratory epithelium	11	1	0	0	15	0	0	0	7	0	0	0	6	0	0	0
		(69)	(6)	(0)	(0)	(100)	(0)	(0)	(0)	(100)	(0)	(0)	(0)	(100)	(0)	(0)	(0)
	inflammation:foreign body	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(6)	(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	respiratory metaplasia:gland	2	0	0	0	3	0	0	0	0	0	0	0	1	0	0	0
		(13)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(17)	(0)	(0)	(0)
lung		<16>				<15>				< 7>				< 6>			
	inflammatory infiltration	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(0)	(0)	(0)
{Hematopoietic system}																	
bone marrow		<16>				<15>				< 7>				< 6>			
	increased hematopoiesis	1	1	0	0	5	0	0	0	1	0	0	0	0	1	0	0
		(6)	(6)	(0)	(0)	(33)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(0)	(17)	(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. : 0610
 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 No. of Animals on Study Grade				Control 16				1000 ppm 15				2000 ppm 7				4000 ppm 6			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Hematopoietic system)																					
spleen		<16>				<15>				< 7>				< 6>							
	deposit of hemosiderin	6 (38)	1 (6)	0 (0)	0 (0)	4 (27)	1 (7)	0 (0)	0 (0)	3 (43)	0 (0)	0 (0)	0 (0)	0 (0)	2 (33)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	fibrosis	0 (0)	1 (6)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	extramedullary hematopoiesis	1 (6)	1 (6)	0 (0)	0 (0)	2 (13)	5 (33)	0 (0)	0 (0)	2 (29)	0 (0)	0 (0)	0 (0)	0 (0)	2 (33)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
(Circulatory system)																					
heart		<16>				<15>				< 7>				< 6>							
	myocardial fibrosis	5 (31)	0 (0)	0 (0)	0 (0)	5 (33)	0 (0)	0 (0)	0 (0)	2 (29)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
(Digestive system)																					
oral cavity		<16>				<15>				< 7>				< 6>							
	squamous cell hyperplasia	0 (0)	1 (6)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	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. : 0610
 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

		Group Name	Control				1000 ppm				2000 ppm				4000 ppm			
		No. of Animals on Study	16				15				7				6			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
oral cavity	epidermal cyst		<16>				<15>				< 7>				< 6>			
		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
stomach	ulcer:forestomach		<16>				<15>				< 7>				< 6>			
		2	0	0	0	1	2	0	0	1	1	0	0	0	0	0	0	0
		(13)	(0)	(0)	(0)	(7)	(13)	(0)	(0)	(14)	(14)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia:forestomach	2	1	0	0	1	1	0	0	3	0	0	0	1	0	0	0	0
	(13)	(6)	(0)	(0)	(7)	(7)	(0)	(0)	(43)	(0)	(0)	(0)	(17)	(0)	(0)	(0)	(0)	
	erosion:glandular stomach	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0
		(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(33)	(0)	(0)	(0)	(0)
liver	herniation		<16>				<15>				< 7>				< 6>			
		3	0	0	0	4	0	0	0	1	0	0	0	2	0	0	0	0
		(19)	(0)	(0)	(0)	(27)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(33)	(0)	(0)	(0)	(0)
	necrosis:central	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)	
	necrosis:focal	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
		(6)	(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. : 0610
 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

		Group Name	Control				1000 ppm				2000 ppm				4000 ppm			
		No. of Animals on Study	16				15				7				6			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
liver			<16>				<15>				< 7>				< 6>			
	fatty change:central		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	granulation		2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(13)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	basophilic cell focus		2	0	0	0	3	0	0	0	0	0	0	0	0	1	0	0
			(13)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(17)	(0)	(0)
	bile duct hyperplasia		4	1	0	0	1	0	0	0	1	1	0	0	0	0	0	0
			(25)	(6)	(0)	(0)	(7)	(0)	(0)	(0)	(14)	(14)	(0)	(0)	(0)	(0)	(0)	(0)
pancreas			<16>				<15>				< 7>				< 6>			
	atrophy		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Urinary system}																		
kidney			<16>				<15>				< 7>				< 6>			
	deposit of hemosiderin		0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(17)	(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. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[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 16				1000 ppm 15				2000 ppm 7				4000 ppm 6			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																					
kidney		<16>				<15>				< 7>				< 6>							
	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)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	chronic nephropathy	4	0	2	0	4	1	0	0	2	0	1	0	0	1	0	0	0	1	0	0
		(25)	(0)	(13)	(0)	(27)	(7)	(0)	(0)	(29)	(0)	(14)	(0)	(0)	(17)	(0)	(0)	(0)	(0)	(0)	(0)
	mineralization:pelvis	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	urothelial hyperplasia:pelvis	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	dilated pelvis	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)
{Endocrine system}																					
pituitary		<16>				<15>				< 7>				< 6>							
	angiectasis	2	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		(13)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	cyst	0	0	0	0	1	0	0	0	1	0	0	0	0	1	0	0	0	1	0	0
		(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(0)	(17)	(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. : 0610
 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

		Group Name	Control				1000 ppm				2000 ppm				4000 ppm			
		No. of Animals on Study	16				15				7				6			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																		
pituitary			<16>				<15>				< 7>				< 6>			
	hyperplasia		0 (0)	1 (6)	0 (0)	0 (0)	1 (7)	1 (7)	0 (0)	0 (0)	1 (14)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	Rathke pouch		1 (6)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
thyroid			<16>				<15>				< 7>				< 6>			
	C-cell hyperplasia		1 (6)	0 (0)	0 (0)	0 (0)	1 (7)	0 (0)	0 (0)	0 (0)	1 (14)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
adrenal			<16>				<15>				< 7>				< 6>			
	hyperplasia:cortical cell		0 (0)	1 (6)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (14)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	focal fatty change:cortex		0 (0)	0 (0)	0 (0)	0 (0)	1 (7)	1 (7)	0 (0)	0 (0)	1 (14)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
{Reproductive system}																		
uterus			<16>				<15>				< 7>				< 6>			
	cystic endometrial hyperplasia		0 (0)	0 (0)	0 (0)	0 (0)	1 (7)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	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. : 0610
 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

		Group Name	Control				1000 ppm				2000 ppm				4000 ppm			
		No. of Animals on Study	16				15				7				6			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Nervous system}																		
brain			<16>				<15>				< 7>				< 6>			
	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)	(14)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Special sense organs/appendage}																		
eye			<16>				<15>				< 7>				< 6>			
	retinal atrophy		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)	(17)	(0)	(0)	(0)
	keratitis		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)
Harder gl			<16>				<15>				< 7>				< 6>			
	degeneration		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)
	lymphocytic infiltration		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(17)	(0)	(0)
nasolacr d			<16>				<15>				< 7>				< 6>			
	inflammation		2	0	0	0	4	0	0	0	2	0	0	0	0	0	0	0
			(13)	(0)	(0)	(0)	(27)	(0)	(0)	(0)	(29)	(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. : 0610
 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	Control				1000 ppm				2000 ppm				4000 ppm			
		No. of Animals on Study	16				15				7				6			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)

(Musculoskeletal system)

bone	osteosclerosis	<16>				<15>				< 7>				< 6>			
		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(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 L6

HISTOPATHOLOGICAL FINDINGS :
NON-NEOPLASTIC LESIONS : FEMALE
SACRIFICED ANIMALS

STUDY NO. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 12

Organ	Findings	Control No. of Animals on Study Grade				1000 ppm 35				2000 ppm 43				4000 ppm 44			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Integumentary system/appandage}																	
subcutis		<34>				<35>				<43>				<44>			
	epidermal cyst	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)	(2)	(0)	(0)	(0)	(2)	(0)	(0)
{Respiratory system}																	
nasal cavit		<34>				<35>				<43>				<44>			
	eosinophilic change:olfactory epithelium	1	31	2	0	0	30	4	0	0	43	0	0	3	40	0	0
		(3)	(91)	(6)	(0)	(0)	(86)	(11)	(0)	(0)	(100)	(0)	(0)	(7)	(91)	(0)	(0)
	eosinophilic change:respiratory epithelium	31	1	0	0	34	0	0	0	42	1	0	0	43	0	0	0
		(91)	(3)	(0)	(0)	(97)	(0)	(0)	(0)	(98)	(2)	(0)	(0)	(98)	(0)	(0)	(0)
	inflammation:foreign body	0	0	0	0	3	0	0	0	2	0	0	0	5	0	0	0
		(0)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(11)	(0)	(0)	(0)
	inflammation:respiratory epithelium	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	respiratory metaplasia:olfactory epithelium	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	respiratory metaplasia:gland	9	0	0	0	7	0	0	0	13	0	0	0	12	0	0	0
		(26)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(30)	(0)	(0)	(0)	(27)	(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. : 0610
 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				1000 ppm				2000 ppm				4000 ppm			
		No. of Animals on Study	34				35				43				44			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
nasal cavit			<34>				<35>				<43>				<44>			
	atrophy: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)	(2)	(0)	(0)
lung			<34>				<35>				<43>				<44>			
	mucocoele		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	inflammatory infiltration		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	bronchiolar-alveolar cell hyperplasia		0	0	0	0	2	0	0	0	3	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
{Hematopoietic system}																		
bone marrow			<34>				<35>				<43>				<44>			
	granulation		4	0	0	0	2	0	0	0	2	0	0	0	6	1	0	0
			(12)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(14)	(2)	(0)	(0)
	increased hematopoiesis		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)	(5)	(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. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 14

Organ	Findings	Group Name	Control				1000 ppm				2000 ppm				4000 ppm			
		No. of Animals on Study	34				35				43				44			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Hematopoietic system)																		
spleen			<34>				<35>				<43>				<44>			
	congestion		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)
	deposit of hemosiderin		17	1	0	0	15	0	0	0	17	3	0	0	20	2	0	0
			(50)	(3)	(0)	(0)	(43)	(0)	(0)	(0)	(40)	(7)	(0)	(0)	(45)	(5)	(0)	(0)
	extramedullary hematopoiesis		1	0	0	0	1	0	0	0	1	0	0	0	3	1	0	0
			(3)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(7)	(2)	(0)	(0)
(Circulatory system)																		
heart			<34>				<35>				<43>				<44>			
	myocardial fibrosis		3	0	0	0	6	0	0	0	5	0	0	0	6	0	0	0
			(9)	(0)	(0)	(0)	(17)	(0)	(0)	(0)	(12)	(0)	(0)	(0)	(14)	(0)	(0)	(0)
artery/aort			<34>				<35>				<43>				<44>			
	arteritis		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
(Digestive system)																		
tongue			<34>				<35>				<43>				<44>			
	arteritis		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe
 < a > a : Number of animals examined at the site
 b : 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. : 0610
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 No. of Animals on Study Grade				Control 34				1000 ppm 35				2000 ppm 43				4000 ppm 44			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																					
stomach		<34>				<35>				<43>				<44>							
	hyperplasia:forestomach	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	erosion:glandular stomach	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		(3)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
liver		<34>				<35>				<43>				<44>							
	herniation	3	0	0	0	3	0	0	0	10	0	0	0	9	0	0	0	0	0	0	0
		(9)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(23)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	necrosis:focal	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
		(3)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	lymphocytic infiltration	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
		(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)
	granulation	8	4	0	0	9	4	0	0	7	6	0	0	10	9	0	0	0	0	0	0
		(24)	(12)	(0)	(0)	(26)	(11)	(0)	(0)	(16)	(14)	(0)	(0)	(23)	(20)	(0)	(0)	(0)	(0)	(0)	(0)
	clear cell focus	0	2	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0
		(0)	(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)
	basophilic cell focus	19	2	0	0	23	1	0	0	19	7	0	0	24	3	0	0	0	0	0	0
		(56)	(6)	(0)	(0)	(66)	(3)	(0)	(0)	(44)	(16)	(0)	(0)	(55)	(7)	(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. : 0610
 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	Control				1000 ppm				2000 ppm				4000 ppm			
		No. of Animals on Study	34				35				43				44			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
liver			<34>				<35>				<43>				<44>			
	bile duct hyperplasia		5 (15)	1 (3)	0 (0)	0 (0)	8 (23)	0 (0)	0 (0)	0 (0)	9 (21)	1 (2)	0 (0)	0 (0)	10 (23)	1 (2)	0 (0)	0 (0)
	cholangiofibrosis		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)
pancreas			<34>				<35>				<43>				<44>			
	atrophy		2 (6)	0 (0)	0 (0)	0 (0)	3 (9)	0 (0)	0 (0)	0 (0)	4 (9)	1 (2)	0 (0)	0 (0)	5 (11)	1 (2)	1 (2)	0 (0)
	islet cell hyperplasia		0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	1 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
{Urinary system}																		
kidney			<34>				<35>				<43>				<44>			
	cyst		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	deposit of hemosiderin		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)

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. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 17

		Group Name	Control				1000 ppm				2000 ppm				4000 ppm			
		No. of Animals on Study	34				35				43				44			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																		
kidney			<34>				<35>				<43>				<44>			
	chronic nephropathy		26 (76)	4 (12)	0 (0)	0 (0)	23 (66)	8 (23)	0 (0)	0 (0)	28 (65)	9 (21)	2 (5)	0 (0)	33 (75)	4 (9)	1 (2)	0 (0)
	desquamation:pelvis		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)
	atypical tubule hyperplasia		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)
	dilated pelvis		0 (0)	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)
{Endocrine system}																		
pituitary			<34>				<35>				<43>				<44>			
	angiectasis		2 (6)	1 (3)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	4 (9)	2 (5)	0 (0)	0 (0)	1 (2)	1 (2)	0 (0)	0 (0)
	cyst		5 (15)	2 (6)	0 (0)	0 (0)	4 (11)	3 (9)	0 (0)	0 (0)	5 (12)	2 (5)	0 (0)	0 (0)	5 (11)	1 (2)	0 (0)	0 (0)
	hyperplasia		8 (24)	5 (15)	0 (0)	0 (0)	10 (29)	2 (6)	0 (0)	0 (0)	3 (7)	5 (12)	0 (0)	0 (0)	11 (25)	4 (9)	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. : 0610
 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				1000 ppm				2000 ppm				4000 ppm			
		No. of Animals on Study	34				35				43				44			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																		
pituitary			<34>				<35>				<43>				<44>			
	Rathke pouch		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)	(7)	(0)	(0)	(0)
thyroid			<34>				<35>				<43>				<44>			
	ultimibranhial body remanet		2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	C-cell hyperplasia		4	0	0	0	4	1	0	0	7	5	0	0	6	3	0	0
			(12)	(0)	(0)	(0)	(11)	(3)	(0)	(0)	(16)	(12)	(0)	(0)	(14)	(7)	(0)	(0)
	focal follicular cell hyperplasia		0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0
			(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)
adrenal			<34>				<35>				<43>				<44>			
	peliosis-like lesion		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)
	hyperplasia:medulla		0	0	0	0	0	0	0	0	1	2	0	0	0	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(5)	(0)	(0)	(0)	(2)	(0)	(0)
	focal fatty change:cortex		4	1	0	0	4	1	0	0	2	1	0	0	1	0	0	0
			(12)	(3)	(0)	(0)	(11)	(3)	(0)	(0)	(5)	(2)	(0)	(0)	(2)	(0)	(0)	(0)

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

STUDY NO. : 0610
 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 34				1000 ppm 35				2000 ppm 43				4000 ppm 44			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Reproductive system}																		
ovary	cyst		<34>				<35>				<43>				<44>			
			0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0
			(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)
uterus	cystic endometrial hyperplasia		<34>				<35>				<43>				<44>			
			0	1	0	0	1	1	0	0	2	3	0	0	3	3	0	0
			(0)	(3)	(0)	(0)	(3)	(3)	(0)	(0)	(5)	(7)	(0)	(0)	(7)	(7)	(0)	(0)
{Special sense organs/appendage}																		
eye	cataract		<34>				<35>				<43>				<44>			
			0	0	0	0	5	0	0	0	7	0	0	0 *	0	0	0	0
			(0)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(16)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	retinal atrophy		<34>				<35>				<43>				<44>			
			0	0	0	0	2	4	0	0 *	0	6	1	0 *	0	0	0	0
			(0)	(0)	(0)	(0)	(6)	(11)	(0)	(0)	(0)	(14)	(2)	(0)	(0)	(0)	(0)	(0)
Harder gl	lymphocytic infiltration		<34>				<35>				<43>				<44>			
			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)
nasolacr d	inflammation		<34>				<35>				<43>				<44>			
			8	0	0	0	14	0	0	0	9	0	0	0	6	0	0	0
			(24)	(0)	(0)	(0)	(40)	(0)	(0)	(0)	(21)	(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. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 20

Organ	Findings	Control				1000 ppm				2000 ppm				4000 ppm			
		No. of Animals on Study				35				43				44			
		Grade															
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)

(Musculoskeletal system)

bone	osteosclerosis	<34>				<35>				<43>				<44>			
		0	0	0	0	1	1	0	0	2	1	0	0	1	0	0	0
		(0)	(0)	(0)	(0)	(3)	(3)	(0)	(0)	(5)	(2)	(0)	(0)	(2)	(0)	(0)	(0)

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

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

b b : Number of animals with lesion

(c) c : b / a * 100

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

(HPT150)

BAIS4

TABLE M1

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

STUDY NO. : 0610
 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	1000 ppm	2000 ppm	4000 ppm
0 - 52	NO. OF EXAMINED ANIMALS		2	0	0	2
	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		1	0	0	0
	NO. OF MALIGNANT TUMORS		0	0	0	1
	NO. OF TOTAL TUMORS		1	0	0	1
53 - 78	NO. OF EXAMINED ANIMALS		4	1	0	1
	NO. OF ANIMALS WITH TUMORS		4	1	0	1
	NO. OF ANIMALS WITH SINGLE TUMORS		3	1	0	0
	NO. OF ANIMALS WITH MULTIPLE TUMORS		1	0	0	1
	NO. OF BENIGN TUMORS		4	1	0	1
	NO. OF MALIGNANT TUMORS		1	0	0	1
	NO. OF TOTAL TUMORS		5	1	0	2
79 - 104	NO. OF EXAMINED ANIMALS		11	7	12	5
	NO. OF ANIMALS WITH TUMORS		11	6	12	5
	NO. OF ANIMALS WITH SINGLE TUMORS		3	1	6	1
	NO. OF ANIMALS WITH MULTIPLE TUMORS		8	5	6	4
	NO. OF BENIGN TUMORS		19	8	15	8
	NO. OF MALIGNANT TUMORS		7	5	6	5
	NO. OF TOTAL TUMORS		26	13	21	13
105 - 105	NO. OF EXAMINED ANIMALS		33	42	38	42
	NO. OF ANIMALS WITH TUMORS		32	42	38	42
	NO. OF ANIMALS WITH SINGLE TUMORS		14	14	12	16
	NO. OF ANIMALS WITH MULTIPLE TUMORS		18	28	26	26
	NO. OF BENIGN TUMORS		56	78	66	63
	NO. OF MALIGNANT TUMORS		2	7	10	9
	NO. OF TOTAL TUMORS		58	85	76	72

STUDY NO. : 0610
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	1000 ppm	2000 ppm	4000 ppm
0 - 105	NO. OF EXAMINED ANIMALS		50	50	50	50
	NO. OF ANIMALS WITH TUMORS		48	49	50	49
	NO. OF ANIMALS WITH SINGLE TUMORS		21	16	18	18
	NO. OF ANIMALS WITH MULTIPLE TUMORS		27	33	32	31
	NO. OF BENIGN TUMORS		80	87	81	72
	NO. OF MALIGNANT TUMORS		10	12	16	16
	NO. OF TOTAL TUMORS		90	99	97	88

(HPT070)

BAIS4

TABLE M2

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

STUDY NO. : 0610
 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	1000 ppm	2000 ppm	4000 ppm
0 - 52	NO. OF EXAMINED ANIMALS		0	0	0	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		3	1	0	3
	NO. OF ANIMALS WITH TUMORS		3	1	0	3
	NO. OF ANIMALS WITH SINGLE TUMORS		3	1	0	2
	NO. OF ANIMALS WITH MULTIPLE TUMORS		0	0	0	1
	NO. OF BENIGN TUMORS		1	0	0	1
	NO. OF MALIGNANT TUMORS		2	1	0	3
	NO. OF TOTAL TUMORS		3	1	0	4
79 - 104	NO. OF EXAMINED ANIMALS		13	14	7	3
	NO. OF ANIMALS WITH TUMORS		13	13	7	3
	NO. OF ANIMALS WITH SINGLE TUMORS		10	11	5	1
	NO. OF ANIMALS WITH MULTIPLE TUMORS		3	2	2	2
	NO. OF BENIGN TUMORS		9	9	6	3
	NO. OF MALIGNANT TUMORS		7	7	4	2
	NO. OF TOTAL TUMORS		16	16	10	5
105 - 105	NO. OF EXAMINED ANIMALS		34	35	43	44
	NO. OF ANIMALS WITH TUMORS		20	23	22	26
	NO. OF ANIMALS WITH SINGLE TUMORS		12	16	16	17
	NO. OF ANIMALS WITH MULTIPLE TUMORS		8	7	6	9
	NO. OF BENIGN TUMORS		26	27	27	26
	NO. OF MALIGNANT TUMORS		4	4	3	10
	NO. OF TOTAL TUMORS		30	31	30	36

STUDY NO. : 0610
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	1000 ppm	2000 ppm	4000 ppm
0 - 105	NO. OF EXAMINED ANIMALS		50	50	50	50
	NO. OF ANIMALS WITH TUMORS		36	37	29	32
	NO. OF ANIMALS WITH SINGLE TUMORS		25	28	21	20
	NO. OF ANIMALS WITH MULTIPLE TUMORS		11	9	8	12
	NO. OF BENIGN TUMORS		36	36	33	30
	NO. OF MALIGNANT TUMORS		13	12	7	15
	NO. OF TOTAL TUMORS		49	48	40	45

(HPT070)

BAIS4

TABLE N1

HISTOPATHOLOGICAL FINDINGS :
NEOPLASTIC LESIONS : MALE

STUDY NO. : 0610
 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	1000 ppm 50	2000 ppm 50	4000 ppm 50
{Integumentary system/appandage}						
skin/app			<50>	<50>	<50>	<50>
	squamous cell papilloma		1 (2%)	1 (2%)	1 (2%)	0 (0%)
	trichoepithelioma		0 (0%)	0 (0%)	1 (2%)	0 (0%)
	keratoacanthoma		2 (4%)	1 (2%)	1 (2%)	2 (4%)
subcutis			<50>	<50>	<50>	<50>
	fibroma		4 (8%)	8 (16%)	5 (10%)	3 (6%)
	lipoma		1 (2%)	0 (0%)	1 (2%)	0 (0%)
	fibrosarcoma		0 (0%)	0 (0%)	1 (2%)	1 (2%)
	leiomyosarcoma		0 (0%)	1 (2%)	0 (0%)	0 (0%)
	histiocytic sarcoma		0 (0%)	0 (0%)	1 (2%)	0 (0%)
{Respiratory system}						
lung			<50>	<50>	<50>	<50>
	bronchiolar-alveolar adenoma		1 (2%)	1 (2%)	2 (4%)	0 (0%)
	bronchiolar-alveolar carcinoma		0 (0%)	0 (0%)	1 (2%)	0 (0%)
{Hematopoietic system}						
spleen			<50>	<50>	<50>	<50>
	histiocytic sarcoma		0 (0%)	1 (2%)	0 (0%)	0 (0%)

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

STUDY NO. : 0610
 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	1000 ppm 50	2000 ppm 50	4000 ppm 50
(Hematopoietic system)						
spleen	mononuclear cell leukemia		<50> 4 (8%)	<50> 1 (2%)	<50> 6 (12%)	<50> 3 (6%)
(Digestive system)						
salivary gl	adenocarcinoma		<50> 0 (0%)	<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)
small intes	adenocarcinoma		<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)
large intes	adenoma		<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)
liver	hepatocellular adenoma		<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)	<50> 2 (4%)
	histiocytic sarcoma		0 (0%)	1 (2%)	0 (0%)	0 (0%)
pancreas	islet cell adenoma		<50> 2 (4%)	<50> 6 (12%)	<50> 2 (4%)	<50> 2 (4%)
	islet cell adenocarcinoma		0 (0%)	1 (2%)	0 (0%)	0 (0%)
(Urinary system)						
kidney	lipoma		<50> 0 (0%)	<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)
	renal cell carcinoma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
urin bladd	transitional cell papilloma		<50> 1 (2%)	<50> 0 (0%)	<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. : 0610
 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	1000 ppm 50	2000 ppm 50	4000 ppm 50
{Endocrine system}						
pituitary			<50>	<50>	<50>	<50>
	adenoma		10 (20%)	13 (26%)	5 (10%)	3 (6%)
thyroid			<50>	<50>	<50>	<50>
	C-cell adenoma		7 (14%)	5 (10%)	6 (12%)	9 (18%)
	follicular adenoma		0 (0%)	2 (4%)	0 (0%)	0 (0%)
	C-cell carcinoma		1 (2%)	2 (4%)	3 (6%)	1 (2%)
adrenal			<50>	<50>	<50>	<50>
	pheochromocytoma		10 (20%)	1 (2%)	4 (8%)	0 (0%)
	pheochromocytoma:malignant		2 (4%)	1 (2%)	1 (2%)	0 (0%)
{Reproductive system}						
testis			<50>	<50>	<50>	<50>
	interstitial cell tumor		41 (82%)	44 (88%)	46 (92%)	47 (94%)
mammary gl			<50>	<50>	<50>	<50>
	adenoma		0 (0%)	2 (4%)	0 (0%)	0 (0%)
	fibroadenoma		0 (0%)	2 (4%)	1 (2%)	0 (0%)
prep/cli gl			<50>	<50>	<50>	<50>
	adenoma		0 (0%)	0 (0%)	2 (4%)	1 (2%)
{Nervous system}						
spinal cord			<50>	<50>	<50>	<50>
	glioma		0 (0%)	0 (0%)	2 (4%)	1 (2%)

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

STUDY NO. : 0610
 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	1000 ppm 50	2000 ppm 50	4000 ppm 50
{Special sense organs/appendage}						
Zymbal gl	Zymbal gland tumor:malignant		<50> 0 (0%)	<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)
{Musculoskeletal system}						
muscle	hemangioma		<50> 0 (0%)	<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)
bone	osteosarcoma		<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)
{Body cavities}						
peritoneum	mesothelioma		<50> 2 (4%)	<50> 2 (4%)	<50> 1 (2%)	<50> 7 (14%)
retroperit	paraganglioma:benign		<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)
	paraganglioma:malignant		1 (2%)	0 (0%)	0 (0%)	0 (0%)

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

(HPT085)

BAIS4

TABLE N2

**HISTOPATHOLOGICAL FINDINGS :
NEOPLASTIC LESIONS : FEMALE**

STUDY NO. : 0610
 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	1000 ppm 50	2000 ppm 50	4000 ppm 50
{Integumentary system/appandage}						
skin/app			<50>	<50>	<50>	<50>
	squamous cell papilloma		0 (0%)	1 (2%)	0 (0%)	0 (0%)
	trichoepithelioma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
	trichoepithelioma:malignant		0 (0%)	0 (0%)	0 (0%)	1 (2%)
subcutis			<50>	<50>	<50>	<50>
	fibroma		0 (0%)	1 (2%)	1 (2%)	0 (0%)
	lipoma		0 (0%)	0 (0%)	1 (2%)	0 (0%)
{Respiratory system}						
lung			<50>	<50>	<50>	<50>
	bronchiolar-alveolar adenoma		2 (4%)	0 (0%)	0 (0%)	2 (4%)
{Hematopoietic system}						
spleen			<50>	<50>	<50>	<50>
	mononuclear cell leukemia		9 (18%)	5 (10%)	4 (8%)	4 (8%)
{Digestive system}						
large intes			<50>	<50>	<50>	<50>
	fibroma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
liver			<50>	<50>	<50>	<50>
	hepatocellular adenoma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
	histiocytic sarcoma		0 (0%)	1 (2%)	0 (0%)	0 (0%)

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

STUDY NO. : 0610
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	1000 ppm 50	2000 ppm 50	4000 ppm 50
(Digestive system)						
pancreas	islet cell adenoma		<50> 0 (0%)	<50> 0 (0%)	<50> 2 (4%)	<50> 1 (2%)
(Endocrine system)						
pituitary	adenoma		<50> 12 (24%)	<50> 8 (16%)	<50> 7 (14%)	<50> 5 (10%)
	adenocarcinoma		1 (2%)	1 (2%)	0 (0%)	2 (4%)
thyroid	C-cell adenoma		<50> 6 (12%)	<50> 5 (10%)	<50> 4 (8%)	<50> 3 (6%)
	C-cell carcinoma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
adrenal	pheochromocytoma		<50> 0 (0%)	<50> 4 (8%)	<50> 4 (8%)	<50> 1 (2%)
	cortical adenoma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
	pheochromocytoma:malignant		0 (0%)	0 (0%)	1 (2%)	1 (2%)
(Reproductive system)						
ovary	granulosa-theca cell tumor		<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)
	granulosa cell tumor:malignant		0 (0%)	0 (0%)	0 (0%)	1 (2%)
uterus	leiomyoma		<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. : 0610
 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	1000 ppm 50	2000 ppm 50	4000 ppm 50
(Reproductive system)						
uterus	hemangioma		<50> 0 (0%)	<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)
	endometrial stromal polyp		6 (12%)	6 (12%)	3 (6%)	8 (16%)
	adenocarcinoma		0 (0%)	1 (2%)	0 (0%)	1 (2%)
	endometrial stromal sarcoma		3 (6%)	2 (4%)	1 (2%)	1 (2%)
vagina	squamous cell papilloma		<50> 0 (0%)	<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)
	polyp		0 (0%)	1 (2%)	0 (0%)	0 (0%)
mammary gl	fibroadenoma		<50> 8 (16%)	<50> 8 (16%)	<50> 5 (10%)	<50> 5 (10%)
	adenoma		<50> 1 (2%)	<50> 2 (4%)	<50> 4 (8%)	<50> 0 (0%)
(Nervous system)						
brain	glioma		<50> 0 (0%)	<50> 0 (0%)	<50> 0 (0%)	<50> 1 (2%)
	histiocytic sarcoma		<50> 0 (0%)	<50> 1 (2%)	<50> 0 (0%)	<50> 0 (0%)
(Special sense organs/appendage)						
Zymbal gl	Zymbal gland tumor:malignant		<50> 0 (0%)	<50> 1 (2%)	<50> 1 (2%)	<50> 1 (2%)

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

STUDY NO. : 0610
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	1000 ppm 50	2000 ppm 50	4000 ppm 50
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(Body cavities)

retroperit			<50>	<50>	<50>	<50>
	hemangiosarcoma		0 (0%)	0 (0%)	0 (0%)	1 (2%)

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

(HPT085)

BAIS4

TABLE O1

NEOPLASTIC LESIONS-INCIDENCE
AND STATISTICAL ANALYSIS : MALE

STUDY No. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 1

Group Name	Control	1000 ppm	2000 ppm	4000 ppm
SITE : subcutis TUMOR : fibroma				
Tumor rate				
Overall rates(a)	4/50(8.0)	8/50(16.0)	5/50(10.0)	3/50(6.0)
Adjusted rates(b)	8.82	16.67	10.87	7.14
Terminal rates(c)	2/33(6.1)	7/42(16.7)	4/38(10.5)	3/42(7.1)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.8857			
Prevalence method(d)	P = 0.7368			
Combined analysis(d)	P = 0.8427			
Cochran-Armitage test(e)	P = 0.4256			
Fisher Exact test(e)		P = 0.1783	P = 0.5000	P = 0.5000
SITE : subcutis TUMOR : fibroma, fibrosarcoma				
Tumor rate				
Overall rates(a)	4/50(8.0)	8/50(16.0)	5/50(10.0)	4/50(8.0)
Adjusted rates(b)	8.82	16.67	10.53	7.14
Terminal rates(c)	2/33(6.1)	7/42(16.7)	4/38(10.5)	3/42(7.1)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.5032			
Prevalence method(d)	P = 0.7607			
Combined analysis(d)	P = 0.7434			
Cochran-Armitage test(e)	P = 0.6680			
Fisher Exact test(e)		P = 0.1783	P = 0.5000	P = 0.6425
SITE : lung TUMOR : bronchiolar-alveolar adenoma, bronchiolar-alveolar carcinoma				
Tumor rate				
Overall rates(a)	1/50(2.0)	1/50(2.0)	3/50(6.0)	0/50(0.0)
Adjusted rates(b)	3.03	2.38	7.50	0.0
Terminal rates(c)	1/33(3.0)	1/42(2.4)	2/38(5.3)	0/42(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.7361			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.5920			
Fisher Exact test(e)		P = 0.7525	P = 0.3087	P = 0.5000

STUDY No. : 0610
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 2

Group Name	Control	1000 ppm	2000 ppm	4000 ppm
SITE : spleen TUMOR : mononuclear cell leukemia				
Tumor rate				
Overall rates(a)	4/50(8.0)	1/50(2.0)	6/50(12.0)	3/50(6.0)
Adjusted rates(b)	3.03	2.38	10.53	4.76
Terminal rates(c)	1/33(3.0)	1/42(2.4)	4/38(10.5)	2/42(4.8)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.7781			
Prevalence method(d)	P = 0.2904			
Combined analysis(d)	P = 0.5388			
Cochran-Armitage test(e)	P = 0.9254			
Fisher Exact test(e)		P = 0.1811	P = 0.3703	P = 0.5000
SITE : pancreas TUMOR : islet cell adenoma				
Tumor rate				
Overall rates(a)	2/50(4.0)	6/50(12.0)	2/50(4.0)	2/50(4.0)
Adjusted rates(b)	5.26	14.29	5.26	4.65
Terminal rates(c)	1/33(3.0)	6/42(14.3)	2/38(5.3)	1/42(2.4)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.7629			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.5459			
Fisher Exact test(e)		P = 0.1343	P = 0.6913	P = 0.6913
SITE : pancreas TUMOR : islet cell adenoma, islet cell adenocarcinoma				
Tumor rate				
Overall rates(a)	2/50(4.0)	7/50(14.0)	2/50(4.0)	2/50(4.0)
Adjusted rates(b)	5.26	16.67	5.26	4.65
Terminal rates(c)	1/33(3.0)	7/42(16.7)	2/38(5.3)	1/42(2.4)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.8023			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.4671			
Fisher Exact test(e)		P = 0.0798	P = 0.6913	P = 0.6913

STUDY No. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 3

Group Name	Control	1000 ppm	2000 ppm	4000 ppm
SITE : pituitary gland TUMOR : adenoma				
Tumor rate				
Overall rates(a)	10/50(20.0)	13/50(26.0)	5/50(10.0)	3/50(6.0)
Adjusted rates(b)	13.33	22.73	10.53	4.76
Terminal rates(c)	3/33(9.1)	9/42(21.4)	4/38(10.5)	2/42(4.8)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.9501			
Prevalence method(d)	P = 0.9796			
Combined analysis(d)	P = 0.9959			
Cochran-Armitage test(e)	P = 0.0110*			
Fisher Exact test(e)		P = 0.3176	P = 0.1312	P = 0.0357*
SITE : thyroid TUMOR : C-cell adenoma				
Tumor rate				
Overall rates(a)	7/50(14.0)	5/50(10.0)	6/50(12.0)	9/50(18.0)
Adjusted rates(b)	18.42	10.87	15.79	21.43
Terminal rates(c)	6/33(18.2)	4/42(9.5)	6/38(15.8)	9/42(21.4)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.2799			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.4211			
Fisher Exact test(e)		P = 0.3798	P = 0.5000	P = 0.3929
SITE : thyroid TUMOR : C-cell carcinoma				
Tumor rate				
Overall rates(a)	1/50(2.0)	2/50(4.0)	3/50(6.0)	1/50(2.0)
Adjusted rates(b)	2.86	4.08	7.89	2.38
Terminal rates(c)	0/33(0.0)	1/42(2.4)	3/38(7.9)	1/42(2.4)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.5353			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.9481			
Fisher Exact test(e)		P = 0.5000	P = 0.3087	P = 0.7525

STUDY No. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 4

Group Name	Control	1000 ppm	2000 ppm	4000 ppm
SITE : thyroid TUMOR : C-cell adenoma, C-cell carcinoma				
Tumor rate				
Overall rates(a)	8/50(16.0)	7/50(14.0)	9/50(18.0)	10/50(20.0)
Adjusted rates(b)	21.05	14.29	23.68	23.81
Terminal rates(c)	6/33(18.2)	5/42(11.9)	9/38(23.7)	10/42(23.8)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.2968			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.4839			
Fisher Exact test(e)		P = 0.5000	P = 0.5000	P = 0.3976
SITE : adrenal gland TUMOR : pheochromocytoma				
Tumor rate				
Overall rates(a)	10/50(20.0)	1/50(2.0)	4/50(8.0)	0/50(0.0)
Adjusted rates(b)	25.64	2.27	9.30	0.0
Terminal rates(c)	7/33(21.2)	0/42(0.0)	3/38(7.9)	0/42(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.9999			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.0017**			
Fisher Exact test(e)		P = 0.0039**	P = 0.0739	P = 0.0006**
SITE : adrenal gland TUMOR : pheochromocytoma, pheochromocytoma:malignant				
Tumor rate				
Overall rates(a)	12/50(24.0)	2/50(4.0)	5/50(10.0)	0/50(0.0)
Adjusted rates(b)	25.64	4.55	11.63	0.0
Terminal rates(c)	7/33(21.2)	1/42(2.4)	4/38(10.5)	0/42(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.9786 ?			
Prevalence method(d)	P = 0.9998			
Combined analysis(d)	P = 1.0000			
Cochran-Armitage test(e)	P = 0.0005**			
Fisher Exact test(e)		P = 0.0038**	P = 0.0542	P = 0.0001**

STUDY No. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 5

Group Name	Control	1000 ppm	2000 ppm	4000 ppm
SITE : testis TUMOR : interstitial cell tumor				
Tumor rate				
Overall rates(a)	41/50(82.0)	44/50(88.0)	46/50(92.0)	47/50(94.0)
Adjusted rates(b)	97.06	100.00	97.56	100.00
Terminal rates(c)	32/33(97.0)	42/42(100.0)	37/38(97.4)	42/42(100.0)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.1113			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.0561			
Fisher Exact test(e)		P = 0.2883	P = 0.1168	P = 0.0606
SITE : mammary gland TUMOR : adenoma, fibroadenoma				
Tumor rate				
Overall rates(a)	0/50(0.0)	4/50(8.0)	1/50(2.0)	0/50(0.0)
Adjusted rates(b)	0.0	9.52	2.38	0.0
Terminal rates(c)	0/33(0.0)	4/42(9.5)	0/38(0.0)	0/42(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.8210			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.3997			
Fisher Exact test(e)		P = 0.0587	P = 0.5000	P = N. C.
(HPT360A)				
BAIS4				

STUDY No. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 6

Group Name	Control	1000 ppm	2000 ppm	4000 ppm
SITE : peritoneum TUMOR : mesothelioma				
Tumor rate				
Overall rates(a)	2/50(4.0)	2/50(4.0)	1/50(2.0)	7/50(14.0)
Adjusted rates(b)	3.03	4.55	2.27	7.14
Terminal rates(c)	1/33(3.0)	1/42(2.4)	0/38(0.0)	3/42(7.1)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.0193*			
Prevalence method(d)	P = 0.1879			
Combined analysis(d)	P = 0.0213*			
Cochran-Armitage test(e)	P = 0.0268*			
Fisher Exact test(e)		P = 0.6913	P = 0.5000	P = 0.0798

(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 outcomes can not be 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. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 7

Group Name	Control	1000 ppm	2000 ppm	4000 ppm
SITE : spleen TUMOR : mononuclear cell leukemia				
Tumor rate				
Overall rates(a)	9/50(18.0)	5/50(10.0)	4/50(8.0)	4/50(8.0)
Adjusted rates(b)	11.76	5.71	4.65	4.55
Terminal rates(c)	4/34(11.8)	2/35(5.7)	2/43(4.7)	2/44(4.5)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.9025			
Prevalence method(d)	P = 0.8632			
Combined analysis(d)	P = 0.9573			
Cochran-Armitage test(e)	P = 0.1466			
Fisher Exact test(e)		P = 0.1940	P = 0.1168	P = 0.1168
SITE : pituitary gland TUMOR : adenoma				
Tumor rate				
Overall rates(a)	12/50(24.0)	8/50(16.0)	7/50(14.0)	5/50(10.0)
Adjusted rates(b)	17.65	17.14	11.36	11.36
Terminal rates(c)	6/34(17.6)	6/35(17.1)	4/43(9.3)	5/44(11.4)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.9930			
Prevalence method(d)	P = 0.8456			
Combined analysis(d)	P = 0.9848			
Cochran-Armitage test(e)	P = 0.0679			
Fisher Exact test(e)		P = 0.2270	P = 0.1540	P = 0.0542
SITE : pituitary gland TUMOR : adenoma, adenocarcinoma				
Tumor rate				
Overall rates(a)	13/50(26.0)	9/50(18.0)	7/50(14.0)	7/50(14.0)
Adjusted rates(b)	17.65	20.00	11.36	13.64
Terminal rates(c)	6/34(17.6)	7/35(20.0)	4/43(9.3)	6/44(13.6)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.9827			
Prevalence method(d)	P = 0.7975			
Combined analysis(d)	P = 0.9705			
Cochran-Armitage test(e)	P = 0.1354			
Fisher Exact test(e)		P = 0.2348	P = 0.1054	P = 0.1054

STUDY No. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 SEX : FEMALE

NEOPLASTIC LESIONS—INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 8

Group Name	Control	1000 ppm	2000 ppm	4000 ppm
SITE : thyroid TUMOR : C-cell adenoma				
Tumor rate				
Overall rates(a)	6/50(12.0)	5/50(10.0)	4/50(8.0)	3/50(6.0)
Adjusted rates(b)	14.71	14.29	8.70	6.82
Terminal rates(c)	5/34(14.7)	5/35(14.3)	3/43(7.0)	3/44(6.8)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.9013			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.2775			
Fisher Exact test(e)		P = 0.5000	P = 0.3703	P = 0.2435
SITE : thyroid TUMOR : C-cell adenoma, C-cell carcinoma				
Tumor rate				
Overall rates(a)	6/50(12.0)	5/50(10.0)	4/50(8.0)	4/50(8.0)
Adjusted rates(b)	14.71	14.29	8.70	9.09
Terminal rates(c)	5/34(14.7)	5/35(14.3)	3/43(7.0)	4/44(9.1)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.8151			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.4883			
Fisher Exact test(e)		P = 0.5000	P = 0.3703	P = 0.3703
SITE : adrenal gland TUMOR : pheochromocytoma				
Tumor rate				
Overall rates(a)	0/50(0.0)	4/50(8.0)	4/50(8.0)	1/50(2.0)
Adjusted rates(b)	0.0	9.52	9.30	2.27
Terminal rates(c)	0/34(0.0)	2/35(5.7)	4/43(9.3)	1/44(2.3)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.5222			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.9540			
Fisher Exact test(e)		P = 0.0587	P = 0.0587	P = 0.5000

STUDY No. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 9

Group Name	Control	1000 ppm	2000 ppm	4000 ppm
SITE : adrenal gland TUMOR : pheochromocytoma, pheochromocytoma:malignant				
Tumor rate				
Overall rates(a)	0/50(0.0)	4/50(8.0)	5/50(10.0)	2/50(4.0)
Adjusted rates(b)	0.0	9.52	11.63	4.55
Terminal rates(c)	0/34(0.0)	2/35(5.7)	5/43(11.6)	2/44(4.5)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.3311			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.5641			
Fisher Exact test(e)		P = 0.0587	P = 0.0281*	P = 0.2475
SITE : uterus TUMOR : endometrial stromal polyp				
Tumor rate				
Overall rates(a)	6/50(12.0)	6/50(12.0)	3/50(6.0)	8/50(16.0)
Adjusted rates(b)	15.00	11.43	6.52	17.02
Terminal rates(c)	4/34(11.8)	4/35(11.4)	2/43(4.7)	7/44(15.9)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.7534			
Prevalence method(d)	P = 0.2512			
Combined analysis(d)	P = 0.3455			
Cochran-Armitage test(e)	P = 0.5741			
Fisher Exact test(e)		P = 0.6202	P = 0.2435	P = 0.3871
SITE : uterus TUMOR : endometrial stromal sarcoma				
Tumor rate				
Overall rates(a)	3/50(6.0)	2/50(4.0)	1/50(2.0)	1/50(2.0)
Adjusted rates(b)	0.0	0.0	0.0	0.0
Terminal rates(c)	0/34(0.0)	0/35(0.0)	0/43(0.0)	0/44(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.8723			
Prevalence method(d)	P = -----			
Combined analysis(d)	P = 0.8723			
Cochran-Armitage test(e)	P = 0.2689			
Fisher Exact test(e)		P = 0.5000	P = 0.3087	P = 0.3087

STUDY No. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 SEX : FEMALE

NEOPLASTIC LESIONS—INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 10

Group Name	Control	1000 ppm	2000 ppm	4000 ppm
SITE : mammary gland TUMOR : fibroadenoma				
Tumor rate				
Overall rates(a)	8/50(16.0)	8/50(16.0)	5/50(10.0)	5/50(10.0)
Adjusted rates(b)	20.59	17.14	11.63	9.09
Terminal rates(c)	7/34(20.6)	6/35(17.1)	5/43(11.6)	4/44(9.1)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.4284			
Prevalence method(d)	P = 0.9501			
Combined analysis(d)	P = 0.9292			
Cochran-Armitage test(e)	P = 0.2863			
Fisher Exact test(e)		P = 0.6071	P = 0.2768	P = 0.2768
SITE : preputial/clitoral gland TUMOR : adenoma				
Tumor rate				
Overall rates(a)	1/50(2.0)	2/50(4.0)	4/50(8.0)	0/50(0.0)
Adjusted rates(b)	2.94	5.71	9.30	0.0
Terminal rates(c)	1/34(2.9)	2/35(5.7)	4/43(9.3)	0/44(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = ———			
Prevalence method(d)	P = 0.7995			
Combined analysis(d)	P = ———			
Cochran-Armitage test(e)	P = 0.5583			
Fisher Exact test(e)		P = 0.5000	P = 0.1811	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 outcomes cannot be 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. : 0610
 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	1000 ppm 50	2000 ppm 50	4000 ppm 50
Organ	Findings				
{Integumentary system/appandage}					
subcutis	leukemic cell infiltration	<50> 0	<50> 0	<50> 0	<50> 1
{Respiratory system}					
trachea	metastasis:thyroid tumor	<50> 0	<50> 0	<50> 0	<50> 1
lung	leukemic cell infiltration	<50> 3	<50> 1	<50> 4	<50> 3
	metastasis:adrenal tumor	0	0	1	0
	metastasis:thyroid tumor	0	0	0	1
	metastasis:subcutis tumor	0	0	2	0
{Hematopoietic system}					
bone marrow	leukemic cell infiltration	<50> 3	<50> 1	<50> 1	<50> 3
	metastasis:liver tumor	0	1	0	0
	metastasis:subcutis tumor	0	0	1	0
lymph node	leukemic cell infiltration	<50> 1	<50> 0	<50> 1	<50> 2
	metastasis:thyroid tumor	0	0	0	1
	metastasis:subcutis tumor	0	0	1	0
	metastasis:small intestine tumor	0	1	0	0

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

STUDY NO. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : MALE

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

PAGE : 2

Organ	Findings	Group Name No. of Animals on Study	Control 50	1000 ppm 50	2000 ppm 50	4000 ppm 50
{Digestive system}						
esophagus	metastasis:thyroid tumor		<50> 0	<50> 0	<50> 0	<50> 1
stomach	metastasis:small intestine tumor		<50> 0	<50> 1	<50> 0	<50> 0
liver	leukemic cell infiltration		<50> 3	<50> 1	<50> 4	<50> 3
	metastasis:subcutis tumor		0	0	1	0
pancreas	metastasis:small intestine tumor		<50> 0	<50> 1	<50> 0	<50> 0
{Urinary system}						
kidney	leukemic cell infiltration		<50> 1	<50> 0	<50> 0	<50> 1
{Endocrine system}						
pituitary	leukemic cell infiltration		<50> 1	<50> 0	<50> 0	<50> 0
{Nervous system}						
spinal cord	metastasis:bone tumor		<50> 0	<50> 1	<50> 0	<50> 0
{Musculoskeletal system}						
muscle	metastasis:subcutis tumor		<50> 0	<50> 0	<50> 1	<50> 0

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

STUDY NO. : 0610
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

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

PAGE : 3

		Group Name	Control	1000 ppm	2000 ppm	4000 ppm
		No. of Animals on Study	50	50	50	50
Organ	Findings					
{Body cavities}						
peritoneum			<50>	<50>	<50>	<50>
	metastasis:subcutis tumor		0	0	1	0
	metastasis:small intestine tumor		0	1	0	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. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 4

Organ	Findings	Group Name No. of Animals on Study	Control 50	1000 ppm 50	2000 ppm 50	4000 ppm 50
{Respiratory system}						
lung			<50>	<50>	<50>	<50>
	leukemic cell infiltration		8	3	2	2
	metastasis:adrenal tumor		0	0	1	0
	metastasis:thyroid tumor		0	0	0	1
	metastasis:zymbal gland tumor		0	0	1	1
{Hematopoietic system}						
bone marrow			<50>	<50>	<50>	<50>
	leukemic cell infiltration		3	3	2	2
	metastasis:liver tumor		0	1	0	0
lymph node			<50>	<50>	<50>	<50>
	leukemic cell infiltration		1	1	0	0
	metastasis:uterus tumor		1	0	0	0
	metastasis:zymbal gland tumor		0	0	1	0
{Circulatory system}						
heart			<50>	<50>	<50>	<50>
	leukemic cell infiltration		1	0	0	0
{Digestive system}						
large intes			<50>	<50>	<50>	<50>
	metastasis:uterus tumor		0	0	1	0

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

STUDY NO. : 0610
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
 REPORT TYPE : A1
 SEX : FEMALE

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

PAGE : 5

Organ	Findings	Group Name No. of Animals on Study	Control 50	1000 ppm 50	2000 ppm 50	4000 ppm 50
(Digestive system)						
liver	leukemic cell infiltration		<50> 8	<50> 4	<50> 3	<50> 4
	metastasis:uterus tumor		1	0	0	1
	metastasis:ovary tumor		0	0	0	1
pancreas	leukemic cell infiltration		<50> 0	<50> 1	<50> 0	<50> 1
(Urinary system)						
kidney	leukemic cell infiltration		<50> 5	<50> 2	<50> 1	<50> 1
(Reproductive system)						
ovary	metastasis:liver tumor		<50> 0	<50> 1	<50> 0	<50> 0
	leukemic cell infiltration		<50> 0	<50> 1	<50> 0	<50> 0
(Nervous system)						
brain	leukemic cell infiltration		<50> 2	<50> 1	<50> 0	<50> 0
	metastasis:pituitary tumor		1	1	0	2
	metastasis:zymlal gland 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. : 0610
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

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

PAGE : 6

Organ	Findings	Group Name No. of Animals on Study	Control 50	1000 ppm 50	2000 ppm 50	4000 ppm 50
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{Special sense organs/appendage}

Harder gl	leukemic cell infiltration	<50> 0	<50> 1	<50> 0	<50> 0
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{Body cavities}

peritoneum	metastasis:uterus tumor	<50> 1	<50> 0	<50> 0	<50> 1
------------	-------------------------	-----------	-----------	-----------	-----------

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

(JPT150)

BAIS4

TABLE Q

HISTORICAL CONTROL DATA OF SELECTED NEOPLASTIC
LESIONS IN JAPAN BIOASSAY RESEARCH CENTER :
F344/DuCr1Cr1j MALE RATS

TABLE Q HISTORICAL CONTROL DATA OF SELECTED NEOPLASTIC LESIONS
IN JAPAN BIOASSAY RESEARCH CENTER : F344/DuCr1Cr1J MALE RATS

Organs	No. of animals examined	No. of animals bearing tumor	Incidence (%)	Min. - Max. (%)
Tumors				
Peritoneum	2247			
Mesothelioma		59	2.6	0 - 8

45 carcinogenicity studies examined in Japan Bioassay Research Center were used.

Study No. :

0043, 0059, 0061, 0063, 0065, 0067, 0095, 0104, 0115, 0130, 0141, 0158, 0162, 0189,
0205, 0210, 0224, 0242, 0246, 0267, 0269, 0278, 0284, 0288, 0294, 0296, 0318, 0328,
0342, 0347, 0365, 0371, 0396, 0399, 0401, 0407, 0417, 0421, 0437, 0448, 0457, 0461,
0497, 0535, 0560

TABLE R

CAUSE OF DEATH OF RATS IN THE 2-YEAR
INHALATION STUDY OF ISOPROPYL ACETATE

STUDY NO. : 0610
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
SEX : MALE

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

PAGE : 1

Group Name	Control	1000 ppm	2000 ppm	4000 ppm
Number of Dead and Moribund Animal	17	8	12	8
no microscop confirm	4	1	1	1
cardiovascular les	0	0	1	0
chronic nephropathy	0	0	2	0
peritonitis	0	0	1	0
tumor d:leukemia	3	0	2	1
tumor d:subcutis	1	2	2	1
tumor d:small intes	0	1	0	0
tumor d:liver	0	1	0	0
tumor d:urin bladd	1	0	0	0
tumor d:pituitary	4	3	1	1
tumor d:adrenal	2	0	0	0
tumor d:prep/cli gl	0	0	1	0
tumor d:spinal cord	0	0	1	0
tumor d:peritoneum	1	0	0	4
tumor d:retroperit	1	0	0	0

(BI0120)

BAIS4

STUDY NO. : 0610
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]
SEX : FEMALE

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

PAGE : 2

Group Name	Control	1000 ppm	2000 ppm	4000 ppm
Number of Dead and Moribund Animal	16	15	7	6
no microscop confirm	2	1	0	0
tumor d:leukemia	5	3	2	2
tumor d:subcutis	0	0	1	0
tumor d:liver	0	1	0	0
tumor d:pituitary	6	2	2	1
tumor d:ovary	0	0	0	1
tumor d:uterus	3	4	1	2
tumor d:mammary gl	0	2	0	0
tumor d:periph nerv	0	1	0	0
tumor d:Zymbal gl	0	1	1	0

(BI0120)

BAIS4