

2-アミノエタノールのラットを用いた  
経口投与によるがん原性試験（混水試験）報告書

試験番号：0641

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TABLE A 1

SURVIVAL ANIMAL NUMBERS: MALE

STUDY NO. : 0641  
 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	50/50
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
800 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	50/50
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2400 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	50/50
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
7200 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	50/50
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of survival/ Number of effective animals																
Survival rate(%)																

(HAN360)

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SURVIVAL		ANIMAL NUMBERS	
1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24
25	26	27	28
29	30	31	32
33	34	35	36
37	38	39	40
41	42	43	44
45	46	47	48
49	50	51	52
53	54	55	56
57	58	59	60
61	62	63	64
65	66	67	68
69	70	71	72
73	74	75	76
77	78	79	80
81	82	83	84
85	86	87	88
89	90	91	92
93	94	95	96
97	98	99	100

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	
800 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	
2400 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	
7200 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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REPORT TYPE : A1 104

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Number of survival/ Number of effective animals	Survival rate(%)
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[illegible]

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	49/50	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	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
800 ppm	50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50
		98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
2400 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
7200 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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STUDY NO. : 0641  
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
REPORT TYPE : A1 104  
SEX : MALE

SURVIVAL ANIMAL NUMBERS

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Group Name	Animals At start	Administration (Weeks)													
		56	57	58	59	60	61	62	63	64	65	66	67	68	69
Control	50	49/50	49/50	49/50	49/50	49/50	48/50	48/50	48/50	48/50	48/50	48/50	47/50	47/50	47/50
		98.0	98.0	98.0	98.0	98.0	96.0	96.0	96.0	96.0	96.0	96.0	94.0	94.0	94.0
800 ppm	50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50
		98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
2400 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
7200 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)															
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SURVIVAL	ANIMAL NUMBERS
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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	47/50	47/50	47/50	47/50	47/50	47/50	47/50	47/50	47/50	47/50	47/50	47/50	46/50
		94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	92.0
800 ppm	50	49/50	49/50	49/50	49/50	49/50	48/50	47/50	47/50	47/50	47/50	47/50	47/50	47/50	47/50
		98.0	98.0	98.0	98.0	98.0	96.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0
2400 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	48/50	47/50	47/50	47/50	47/50
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.0	94.0	94.0	94.0
7200 ppm	50	50/50	50/50	50/50	50/50	50/50	48/50	48/50	48/50	48/50	48/50	48/50	48/50	48/50	48/50
		100.0	100.0	100.0	100.0	100.0	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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STUDY NO. : 0641

## SURVIVAL ANIMAL NUMBERS

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

SEX : MALE

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Group Name	Animals At start	Administration (Weeks)													
		84	85	86	87	88	89	90	91	92	93	94	95	96	97
Control	50	46/50	46/50	46/50	46/50	46/50	45/50	45/50	45/50	45/50	45/50	44/50	43/50	43/50	42/50
		92.0	92.0	92.0	92.0	92.0	90.0	90.0	90.0	90.0	90.0	88.0	86.0	86.0	84.0
800 ppm	50	47/50	47/50	47/50	47/50	47/50	47/50	47/50	47/50	47/50	47/50	47/50	46/50	46/50	46/50
		94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	94.0	92.0	92.0	92.0
2400 ppm	50	47/50	47/50	47/50	46/50	46/50	46/50	45/50	43/50	42/50	42/50	42/50	42/50	42/50	42/50
		94.0	94.0	94.0	92.0	92.0	92.0	90.0	86.0	84.0	84.0	84.0	84.0	84.0	84.0
7200 ppm	50	48/50	48/50	48/50	48/50	48/50	48/50	48/50	46/50	46/50	45/50	45/50	45/50	45/50	44/50
		96.0	96.0	96.0	96.0	96.0	96.0	96.0	92.0	92.0	90.0	90.0	90.0	90.0	88.0
Number of survival/ Number of effective animals															
Survival rate(%)															

(HAN360)

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STUDY NO. : 0641  
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
REPORT TYPE : A1 104  
SEX : MALE

SURVIVAL ANIMAL NUMBERS

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Group Name	Animals At start	Administration (Weeks)						
		98	99	100	101	102	103	104
Control	50	42/50	42/50	42/50	41/50	41/50	40/50	40/50
		84.0	84.0	84.0	82.0	82.0	80.0	80.0
800 ppm	50	46/50	46/50	46/50	46/50	46/50	45/50	45/50
		92.0	92.0	92.0	92.0	92.0	90.0	90.0
2400 ppm	50	42/50	41/50	41/50	41/50	40/50	39/50	38/50
		84.0	82.0	82.0	82.0	80.0	78.0	76.0
7200 ppm	50	44/50	44/50	42/50	41/50	41/50	40/50	40/50
		88.0	88.0	84.0	82.0	82.0	80.0	80.0
Number of survival/ Number of effective animals Survival rate(%)								
(HAN360)								

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**TABLE A 2**

**SURVIVAL ANIMAL NUMBERS: FEMALE**

[illegible]

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
800 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
2400 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
7200 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)															

STUDY NO. : 0641  
 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
800 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
2400 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
7200 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)		BA15													

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STUDY NO. : 0641

## SURVIVAL ANIMAL NUMBERS

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

REPORT TYPE : A1 104

SEX : FEMALE

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
800 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
2400 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
7200 ppm	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	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
Number of survival/ Number of effective animals Survival rate(%)															

(HAN360)

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STUDY NO. : 0641  
 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
800 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
2400 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
7200 ppm	50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50
		98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0
Number of survival/ Number of effective animals Survival rate(%)															

(HAN360)

BA1S4

STUDY NO. : 0641  
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
800 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	49/50	49/50	49/50	49/50
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.0	98.0	98.0	98.0
2400 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
7200 ppm	50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	47/50	47/50	47/50	47/50	47/50	47/50
		98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	94.0	94.0	94.0	94.0	94.0	94.0
Number of survival/ Number of effective animals Survival rate(%)															
(HAN360)															
BAISA															

BAIS4

SURVIVAL	ANIMAL NUMBERS
0-100%	10
75-99%	10
50-74%	10
25-49%	10
0-24%	10
Died	10
Total	60

Group Name	Animals At start	Administration (Weeks)														
		70	71	72	73	74	75	76	77	78	79	80	81	82	83	
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	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	100.0	100.0	98.0
800 ppm	50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	49/50	48/50	48/50	48/50	47/50	46/50	46/50	46/50
		98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	98.0	96.0	96.0	96.0	94.0	92.0	92.0
2400 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	50/50
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
7200 ppm	50	47/50	46/50	46/50	46/50	46/50	46/50	45/50	45/50	44/50	44/50	44/50	44/50	44/50	44/50	43/50
		94.0	92.0	92.0	92.0	92.0	92.0	90.0	90.0	88.0	88.0	88.0	88.0	88.0	88.0	86.0
Number of survival/ Number of effective animals																
Survival rate(%)																

BAIS4

STUDY NO. : 0641  
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	49/50	49/50	49/50	49/50	49/50	48/50	48/50	48/50	47/50	47/50	46/50	46/50	45/50	45/50
		98.0	98.0	98.0	98.0	98.0	96.0	96.0	96.0	94.0	94.0	92.0	92.0	90.0	90.0
800 ppm	50	46/50	46/50	44/50	44/50	43/50	43/50	43/50	43/50	43/50	43/50	43/50	43/50	43/50	42/50
		92.0	92.0	88.0	88.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	86.0	84.0
2400 ppm	50	50/50	50/50	50/50	50/50	50/50	50/50	49/50	49/50	49/50	48/50	48/50	48/50	47/50	47/50
		100.0	100.0	100.0	100.0	100.0	100.0	98.0	98.0	98.0	96.0	96.0	96.0	94.0	94.0
7200 ppm	50	43/50	43/50	42/50	41/50	40/50	39/50	38/50	38/50	38/50	38/50	38/50	38/50	37/50	37/50
		86.0	86.0	84.0	82.0	80.0	78.0	76.0	76.0	76.0	76.0	76.0	76.0	74.0	74.0
Number of survival/ Number of effective animals															
Survival rate(%)															

(HAN360)

BAIS4

STUDY NO. : 0641  
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	44/50	41/50	41/50	41/50	40/50	40/50	38/50
		88.0	82.0	82.0	82.0	80.0	80.0	76.0
800 ppm	50	42/50	42/50	41/50	40/50	39/50	38/50	38/50
		84.0	84.0	82.0	80.0	78.0	76.0	76.0
2400 ppm	50	46/50	46/50	46/50	44/50	44/50	43/50	42/50
		92.0	92.0	92.0	88.0	88.0	86.0	84.0
7200 ppm	50	36/50	35/50	35/50	35/50	35/50	34/50	33/50
		72.0	70.0	70.0	70.0	70.0	68.0	66.0
Number of survival/ Number of effective animals Survival rate(%)								
(HAN360)								

BAIS4

**TABLE B 1**

**CLINICAL OBSERVATION: MALE**

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
 ALL ANIMALS

SEX : MALE

PAGE : 1

Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0



STUDY NO. : 0641  
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
ALL ANIMALS

SEX : MALE

PAGE : 2

Clinical sign	Group Name	Administration Week-day													
		15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	1	1	1	1	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	1	1	1	1	1	0	0	0	0

STUDY NO. : 0641  
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
ALL ANIMALS

SEX : MALE

PAGE : 3

Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	1	1	1	1	1	1	1	1	1
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	3	3	3	3	3	3	3	3	3	3	3	3	3

STUDY NO. : 0641  
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
ALL ANIMALS

SEX : MALE

PAGE : 4

Clinical sign	Group Name	Administration Week-day													
		43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
DEATH	Control	0	0	0	1	1	1	1	1	1	1	1	1	1	1
	800 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	1	1	1	0	0	0	0
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	1	1	1	1	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	3	3	3	3	3	3	3	2	2	2	2	2	2	2

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
 ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		57-7	58-7	59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
DEATH	Control	1	1	1	1	2	2	2	2	2	2	3	3	3	3
	800 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	1	1	1	1	1	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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1

STUDY NO. : 0641  
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
DEATH	Control	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	800 ppm	1	1	1	1	2	3	3	3	3	3	3	3	3	3
	2400 ppm	0	0	0	0	0	0	0	0	1	2	2	2	2	2
	7200 ppm	0	0	0	0	1	1	1	1	1	1	1	1	1	1
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	1	1	1	1	1	1
	7200 ppm	0	0	0	0	1	1	1	1	1	1	1	1	1	1
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	1	1	1	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	1	1	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	1	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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	1	1	1	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
	800 ppm	1	1	1	1	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	2	0	0	0	0	0	0
	7200 ppm	1	1	1	1	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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	1	1	1	1	1	1	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1

STUDY NO. : 0641  
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
DEATH	Control	3	3	3	3	4	4	4	4	4	5	6	6	7	7
	800 ppm	3	3	3	3	3	3	3	3	3	3	4	4	4	4
	2400 ppm	2	2	2	2	2	3	4	5	5	5	5	5	5	5
	7200 ppm	1	1	1	1	1	1	2	2	3	3	3	3	3	3
MORIBUND SACRIFICE	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	1	1	2	2	2	2	3	3	3	3	3	3	3	3
	7200 ppm	1	1	1	1	1	1	2	2	2	2	2	2	3	3
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	1	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
SOILED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	2	2	1	1	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	2400 ppm	0	0	0	0	1	1	0	0	0	0	1	1	1	2
	7200 ppm	0	0	0	0	0	2	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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	1	1	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	1	1	0	0	0	0	0	0	1	1
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
 ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
DEATH	Control	7	7	8	8	8	8
	800 ppm	4	4	4	4	4	5
	2400 ppm	5	5	5	5	5	6
	7200 ppm	3	5	6	6	7	7
MORIBUND SACRIFICE	Control	1	1	1	1	2	2
	800 ppm	0	0	0	0	0	0
	2400 ppm	4	4	4	5	6	6
	7200 ppm	3	3	3	3	3	3
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0
	7200 ppm	1	1	1	1	0	0
SOILED	Control	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	1	1
	800 ppm	0	0	0	0	1	1
	2400 ppm	1	1	1	1	0	0
	7200 ppm	0	0	0	0	1	1
SOILED PERI-GENITALIA	Control	0	1	0	0	0	0
	800 ppm	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0
	7200 ppm	2	1	1	1	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0
	7200 ppm	1	1	0	0	0	0

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
 ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
CATARACT	Control	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
EXTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ORAL CAVITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0



STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
 ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
CATARACT	Control	1	1	1	1	1	1	1	1	1	1	2	2	2	2
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	7200 ppm	0	0	0	0	0	0	0	1	1	1	1	1	1	1
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
EXTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERT-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ORAL CAVITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
 ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
CATARACT	Control	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	7200 ppm	2	2	2	3	3	3	3	3	3	3	3	3	4	4
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	1	1	1	0	0	0	0	0	0	0	0	1	1	1
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	1	1	1	1	1	1	1	1	1	1	1	0	0	0
EXTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERT-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ORAL CAVITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
 ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
CATARACT	Control	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	1	1	2	2	2	2	2	2	2	2	2	2	2	2
	7200 ppm	4	4	4	4	5	5	5	5	5	5	5	5	5	5
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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	1	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	7200 ppm	0	0	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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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	1	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	1	1	1	1	1	1	1	1	1	1	1	1
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ORAL CAVITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]  
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
 ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		57-7	58-7	59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
CATARACT	Control	3	3	3	4	4	4	4	4	4	4	4	4	4	4
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	2	2	2	2	2	2	2	2	2	2	2	3	3	3
	7200 ppm	5	5	5	5	5	5	5	5	5	5	5	5	5	5
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	1	1	2	2	2	2	2	2	3	6	5	5	5	7
	800 ppm	0	0	1	1	1	1	1	1	1	1	1	1	1	1
	2400 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	7200 ppm	1	1	1	1	1	1	1	1	2	4	4	4	4	4
INTERNAL MASS	Control	0	0	1	1	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	Control	1	1	2	2	2	2	2	2	3	4	3	3	3	3
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ORAL CAVITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0641  
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
CATARACT	Control	5	5	5	5	5	5	5	5	5	5	5	5	4	4
	800 ppm	0	0	0	0	1	3	4	4	4	4	4	4	4	4
	2400 ppm	3	3	3	3	3	3	3	3	3	3	3	4	4	4
	7200 ppm	5	6	6	6	6	6	6	6	6	6	6	6	6	6
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	7	7	7	7	7	7	7	7	8	8	8	9	8	8
	800 ppm	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2400 ppm	1	2	2	2	2	2	2	3	3	3	3	4	4	5
	7200 ppm	4	4	4	5	4	5	6	7	7	7	6	7	7	8
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	Control	3	3	3	3	3	3	3	3	3	3	3	4	4	4
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ORAL CAVITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0641  
 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
CATARACT	Control	4	4	4	4	4	4	4	4	4	4	3	4	4	4
	800 ppm	4	4	4	4	4	4	4	4	5	5	5	6	6	6
	2400 ppm	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	7200 ppm	6	6	6	6	6	6	5	5	5	5	5	5	6	6
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	1	1	1	1	1	1	1	1	1	1	1	1	0	0
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	9	10	10	10	10	10	10	10	12	15	15	15	15	15
	800 ppm	2	2	2	2	2	3	2	3	2	2	2	3	3	4
	2400 ppm	5	6	5	6	6	5	3	3	3	3	4	4	4	4
	7200 ppm	8	8	8	8	8	9	9	8	7	7	7	9	8	8
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	Control	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	2400 ppm	1	1	1	1	1	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	1	0	0
M. ORAL CAVITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
 ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
CATARACT	Control	4	5	5	7	6	6
	800 ppm	6	6	6	7	7	7
	2400 ppm	4	4	4	4	3	3
	7200 ppm	6	7	6	6	6	6
CORNEAL OPACITY	Control	0	0	0	1	0	0
	800 ppm	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0
EXTERNAL MASS	Control	15	15	15	18	17	17
	800 ppm	4	4	4	4	5	5
	2400 ppm	4	4	4	8	9	8
	7200 ppm	8	8	7	7	6	6
INTERNAL MASS	Control	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0
M. NOSE	Control	5	5	5	5	5	5
	800 ppm	0	0	0	0	0	0
	2400 ppm	1	1	1	1	1	1
	7200 ppm	0	0	0	0	0	0
M. EYE	Control	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0
	7200 ppm	1	1	1	1	0	0
M. PERI-MOUTH	Control	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0
	7200 ppm	1	1	1	1	1	0
M. ORAL CAVITY	Control	1	1	1	1	0	0
	800 ppm	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
 ALL ANIMALS

SEX : MALE

PAGE : 17

Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
M. EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0



STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
 ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
M. EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. HYNDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0641  
 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				32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
		29-7	30-7	31-7												
M. EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	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	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
 ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
M. EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
 ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		57-7	58-7	59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
M. EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	1	1	1	1	1	1	1	1	1	1	1	1
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	1	1	1	1	1	1
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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	1	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	2	2	2	2	2
M. HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0641  
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
M. EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	7200 ppm	0	0	0	1	0	0	0	0	0	0	0	0	0	0
M. NECK	Control	0	0	0	0	0	0	0	0	1	1	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	1	1	1	1	1	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
M. ABDOMEN	Control	1	1	1	1	1	1	1	1	1	1	2	2	2	2
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	7200 ppm	0	0	0	0	0	1	1	1	1	1	1	1	1	1
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	1	2	2	2	2	2	2	2	2
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	2	2	2	2	2	2	2	2	2	2	2	2	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	2	2	2	2	2	2	2	2	2	2	2	2	2
	7200 ppm	2	2	2	2	2	2	3	3	3	3	3	4	4	4
M. HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
 ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
M. EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	1	1	2	2	2
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	1	1	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	1	1	0	0	0	0	0	0	0
M. NECK	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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	1	1	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	1	1	1	1	1	1	1	1	1	1	1	1	1
	7200 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. ABDOMEN	Control	2	3	3	3	3	3	3	3	3	4	4	4	4	4
	800 ppm	0	0	0	0	0	1	0	0	0	0	0	1	1	1
	2400 ppm	1	1	1	1	1	1	0	0	0	0	0	0	0	0
	7200 ppm	1	1	1	1	1	1	1	1	1	1	1	2	2	2
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	2	2	2	2	1	1	1	1	1	2	2	2	2	3
	2400 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	1	1	1	1	1	1	1	1	2	2	2	2	2	2
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	2	2	2	3	3	2	1	1	1	1	1	1	1	1
	7200 ppm	4	4	4	4	4	4	4	4	3	3	3	3	3	3
M. HINDLIMB	Control	0	0	0	0	0	0	0	0	1	2	2	2	2	2
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
 ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
M. EAR	Control	0	0	0	0	0	0
	800 ppm	1	1	1	1	1	1
	2400 ppm	0	0	0	0	0	0
	7200 ppm	1	1	1	1	1	1
M. PERI EAR	Control	2	2	2	2	2	2
	800 ppm	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0
M. NECK	Control	1	1	1	1	1	1
	800 ppm	0	0	0	0	0	0
	2400 ppm	0	0	0	0	1	1
	7200 ppm	0	0	0	0	0	0
M. BREAST	Control	1	1	1	2	0	0
	800 ppm	0	0	0	0	0	0
	2400 ppm	1	1	1	2	2	1
	7200 ppm	1	1	1	1	1	1
M. ABDOMEN	Control	4	4	4	4	4	4
	800 ppm	1	1	1	1	2	2
	2400 ppm	0	0	0	2	2	2
	7200 ppm	2	2	2	2	2	2
M. ANTERIOR DORSUM	Control	0	0	0	0	0	0
	800 ppm	3	3	3	3	3	3
	2400 ppm	1	1	1	2	2	2
	7200 ppm	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	2	2	2	4	4	4
	800 ppm	0	0	0	0	0	0
	2400 ppm	1	1	1	1	1	1
	7200 ppm	3	3	2	2	2	2
M. HINDLIMB	Control	2	2	2	2	2	2
	800 ppm	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0
M. GENITALIA	Control	0	0	0	0	1	1
	800 ppm	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
 ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
M. ANUS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. SCROTUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ULCER	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SWELLING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PROLAPSE OF PENIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0



STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
 ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
M. ANUS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. SCROTUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ULCER	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SWELLING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PROLAPSE OF PENIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
 ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
M. ANUS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. SCROTUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ULCER	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SWELLING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PROLAPSE OF PENIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
 ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
M. ANUS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. SCROTUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ULCER	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SWELLING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHIAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PROLAPSE OF PENIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0641  
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				60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
		57-7	58-7	59-7												
M. ANUS	Control	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. SCROTUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ULCER	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
SWELLING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	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	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PROLAPSE OF PENIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
 ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
M. ANUS	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. SCROTUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	1	1	1	0	0	0	0
EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ULCER	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	1	1	1	1	0	0	0	0	0	0	0	0	0	0
SWELLING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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	1	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PROLAPSE OF PENIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
 ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
M. ANUS	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. SCROTUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	1	1	1	1	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ULCER	Control	0	0	0	0	0	0	0	0	1	1	1	1	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	1	1	1	1	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SWELLING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PROLAPSE OF PENIS	Control	0	0	0	0	0	0	0	0	1	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]  
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
 ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
M. ANUS	Control	1	1	1	1	1	1
	800 ppm	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0
M. SCROTUM	Control	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0
EDEMA	Control	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	1
	800 ppm	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	1
ULCER	Control	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0
	2400 ppm	0	0	1	0	0	0
	7200 ppm	0	0	0	0	0	0
SWELLING	Control	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0
	2400 ppm	1	1	1	0	0	0
	7200 ppm	0	0	0	0	0	0
HEMORRHAGE	Control	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0
	2400 ppm	0	1	0	0	0	0
	7200 ppm	0	0	0	0	0	0
PROLAPSE OF PENIS	Control	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0

STUDY NO. : 0641  
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
ALL ANIMALS

SEX : MALE

PAGE : 33

Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BROWN URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OLIGO STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	50	50	50	50	50	50	50	50	50	50	49	49	49	49
	800 ppm	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	2400 ppm	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	7200 ppm	49	49	49	49	49	49	49	49	49	49	48	48	48	48



STUDY NO. : 0641  
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
ALL ANIMALS

SEX : MALE

PAGE : 34

Clinical sign	Group Name	Administration Week-day													
		15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BROWN URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OLIGO STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	49	49	49	49	49	49	49	49	49	49	48	48	48	48
	800 ppm	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	2400 ppm	50	50	50	50	50	50	50	49	49	49	49	49	49	49
	7200 ppm	48	48	48	48	48	46	46	45	45	46	47	47	47	47

STUDY NO. : 0641  
 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													
		29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BROWN URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OLIGO STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	47	47	47	47	47	47	47	47	47	47	47	47	47	47
	800 ppm	50	50	50	50	50	49	49	49	49	49	49	49	49	49
	2400 ppm	49	49	49	49	49	49	49	49	49	49	49	49	49	49
	7200 ppm	46	46	46	46	46	46	46	46	46	46	46	46	45	45

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
 ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BROWN URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OLIGO STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	47	47	47	46	46	46	46	46	46	45	45	45	45	45
	800 ppm	49	49	49	49	49	49	49	49	49	49	49	49	49	49
	2400 ppm	49	49	48	48	48	48	48	48	48	48	47	47	47	47
	7200 ppm	45	45	44	44	43	42	42	42	42	42	43	43	43	43

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
 ALL ANIMALS

SEX : MALE

PAGE : 37

Clinical sign	Group Name	Administration Week-day													
		57-7	58-7	59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
IRREGULAR BREATHING	Control	0	1	1	1	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	1	1	0	0	0	0	0	0	0	0	0	0	1
NOISY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	1	1	0	0	0	0	0	0	0	0	0	0
YELLOW URINE	Control	0	0	1	1	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BROWN URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	1	1	1	1	1	1	1	1	1	1
SMALL STOOL	Control	0	1	1	1	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	1	0	0	0	0	0	0	0	0	0	0	0	1
OLIGO STOOL	Control	0	1	1	1	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	1	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	45	44	43	42	42	42	42	42	41	38	37	37	38	37
	800 ppm	49	49	48	48	48	48	48	48	48	48	47	47	47	47
	2400 ppm	47	47	47	47	47	47	47	47	47	47	47	46	46	46
	7200 ppm	42	42	41	41	41	42	42	42	41	39	39	39	38	37

STUDY NO. : 0641  
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	1	1	1	1	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	7200 ppm	1	1	1	1	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
	800 ppm	1	1	1	1	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BROWN URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	1	1	1	1	1	1	1	1	1	1	0	0	0	0
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	1	1	1	2	1	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	1	0	0	0	1	0	0	0	1	1	1
	7200 ppm	1	1	2	3	1	0	0	0	0	0	0	0	0	1
OLIGO STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	1	1	1	1	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	1	0	0	0	0	0	1
	7200 ppm	0	1	2	1	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	36	36	36	36	36	36	36	36	35	35	34	33	33	33
	800 ppm	46	46	46	46	45	42	41	41	41	41	41	41	41	41
	2400 ppm	46	45	45	44	45	45	44	42	42	41	41	39	39	38
	7200 ppm	37	36	35	35	36	35	34	33	33	33	34	34	34	33

STUDY NO. : 0641  
 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
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	2400 ppm	0	0	0	0	1	1	0	0	0	0	0	0	0	1
	7200 ppm	0	1	1	1	1	1	0	0	1	1	1	1	1	1
NOISY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	1	1	2	2	2	2	0	0	0	0	1	1	0	0
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BROWN URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	2	2	2	2	1	1	1	2
SMALL STOOL	Control	0	1	1	1	1	1	1	2	2	2	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	1	2	1	1	1	1	0	0	0	0	1	1	1	2
	7200 ppm	1	2	3	2	2	2	0	0	0	2	2	2	1	1
OLIGO STOOL	Control	0	1	1	1	0	0	0	1	1	1	0	1	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	2400 ppm	1	1	0	0	0	0	0	0	0	0	1	1	1	1
	7200 ppm	0	1	2	2	2	3	1	1	1	1	1	2	1	1
NON REMARKABLE	Control	33	32	32	32	30	31	31	30	29	26	27	27	26	26
	800 ppm	41	41	41	41	41	41	41	40	40	39	39	37	37	36
	2400 ppm	38	37	37	37	37	37	36	35	35	35	33	33	33	32
	7200 ppm	33	32	32	32	32	31	31	32	32	32	32	29	30	30

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
 ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
IRREGULAR BREATHING	Control	0	1	0	1	0	0
	800 ppm	0	0	0	0	0	1
	2400 ppm	0	0	1	0	0	0
	7200 ppm	1	2	1	1	0	0
NOISY	Control	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0
RED URINE	Control	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0
YELLOW URINE	Control	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0
BROWN URINE	Control	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0
	7200 ppm	2	1	1	1	1	1
SMALL STOOL	Control	0	1	0	2	1	1
	800 ppm	0	0	0	2	1	2
	2400 ppm	1	2	2	1	0	0
	7200 ppm	2	2	2	2	1	1
OLIGO STOOL	Control	1	1	0	1	0	1
	800 ppm	0	0	0	1	1	1
	2400 ppm	0	1	2	1	0	0
	7200 ppm	2	1	1	1	0	0
NON REMARKABLE	Control	25	24	24	20	19	19
	800 ppm	36	36	36	35	34	33
	2400 ppm	32	32	32	28	27	27
	7200 ppm	30	27	27	27	26	26

**TABLE B 2**

**CLINICAL OBSERVATION: FEMALE**



STUDY NO. : 0641  
 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													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	1	1	3	3	3	3	5	5	6	6	6	6
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	1	1	1	1	1
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	1	1	1	1	1	1	1	1	1	1
CATARACT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0641  
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
REPORT TYPE : A1 104

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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
		15-7	16-7	17-7	18-7														
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	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	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	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	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	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	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	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	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	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	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	6	6	6	6	7	6	7	7	7	8	8	8	8	8	8	8	8	8
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CATARACT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0641  
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													
		29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	1	1	1	1	1	1	1
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	1	0	0	0	0	0	0	0	0
SOILED PERI GENITALIA	Control	0	0	0	0	0	0	0	0	1	1	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	8	8	9	11	17	18	20	20	16	16	23	23	21	21
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	1	1	1	1	1	1	1	1	1	1	1	1	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CATARACT	Control	0	1	1	1	1	1	1	1	1	1	1	1	1	1
	800 ppm	2	2	2	3	3	3	3	4	4	4	4	4	4	4
	2400 ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	1
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0641  
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													
		43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	1	1	1	1	1	1	1	1	1	1	1	1
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED PERI GENITALIA	Control	1	1	0	0	0	0	0	0	0	0	0	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	13	13	11	11	11	11	11	12	12	12	12	13	13	13
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CATARACT	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	800 ppm	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	2400 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	7200 ppm	0	0	1	1	1	1	1	1	1	1	1	1	1	1

STUDY NO. : 0641  
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
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	1	1	1	1	1
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	1	1	1	1	1	1	1	2	2	2	2	2	2	2
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	1	1	1	1	1	1	1
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	1	0	0	0	0	0	0	0	0	0	0	0	0	1
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	2	2	0	0	2
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED PERI GENITALIA	Control	1	1	1	1	1	1	1	1	1	0	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	13	13	13	13	13	18	18	16	16	15	14	13	13	15
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CATARACT	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	2
	800 ppm	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	2400 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	7200 ppm	1	1	1	1	2	2	2	2	2	2	3	3	3	3

STUDY NO. : 0641  
 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				74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
		71-7	72-7	73-7												
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	800 ppm	1	1	1	1	1	1	1	2	2	2	3	4	4	4	4
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	1	1	1	1	1	1	1	1	2	2	2	2	2	3	3
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	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	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
PILOERECTOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	1	3	3	1	1	1	1	1
	2400 ppm	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0
	7200 ppm	2	1	1	1	1	1	1	1	2	2	2	2	2	1	0
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED PERI GENITALIA	Control	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	15	12	12	11	11	14	14	13	13	13	13	13	12	11	9
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0
CATARACT	Control	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	800 ppm	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5
	2400 ppm	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2
	7200 ppm	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

STUDY NO. : 0641  
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
DEATH	Control	1	1	1	1	1	1	1	1	1	2	2	2	2	3
	800 ppm	4	4	4	5	5	5	5	5	5	5	5	5	6	6
	2400 ppm	0	0	0	0	0	1	1	1	2	2	2	3	3	4
	7200 ppm	4	5	6	7	8	9	9	9	9	9	9	9	9	10
MORIBUND SACRIFICE	Control	0	0	0	0	1	1	1	2	2	2	2	3	3	3
	800 ppm	0	2	2	2	2	2	2	2	2	2	2	2	2	2
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	3	3	3	3	3	3	3	3	3	3	3	4	4	4
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	1	1	1	0	0	0	0	0	0
	7200 ppm	0	1	1	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	1	1	1	1	0	0	0	0	0	0
	7200 ppm	9	8	7	8	9	7	7	7	7	7	7	4	4	5
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	3	3	3	3	4	4	5	5	5	5	5	5	5	5
	800 ppm	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	2400 ppm	2	2	2	2	2	2	2	2	2	2	2	2	3	3
	7200 ppm	3	3	3	3	3	3	3	3	3	3	3	2	2	2

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
 ALL ANIMALS

SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
DEATH	Control	5	5	5	6	6	7
	800 ppm	6	6	7	8	9	9
	2400 ppm	4	4	6	6	7	8
	7200 ppm	11	11	11	11	12	13
MORIBUND SACRIFICE	Control	4	4	4	4	4	5
	800 ppm	2	3	3	3	3	3
	2400 ppm	0	0	0	0	0	0
	7200 ppm	4	4	4	4	4	4
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0
SOILED	Control	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0
SOILED PERI GENITALIA	Control	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0
	7200 ppm	4	4	4	5	5	5
EXOPHTHALMOS	Control	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0
CATARACT	Control	5	5	5	5	5	4
	800 ppm	5	5	5	4	3	3
	2400 ppm	3	3	3	3	3	2
	7200 ppm	2	2	2	2	2	2



STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
 ALL ANIMALS

SEX : FEMALE

PAGE : 49

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
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ORAL CAVITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
 ALL ANIMALS

SEX : FEMALE

PAGE : 50

Clinical sign	Group Name	Administration Week-day				18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
		15-7	16-7	17-7												
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	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	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ORAL CAVITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	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	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]  
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
 ALL ANIMALS

SEX : FEMALE

PAGE : 51

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
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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	1	1	1	1	1	1
	800 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	1	0	0	0	0	0	0	0
M. EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ORAL CAVITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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	1	1	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
 ALL ANIMALS

SEX : FEMALE

PAGE : 52

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
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	1	1	1	1	1	2	2	2	1	1	1	1	1	1
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ORAL CAVITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EAR	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0641  
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
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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	2	3	3	3
	800 ppm	1	1	1	1	1	1	1	1	1	1	1	1	2	2
	2400 ppm	0	0	0	0	0	0	0	1	2	2	2	2	2	2
	7200 ppm	1	1	1	1	1	1	1	0	0	0	1	1	2	2
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EYE	Control	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ORAL CAVITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EAR	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
 ALL ANIMALS

SEX : FEMALE

PAGE : 54

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
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	1	1	1	1	1
EXTERNAL MASS	Control	3	3	3	3	3	3	3	3	3	3	3	3	5	5
	800 ppm	2	2	3	3	3	4	4	5	5	4	3	3	3	4
	2400 ppm	2	2	2	2	2	3	3	3	3	3	3	2	2	3
	7200 ppm	2	2	2	2	2	2	3	3	3	3	3	3	3	3
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EYE	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ORAL CAVITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EAR	Control	1	1	1	1	1	1	1	1	1	1	1	1	2	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	1
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	2400 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	2
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0641  
 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
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	1	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	5	5	5	5	4	4	5	4	4	5	5	5	5	5
	800 ppm	4	4	4	4	4	4	4	4	4	4	5	6	5	8
	2400 ppm	3	3	3	3	4	4	5	5	6	6	6	7	7	7
	7200 ppm	3	2	2	2	2	2	2	2	3	4	4	4	4	5
INTERNAL MASS	Control	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	1	0	0	0	0	0	0	1	0	0	0
M. EYE	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ORAL CAVITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EAR	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. PERI EAR	Control	1	1	1	1	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	1	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NECK	Control	0	0	0	0	1	1	1	1	1	1	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	1	1	1	1	1	1	1	1	1	1	2	2	2	5
	2400 ppm	2	2	2	2	2	2	2	3	3	3	3	3	3	3
	7200 ppm	0	0	0	0	0	0	0	0	1	1	1	1	1	2

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]  
 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
CORNEAL OPACITY	Control	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0
EXTERNAL MASS	Control	6	6	6	6	7	7
	800 ppm	9	9	9	8	9	9
	2400 ppm	8	8	8	8	9	8
	7200 ppm	5	6	6	6	5	5
INTERNAL MASS	Control	1	1	1	0	0	0
	800 ppm	0	0	0	0	0	3
	2400 ppm	1	1	0	0	0	0
	7200 ppm	0	0	1	1	1	0
M. EYE	Control	1	1	1	1	1	1
	800 ppm	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0
M. ORAL CAVITY	Control	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0
	7200 ppm	0	1	1	1	1	1
M. EAR	Control	1	1	1	1	1	1
	800 ppm	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0
	7200 ppm	1	1	1	1	1	1
M. PERI EAR	Control	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0
M. NECK	Control	1	1	1	1	1	1
	800 ppm	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0
M. BREAST	Control	2	2	2	2	2	2
	800 ppm	6	6	6	6	6	6
	2400 ppm	4	4	4	4	4	3
	7200 ppm	2	2	2	2	2	2



STUDY NO. : 0641  
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
ALL ANIMALS

SEX : FEMALE

PAGE : 57

Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JAUNDICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0641  
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													
		15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JAUNDICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0641  
 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													
		29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	1	1	1	1	0
JAUNDICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHIAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0641  
 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				46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
		43-7	44-7	45-7												
M. ABDOMEN	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	800 ppm	1	1	1		1	1	1	1	1	1	1	1	1	1	1
	2400 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	1	1	1		1	1	1	1	1	1	1	1	1	1	1
M. ANTERIOR. DORSUM	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0		0	0	1	1	1	0	0	0	0	0	0
	2400 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
EDEMA	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0		0	0	0	1	0	0	0	0	0	0	0
	800 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
JAUNDICE	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
HEMORRHIAGE	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0		0	1	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0641  
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
ALL ANIMALS

SEX : FEMALE

PAGE : 61

Clinical sign	Group Name	Administration Week-day													
		57-7	58-7	59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2400 ppm	0	0	0	0	0	0	0	1	1	1	0	0	0	0
	7200 ppm	1	1	1	1	1	1	1	0	0	0	0	0	1	1
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	2400 ppm	0	0	0	0	0	0	0	0	1	1	1	1	1	1
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	1	0	0	0	0	0	0	0
JAUNDICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0641  
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
ALL ANIMALS

SEX : FEMALE

PAGE : 62

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. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	800 ppm	1	1	2	2	2	2	2	2	2	1	1	1	1	1
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	1	1	2	2	2	1	1	1	1
	2400 ppm	0	0	0	0	0	1	1	1	1	1	1	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	800 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2400 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	800 ppm	1	1	1	1	1	1	1	1	1	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	1	1	0	0	0
JAUNDICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	1	1	1	1	1	1	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	1	1	1	1	1	1	1	1	1	1	1	1	1
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	1	1	0	0	0	1	1	1	1	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0641  
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]  
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
ALL ANIMALS

SEX : FEMALE

PAGE : 63

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. ABDOMEN	Control	1	1	1	1	1	1	2	2	2	2	2	1	1	1
	800 ppm	1	1	1	1	1	1	1	1	1	1	1	2	2	2
	2400 ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	1
	7200 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	2400 ppm	0	0	0	0	0	0	2	1	1	1	1	1	1	1
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	Control	1	1	1	1	1	1	1	0	0	1	1	2	2	2
	800 ppm	1	1	1	1	1	1	1	1	1	1	1	2	1	1
	2400 ppm	1	1	1	1	2	2	2	2	3	3	3	4	4	4
	7200 ppm	0	0	0	0	0	0	0	0	0	1	1	1	1	1
EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	1	1	1	0	0	0	0	0	0	0	0	0
ANEMIA	Control	1	0	1	1	1	1	1	0	0	1	1	0	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	1	0	0	0	0	0	0	0	2	2
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
JAUNDICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	1	1	1	1	0	0	0	0	0	0	0	0	0	0
	800 ppm	1	0	0	0	0	0	0	0	0	0	0	0	1	0
	2400 ppm	0	0	0	0	0	1	1	1	0	0	0	0	0	0
	7200 ppm	0	0	0	1	1	0	0	0	0	0	0	0	0	0

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
 ALL ANIMALS

SEX : FEMALE

PAGE : 64

Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
M. ABDOMEN	Control	1	1	1	1	2	3
	800 ppm	2	2	2	1	2	2
	2400 ppm	1	1	1	1	2	2
	7200 ppm	1	1	1	1	1	1
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0
	800 ppm	1	1	1	1	1	1
	2400 ppm	1	1	1	1	1	1
	7200 ppm	0	0	0	0	0	0
M. GENITALIA	Control	1	1	1	1	1	0
	800 ppm	1	1	1	1	1	1
	2400 ppm	4	4	4	4	4	4
	7200 ppm	1	1	1	1	0	0
EDEMA	Control	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0
ANEMIA	Control	1	1	1	0	0	1
	800 ppm	0	0	0	0	1	1
	2400 ppm	2	1	0	1	0	0
	7200 ppm	1	1	2	1	0	0
JAUNDICE	Control	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0
	2400 ppm	0	1	0	0	0	0
	7200 ppm	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0
	7200 ppm	1	1	1	1	1	1
HEMORRHAGE	Control	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0
	800 ppm	1	0	0	0	0	0
	2400 ppm	0	0	0	1	1	0
	7200 ppm	0	0	0	0	1	0



STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
 ALL ANIMALS

SEX : FEMALE

PAGE : 65

Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BROWN URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OLIGO-STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	800 ppm	50	50	50	50	50	50	50	50	50	49	49	49	49	49
	2400 ppm	50	50	50	50	49	50	50	50	50	50	50	50	50	50
	7200 ppm	50	50	49	49	47	47	47	47	45	45	44	44	44	44

(HAN190)

BATS 4

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
 ALL ANIMALS

SEX : FEMALE

PAGE : 66

Clinical sign	Group Name	Administration				Week-day										
		15-7	16-7	17-7		18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
RED URINE	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
BROWN URINE	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
SMALL STOOL	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
OLIGO-STOOL	Control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	50	50	50		50	50	50	50	50	50	50	50	50	50	50
	800 ppm	49	49	48		48	48	48	48	48	48	48	48	47	47	47
	2400 ppm	50	50	50		50	50	50	50	50	50	50	50	50	50	50
	7200 ppm	44	44	43		43	42	43	42	42	41	41	41	40	40	40

(HAN190)

BAIS 4

STUDY NO. : 0641  
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
ALL ANIMALS

SEX : FEMALE

PAGE : 67

Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BROWN URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OLIGO-STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	50	49	49	49	49	49	49	49	47	47	47	47	47	47
	800 ppm	47	47	47	46	46	46	46	45	45	45	45	45	45	45
	2400 ppm	50	50	50	50	50	50	49	49	49	49	49	49	49	49
	7200 ppm	40	40	40	38	32	30	28	28	32	32	25	25	27	27

(IAN190)

BAIS 4

STUDY NO. : 0641  
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
ALL ANIMALS

SEX : FEMALE

PAGE : 68

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
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BROWN URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OLIGO-STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	47	47	48	48	48	48	47	48	48	48	48	47	47	47
	800 ppm	45	45	45	45	45	44	44	44	45	45	45	45	45	45
	2400 ppm	49	49	49	49	49	49	49	49	49	49	49	49	49	49
	7200 ppm	35	35	35	35	35	35	35	34	34	34	34	33	33	33

(HAN190)

BAIS 4

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]  
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
 ALL ANIMALS

SEX : FEMALE

PAGE : 69

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
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BROWN URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	1	1	1	2	2	3	3	3
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	1	0	0	0	0	0	0	0
OLIGO-STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	Control	47	47	47	47	47	47	47	47	47	48	46	45	45	44
	800 ppm	45	45	45	45	45	45	45	45	45	44	44	44	43	42
	2400 ppm	49	49	49	49	49	49	49	48	47	47	47	47	47	47
	7200 ppm	33	33	33	34	34	29	28	29	29	29	29	29	28	26

(HAN190)

BAIS 4

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
 ALL ANIMALS

SEX : FEMALE

PAGE : 70

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
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 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
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BROWN URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	3	3	4	4	4	6	6	8	8	8	10	11	10	10
SMALL STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	1	1	1	0	0	0	0	0	1	1	1	1
OLIGO-STOOL	Control	0	0	1	0	0	0	0	0	0	0	0	2	2	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	2	2
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	1	1	1	1	0	0	1	1	0	1	1	2	1
NON REMARKABLE	Control	44	45	45	45	44	44	44	44	44	44	44	42	41	42
	800 ppm	42	42	41	41	40	40	39	36	36	37	37	37	36	35
	2400 ppm	47	47	47	47	47	46	46	45	45	46	46	47	47	46
	7200 ppm	25	27	26	27	27	23	23	22	22	22	22	21	21	22

(HAN190)

BAIS 4

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
 ALL ANIMALS

SEX : FEMALE

PAGE : 71

Clinical sign	Group Name	Administration Week-day													
		85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
RED URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	2	2	2
YELLOW URINE	Control	0	0	0	0	0	0	0	0	0	1	1	1	1	1
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BROWN URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7200 ppm	10	12	12	11	8	12	12	13	13	14	14	12	12	13
SMALL STOOL	Control	1	1	1	1	0	0	0	0	1	1	1	0	1	2
	800 ppm	0	1	1	0	0	0	0	0	0	0	0	0	0	1
	2400 ppm	0	0	0	0	1	1	1	1	0	0	0	0	1	0
	7200 ppm	2	1	1	1	1	0	0	0	0	0	1	0	0	0
OLIGO-STOOL	Control	1	1	1	1	0	0	0	0	0	1	1	0	0	0
	800 ppm	2	1	1	0	0	0	0	0	0	0	0	0	1	2
	2400 ppm	0	0	0	0	0	0	1	0	0	0	0	0	0	1
	7200 ppm	3	1	1	3	2	0	1	1	1	1	2	0	0	0
NON REMARKABLE	Control	41	41	41	41	40	40	38	37	37	35	35	34	34	32
	800 ppm	35	34	34	34	34	34	34	34	34	34	33	33	33	30
	2400 ppm	46	46	46	46	44	43	42	42	41	41	41	39	35	34
	7200 ppm	22	20	20	19	19	18	18	18	17	15	15	16	16	15

(HAN190)

BAIS 4

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
 ALL ANIMALS

SEX : FEMALE

PAGE : 72

Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
RED URINE	Control	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0
	7200 ppm	2	2	2	3	3	3
YELLOW URINE	Control	1	1	1	0	0	0
	800 ppm	0	0	0	0	0	1
	2400 ppm	1	1	0	0	0	0
	7200 ppm	0	0	1	1	0	0
BROWN URINE	Control	0	0	0	0	0	0
	800 ppm	0	0	0	0	0	0
	2400 ppm	0	0	0	0	0	0
	7200 ppm	12	13	12	15	15	14
SMALL STOOL	Control	2	2	2	1	1	1
	800 ppm	2	1	1	0	1	1
	2400 ppm	1	2	0	1	1	0
	7200 ppm	0	1	2	2	2	1
OLIGO-STOOL	Control	1	1	1	1	1	0
	800 ppm	2	1	1	0	1	1
	2400 ppm	2	3	1	2	1	0
	7200 ppm	0	1	2	3	4	3
NON REMARKABLE	Control	30	30	30	30	30	29
	800 ppm	29	29	28	28	26	24
	2400 ppm	32	32	33	32	32	32
	7200 ppm	15	13	12	10	9	9

(HAN190)

BAIS 4



TABLE C 1

BODY WEIGHT CHANGES AND  
SURVIVAL ANIMAL NUMBERS: MALE

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCrI:CrIj[F344/DuCrIj]  
 UNIT : g  
 REPORT TYPE : A1 104  
 SEX : MALE

MEAN BODY WEIGHTS AND SURVIVAL

PAGE : 1

Week-Day on Study	Control		800 ppm			2400 ppm			7200 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	121 (50)	50/50	121 (50)	100	50/50	121 (50)	100	50/50	121 (50)	100	50/50
1-7	150 (50)	50/50	149 (50)	99	50/50	149 (50)	99	50/50	141 (50)	94	50/50
2-7	181 (50)	50/50	179 (50)	99	50/50	179 (50)	99	50/50	170 (50)	94	50/50
3-7	206 (50)	50/50	204 (50)	99	50/50	205 (50)	100	50/50	194 (50)	94	50/50
4-7	225 (50)	50/50	224 (50)	100	50/50	225 (50)	100	50/50	214 (50)	95	50/50
5-7	240 (50)	50/50	239 (50)	100	50/50	241 (50)	100	50/50	229 (50)	95	50/50
6-7	253 (50)	50/50	252 (50)	100	50/50	254 (50)	100	50/50	241 (50)	95	50/50
7-7	264 (50)	50/50	263 (50)	100	50/50	265 (50)	100	50/50	252 (50)	95	50/50
8-7	274 (50)	50/50	273 (50)	100	50/50	274 (50)	100	50/50	260 (50)	95	50/50
9-7	283 (50)	50/50	282 (50)	100	50/50	282 (50)	100	50/50	266 (50)	94	50/50
10-7	290 (50)	50/50	291 (50)	100	50/50	290 (50)	100	50/50	273 (50)	94	50/50
11-7	296 (50)	50/50	299 (50)	101	50/50	299 (50)	101	50/50	279 (50)	94	50/50
12-7	303 (50)	50/50	306 (50)	101	50/50	305 (50)	101	50/50	285 (50)	94	50/50
13-7	309 (50)	50/50	312 (50)	101	50/50	312 (50)	101	50/50	290 (50)	94	50/50
14-7	315 (50)	50/50	318 (50)	101	50/50	317 (50)	101	50/50	295 (50)	94	50/50
18-7	333 (50)	50/50	336 (50)	101	50/50	334 (50)	100	50/50	309 (50)	93	50/50
22-7	347 (50)	50/50	350 (50)	101	50/50	348 (50)	100	50/50	320 (50)	92	50/50
26-7	359 (50)	50/50	362 (50)	101	50/50	360 (50)	100	50/50	329 (50)	92	50/50
30-7	372 (50)	50/50	373 (50)	100	50/50	370 (50)	99	50/50	337 (50)	91	50/50
34-7	382 (50)	50/50	385 (49)	101	49/50	380 (50)	99	50/50	345 (50)	90	50/50
38-7	390 (50)	50/50	394 (49)	101	49/50	388 (50)	99	50/50	351 (50)	90	50/50
42-7	396 (50)	50/50	401 (49)	101	49/50	394 (50)	99	50/50	356 (50)	90	50/50
46-7	404 (49)	49/50	406 (49)	100	49/50	399 (50)	99	50/50	359 (50)	89	50/50
50-7	411 (49)	49/50	411 (49)	100	49/50	405 (50)	99	50/50	363 (50)	88	50/50
54-7	417 (49)	49/50	418 (49)	100	49/50	410 (50)	98	50/50	366 (50)	88	50/50
58-7	422 (49)	49/50	424 (49)	100	49/50	416 (50)	99	50/50	369 (50)	87	50/50
62-7	430 (48)	48/50	430 (49)	100	49/50	421 (50)	98	50/50	374 (50)	87	50/50
66-7	434 (48)	48/50	435 (49)	100	49/50	426 (50)	98	50/50	377 (50)	87	50/50
70-7	438 (47)	47/50	434 (49)	99	49/50	429 (50)	98	50/50	379 (50)	87	50/50
74-7	440 (47)	47/50	434 (49)	99	49/50	433 (50)	98	50/50	379 (50)	86	50/50
78-7	443 (47)	47/50	442 (47)	100	47/50	433 (50)	98	50/50	385 (48)	87	48/50
82-7	447 (47)	47/50	446 (47)	100	47/50	436 (47)	98	47/50	385 (48)	86	48/50
86-7	440 (46)	46/50	448 (47)	102	47/50	437 (47)	99	47/50	386 (48)	88	48/50
90-7	438 (45)	45/50	448 (47)	102	47/50	439 (45)	100	45/50	383 (48)	87	48/50
94-7	435 (44)	44/50	444 (47)	102	47/50	436 (42)	100	42/50	386 (45)	89	45/50
98-7	434 (42)	42/50	441 (46)	102	46/50	435 (42)	100	42/50	386 (44)	89	44/50
102-7	428 (41)	41/50	433 (46)	101	46/50	439 (40)	103	40/50	386 (41)	90	41/50
104-7	428 (40)	40/50	426 (45)	100	45/50	431 (38)	101	38/50	387 (40)	90	40/50

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

TABLE C 2

BODY WEIGHT CHANGES AND  
SURVIVAL ANIMAL NUMBERS: FEMALE

STUDY NO. : 0641  
 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			800 ppm		2400 ppm			7200 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	100 (50)	50/50	100 (50)	100	50/50	100 (50)	100	50/50	100 (50)	100	50/50
1-7	116 (50)	50/50	115 (50)	99	50/50	115 (50)	99	50/50	110 (50)	95	50/50
2-7	128 (50)	50/50	127 (50)	99	50/50	128 (50)	100	50/50	123 (50)	96	50/50
3-7	137 (50)	50/50	135 (50)	99	50/50	135 (50)	99	50/50	132 (50)	96	50/50
4-7	145 (50)	50/50	143 (50)	99	50/50	144 (50)	99	50/50	138 (50)	95	50/50
5-7	150 (50)	50/50	149 (50)	99	50/50	149 (50)	99	50/50	144 (50)	96	50/50
6-7	155 (50)	50/50	154 (50)	99	50/50	155 (50)	100	50/50	148 (50)	95	50/50
7-7	160 (50)	50/50	158 (50)	99	50/50	159 (50)	99	50/50	152 (50)	95	50/50
8-7	164 (50)	50/50	162 (50)	99	50/50	163 (50)	99	50/50	156 (50)	95	50/50
9-7	167 (50)	50/50	165 (50)	99	50/50	166 (50)	99	50/50	159 (50)	95	50/50
10-7	171 (50)	50/50	168 (50)	98	50/50	170 (50)	99	50/50	162 (50)	95	50/50
11-7	173 (50)	50/50	172 (50)	99	50/50	173 (50)	100	50/50	165 (50)	95	50/50
12-7	177 (50)	50/50	176 (50)	99	50/50	176 (50)	99	50/50	167 (50)	94	50/50
13-7	178 (50)	50/50	177 (50)	99	50/50	178 (50)	100	50/50	169 (50)	95	50/50
14-7	180 (50)	50/50	179 (50)	99	50/50	180 (50)	100	50/50	170 (50)	94	50/50
18-7	186 (50)	50/50	187 (50)	101	50/50	188 (50)	101	50/50	176 (50)	95	50/50
22-7	191 (50)	50/50	192 (50)	101	50/50	193 (50)	101	50/50	180 (50)	94	50/50
26-7	196 (50)	50/50	197 (50)	101	50/50	199 (50)	102	50/50	185 (50)	94	50/50
30-7	202 (50)	50/50	203 (50)	100	50/50	205 (50)	101	50/50	189 (50)	94	50/50
34-7	207 (50)	50/50	210 (50)	101	50/50	210 (50)	101	50/50	192 (50)	93	50/50
38-7	210 (50)	50/50	213 (50)	101	50/50	213 (50)	101	50/50	195 (49)	93	49/50
42-7	215 (50)	50/50	218 (50)	101	50/50	219 (50)	102	50/50	199 (49)	93	49/50
46-7	218 (50)	50/50	221 (50)	101	50/50	222 (50)	102	50/50	201 (49)	92	49/50
50-7	224 (50)	50/50	226 (50)	101	50/50	226 (50)	101	50/50	203 (49)	91	49/50
54-7	227 (50)	50/50	230 (50)	101	50/50	230 (50)	101	50/50	207 (49)	91	49/50
58-7	231 (50)	50/50	234 (50)	101	50/50	234 (50)	101	50/50	209 (49)	90	49/50
62-7	238 (50)	50/50	241 (50)	101	50/50	243 (50)	102	50/50	212 (49)	89	49/50
66-7	244 (50)	50/50	247 (49)	101	49/50	249 (50)	102	50/50	217 (47)	89	47/50
70-7	250 (50)	50/50	253 (49)	101	49/50	254 (50)	102	50/50	219 (47)	88	47/50
74-7	255 (50)	50/50	258 (49)	101	49/50	259 (50)	102	50/50	222 (46)	87	46/50
78-7	261 (50)	50/50	264 (48)	101	48/50	264 (50)	101	50/50	223 (44)	85	44/50
82-7	265 (49)	49/50	270 (46)	102	46/50	270 (50)	102	50/50	224 (44)	85	44/50
86-7	267 (49)	49/50	273 (44)	102	44/50	275 (50)	103	50/50	227 (42)	85	42/50
90-7	273 (48)	48/50	280 (43)	103	43/50	274 (49)	100	49/50	232 (38)	85	38/50
94-7	278 (46)	46/50	284 (43)	102	43/50	281 (48)	101	48/50	230 (38)	83	38/50
98-7	279 (44)	44/50	284 (42)	102	42/50	283 (46)	101	46/50	227 (36)	81	36/50
102-7	280 (40)	40/50	285 (39)	102	39/50	284 (44)	101	44/50	222 (35)	79	35/50
104-7	280 (38)	38/50	281 (38)	100	38/50	283 (42)	101	42/50	221 (33)	79	33/50

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

Av. Wt.: g

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

**TABLE C 3**

**BODY WEIGHT CHANGES: MALE**

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 UNIT : g  
 REPORT TYPE : AI 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	121±	5	150±	7	181±	9	206±	11	225±	12	240±	13
800 ppm	121±	5	149±	7	179±	11	204±	12	224±	14	239±	14
2400 ppm	121±	5	149±	7	179±	10	205±	11	225±	12	241±	13
7200 ppm	121±	5	141±	7**	170±	10**	194±	12**	214±	12**	229±	13**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0641  
 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	264±	15	274±	16	283±	16	290±	16	296±	18	303±	18	309±	18		
800 ppm	263±	17	273±	18	282±	17	291±	18	299±	18	306±	18	312±	18		
2400 ppm	265±	15	274±	15	282±	16	290±	16	299±	16	305±	17	312±	17		
7200 ppm	252±	13**	260±	14**	266±	14**	273±	15**	279±	16**	285±	16**	290±	16**		

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0641  
 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	315±	19	333±	19	347±	21	359±	21	372±	22	382±	24	390±	26		
800 ppm	318±	17	336±	17	350±	18	362±	19	373±	19	385±	20	394±	20		
2400 ppm	317±	17	334±	18	348±	19	360±	21	370±	21	380±	22	388±	23		
7200 ppm	295±	16**	309±	17**	320±	19**	329±	20**	337±	22**	345±	23**	351±	24**		

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

Test of Dunnett

(HAN260)

BAIS 4



STUDY NO. : 0641  
 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	396±	27	404±	24	411±	23	417±	23	422±	23	430±	23
800 ppm	401±	21	406±	22	411±	24	418±	23	424±	23	430±	24
2400 ppm	394±	24	399±	25	405±	26	410±	26	416±	27	421±	27
7200 ppm	356±	25**	359±	27**	363±	29**	366±	28**	369±	31**	374±	29**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr.j]  
 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	438±	23	440±	24	443±	28	447±	46	440±	31	438±	35
800 ppm	434±	30	434±	38	442±	26	446±	27	448±	26	448±	27
2400 ppm	429±	28	433±	28	433±	29	436±	28	437±	34	439±	27
7200 ppm	379±	30**	379±	42**	385±	29**	385±	31**	386±	34**	383±	41**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0641  
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	434±	31	428±	41	428±	42
800 ppm	441±	29	433±	32	426±	40
2400 ppm	435±	50	439±	82	431±	26
7200 ppm	386±	49**	386±	61**	387±	59**

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

Test of Dunnett

(HAN260)

BAIS 4

**TABLE C 4**

**BODY WEIGHT CHANGES: FEMALE**

STUDY NO. : 0641  
 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	100±	4	116±	5	128±	6	137±	6	145±	7	150±	7
800 ppm	100±	4	115±	4	127±	5	135±	6	143±	6	149±	7
2400 ppm	100±	4	115±	4	128±	4	135±	5	144±	6	149±	7
7200 ppm	100±	4	110±	5**	123±	5**	132±	6**	138±	7**	144±	7**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 UNIT : g  
 REPORT TYPE : AI 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	160±	8	164±	8	167±	9	171±	9	173±	10	177±	10
800 ppm	158±	8	162±	8	165±	8	168±	8	172±	9	176±	9
2400 ppm	159±	7	163±	8	166±	8	170±	9	173±	9	176±	9
7200 ppm	152±	8**	156±	9**	159±	9**	162±	9**	165±	10**	167±	9**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0641  
 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	180±	10	186±	10	191±	11	196±	11	202±	13	207±	12
800 ppm	179±	9	187±	10	192±	10	197±	10	203±	11	210±	13
2400 ppm	180±	10	188±	10	193±	11	199±	11	205±	12	210±	12
7200 ppm	170±	10**	176±	10**	180±	10**	185±	11**	189±	10**	192±	12**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0641  
 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±	13	218±	14	224±	15	227±	15	231±	15	238±	18
800 ppm	218±	13	221±	14	226±	15	230±	16	234±	17	241±	18
2400 ppm	219±	14	222±	14	226±	14	230±	15	234±	16	243±	18
7200 ppm	199±	12**	201±	13**	203±	15**	207±	15**	209±	16**	212±	18**

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

Test of Dunnett

(HAN260)

BAIS 4



STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 UNIT : g  
 REPORT TYPE : AI 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	250±	20	255±	21	261±	21	265±	22	267±	25	273±	26
800 ppm	253±	22	258±	23	264±	23	270±	23	273±	24	280±	24
2400 ppm	254±	21	259±	22	264±	26	270±	30	275±	29	274±	28
7200 ppm	219±	20**	222±	23**	223±	24**	224±	26**	227±	25**	232±	23**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0641  
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	279±	29	280±	31	280±	31
800 ppm	284±	21	285±	24	281±	29
2400 ppm	283±	28	284±	28	283±	30
7200 ppm	227±	22**	222±	27**	221±	25**

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

Test of Dunnett

(HAN260)

BAIS 4

TABLE D 1

FOOD CONSUMPTION CHANGES AND  
SURVIVAL ANIMAL NUMBERS: MALE

STUDY NO. : 0641  
 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		800 ppm		2400 ppm		7200 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	13.3 (50)	50/50	13.3 (50)	100	50/50	13.4 (50)	101	50/50	11.8 (50)	89	50/50
2-7	15.0 (50)	50/50	15.1 (50)	101	50/50	14.7 (50)	98	50/50	13.6 (50)	91	50/50
3-7	15.7 (50)	50/50	15.5 (50)	99	50/50	15.5 (50)	99	50/50	14.2 (50)	90	50/50
4-7	16.0 (50)	50/50	15.7 (50)	98	50/50	15.6 (50)	98	50/50	14.4 (50)	90	50/50
5-7	15.6 (50)	50/50	15.6 (50)	100	50/50	15.6 (50)	100	50/50	14.5 (50)	93	50/50
6-7	15.1 (50)	50/50	15.1 (50)	100	50/50	15.2 (50)	101	50/50	14.2 (50)	94	50/50
7-7	14.9 (50)	50/50	15.0 (50)	101	50/50	14.9 (50)	100	50/50	14.0 (50)	94	50/50
8-7	15.4 (50)	50/50	15.7 (50)	102	50/50	15.3 (50)	99	50/50	14.1 (50)	92	50/50
9-7	14.9 (50)	50/50	15.4 (50)	103	50/50	15.0 (50)	101	50/50	13.6 (50)	91	50/50
10-7	15.1 (50)	50/50	15.4 (50)	102	50/50	15.5 (50)	103	50/50	14.0 (50)	93	50/50
11-7	14.4 (50)	50/50	14.7 (50)	102	50/50	14.7 (50)	102	50/50	13.6 (50)	94	50/50
12-7	14.5 (50)	50/50	14.7 (50)	101	50/50	14.7 (50)	101	50/50	13.6 (50)	94	50/50
13-7	14.5 (50)	50/50	14.6 (50)	101	50/50	14.4 (50)	99	50/50	13.4 (50)	92	50/50
14-7	14.7 (50)	50/50	14.7 (50)	100	50/50	14.6 (50)	99	50/50	13.6 (50)	93	50/50
18-7	14.5 (50)	50/50	14.6 (50)	101	50/50	14.3 (50)	99	50/50	13.2 (50)	91	50/50
22-7	14.8 (49)	50/50	14.8 (50)	100	50/50	14.8 (50)	100	50/50	13.5 (50)	91	50/50
26-7	15.0 (50)	50/50	15.1 (50)	101	50/50	14.8 (50)	99	50/50	13.3 (50)	89	50/50
30-7	14.8 (50)	50/50	14.8 (50)	100	50/50	14.6 (50)	99	50/50	13.3 (50)	90	50/50
34-7	15.0 (50)	50/50	15.1 (49)	101	49/50	14.9 (50)	99	50/50	13.6 (50)	91	50/50
38-7	15.3 (50)	50/50	15.3 (49)	100	49/50	15.2 (50)	99	50/50	13.7 (50)	90	50/50
42-7	15.4 (50)	50/50	15.5 (49)	101	49/50	15.3 (50)	99	50/50	13.9 (50)	90	50/50
46-7	15.8 (49)	49/50	15.8 (49)	100	49/50	15.5 (50)	98	50/50	14.2 (50)	90	50/50
50-7	16.1 (49)	49/50	15.9 (49)	99	49/50	15.7 (50)	98	50/50	14.1 (50)	88	50/50
54-7	15.6 (49)	49/50	15.7 (49)	101	49/50	15.4 (50)	99	50/50	14.1 (50)	90	50/50
58-7	15.8 (49)	49/50	15.9 (49)	101	49/50	15.6 (50)	99	50/50	14.2 (50)	90	50/50
62-7	15.9 (48)	48/50	15.8 (49)	99	49/50	15.3 (50)	96	50/50	14.2 (50)	89	50/50
66-7	16.2 (48)	48/50	16.1 (49)	99	49/50	15.8 (50)	98	50/50	14.8 (50)	91	50/50
70-7	16.4 (47)	47/50	15.8 (49)	96	49/50	15.8 (50)	96	50/50	14.8 (50)	90	50/50
74-7	16.2 (47)	47/50	15.9 (49)	98	49/50	15.9 (50)	98	50/50	14.6 (50)	90	50/50
78-7	16.7 (47)	47/50	16.4 (47)	98	47/50	16.0 (50)	96	50/50	14.6 (48)	87	48/50
82-7	16.4 (47)	47/50	16.2 (47)	99	47/50	15.8 (47)	96	47/50	14.4 (48)	88	48/50
86-7	16.5 (46)	46/50	16.3 (47)	99	47/50	15.8 (47)	96	47/50	14.4 (48)	87	48/50
90-7	16.2 (45)	45/50	16.1 (47)	99	47/50	15.6 (45)	96	45/50	14.3 (48)	88	48/50
94-7	16.6 (44)	44/50	15.8 (47)	95	47/50	15.9 (42)	96	42/50	14.6 (45)	88	45/50
98-7	16.2 (41)	42/50	15.9 (46)	98	46/50	15.5 (42)	96	42/50	14.7 (44)	91	44/50
102-7	15.6 (41)	41/50	15.1 (46)	97	46/50	15.2 (39)	97	40/50	14.3 (41)	92	41/50
104-7	15.6 (39)	40/50	15.1 (45)	97	45/50	15.5 (38)	99	38/50	14.3 (40)	92	40/50

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

Av. FC. : g

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

TABLE D 2

FOOD CONSUMPTION CHANGES AND  
SURVIVAL ANIMAL NUMBERS: FEMALE

STUDY NO. : 0641  
 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		800 ppm		2400 ppm		7200 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	10.5 (50)	50/50	10.6 (50)	101	50/50	10.4 (50)	99	50/50	9.1 (50)	87	50/50
2-7	10.7 (50)	50/50	10.7 (50)	100	50/50	10.6 (50)	99	50/50	10.0 (49)	93	50/50
3-7	10.5 (50)	50/50	10.5 (50)	100	50/50	10.3 (50)	98	50/50	9.8 (50)	93	50/50
4-7	10.6 (50)	50/50	10.6 (50)	100	50/50	10.5 (50)	99	50/50	9.6 (50)	91	50/50
5-7	10.3 (50)	50/50	10.3 (50)	100	50/50	10.2 (50)	99	50/50	9.4 (50)	91	50/50
6-7	10.1 (50)	50/50	10.0 (50)	99	50/50	9.9 (50)	98	50/50	9.2 (50)	91	50/50
7-7	10.0 (50)	50/50	10.0 (50)	100	50/50	9.9 (50)	99	50/50	9.2 (50)	92	50/50
8-7	10.1 (50)	50/50	10.1 (50)	100	50/50	9.9 (50)	98	50/50	9.2 (50)	91	50/50
9-7	9.9 (50)	50/50	9.9 (50)	100	50/50	9.9 (50)	100	50/50	9.0 (50)	91	50/50
10-7	10.0 (50)	50/50	10.0 (50)	100	50/50	9.8 (50)	98	50/50	9.1 (50)	91	50/50
11-7	9.9 (50)	50/50	10.0 (50)	101	50/50	9.9 (50)	100	50/50	9.0 (50)	91	50/50
12-7	10.1 (50)	50/50	10.2 (50)	101	50/50	10.0 (50)	99	50/50	9.1 (50)	90	50/50
13-7	9.9 (50)	50/50	10.1 (50)	102	50/50	9.9 (50)	100	50/50	9.0 (50)	91	50/50
14-7	10.1 (50)	50/50	10.4 (50)	103	50/50	10.1 (50)	100	50/50	9.2 (50)	91	50/50
18-7	9.9 (50)	50/50	10.2 (50)	103	50/50	10.0 (50)	101	50/50	9.0 (50)	91	50/50
22-7	10.3 (50)	50/50	10.4 (50)	101	50/50	10.2 (50)	99	50/50	9.2 (50)	89	50/50
26-7	9.9 (50)	50/50	10.1 (50)	102	50/50	10.0 (50)	101	50/50	9.1 (50)	92	50/50
30-7	10.1 (50)	50/50	10.3 (50)	102	50/50	10.3 (50)	102	50/50	9.2 (50)	91	50/50
34-7	10.3 (50)	50/50	10.4 (50)	101	50/50	10.3 (50)	100	50/50	9.2 (50)	89	50/50
38-7	10.3 (50)	50/50	10.4 (50)	101	50/50	10.4 (50)	101	50/50	9.4 (49)	91	49/50
42-7	10.5 (50)	50/50	10.7 (50)	102	50/50	10.6 (50)	101	50/50	9.8 (49)	93	49/50
46-7	10.6 (50)	50/50	10.8 (50)	102	50/50	10.7 (50)	101	50/50	9.7 (49)	92	49/50
50-7	10.8 (50)	50/50	11.0 (50)	102	50/50	10.9 (50)	101	50/50	9.9 (49)	92	49/50
54-7	11.0 (50)	50/50	11.1 (50)	101	50/50	11.3 (50)	103	50/50	10.1 (49)	92	49/50
58-7	11.1 (50)	50/50	11.0 (50)	99	50/50	10.9 (50)	98	50/50	10.0 (49)	90	49/50
62-7	11.3 (50)	50/50	11.5 (50)	102	50/50	11.3 (50)	100	50/50	10.1 (49)	89	49/50
66-7	11.5 (50)	50/50	11.4 (49)	99	49/50	11.4 (50)	99	50/50	10.3 (47)	90	47/50
70-7	11.7 (50)	50/50	11.9 (49)	102	49/50	11.3 (50)	97	50/50	10.6 (47)	91	47/50
74-7	11.6 (50)	50/50	11.8 (49)	102	49/50	11.5 (50)	99	50/50	10.6 (46)	91	46/50
78-7	12.0 (50)	50/50	12.2 (48)	102	48/50	11.9 (50)	99	50/50	10.5 (44)	88	44/50
82-7	11.8 (49)	49/50	12.0 (46)	102	46/50	11.9 (50)	101	50/50	10.4 (44)	88	44/50
86-7	11.5 (49)	49/50	11.6 (44)	101	44/50	11.9 (50)	103	50/50	10.4 (42)	90	42/50
90-7	11.8 (48)	48/50	12.1 (43)	103	43/50	11.6 (49)	98	49/50	10.8 (38)	92	38/50
94-7	12.1 (46)	46/50	12.7 (43)	105	43/50	12.4 (48)	102	48/50	10.5 (38)	87	38/50
98-7	12.1 (44)	44/50	12.3 (42)	102	42/50	12.0 (46)	99	46/50	10.8 (36)	89	36/50
102-7	12.1 (40)	40/50	12.1 (39)	100	39/50	11.8 (44)	98	44/50	10.5 (35)	87	35/50
104-7	11.8 (38)	38/50	11.7 (38)	99	38/50	11.7 (42)	99	42/50	10.5 (33)	89	33/50
< >:No. of effective animals, ( ):No. of measured animals											
Av. FC. : g											

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

# TABLE D 3

## FOOD CONSUMPTION CHANGES: MALE

STUDY NO. : 0641  
 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	13.3± 0.8	15.0± 0.9	15.7± 1.1	16.0± 0.9	15.6± 0.8	15.1± 1.0	14.9± 1.0
800 ppm	13.3± 0.8	15.1± 1.3	15.5± 1.2	15.7± 1.1	15.6± 1.0	15.1± 1.0	15.0± 1.0
2400 ppm	13.4± 0.8	14.7± 1.0	15.5± 1.0	15.6± 1.1	15.6± 1.0	15.2± 1.1	14.9± 1.1
7200 ppm	11.8± 0.7**	13.6± 1.0**	14.2± 1.1**	14.4± 1.0**	14.5± 0.8**	14.2± 0.9**	14.0± 0.9**

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

Test of Dunnett

(HAN260)

BAIS 4



STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]  
 UNIT : g  
 REPORT TYPE : A1 104  
 SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)  
 ALL ANIMALS

PAGE : 2

Group Name	Administration week-day(effective)						
	8-7(7)	9-7(7)	10-7(7)	11-7(7)	12-7(7)	13-7(7)	14-7(7)
Control	15.4± 1.1	14.9± 1.1	15.1± 1.2	14.4± 1.1	14.5± 1.0	14.5± 0.9	14.7± 0.9
800 ppm	15.7± 1.2	15.4± 1.2	15.4± 1.2	14.7± 1.0	14.7± 1.0	14.6± 0.9	14.7± 0.9
2400 ppm	15.3± 1.1	15.0± 1.1	15.5± 1.0	14.7± 1.0	14.7± 0.9	14.4± 0.9	14.6± 1.0
7200 ppm	14.1± 1.0**	13.6± 1.0**	14.0± 1.0**	13.6± 1.0**	13.6± 1.0**	13.4± 1.0**	13.6± 0.9**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0641  
 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	14.5± 0.9	14.8± 1.0	15.0± 0.9	14.8± 0.9	15.0± 1.1	15.3± 1.0	15.4± 1.0
800 ppm	14.6± 0.8	14.8± 1.0	15.1± 1.0	14.8± 0.9	15.1± 0.9	15.3± 0.9	15.5± 0.9
2400 ppm	14.3± 1.1	14.8± 1.0	14.8± 1.1	14.6± 0.9	14.9± 1.0	15.2± 0.9	15.3± 1.1
7200 ppm	13.2± 1.0**	13.5± 1.0**	13.3± 1.1**	13.3± 0.9**	13.6± 1.0**	13.7± 1.0**	13.9± 1.1**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0641  
 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	15.8± 0.9	16.1± 0.8	15.6± 0.8	15.8± 1.3	15.9± 0.9	16.2± 1.3	16.4± 0.9
800 ppm	15.8± 1.0	15.9± 1.1	15.7± 0.9	15.9± 0.9	15.8± 1.0	16.1± 1.0	15.8± 2.1*
2400 ppm	15.5± 1.1	15.7± 1.1*	15.4± 1.0	15.6± 1.0	15.3± 1.0*	15.8± 1.0	15.8± 1.1*
7200 ppm	14.2± 1.0**	14.1± 1.6**	14.1± 1.1**	14.2± 1.2**	14.2± 1.1**	14.8± 1.1**	14.8± 1.1**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0641  
 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	16.2± 1.0	16.7± 1.1	16.4± 1.5	16.5± 1.4	16.2± 1.6	16.6± 2.0	16.2± 1.3
800 ppm	15.9± 1.4	16.4± 1.0	16.2± 1.0	16.3± 0.8	16.1± 1.1	15.8± 2.4	15.9± 1.3
2400 ppm	15.9± 1.1	16.0± 2.4	15.8± 1.3	15.8± 2.2	15.6± 1.6	15.9± 1.3	15.5± 2.2
7200 ppm	14.6± 1.4**	14.6± 1.2**	14.4± 1.2**	14.4± 1.4**	14.3± 1.8**	14.6± 1.2**	14.7± 1.4**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0641  
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]  
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	15.6± 2.7	15.6± 2.1
800 ppm	15.1± 1.8	15.1± 2.2
2400 ppm	15.2± 1.4	15.5± 1.3
7200 ppm	14.3± 1.6**	14.3± 1.8**

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

Test of Dunnett

(HAN260)

BAIS 4

**TABLE D 4**

**FOOD CONSUMPTION CHANGES: FEMALE**

STUDY NO. : 0641  
 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	10.5± 0.7	10.7± 0.6	10.5± 0.7	10.6± 0.6	10.3± 0.6	10.1± 0.7	10.0± 0.6
800 ppm	10.6± 0.6	10.7± 0.6	10.5± 0.7	10.6± 0.6	10.3± 0.7	10.0± 0.6	10.0± 0.7
2400 ppm	10.4± 0.5	10.6± 0.6	10.3± 0.5	10.5± 0.7	10.2± 0.8	9.9± 0.6	9.9± 0.7
7200 ppm	9.1± 0.6**	10.0± 0.6**	9.8± 0.6**	9.6± 0.7**	9.4± 0.6**	9.2± 0.7**	9.2± 0.7**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 UNIT : g  
 REPORT TYPE : A1 104  
 SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)  
 ALL ANIMALS

PAGE : 8

Group Name	Administration week-day(effective)						
	8-7(7)	9-7(7)	10-7(7)	11-7(7)	12-7(7)	13-7(7)	14-7(7)
Control	10.1± 0.7	9.9± 0.7	10.0± 0.7	9.9± 0.7	10.1± 0.7	9.9± 0.7	10.1± 0.7
800 ppm	10.1± 0.7	9.9± 0.6	10.0± 0.6	10.0± 0.7	10.2± 0.7	10.1± 0.6	10.4± 0.7
2400 ppm	9.9± 0.7	9.9± 0.7	9.8± 0.7	9.9± 0.7	10.0± 0.7	9.9± 0.7	10.1± 0.6
7200 ppm	9.2± 0.6**	9.0± 0.7**	9.1± 0.7**	9.0± 0.7**	9.1± 0.6**	9.0± 0.6**	9.2± 0.6**

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

Test of Dunnett

(HAN260)

BAIS 4



STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 UNIT : g  
 REPORT TYPE : AI 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	9.9± 0.7	10.3± 0.6	9.9± 0.6	10.1± 0.7	10.3± 0.5	10.3± 0.5	10.5± 0.6
800 ppm	10.2± 0.6	10.4± 0.7	10.1± 0.6	10.3± 0.6	10.4± 0.7	10.4± 0.6	10.7± 0.8
2400 ppm	10.0± 0.7	10.2± 0.7	10.0± 0.6	10.3± 0.6	10.3± 0.8	10.4± 0.8	10.6± 0.7
7200 ppm	9.0± 0.6**	9.2± 0.5**	9.1± 0.6**	9.2± 0.5**	9.2± 0.5**	9.4± 0.6**	9.8± 0.8**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0641  
 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	10.6± 0.7	10.8± 0.8	11.0± 0.7	11.1± 0.6	11.3± 0.9	11.5± 0.9	11.7± 1.1
800 ppm	10.8± 0.7	11.0± 0.8	11.1± 0.9	11.0± 0.9	11.5± 0.9	11.4± 1.0	11.9± 1.1
2400 ppm	10.7± 0.7	10.9± 0.8	11.3± 2.6	10.9± 0.9	11.3± 0.9	11.4± 0.8	11.3± 1.0
7200 ppm	9.7± 0.8**	9.9± 0.9**	10.1± 0.8**	10.0± 0.7**	10.1± 0.9**	10.3± 0.8**	10.6± 0.9**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 UNIT : g  
 REPORT TYPE : A1 104  
 SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)  
 ALL ANIMALS

PAGE : 11

Group Name	Administration week-day(effective)						
	74-7(7)	78-7(7)	82-7(7)	86-7(7)	90-7(7)	94-7(7)	98-7(7)
Control	11.6± 0.8	12.0± 0.9	11.8± 1.0	11.5± 1.1	11.8± 1.1	12.1± 1.9	12.1± 1.8
800 ppm	11.8± 1.2	12.2± 1.2	12.0± 1.1	11.6± 1.9	12.1± 1.1	12.7± 1.5	12.3± 1.6
2400 ppm	11.5± 0.8	11.9± 1.0	11.9± 1.3	11.9± 2.1	11.6± 1.2	12.4± 1.0	12.0± 1.5
7200 ppm	10.6± 1.0**	10.5± 1.2**	10.4± 1.6**	10.4± 1.1**	10.8± 1.1**	10.5± 1.5**	10.8± 1.2**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0641  
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± 1.3	11.8± 1.2
800 ppm	12.1± 1.6	11.7± 1.9
2400 ppm	11.8± 1.1	11.7± 1.0
7200 ppm	10.5± 2.0**	10.5± 1.4**

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

Test of Dunnett

(HAN260)

BAIS 4

TABLE E 1

WATER CONSUMPTION CHANGES AND  
SURVIVAL ANIMAL NUMBERS: MALE

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr-j]  
 UNIT : g  
 REPORT TYPE : A1 104  
 SEX : MALE

MEAN WATER CONSUMPTION(WC) AND SURVIVAL

PAGE : 1

Week-Day on Study	Control		800 ppm		2400 ppm		7200 ppm				
	Av. WC.	No. of Surviv. <50>	Av. WC.	% of cont. <50>	No. of Surviv.	Av. WC.	% of cont. <50>	No. of Surviv.	Av. WC.	% of cont. <50>	No. of Surviv.
1-7	16.3 (50)	50/50	15.6 (50)	96	50/50	14.6 (50)	90	50/50	13.1 (50)	80	50/50
2-7	17.5 (50)	50/50	16.9 (50)	97	50/50	15.7 (50)	90	50/50	13.4 (50)	77	50/50
3-7	18.0 (50)	50/50	17.6 (49)	98	50/50	16.3 (50)	91	50/50	13.0 (49)	72	50/50
4-7	17.9 (50)	50/50	18.4 (50)	103	50/50	16.2 (50)	91	50/50	12.8 (50)	72	50/50
5-7	17.8 (49)	50/50	17.7 (50)	99	50/50	16.2 (50)	91	50/50	12.9 (50)	72	50/50
6-7	17.5 (50)	50/50	17.5 (49)	100	50/50	16.7 (50)	95	50/50	12.6 (50)	72	50/50
7-7	17.1 (50)	50/50	18.1 (48)	106	50/50	16.5 (50)	96	50/50	12.8 (50)	75	50/50
8-7	16.8 (50)	50/50	18.7 (47)	111	50/50	16.6 (50)	99	50/50	12.7 (50)	76	50/50
9-7	17.0 (50)	50/50	18.1 (49)	106	50/50	17.3 (49)	102	50/50	13.1 (50)	77	50/50
10-7	17.2 (50)	50/50	17.5 (49)	102	50/50	17.2 (49)	100	50/50	13.3 (50)	77	50/50
11-7	17.2 (50)	50/50	16.8 (50)	98	50/50	16.6 (50)	97	50/50	12.5 (50)	73	50/50
12-7	17.5 (50)	50/50	17.1 (48)	98	50/50	15.9 (50)	91	50/50	12.0 (50)	69	50/50
13-7	16.7 (50)	50/50	16.7 (49)	100	50/50	15.4 (49)	92	50/50	11.6 (50)	69	50/50
14-7	17.1 (50)	50/50	16.8 (49)	98	50/50	15.4 (50)	90	50/50	12.5 (50)	73	50/50
18-7	16.0 (50)	50/50	16.3 (50)	102	50/50	15.0 (50)	94	50/50	11.3 (50)	71	50/50
22-7	15.8 (50)	50/50	16.1 (50)	102	50/50	14.9 (50)	94	50/50	11.4 (50)	72	50/50
26-7	16.1 (50)	50/50	16.5 (50)	102	50/50	15.5 (50)	96	50/50	12.4 (50)	77	50/50
30-7	15.7 (50)	50/50	16.3 (50)	104	50/50	15.0 (50)	96	50/50	12.5 (50)	80	50/50
34-7	16.0 (50)	50/50	16.4 (49)	103	49/50	15.2 (50)	95	50/50	12.3 (50)	77	50/50
38-7	16.1 (50)	50/50	16.1 (49)	100	49/50	15.3 (50)	95	50/50	12.2 (50)	76	50/50
42-7	16.1 (50)	50/50	16.7 (49)	104	49/50	15.4 (50)	96	50/50	12.6 (50)	78	50/50
46-7	16.5 (49)	49/50	16.7 (49)	101	49/50	15.6 (50)	95	50/50	13.0 (50)	79	50/50
50-7	16.4 (49)	49/50	17.1 (49)	101	49/50	15.9 (50)	97	50/50	13.0 (50)	79	50/50
54-7	16.3 (49)	49/50	16.6 (49)	102	49/50	15.8 (50)	97	50/50	12.9 (50)	79	50/50
58-7	16.4 (49)	49/50	16.6 (49)	101	49/50	15.8 (50)	96	50/50	13.0 (50)	79	50/50
62-7	17.0 (48)	48/50	16.9 (49)	99	49/50	15.9 (50)	94	50/50	13.1 (50)	77	50/50
66-7	16.8 (48)	48/50	16.7 (49)	99	49/50	15.9 (50)	95	50/50	13.6 (50)	81	50/50
70-7	17.5 (47)	47/50	16.8 (49)	96	49/50	16.1 (50)	92	50/50	14.0 (50)	80	50/50
74-7	17.5 (47)	47/50	16.7 (49)	95	49/50	16.4 (50)	94	50/50	14.1 (50)	81	50/50
78-7	18.0 (46)	47/50	17.7 (47)	98	47/50	16.5 (50)	92	50/50	14.9 (48)	83	48/50
82-7	18.4 (46)	47/50	17.3 (47)	94	47/50	16.4 (47)	89	47/50	14.2 (48)	77	48/50
86-7	18.5 (44)	46/50	18.0 (47)	97	47/50	16.5 (47)	89	47/50	13.9 (48)	75	48/50
90-7	18.4 (42)	45/50	17.7 (47)	96	47/50	16.9 (45)	92	45/50	14.4 (48)	78	48/50
94-7	18.3 (39)	44/50	18.5 (47)	101	47/50	17.2 (41)	94	42/50	14.7 (45)	80	45/50
98-7	18.7 (37)	42/50	18.8 (46)	101	46/50	18.2 (41)	97	42/50	15.1 (44)	81	44/50
102-7	19.0 (37)	41/50	19.2 (45)	101	46/50	18.4 (38)	97	40/50	15.0 (41)	79	41/50
104-7	20.0 (36)	40/50	18.7 (41)	94	45/50	18.8 (37)	94	38/50	15.3 (40)	77	40/50
< >:No. of effective animals, ( ) :No. of measured animals											
Av. WC. : g											

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

**TABLE E 2**

**WATER CONSUMPTION CHANGES AND  
SURVIVAL ANIMAL NUMBERS: FEMALE**

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 UNIT : g  
 REPORT TYPE : A1 104  
 SEX : FEMALE

MEAN WATER CONSUMPTION(WC) AND SURVIVAL

PAGE : 2

Week-Day on Study	Control		800 ppm			2400 ppm			7200 ppm		
	Av. WC.	No. of Surviv. <50>	Av. WC.	% of cont. <50>	No. of Surviv.	Av. WC.	% of cont. <50>	No. of Surviv.	Av. WC.	% of cont. <50>	No. of Surviv.
1-7	15.4 (49)	50/50	15.7 (48)	102	50/50	13.9 (50)	90	50/50	10.8 (50)	70	50/50
2-7	15.9 (49)	50/50	18.0 (48)	113	50/50	14.1 (50)	89	50/50	10.3 (50)	65	50/50
3-7	16.0 (47)	50/50	15.9 (38)	99	50/50	14.5 (44)	91	50/50	10.7 (50)	67	50/50
4-7	15.6 (45)	50/50	16.7 (36)	107	50/50	15.6 (47)	100	50/50	10.3 (50)	66	50/50
5-7	18.0 (48)	50/50	18.0 (39)	100	50/50	16.3 (48)	91	50/50	10.1 (50)	56	50/50
6-7	16.1 (44)	50/50	17.3 (36)	107	50/50	16.2 (44)	101	50/50	9.9 (50)	61	50/50
7-7	15.9 (44)	50/50	18.0 (31)	113	50/50	15.5 (37)	97	50/50	10.6 (49)	67	50/50
8-7	16.6 (43)	50/50	16.5 (30)	99	50/50	15.0 (38)	90	50/50	10.0 (50)	60	50/50
9-7	16.5 (47)	50/50	18.5 (33)	112	50/50	16.1 (44)	98	50/50	9.6 (50)	58	50/50
10-7	16.4 (47)	50/50	17.6 (39)	107	50/50	14.6 (41)	89	50/50	9.5 (50)	58	50/50
11-7	16.5 (42)	50/50	18.2 (40)	110	50/50	15.6 (41)	95	50/50	9.4 (49)	57	50/50
12-7	15.9 (43)	50/50	18.7 (34)	118	50/50	14.6 (43)	92	50/50	9.6 (50)	60	50/50
13-7	16.4 (46)	50/50	18.4 (34)	112	50/50	16.0 (39)	98	50/50	9.8 (50)	60	50/50
14-7	16.3 (43)	50/50	18.0 (29)	110	50/50	15.2 (39)	93	50/50	9.7 (49)	60	50/50
18-7	17.2 (46)	50/50	16.7 (27)	97	50/50	15.4 (39)	90	50/50	10.4 (50)	60	50/50
22-7	16.8 (44)	50/50	18.6 (42)	111	50/50	16.4 (43)	98	50/50	10.3 (50)	61	50/50
26-7	17.0 (47)	50/50	18.5 (40)	109	50/50	16.5 (44)	97	50/50	10.7 (48)	63	50/50
30-7	16.5 (47)	50/50	18.4 (40)	112	50/50	15.6 (38)	95	50/50	10.5 (50)	64	50/50
34-7	16.7 (48)	50/50	17.3 (44)	104	50/50	15.1 (43)	90	50/50	10.5 (48)	63	50/50
38-7	16.2 (47)	50/50	17.9 (45)	110	50/50	15.4 (43)	95	50/50	10.8 (49)	67	49/50
42-7	15.9 (49)	50/50	18.3 (44)	115	50/50	16.0 (44)	101	50/50	11.1 (49)	70	49/50
46-7	15.7 (49)	50/50	16.0 (45)	102	50/50	16.7 (46)	106	50/50	10.8 (48)	69	49/50
50-7	15.1 (49)	50/50	16.6 (44)	110	50/50	17.0 (43)	113	50/50	11.8 (49)	78	49/50
54-7	15.3 (49)	50/50	15.5 (45)	101	50/50	15.2 (44)	99	50/50	11.4 (48)	75	49/50
58-7	14.7 (50)	50/50	15.2 (49)	103	50/50	14.9 (47)	101	50/50	11.1 (49)	76	49/50
62-7	14.7 (50)	50/50	16.4 (49)	112	50/50	14.3 (47)	97	50/50	11.3 (48)	77	49/50
66-7	14.7 (49)	50/50	16.6 (46)	113	49/50	14.2 (47)	97	50/50	11.2 (47)	76	47/50
70-7	14.7 (50)	50/50	15.5 (47)	105	49/50	14.1 (47)	96	50/50	12.4 (47)	84	47/50
74-7	14.4 (50)	50/50	15.5 (47)	108	49/50	14.8 (48)	103	50/50	12.4 (46)	86	46/50
78-7	14.6 (50)	50/50	16.3 (46)	112	48/50	14.5 (48)	99	50/50	12.5 (44)	86	44/50
82-7	14.3 (48)	49/50	15.6 (46)	109	46/50	14.3 (49)	100	50/50	12.9 (43)	90	44/50
86-7	15.0 (47)	49/50	15.8 (42)	105	44/50	15.4 (48)	103	50/50	13.2 (42)	88	42/50
90-7	14.9 (46)	48/50	15.3 (43)	103	43/50	14.4 (49)	97	49/50	13.8 (38)	93	38/50
94-7	15.5 (45)	46/50	15.6 (41)	101	43/50	14.8 (47)	95	48/50	15.3 (37)	99	38/50
98-7	16.1 (44)	44/50	16.4 (41)	102	42/50	15.3 (45)	95	46/50	16.8 (36)	104	36/50
102-7	16.7 (40)	40/50	16.4 (34)	98	39/50	16.4 (44)	98	44/50	17.1 (35)	102	35/50
104-7	16.8 (38)	38/50	16.4 (36)	98	38/50	15.9 (42)	95	42/50	18.4 (31)	110	33/50
< >:No. of effective animals, ( ):No. of measured animals      Av.WC.: g											

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



TABLE E 3

WATER CONSUMPTION CHANGES: MALE

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]  
 UNIT : g  
 REPORT TYPE : A1 104  
 SEX : MALE

WATER CONSUMPTION CHANGES (SUMMARY)  
 ALL ANIMALS

PAGE : 1

Group Name	Administration week-day(effective)						
	1-7(3)	2-7(3)	3-7(3)	4-7(3)	5-7(3)	6-7(3)	7-7(3)
Control	16.3± 1.6	17.5± 1.4	18.0± 1.8	17.9± 1.5	17.8± 1.7	17.5± 1.9	17.1± 1.8
800 ppm	15.6± 1.0	16.9± 1.8*	17.6± 2.3	18.4± 3.9	17.7± 2.5	17.5± 3.0	18.1± 2.4*
2400 ppm	14.6± 1.0**	15.7± 1.2**	16.3± 1.2**	16.2± 1.6**	16.2± 1.6**	16.7± 3.3**	16.5± 2.3*
7200 ppm	13.1± 4.5**	13.4± 2.1**	13.0± 1.2**	12.8± 1.0**	12.9± 1.1**	12.6± 0.9**	12.8± 1.1**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 UNIT : g  
 REPORT TYPE : A1 104  
 SEX : MALE

WATER CONSUMPTION CHANGES (SUMMARY)  
 ALL ANIMALS

PAGE : 2

Group Name	Administration week-day(effective)						
	8-7(3)	9-7(3)	10-7(3)	11-7(3)	12-7(3)	13-7(3)	14-7(3)
Control	16.8± 1.4	17.0± 1.8	17.2± 2.0	17.2± 2.3	17.5± 2.3	16.7± 1.8	17.1± 2.5
800 ppm	18.7± 2.1**	18.1± 2.1**	17.5± 2.7	16.8± 2.0	17.1± 3.0	16.7± 2.6	16.8± 3.0
2400 ppm	16.6± 2.0	17.3± 2.1	17.2± 1.4	16.6± 2.4	15.9± 2.5**	15.4± 1.5**	15.4± 2.2**
7200 ppm	12.7± 1.1**	13.1± 1.3**	13.3± 1.2**	12.5± 1.1**	12.0± 1.2**	11.6± 0.9**	12.5± 2.2**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 UNIT : g  
 REPORT TYPE : A1 104  
 SEX : MALE

WATER CONSUMPTION CHANGES (SUMMARY)  
 ALL ANIMALS

PAGE : 3

Group Name	Administration week-day(effective)						
	18-7(3)	22-7(3)	26-7(3)	30-7(3)	34-7(3)	38-7(3)	42-7(3)
Control	16.0± 1.4	15.8± 1.4	16.1± 1.0	15.7± 1.2	16.0± 1.3	16.1± 1.3	16.1± 1.3
800 ppm	16.3± 2.1	16.1± 2.4	16.5± 1.7	16.3± 1.7	16.4± 1.5	16.1± 1.4	16.7± 1.4**
2400 ppm	15.0± 1.4**	14.9± 1.5**	15.5± 1.2**	15.0± 1.1**	15.2± 0.9**	15.3± 1.0**	15.4± 0.9**
7200 ppm	11.3± 1.1**	11.4± 0.9**	12.4± 1.1**	12.5± 1.1**	12.3± 0.9**	12.2± 0.9**	12.6± 1.1**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 UNIT : g  
 REPORT TYPE : AI 104  
 SEX : MALE

WATER CONSUMPTION CHANGES (SUMMARY)  
 ALL ANIMALS

PAGE : 4

Group Name	Administration		week-day(effective)							
	46-7(3)		50-7(3)		54-7(3)		58-7(3)		62-7(3)	
Control	16.5±	1.2	16.4±	1.2	16.3±	1.0	16.4±	1.5	17.0±	1.3
800 ppm	16.7±	1.4	17.1±	2.7*	16.6±	1.3	16.6±	1.2	16.9±	1.4
2400 ppm	15.6±	1.3**	15.9±	1.0	15.8±	1.2	15.8±	1.0**	15.9±	1.3**
7200 ppm	13.0±	1.0**	13.0±	1.2**	12.9±	1.3**	13.0±	1.2**	13.1±	1.3**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 UNIT : g  
 REPORT TYPE : A1 104  
 SEX : MALE

WATER CONSUMPTION CHANGES (SUMMARY)  
 ALL ANIMALS

PAGE : 5

Group Name	Administration		week-day(effective)											
	74-7(3)		78-7(3)		82-7(3)		86-7(3)		90-7(3)		94-7(3)		98-7(3)	
Control	17.5±	2.3	18.0±	2.3	18.4±	3.0	18.5±	3.3	18.4±	3.3	18.3±	4.1	18.7±	3.6
800 ppm	16.7±	2.0	17.7±	1.5	17.3±	1.5	18.0±	1.9	17.7±	2.2	18.5±	3.5	18.8±	3.2
2400 ppm	16.4±	1.3*	16.5±	2.4**	16.4±	1.8**	16.5±	2.1**	16.9±	2.2	17.2±	2.4	18.2±	3.0
7200 ppm	14.1±	1.4**	14.9±	1.7**	14.2±	1.5**	13.9±	2.0**	14.4±	2.2**	14.7±	2.0**	15.1±	2.8**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0641  
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
UNIT : g  
REPORT TYPE : A1 104  
SEX : MALE

WATER CONSUMPTION CHANGES (SUMMARY)  
ALL ANIMALS

PAGE : 6

Group Name	Administration week-day(effective)	
	102-7(3)	104-7(3)
Control	19.0± 3.7	20.0± 4.3
800 ppm	19.2± 3.4	18.7± 3.9
2400 ppm	18.4± 2.9	18.8± 3.4
7200 ppm	15.0± 2.9**	15.3± 2.8**

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

Test of Dunnett

(HAN260)

BAIS 4

TABLE E 4

WATER CONSUMPTION CHANGES: FEMALE



STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 UNIT : g  
 REPORT TYPE : A1 104  
 SEX : FEMALE

WATER CONSUMPTION CHANGES (SUMMARY)  
 ALL ANIMALS

PAGE : 7

Group Name	Administration week-day(effective)						
	1-7 (3)	2-7 (3)	3-7 (3)	4-7 (3)	5-7 (3)	6-7 (3)	7-7 (3)
Control	15.4± 3.4	15.9± 4.2	16.0± 2.7	15.6± 2.7	18.0± 7.6	16.1± 4.0	15.9± 4.1
800 ppm	15.7± 4.2	18.0± 7.6	15.9± 3.4	16.7± 4.6	18.0± 6.9	17.3± 5.4	18.0± 5.3
2400 ppm	13.9± 4.0**	14.1± 4.5**	14.5± 4.4**	15.6± 4.1	16.3± 6.5*	16.2± 5.9*	15.5± 4.7
7200 ppm	10.8± 1.0**	10.3± 0.8**	10.7± 2.6**	10.3± 2.3**	10.1± 1.2**	9.9± 1.0**	10.6± 2.3**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 UNIT : g  
 REPORT TYPE : A1 104  
 SEX : FEMALE

WATER CONSUMPTION CHANGES (SUMMARY)  
 ALL ANIMALS

PAGE : 8

Group Name	Administration		week-day(effective)							
	8-7(3)		9-7(3)		10-7(3)		11-7(3)		12-7(3)	
Control	16.6±	4.8	16.5±	7.1	16.4±	4.4	16.5±	4.6	15.9±	3.8
800 ppm	16.5±	4.9	18.5±	7.4	17.6±	5.8	18.2±	5.1	18.7±	5.5
2400 ppm	15.0±	4.1	16.1±	5.2	14.6±	3.9*	15.6±	4.9	14.6±	4.3*
7200 ppm	10.0±	3.2**	9.6±	1.3**	9.5±	2.0**	9.4±	1.5**	9.6±	3.0**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]  
 UNIT : g  
 REPORT TYPE : A1 104  
 SEX : FEMALE

WATER CONSUMPTION CHANGES (SUMMARY)  
 ALL ANIMALS

PAGE : 9

Group Name	Administration week-day(effective)						
	18-7(3)	22-7(3)	26-7(3)	30-7(3)	34-7(3)	38-7(3)	42-7(3)
Control	17.2± 4.8	16.8± 4.8	17.0± 4.7	16.5± 4.6	16.7± 4.0	16.2± 4.0	15.9± 3.5
800 ppm	16.7± 4.9	18.6± 5.4	18.5± 5.2	18.4± 4.7	17.3± 4.6	17.9± 4.9	18.3± 4.8*
2400 ppm	15.4± 4.3	16.4± 5.4	16.5± 5.1	15.6± 4.2	15.1± 3.6*	15.4± 4.2	16.0± 4.9
7200 ppm	10.4± 3.0**	10.3± 3.8**	10.7± 3.0**	10.5± 2.5**	10.5± 2.2**	10.8± 2.7**	11.1± 2.8**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 UNIT : g  
 REPORT TYPE : A1 104  
 SEX : FEMALE

WATER CONSUMPTION CHANGES (SUMMARY)  
 ALL ANIMALS

PAGE : 10

Group Name	Administration week-day(effective)						
	46-7(3)	50-7(3)	54-7(3)	58-7(3)	62-7(3)	66-7(3)	70-7(3)
Control	15.7± 3.6	15.1± 3.2	15.3± 4.0	14.7± 2.9	14.7± 2.8	14.7± 2.8	14.7± 2.8
800 ppm	16.0± 3.3	16.6± 4.0	15.5± 3.7	15.2± 3.6	16.4± 4.4	16.6± 4.6	15.5± 3.2
2400 ppm	16.7± 4.7	17.0± 5.5	15.2± 4.6	14.9± 4.5	14.3± 4.0	14.2± 3.5	14.1± 3.4
7200 ppm	10.8± 1.9**	11.8± 3.6**	11.4± 3.1**	11.1± 2.7**	11.3± 2.5**	11.2± 2.3**	12.4± 2.8**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 UNIT : g  
 REPORT TYPE : AI 104  
 SEX : FEMALE

WATER CONSUMPTION CHANGES (SUMMARY)  
 ALL ANIMALS

PAGE : 11

Group Name	Administration		week-day(effective)									
	74-7(3)		78-7(3)		82-7(3)		86-7(3)		90-7(3)		94-7(3)	
Control	14.4±	3.0	14.6±	3.0	14.3±	2.1	15.0±	2.5	14.9±	2.5	15.5±	3.8
800 ppm	15.5±	4.1	16.3±	4.4	15.6±	4.2	15.8±	5.5	15.3±	3.6	15.6±	3.6
2400 ppm	14.8±	3.5	14.5±	3.3	14.3±	3.3	15.4±	5.8	14.4±	4.3*	14.8±	3.5
7200 ppm	12.4±	2.9**	12.5±	3.4**	12.9±	3.3*	13.2±	2.4**	13.8±	2.8*	15.3±	2.6

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0641  
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
UNIT : g  
REPORT TYPE : A1 104  
SEX : FEMALE

WATER CONSUMPTION CHANGES (SUMMARY)  
ALL ANIMALS

PAGE : 12

Group Name	Administration week-day(effective)	
	102-7(3)	104-7(3)
Control	16.7± 3.8	16.8± 3.9
800 ppm	16.4± 3.8	16.4± 3.8
2400 ppm	16.4± 4.9	15.9± 3.6
7200 ppm	17.1± 3.9	18.4± 3.3

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

Test of Dunnett

(HAN260)

BATS 4

TABLE F 1

CHEMICAL INTAKE CHANGES: MALE

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]  
 UNIT : mg/kg/day  
 REPORT TYPE : AI 104  
 SEX : MALE

CHEMICAL INTAKE CHANGES (SUMMARY)  
 ALL ANIMALS

PAGE : 1

Group Name	Administration (weeks)													
	1		2		3		4		5		6		7	
Control	0±	0	0±	0	0±	0	0±	0	0±	0	0±	0	0±	0
800 ppm	84±	4	76±	6	69±	8	66±	14	59±	9	56±	11	55±	7
2400 ppm	235±	10	210±	11	192±	11	172±	14	162±	12	158±	27	150±	17
7200 ppm	667±	243	567±	77	483±	31	432±	24	405±	25	375±	21	365±	24

(HAN300)

BAIS 4



STUDY NO. : 0641  
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]  
UNIT : mg/kg/day  
REPORT TYPE : A1 104  
SEX : MALE

CHEMICAL INTAKE CHANGES (SUMMARY)  
ALL ANIMALS

PAGE : 2

Group Name	Administration (weeks)													
	8		9		10		11		12		13		14	
Control	0±	0	0±	0	0±	0	0±	0	0±	0	0±	0	0±	0
800 ppm	55±	6	52±	6	48±	8	45±	6	45±	10	43±	7	43±	9
2400 ppm	146±	14	147±	15	143±	10	134±	17	125±	16	119±	8	117±	14
7200 ppm	352±	26	353±	28	349±	27	323±	21	304±	24	289±	21	306±	53

(HAN300)

BAIS 4

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 UNIT : mg/kg/d a y  
 REPORT TYPE : A1 104  
 SEX : MALE

CHEMICAL INTAKE CHANGES (SUMMARY)  
 ALL ANIMALS

PAGE : 3

Group Name	Administration (weeks)													
	18		22		26		30		34		38		42	
Control	0±	0	0±	0	0±	0	0±	0	0±	0	0±	0	0±	0
800 ppm	39±	5	37±	6	37±	4	35±	4	34±	3	33±	2	33±	3
2400 ppm	108±	7	102±	8	103±	6	97±	6	96±	4	95±	5	94±	4
7200 ppm	264±	22	258±	18	273±	23	267±	22	257±	15	250±	16	256±	21

(HAN300)

BAIS 4

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]  
 UNIT : mg/kg/d a y  
 REPORT TYPE : A1 104  
 SEX : MALE

CHEMICAL INTAKE CHANGES (SUMMARY)  
 ALL ANIMALS

PAGE : 4

Group Name	Administration (weeks)													
	46		50		54		58		62		66		70	
Control	0±	0	0±	0	0±	0	0±	0	0±	0	0±	0	0±	0
800 ppm	33±	2	33±	5	32±	2	31±	2	32±	2	31±	2	31±	3
2400 ppm	94±	6	94±	5	93±	6	91±	5	91±	6	89±	5	90±	6
7200 ppm	261±	16	258±	19	254±	29	255±	23	253±	23	260±	27	268±	41

(HAN300)

BAIS 4

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 UNIT : mg/kg/day  
 REPORT TYPE : A1 104  
 SEX : MALE

CHEMICAL INTAKE CHANGES (SUMMARY)  
 ALL ANIMALS

PAGE : 5

Group Name	Administration (weeks)													
	74		78		82		86		90		94		98	
Control	0±	0	0±	0	0±	0	0±	0	0±	0	0±	0	0±	0
800 ppm	31±	3	32±	2	31±	2	32±	3	32±	3	33±	6	34±	5
2400 ppm	91±	5	91±	13	90±	7	90±	8	92±	10	95±	13	101±	18
7200 ppm	272±	48	279±	33	265±	30	260±	41	274±	52	280±	70	291±	108

(HAN300)

BAIS 4

STUDY NO. : 0641  
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
UNIT : mg/kg/day  
REPORT TYPE : A1 104  
SEX : MALE

CHEMICAL INTAKE CHANGES (SUMMARY)  
ALL ANIMALS

PAGE : 6

Group Name	Administration (weeks)			
	102		104	
Control	0±	0	0±	0
800 ppm	35±	6	35±	7
2400 ppm	105±	27	104±	17
7200 ppm	287±	92	288±	66

(HAN300)

BAIS 4

**TABLE F 2**

**CHEMICAL INTAKE CHANGES: FEMALE**

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 UNIT : mg/kg/day  
 REPORT TYPE : A1 104  
 SEX : FEMALE

CHEMICAL INTAKE CHANGES (SUMMARY)  
 ALL ANIMALS

PAGE : 7

Group Name	Administration (weeks)													
	1		2		3		4		5		6		7	
Control	0±	0	0±	0	0±	0	0±	0	0±	0	0±	0	0±	0
800 ppm	109±	29	114±	49	93±	19	94±	27	98±	40	90±	28	91±	29
2400 ppm	290±	79	264±	83	259±	83	261±	72	263±	107	251±	90	234±	69
7200 ppm	706±	68	606±	34	583±	133	537±	108	508±	53	480±	41	499±	105

(HAN300)

BAIS 4

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]  
 UNIT : mg/kg/day  
 REPORT TYPE : A1 104  
 SEX : FEMALE

CHEMICAL INTAKE CHANGES (SUMMARY)  
 ALL ANIMALS

PAGE : 8

Group Name	Administration (weeks)													
	8		9		10		11		12		13		14	
Control	0±	0	0±	0	0±	0	0±	0	0±	0	0±	0	0±	0
800 ppm	82±	26	90±	37	84±	28	85±	25	86±	27	83±	24	80±	22
2400 ppm	222±	60	233±	75	206±	55	215±	65	199±	59	215±	76	201±	62
7200 ppm	462±	141	437±	57	422±	84	413±	61	413±	124	419±	108	411±	136

(HAN300)

BAIS 4



STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 UNIT : mg/kg/day  
 REPORT TYPE : A1 104  
 SEX : FEMALE

CHEMICAL INTAKE CHANGES (SUMMARY)  
 ALL ANIMALS

PAGE : 9

Group Name	Administration (weeks)													
	18		22		26		30		34		38		42	
Control	0±	0	0±	0	0±	0	0±	0	0±	0	0±	0	0±	0
800 ppm	73±	21	78±	23	75±	20	72±	18	66±	17	68±	18	68±	18
2400 ppm	197±	58	207±	71	200±	63	183±	49	174±	42	175±	48	176±	56
7200 ppm	424±	122	414±	149	420±	123	398±	92	394±	82	399±	95	402±	94

(HAN300)

BAIS 4

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 UNIT : mg/kg/day  
 REPORT TYPE : A1 104  
 SEX : FEMALE

CHEMICAL INTAKE CHANGES (SUMMARY)  
 ALL ANIMALS

PAGE : 10

Group Name	Administration (weeks)													
	46		50		54		58		62		66		70	
Control	0±	0	0±	0	0±	0	0±	0	0±	0	0±	0	0±	0
800 ppm	58±	12	59±	15	54±	14	52±	13	55±	16	54±	15	49±	10
2400 ppm	181±	51	181±	59	159±	50	153±	47	142±	40	139±	37	134±	35
7200 ppm	387±	61	419±	129	398±	110	385±	90	386±	91	374±	78	412±	107

(HAN300)

BAIS 4

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]  
 UNIT : mg/kg/day  
 REPORT TYPE : A1 104  
 SEX : FEMALE

CHEMICAL INTAKE CHANGES (SUMMARY)  
 ALL ANIMALS

PAGE : 11

Group Name	Administration (weeks)													
	74		78		82		86		90		94		98	
Control	0±	0	0±	0	0±	0	0±	0	0±	0	0±	0	0±	0
800 ppm	48±	13	50±	14	46±	12	46±	14	44±	10	44±	9	46±	10
2400 ppm	138±	37	133±	33	128±	33	136±	60	130±	59	129±	42	132±	47
7200 ppm	412±	133	408±	125	423±	128	427±	111	436±	121	485±	109	536±	125

(HAN300)

BAIS 4

STUDY NO. : 0641  
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
UNIT : mg/kg/day  
REPORT TYPE : A1 104  
SEX : FEMALE

CHEMICAL INTAKE CHANGES (SUMMARY)  
ALL ANIMALS

PAGE : 12

Group Name	Administration (weeks)			
	102		104	
Control	0±	0	0±	0
800 ppm	47±	12	47±	11
2400 ppm	142±	57	138±	45
7200 ppm	561±	150	610±	143

(HAN300)

BAIS 4

TABLE G 1

HEMATOLOGY: MALE

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]  
 MEASURE. TIME : 1  
 SEX : MALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)  
 ALL ANIMALS (105W)

PAGE : 1

Group Name	NO. of Animals	RED BLOOD CELL 10 <sup>6</sup> /μl		HEMOGLOBIN g/dl		HEMATOCRIT %		MCV fl		MCH pg		MCHC g/dl		PLATELET 10 <sup>3</sup> /μl	
Control	40	7.81±	1.36	13.6±	2.7	38.8±	6.1	50.0±	2.7	17.4±	1.3	34.9±	2.1	1041±	288
800 ppm	45	8.18±	1.45	14.4±	2.5	40.6±	6.0	50.5±	6.7	17.8±	2.2	35.3±	1.6	1019±	334
2400 ppm	38	8.46±	1.00	14.8±	2.0	41.6±	4.6	49.2±	1.8	17.4±	1.0	35.4±	1.4	962±	264
7200 ppm	40	8.39±	1.00	14.7±	1.9	40.8±	4.4	48.7±	2.0**	17.5±	0.9	35.9±	1.4	901±	244

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

Test of Dunnett

(HCL070)

BAIS 4

STUDY NO. : 0641  
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]  
MEASURE. TIME : 1  
SEX : MALE

HEMATOLOGY (SUMMARY)  
ALL ANIMALS (105W)

REPORT TYPE : A1

PAGE : 2

Group Name	NO. of Animals	RETICULOCYTE %	
Control	40	5.5±	4.8
800 ppm	45	5.0±	5.4
2400 ppm	38	4.0±	2.3
7200 ppm	40	3.2±	1.9**

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

Test of Dunnett

(HCL070)

BAIS 4

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]  
 MEASURE TIME : 1  
 SEX : MALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)  
 ALL ANIMALS (105W)

PAGE : 3

Group Name	NO. of Animals	WBC 10 <sup>3</sup> /μl		Differential		WBC (%)		MONO		EOSINO		BASO		OTHER	
				NEUTRO		LYMPHO									
Control	40	8.84±	6.07	49±	10	42±	10	6±	2	1±	1	0±	0	1±	1
800 ppm	45	6.74±	1.85	47±	7	45±	7	6±	1	2±	1	0±	0	1±	1
2400 ppm	38	6.91±	1.38	46±	8	46±	9	5±	1	2±	1	0±	0	1±	0
7200 ppm	40	6.29±	1.72	46±	7	46±	7	5±	1	2±	1	0±	0	1±	0**

Significant difference ; \* : P ≤ 0.05

\*\* : P ≤ 0.01

Test of Dunnett

(HCL070)

BAIS 4



TABLE G 2

HEMATOLOGY: FEMALE

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 MEASURE TIME : 1  
 SEX : FEMALE

HEMATOLOGY (SUMMARY)  
 ALL ANIMALS (105W)

REPORT TYPE : A1

PAGE : 4

Group Name	NO. of Animals	RED BLOOD CELL 10 <sup>6</sup> /μl		HEMOGLOBIN g/dl		HEMATOCRIT %		MCV fl		MCH pg		MCHC g/dl		PLATELET 10 <sup>9</sup> /μl	
Control	37	7.84±	1.31	14.9±	2.5	40.5±	5.7	52.2±	4.3	19.0±	1.2	36.6±	1.7	782±	252
800 ppm	38	7.80±	1.53	14.8±	2.4	40.1±	5.8	53.2±	10.0	19.4±	2.5	36.7±	1.5	709±	180
2400 ppm	42	7.66±	1.10	14.4±	2.0	39.1±	4.8	51.4±	3.0	18.8±	1.1	36.6±	1.1	815±	202
7200 ppm	33	7.17±	0.94**	13.6±	1.6	37.0±	3.9*	51.9±	2.7	19.0±	0.9	36.7±	1.2	886±	134**

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

Test of Dunnett

(HCL070)

BAIS 4

STUDY NO. : 0641  
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
MEASURE. TIME : 1  
SEX : FEMALE

HEMATOLOGY (SUMMARY)  
ALL ANIMALS (105W)

REPORT TYPE : A1

PAGE : 5

Group Name	NO. of Animals	RETICULOCYTE %	
Control	37	4.7±	7.8
800 ppm	38	4.8±	7.7
2400 ppm	42	4.0±	3.7
7200 ppm	33	4.1±	2.0**

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

Test of Dunnett

(HCL070)

BAIS4

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]  
 MEASURE. TIME : 1  
 SEX : FEMALE

HEMATOLOGY (SUMMARY)  
 ALL ANIMALS (105W)

REPORT TYPE : A1

PAGE : 6

Group Name	NO. of Animals	WBC 10 <sup>3</sup> /μl		Differential		WBC (%)		MONO		EOSINO		BASO		OTHER	
				NEUTRO		LYMPHO									
Control	37	4.42±	3.21	41±	13	51±	13	5±	1	2±	1	0±	0	1±	1
800 ppm	38	7.14±	10.00	37±	14	48±	17	5±	2	2±	1	0±	1	8±	24
2400 ppm	42	4.87±	3.68	40±	13	52±	13	5±	2	2±	1	0±	0	1±	1
7200 ppm	33	3.84±	3.18	50±	12*	42±	12*	6±	1	2±	1	0±	0	1±	0

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

\*\* :  $P \leq 0.01$

Test of Dunnett

(HCL070)

BAIS 4

**TABLE H 1**

**BIOCHEMISTRY: MALE**

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]  
 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	40	6.7±	0.5	2.8±	0.3	0.7±	0.1	0.18±	0.10	154±	28	195±	47	148±	121
800 ppm	45	6.6±	0.4	2.9±	0.3	0.8±	0.1	0.14±	0.03**	160±	21	149±	47**	104±	61
2400 ppm	38	6.7±	0.3	2.9±	0.2	0.8±	0.1	0.14±	0.03*	159±	18	127±	27**	79±	39**
7200 ppm	40	6.5±	0.6**	3.0±	0.3	0.9±	0.1**	0.15±	0.04	147±	27	123±	37**	65±	53**

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

Test of Dunnett

(HCL074)

BAIS 4

STUDY NO. : 0641

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]

MEASURE. TIME : 1

SEX : MALE

REPORT TYPE : A1

## BIOCHEMISTRY (SUMMARY)

ALL ANIMALS (105W)

PAGE : 2

Group Name	NO. of Animals	PHOSPHOLIPID mg/dl		AST I U / l		ALT I U / l		LDH I U / l		ALP I U / l		G-GTP I U / l		CK I U / l	
Control	40	284±	73	106±	74	42±	22	181±	54	267±	205	7±	3	120±	73
800 ppm	45	223±	68**	106±	43	48±	20	219±	68**	170±	45**	3±	1**	108±	31
2400 ppm	38	190±	36**	116±	35**	56±	21*	209±	50	188±	43**	3±	1**	109±	25
7200 ppm	40	186±	60**	137±	88**	61±	26**	240±	205*	190±	89**	3±	3**	135±	215

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

Test of Dunnett

(HCL074)

BAIS 4

STUDY NO. : 0641

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME : 1

SEX : MALE

REPORT TYPE : A1

## BIOCHEMISTRY (SUMMARY)

ALL ANIMALS (105W)

PAGE : 3

Group Name	NO. of Animals	UREA NITROGEN mg/dl		CREATININE mg/dl		SODIUM mEq/l		POTASSIUM mEq/l		CHLORIDE mEq/l		CALCIUM mg/dl		INORGANIC PHOSPHORUS mg/dl	
Control	40	20.3±	8.2	0.7±	0.2	142±	2	3.5±	0.2	105±	2	10.6±	0.5	4.2±	0.9
800 ppm	45	19.2±	4.1	0.6±	0.1	143±	1	3.6±	0.3	105±	2	10.4±	0.4	4.1±	0.5
2400 ppm	38	18.0±	2.4	0.6±	0.1	143±	1	3.6±	0.3	105±	1	10.3±	0.2**	4.1±	0.5
7200 ppm	40	19.9±	9.9	0.6±	0.1**	143±	2	3.5±	0.4	104±	2	10.3±	0.5**	4.1±	1.0

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

Test of Dunnett

(HCL074)

BAIS 4



**TABLE H 2**

**BIOCHEMISTRY: FEMALE**

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 MEASURE. TIME : 1  
 SEX : FEMALE

BIOCHEMISTRY (SUMMARY)  
 ALL ANIMALS (105W)

REPORT TYPE : A1

PAGE : 4

Group Name	NO. of Animals	TOTAL PROTEIN g/dl		ALBUMIN g/dl		A/G RATIO		T-BILIRUBIN mg/dl		GLUCOSE mg/dl		T-CHOLESTEROL mg/dl		TRIGLYCERIDE mg/dl	
Control	38	6.9±	0.4	3.5±	0.3	1.0±	0.2	0.16±	0.13	151±	16	135±	49	106±	119
800 ppm	38	6.9±	0.4	3.5±	0.3	1.0±	0.1	0.40±	1.27**	146±	18	129±	26	109±	107
2400 ppm	42	6.9±	0.6	3.4±	0.3	1.0±	0.2	0.15±	0.04	147±	17	119±	25	66±	39
7200 ppm	33	6.5±	0.6**	3.4±	0.4	1.1±	0.2	0.13±	0.02	139±	23	119±	45**	58±	34*

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

Test of Dunnett

(HCL074)

BAIS 4

STUDY NO. : 0641

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME : 1

SEX : FEMALE

REPORT TYPE : A1

## BIOCHEMISTRY (SUMMARY)

ALL ANIMALS (105W)

PAGE : 5

Group Name	NO. of Animals	PHOSPHOLIPID mg/dl		AST IU/l		ALT IU/l		LDH IU/l		ALP IU/l		G-GTP IU/l		CK IU/l	
Control	38	245±	77	140±	115	56±	32	253±	268	136±	121	2±	1	100±	36
800 ppm	38	241±	70	229±	242**	77±	42**	389±	728**	169±	159	3±	2	104±	37
2400 ppm	42	219±	45	168±	84**	61±	25*	262±	92*	131±	50	2±	1	110±	82
7200 ppm	33	218±	49*	147±	55	44±	13	239±	80	188±	372	2±	3**	110±	63

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

Test of Dunnett

(HCL074)

BAIS 4

STUDY NO. : 0641

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]

MEASURE. TIME : 1

SEX : FEMALE

REPORT TYPE : A1

## BIOCHEMISTRY (SUMMARY)

ALL ANIMALS (105W)

PAGE : 6

Group Name	NO. of Animals	UREA NITROGEN mg/dl		CREATININE mg/dl		SODIUM mEq/l		POTASSIUM mEq/l		CHLORIDE mEq/l		CALCIUM mg/dl		INORGANIC PHOSPHORUS mg/dl	
Control	38	17.1±	2.9	0.6±	0.1	141±	1	3.6±	0.3	104±	2	10.5±	0.3	3.9±	0.7
800 ppm	38	16.9±	2.1	0.5±	0.1	141±	2	3.6±	0.4	104±	2	10.5±	0.4	3.8±	0.7
2400 ppm	42	17.6±	6.9	0.5±	0.1	141±	1	3.6±	0.4	104±	2	10.4±	0.3	4.0±	1.2
7200 ppm	33	27.0±	15.9**	0.6±	0.1	141±	3	3.8±	0.4	104±	2	10.5±	0.4	4.7±	1.3**

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

Test of Dunnett

(HCL074)

BAIS 4

TABLE I 1

URINALYSIS: MALE

STUDY NO. : 0641  
 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	40	0	3	4	9	14	10	0		0	0	0	1	29	10		40	0	0	0	0	0	0		37	3	0	0	0	0		39	1	0	0
800 ppm	45	0	0	3	6	23	12	1		0	0	0	0	34	11		45	0	0	0	0	0	0		43	2	0	0	0	0		44	1	0	0
2400 ppm	38	0	0	1	9	16	12	0		0	0	0	0	27	11		38	0	0	0	0	0	0		32	6	0	0	0	0		38	0	0	0
7200 ppm	40	0	3	4	6	15	12	0		0	0	0	1	27	12		40	0	0	0	0	0	0		30	10	0	0	0	0	*	40	0	0	0

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

Test of CHI SQUARE

(HCL101)

BATS 4

STUDY NO. : 0641

URINALYSIS

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME : 1

SEX : MALE

REPORT TYPE : A1

PAGE : 2

Group Name	NO. of Animals	Occult blood					CHI	Urobilinogen					CHI
		-	±	+	2+	3+		±	+	2+	3+	4+	
Control	40	36	1	0	1	2		40	0	0	0	0	
800 ppm	45	44	0	0	0	1		45	0	0	0	0	
2400 ppm	38	37	0	1	0	0		38	0	0	0	0	
7200 ppm	40	28	1	2	3	6		40	0	0	0	0	

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

Test of CHI SQUARE

(HCL101)

BAIS 4

**TABLE I 2**

**URINALYSIS: FEMALE**



STUDY NO. : 0641

## URINALYSIS

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME : 1

SEX : FEMALE

REPORT TYPE : A1

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	38	0	1	5	6	16	9	1		0	1	1	10	18	8		38	0	0	0	0	0		17	21	0	0	0	0		38	0	0	0				
800 ppm	38	0	2	4	8	8	14	2		0	0	3	7	18	10		38	0	0	0	0	0		12	25	1	0	0	0		36	1	0	1				
2400 ppm	43	0	2	11	9	11	10	0		0	0	2	8	19	14		43	0	0	0	0	0		10	32	0	1	0	0		43	0	0	0				
7200 ppm	33	0	6	9	6	5	4	3	*	0	0	0	0	11	22	**	33	0	0	0	0	0		17	16	0	0	0	0		33	0	0	0				

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

Test of CHI SQUARE

(HCL101)

BATS 4

STUDY NO. : 0641

URINALYSIS

ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]

MEASURE. TIME : 1

SEX : FEMALE

REPORT TYPE : A1

PAGE : 4

Group Name	NO. of Animals	Occult blood					CHI	Urobilinogen					CHI
		-	±	+	2+	3+		±	+	2+	3+	4+	
Control	38	38	0	0	0	0		38	0	0	0	0	
800 ppm	38	35	0	1	0	2		37	1	0	0	0	
2400 ppm	43	35	1	0	4	3	*	43	0	0	0	0	
7200 ppm	33	5	1	0	0	27	**	33	0	0	0	0	

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

Test of CHI SQUARE

(HCL101)

BATS 4

**TABLE J 1**

**GROSS FINDINGS: MALE: ALL ANIMALS**

STUDY NO. : 0641  
 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		800 ppm		2400 ppm		7200 ppm	
			50	(%)	50	(%)	50	(%)	50	(%)
skin/app	nodule		7	( 14)	2	( 4)	2	( 4)	3	( 6)
	scab		0	( 0)	0	( 0)	1	( 2)	0	( 0)
subcutis	edema		0	( 0)	0	( 0)	1	( 2)	0	( 0)
	mass		13	( 26)	3	( 6)	14	( 28)	6	( 12)
lung	white zone		2	( 4)	3	( 6)	1	( 2)	0	( 0)
	red zone		0	( 0)	0	( 0)	0	( 0)	2	( 4)
	brown zone		0	( 0)	0	( 0)	1	( 2)	0	( 0)
	nodule		1	( 2)	1	( 2)	0	( 0)	2	( 4)
lymph node	enlarged		0	( 0)	1	( 2)	0	( 0)	2	( 4)
spleen	enlarged		4	( 8)	3	( 6)	5	( 10)	0	( 0)
	nodule		1	( 2)	0	( 0)	0	( 0)	0	( 0)
heart	white zone		0	( 0)	1	( 2)	1	( 2)	0	( 0)
artery/aort	induration		1	( 2)	0	( 0)	0	( 0)	0	( 0)
oral cavity	nodule		0	( 0)	0	( 0)	1	( 2)	0	( 0)
tongue	nodule		1	( 2)	1	( 2)	0	( 0)	0	( 0)
stomach	forestomach:ulcer		1	( 2)	0	( 0)	0	( 0)	0	( 0)
	forestomach:nodule		0	( 0)	1	( 2)	1	( 2)	0	( 0)
small intes	dilated		0	( 0)	0	( 0)	0	( 0)	1	( 2)
anus	nodule		1	( 2)	0	( 0)	0	( 0)	0	( 0)
liver	enlarged		0	( 0)	1	( 2)	0	( 0)	0	( 0)
	white zone		1	( 2)	1	( 2)	1	( 2)	0	( 0)
	nodule		2	( 4)	1	( 2)	1	( 2)	1	( 2)

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 2

Organ	Findings	Group Name NO. of Animals	Control		800 ppm		2400 ppm		7200 ppm	
			50	(%)	50	(%)	50	(%)	50	(%)
liver	cyst		0	( 0)	0	( 0)	0	( 0)	1	( 2)
	herniation		3	( 6)	4	( 8)	6	( 12)	3	( 6)
pancreas	nodule		1	( 2)	0	( 0)	0	( 0)	0	( 0)
kidney	enlarged		0	( 0)	0	( 0)	0	( 0)	1	( 2)
	brown zone		0	( 0)	1	( 2)	0	( 0)	0	( 0)
	nodule		0	( 0)	1	( 2)	0	( 0)	0	( 0)
	cyst		0	( 0)	1	( 2)	0	( 0)	0	( 0)
	granular		13	( 26)	7	( 14)	2	( 4)	2	( 4)
urin bladd	nodule		0	( 0)	0	( 0)	0	( 0)	1	( 2)
	urine:marked retention		0	( 0)	0	( 0)	1	( 2)	0	( 0)
	urine:red		0	( 0)	0	( 0)	0	( 0)	1	( 2)
pituitary	enlarged		7	( 14)	4	( 8)	3	( 6)	5	( 10)
	red zone		3	( 6)	0	( 0)	4	( 8)	1	( 2)
	nodule		3	( 6)	2	( 4)	1	( 2)	3	( 6)
thyroid	enlarged		2	( 4)	3	( 6)	2	( 4)	3	( 6)
	nodule		1	( 2)	1	( 2)	0	( 0)	0	( 0)
adrenal	enlarged		1	( 2)	1	( 2)	1	( 2)	3	( 6)
testis	nodule		27	( 54)	21	( 42)	20	( 40)	9	( 18)
semin ves	nodule		1	( 2)	0	( 0)	0	( 0)	0	( 0)
brain	red zone		1	( 2)	0	( 0)	1	( 2)	0	( 0)
	nodule		0	( 0)	0	( 0)	0	( 0)	1	( 2)
eye	white		9	( 18)	7	( 14)	4	( 8)	8	( 16)

STUDY NO. : 0641  
 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		800 ppm		2400 ppm		7200 ppm	
			50	(%)	50	(%)	50	(%)	50	(%)
eye	red		1	( 2)	0	( 0)	0	( 0)	0	( 0)
Zymbal gl	nodule		1	( 2)	0	( 0)	0	( 0)	1	( 2)
bone	red zone		0	( 0)	0	( 0)	1	( 2)	0	( 0)
	nodule		0	( 0)	1	( 2)	0	( 0)	0	( 0)
pleura	nodule		0	( 0)	0	( 0)	0	( 0)	1	( 2)
peritoneum	nodule		1	( 2)	2	( 4)	0	( 0)	1	( 2)
retroperit	mass		0	( 0)	0	( 0)	0	( 0)	1	( 2)
abdominal c	hemorrhage		0	( 0)	0	( 0)	1	( 2)	0	( 0)
	ascites		1	( 2)	2	( 4)	0	( 0)	1	( 2)
thoracic ca	pleural fluid		1	( 2)	1	( 2)	0	( 0)	1	( 2)
other	lip:nodule		0	( 0)	0	( 0)	1	( 2)	0	( 0)
	ear:nodule		1	( 2)	1	( 2)	0	( 0)	1	( 2)
	lower jaw:nodule		1	( 2)	0	( 0)	0	( 0)	0	( 0)
	nose:nodule		0	( 0)	0	( 0)	1	( 2)	0	( 0)

(UPT080)

BAIS 4

**TABLE J 2**

**GROSS FINDINGS: MALE: DEAD AND MORIBUND ANIMALS**

STUDY NO. : 0641  
 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		800 ppm		2400 ppm		7200 ppm	
			10	(%)	5	(%)	12	(%)	10	(%)
skin/app	nodule		0	( 0)	0	( 0)	0	( 0)	3	( 30)
	scab		0	( 0)	0	( 0)	1	( 8)	0	( 0)
subcutis	edema		0	( 0)	0	( 0)	1	( 8)	0	( 0)
	mass		3	( 30)	0	( 0)	5	( 42)	1	( 10)
lung	red zone		0	( 0)	0	( 0)	0	( 0)	1	( 10)
	nodule		0	( 0)	1	( 20)	0	( 0)	2	( 20)
lymph node	enlarged		0	( 0)	0	( 0)	0	( 0)	1	( 10)
spleen	enlarged		2	( 20)	2	( 40)	5	( 42)	0	( 0)
	nodule		1	( 10)	0	( 0)	0	( 0)	0	( 0)
heart	white zone		0	( 0)	1	( 20)	0	( 0)	0	( 0)
artery/aort	induration		1	( 10)	0	( 0)	0	( 0)	0	( 0)
stomach	forestomach:ulcer		1	( 10)	0	( 0)	0	( 0)	0	( 0)
small intes	dilated		0	( 0)	0	( 0)	0	( 0)	1	( 10)
liver	enlarged		0	( 0)	1	( 20)	0	( 0)	0	( 0)
	white zone		0	( 0)	1	( 20)	0	( 0)	0	( 0)
	nodule		0	( 0)	0	( 0)	0	( 0)	1	( 10)
	cyst		0	( 0)	0	( 0)	0	( 0)	1	( 10)
	herniation		0	( 0)	0	( 0)	0	( 0)	1	( 10)
pancreas	nodule		1	( 10)	0	( 0)	0	( 0)	0	( 0)
kidney	enlarged		0	( 0)	0	( 0)	0	( 0)	1	( 10)
	nodule		0	( 0)	1	( 20)	0	( 0)	0	( 0)
	granular		2	( 20)	0	( 0)	1	( 8)	0	( 0)



STUDY NO. : 0641  
 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		800 ppm		2400 ppm		7200 ppm	
			10	(%)	5	(%)	12	(%)	10	(%)
urin bladd	nodule		0	( 0)	0	( 0)	0	( 0)	1	( 10)
	urine:marked retention		0	( 0)	0	( 0)	1	( 8)	0	( 0)
	urine:red		0	( 0)	0	( 0)	0	( 0)	1	( 10)
pituitary	enlarged		2	( 20)	0	( 0)	0	( 0)	2	( 20)
	red zone		1	( 10)	0	( 0)	0	( 0)	0	( 0)
thyroid	enlarged		0	( 0)	0	( 0)	1	( 8)	0	( 0)
	nodule		1	( 10)	1	( 20)	0	( 0)	0	( 0)
adrenal	enlarged		1	( 10)	0	( 0)	0	( 0)	1	( 10)
testis	nodule		0	( 0)	0	( 0)	2	( 17)	1	( 10)
brain	red zone		1	( 10)	0	( 0)	1	( 8)	0	( 0)
eye	white		3	( 30)	0	( 0)	1	( 8)	2	( 20)
	red		1	( 10)	0	( 0)	0	( 0)	0	( 0)
bone	red zone		0	( 0)	0	( 0)	1	( 8)	0	( 0)
	nodule		0	( 0)	1	( 20)	0	( 0)	0	( 0)
pleura	nodule		0	( 0)	0	( 0)	0	( 0)	1	( 10)
peritoneum	nodule		0	( 0)	1	( 20)	0	( 0)	1	( 10)
retroperit	mass		0	( 0)	0	( 0)	0	( 0)	1	( 10)
abdominal c	hemorrhage		0	( 0)	0	( 0)	1	( 8)	0	( 0)
	ascites		0	( 0)	2	( 40)	0	( 0)	1	( 10)
thoracic ca	pleural fluid		1	( 10)	1	( 20)	0	( 0)	1	( 10)
other	lip:nodule		0	( 0)	0	( 0)	1	( 8)	0	( 0)
	lower jaw:nodule		1	( 10)	0	( 0)	0	( 0)	0	( 0)

TABLE J 3

GROSS FINDINGS: MALE: SACRIFICED ANIMALS

STUDY NO. : 0641  
 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		800 ppm		2400 ppm		7200 ppm	
			40	(%)	45	(%)	38	(%)	40	(%)
skin/app	nodule		7	( 18)	2	( 4)	2	( 5)	0	( 0)
subcutis	mass		10	( 25)	3	( 7)	9	( 24)	5	( 13)
lung	white zone		2	( 5)	3	( 7)	1	( 3)	0	( 0)
	red zone		0	( 0)	0	( 0)	0	( 0)	1	( 3)
	brown zone		0	( 0)	0	( 0)	1	( 3)	0	( 0)
	nodule		1	( 3)	0	( 0)	0	( 0)	0	( 0)
lymph node	enlarged		0	( 0)	1	( 2)	0	( 0)	1	( 3)
spleen	enlarged		2	( 5)	1	( 2)	0	( 0)	0	( 0)
heart	white zone		0	( 0)	0	( 0)	1	( 3)	0	( 0)
oral cavity	nodule		0	( 0)	0	( 0)	1	( 3)	0	( 0)
tongue	nodule		1	( 3)	1	( 2)	0	( 0)	0	( 0)
stomach	forestomach:nodule		0	( 0)	1	( 2)	1	( 3)	0	( 0)
anus	nodule		1	( 3)	0	( 0)	0	( 0)	0	( 0)
liver	white zone		1	( 3)	0	( 0)	1	( 3)	0	( 0)
	nodule		2	( 5)	1	( 2)	1	( 3)	0	( 0)
	herniation		3	( 8)	4	( 9)	6	( 16)	2	( 5)
kidney	brown zone		0	( 0)	1	( 2)	0	( 0)	0	( 0)
	cyst		0	( 0)	1	( 2)	0	( 0)	0	( 0)
	granular		11	( 28)	7	( 16)	1	( 3)	2	( 5)
pituitary	enlarged		5	( 13)	4	( 9)	3	( 8)	3	( 8)
	red zone		2	( 5)	0	( 0)	4	( 11)	1	( 3)
	nodule		3	( 8)	2	( 4)	1	( 3)	3	( 8)

STUDY NO. : 0641  
 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		800 ppm		2400 ppm		7200 ppm	
			40	(%)	45	(%)	38	(%)	40	(%)
thyroid	enlarged		2	( 5)	3	( 7)	1	( 3)	3	( 8)
adrenal	enlarged		0	( 0)	1	( 2)	1	( 3)	2	( 5)
testis	nodule		27	( 68)	21	( 47)	18	( 47)	8	( 20)
semin ves	nodule		1	( 3)	0	( 0)	0	( 0)	0	( 0)
brain	nodule		0	( 0)	0	( 0)	0	( 0)	1	( 3)
eye	white		6	( 15)	7	( 16)	3	( 8)	6	( 15)
Zymbal gl	nodule		1	( 3)	0	( 0)	0	( 0)	1	( 3)
peritoneum	nodule		1	( 3)	1	( 2)	0	( 0)	0	( 0)
abdominal c	ascites		1	( 3)	0	( 0)	0	( 0)	0	( 0)
other	ear:nodule		1	( 3)	1	( 2)	0	( 0)	1	( 3)
	nose:nodule		0	( 0)	0	( 0)	1	( 3)	0	( 0)

(HPT080)

BAIS 4

**TABLE J 4**

**GROSS FINDINGS: FEMALE: ALL ANIMALS**

STUDY NO. : 0641  
 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		800 ppm		2400 ppm		7200 ppm	
			50	(%)	50	(%)	50	(%)	50	(%)
skin/app	nodule		1	( 2)	1	( 2)	0	( 0)	0	( 0)
	ulcer		0	( 0)	0	( 0)	0	( 0)	1	( 2)
	scab		0	( 0)	0	( 0)	0	( 0)	1	( 2)
subcutis	edema		0	( 0)	0	( 0)	0	( 0)	1	( 2)
	jaundice		2	( 4)	1	( 2)	0	( 0)	1	( 2)
	mass		11	( 22)	15	( 30)	10	( 20)	8	( 16)
lung	white zone		1	( 2)	0	( 0)	0	( 0)	1	( 2)
	nodule		0	( 0)	1	( 2)	0	( 0)	0	( 0)
lymph node	enlarged		0	( 0)	2	( 4)	0	( 0)	0	( 0)
thymus	enlarged		1	( 2)	0	( 0)	0	( 0)	0	( 0)
spleen	enlarged		5	( 10)	9	( 18)	4	( 8)	5	( 10)
heart	white zone		0	( 0)	0	( 0)	0	( 0)	1	( 2)
oral cavity	nodule		0	( 0)	0	( 0)	0	( 0)	2	( 4)
tongue	nodule		1	( 2)	0	( 0)	1	( 2)	0	( 0)
stomach	forestomach:ulcer		2	( 4)	0	( 0)	0	( 0)	1	( 2)
	glandular stomach:erosion		0	( 0)	0	( 0)	0	( 0)	1	( 2)
liver	white zone		0	( 0)	0	( 0)	1	( 2)	1	( 2)
	red zone		1	( 2)	0	( 0)	0	( 0)	0	( 0)
	nodule		0	( 0)	1	( 2)	1	( 2)	0	( 0)
	rough		2	( 4)	2	( 4)	1	( 2)	1	( 2)
	granular		0	( 0)	0	( 0)	0	( 0)	1	( 2)
	herniation		6	( 12)	7	( 14)	7	( 14)	8	( 16)

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 5

Organ	Findings	Group Name NO. of Animals	Control		800 ppm		2400 ppm		7200 ppm	
			50	(%)	50	(%)	50	(%)	50	(%)
kidney	cyst		0	( 0)	1	( 2)	1	( 2)	0	( 0)
	deformed		0	( 0)	0	( 0)	0	( 0)	1	( 2)
	granular		1	( 2)	1	( 2)	0	( 0)	0	( 0)
	hydronephrosis		0	( 0)	0	( 0)	0	( 0)	1	( 2)
	dilated pelvis		0	( 0)	0	( 0)	0	( 0)	1	( 2)
urin bladd	urine:marked retention		0	( 0)	0	( 0)	0	( 0)	1	( 2)
pituitary	enlarged		8	( 16)	10	( 20)	8	( 16)	4	( 8)
	red zone		8	( 16)	11	( 22)	15	( 30)	21	( 42)
	black zone		0	( 0)	1	( 2)	0	( 0)	0	( 0)
	nodule		6	( 12)	8	( 16)	0	( 0)	3	( 6)
thyroid	enlarged		3	( 6)	3	( 6)	2	( 4)	0	( 0)
adrenal	enlarged		0	( 0)	1	( 2)	0	( 0)	2	( 4)
ovary	enlarged		0	( 0)	0	( 0)	0	( 0)	1	( 2)
	cyst		1	( 2)	1	( 2)	1	( 2)	0	( 0)
uterus	nodule		4	( 8)	3	( 6)	5	( 10)	7	( 14)
	adhesion		0	( 0)	0	( 0)	0	( 0)	1	( 2)
	fluid		0	( 0)	0	( 0)	0	( 0)	1	( 2)
	fluid:red		0	( 0)	0	( 0)	1	( 2)	0	( 0)
brain	red zone		1	( 2)	0	( 0)	0	( 0)	0	( 0)
eye	white		5	( 10)	5	( 10)	3	( 6)	3	( 6)
Zymbal gl	nodule		1	( 2)	0	( 0)	0	( 0)	1	( 2)
peritoneum	nodule		0	( 0)	0	( 0)	0	( 0)	1	( 2)

STUDY NO. : 0641  
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]  
REPORT TYPE : A1  
SEX : FEMALE

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

PAGE : 6

Organ	Findings	Group Name NO. of Animals	Control		800 ppm		2400 ppm		7200 ppm	
			50	(%)	50	(%)	50	(%)	50	(%)
peritoneum	thick		0	( 0)	0	( 0)	0	( 0)	1	( 2)
retroperit	mass		0	( 0)	0	( 0)	0	( 0)	1	( 2)
abdominal c	ascites		1	( 2)	0	( 0)	1	( 2)	1	( 2)
thoracic ca	mass		0	( 0)	0	( 0)	0	( 0)	1	( 2)
	pleural fluid		1	( 2)	1	( 2)	1	( 2)	2	( 4)
other	eye lid:nodule		1	( 2)	0	( 0)	0	( 0)	0	( 0)
	ear:nodule		1	( 2)	0	( 0)	0	( 0)	1	( 2)
whole body	anemic		1	( 2)	1	( 2)	0	( 0)	0	( 0)

(HPT080)

BAIS 4



**TABLE J 5**

**GROSS FINDINGS: FEMALE: DEAD AND MORIBUND ANIMALS**

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1j[F344/DuCrj]  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 3

Organ	Findings	Group Name NO. of Animals	Control		800 ppm		2400 ppm		7200 ppm	
			12	(%)	12	(%)	8	(%)	17	(%)
skin/app	ulcer		0	( 0)	0	( 0)	0	( 0)	1	( 6)
subcutis	edema		0	( 0)	0	( 0)	0	( 0)	1	( 6)
	jaundice		2	( 17)	0	( 0)	0	( 0)	1	( 6)
	mass		5	( 42)	6	( 50)	2	( 25)	1	( 6)
lymph node	enlarged		0	( 0)	2	( 17)	0	( 0)	0	( 0)
thymus	enlarged		1	( 8)	0	( 0)	0	( 0)	0	( 0)
spleen	enlarged		3	( 25)	5	( 42)	3	( 38)	4	( 24)
heart	white zone		0	( 0)	0	( 0)	0	( 0)	1	( 6)
tongue	nodule		1	( 8)	0	( 0)	0	( 0)	0	( 0)
stomach	forestomach:ulcer		2	( 17)	0	( 0)	0	( 0)	1	( 6)
liver	white zone		0	( 0)	0	( 0)	0	( 0)	1	( 6)
	nodule		0	( 0)	0	( 0)	1	( 13)	0	( 0)
	rough		1	( 8)	0	( 0)	0	( 0)	0	( 0)
	granular		0	( 0)	0	( 0)	0	( 0)	1	( 6)
	herniation		1	( 8)	1	( 8)	1	( 13)	1	( 6)
kidney	granular		0	( 0)	1	( 8)	0	( 0)	0	( 0)
	hydronephrosis		0	( 0)	0	( 0)	0	( 0)	1	( 6)
	dilated pelvis		0	( 0)	0	( 0)	0	( 0)	1	( 6)
urin bladd	urine:marked retention		0	( 0)	0	( 0)	0	( 0)	1	( 6)
pituitary	enlarged		7	( 58)	6	( 50)	2	( 25)	2	( 12)
	red zone		1	( 8)	1	( 8)	0	( 0)	3	( 18)
	nodule		1	( 8)	2	( 17)	0	( 0)	1	( 6)

STUDY NO. : 0641  
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		800 ppm		2400 ppm		7200 ppm	
			12	(%)	12	(%)	8	(%)	17	(%)
thyroid	enlarged		1	( 8)	1	( 8)	0	( 0)	0	( 0)
adrenal	enlarged		0	( 0)	1	( 8)	0	( 0)	0	( 0)
ovary	enlarged		0	( 0)	0	( 0)	0	( 0)	1	( 6)
	cyst		1	( 8)	0	( 0)	0	( 0)	0	( 0)
uterus	nodule		1	( 8)	0	( 0)	0	( 0)	4	( 24)
	adhesion		0	( 0)	0	( 0)	0	( 0)	1	( 6)
	fluid		0	( 0)	0	( 0)	0	( 0)	1	( 6)
	fluid:red		0	( 0)	0	( 0)	1	( 13)	0	( 0)
eye	white		1	( 8)	2	( 17)	1	( 13)	1	( 6)
Zymal gl	nodule		1	( 8)	0	( 0)	0	( 0)	1	( 6)
peritoneum	nodule		0	( 0)	0	( 0)	0	( 0)	1	( 6)
	thick		0	( 0)	0	( 0)	0	( 0)	1	( 6)
retroperit	mass		0	( 0)	0	( 0)	0	( 0)	1	( 6)
abdominal c	ascites		1	( 8)	0	( 0)	1	( 13)	1	( 6)
thoracic ca	pleural fluid		1	( 8)	1	( 8)	1	( 13)	2	( 12)
whole body	anemic		1	( 8)	1	( 8)	0	( 0)	0	( 0)

**TABLE J 6**

**GROSS FINDINGS: FEMALE: SACRIFICED ANIMALS**

STUDY NO. : 0641  
 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		800 ppm		2400 ppm		7200 ppm	
			38	(%)	38	(%)	42	(%)	33	(%)
skin/app	nodule		1	( 3)	1	( 3)	0	( 0)	0	( 0)
	scab		0	( 0)	0	( 0)	0	( 0)	1	( 3)
subcutis	jaundice		0	( 0)	1	( 3)	0	( 0)	0	( 0)
	mass		6	( 16)	9	( 24)	8	( 19)	7	( 21)
lung	white zone		1	( 3)	0	( 0)	0	( 0)	1	( 3)
	nodule		0	( 0)	1	( 3)	0	( 0)	0	( 0)
spleen	enlarged		2	( 5)	4	( 11)	1	( 2)	1	( 3)
oral cavity	nodule		0	( 0)	0	( 0)	0	( 0)	2	( 6)
tongue	nodule		0	( 0)	0	( 0)	1	( 2)	0	( 0)
stomach	glandular stomach:erosion		0	( 0)	0	( 0)	0	( 0)	1	( 3)
liver	white zone		0	( 0)	0	( 0)	1	( 2)	0	( 0)
	red zone		1	( 3)	0	( 0)	0	( 0)	0	( 0)
	nodule		0	( 0)	1	( 3)	0	( 0)	0	( 0)
	rough		1	( 3)	2	( 5)	1	( 2)	1	( 3)
	herniation		5	( 13)	6	( 16)	6	( 14)	7	( 21)
kidney	cyst		0	( 0)	1	( 3)	1	( 2)	0	( 0)
	deformed		0	( 0)	0	( 0)	0	( 0)	1	( 3)
	granular		1	( 3)	0	( 0)	0	( 0)	0	( 0)
pituitary	enlarged		1	( 3)	4	( 11)	6	( 14)	2	( 6)
	red zone		7	( 18)	10	( 26)	15	( 36)	18	( 55)
	black zone		0	( 0)	1	( 3)	0	( 0)	0	( 0)
	nodule		5	( 13)	6	( 16)	0	( 0)	2	( 6)

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]  
 REPORT TYPE : A1  
 SEX : FEMALE

GROSS FINDINGS (SUMMARY)  
 SACRIFICED ANIMALS (105W)

PAGE : 4

Organ	Findings	Group Name NO. of Animals	Control		800 ppm		2400 ppm		7200 ppm	
			38	(%)	38	(%)	42	(%)	33	(%)
thyroid	enlarged		2	( 5)	2	( 5)	2	( 5)	0	( 0)
adrenal	enlarged		0	( 0)	0	( 0)	0	( 0)	2	( 6)
ovary	cyst		0	( 0)	1	( 3)	1	( 2)	0	( 0)
uterus	nodule		3	( 8)	3	( 8)	5	( 12)	3	( 9)
brain	red zone		1	( 3)	0	( 0)	0	( 0)	0	( 0)
eye	white		4	( 11)	3	( 8)	2	( 5)	2	( 6)
thoracic ca	mass		0	( 0)	0	( 0)	0	( 0)	1	( 3)
other	eye lid:nodule		1	( 3)	0	( 0)	0	( 0)	0	( 0)
	ear:nodule		1	( 3)	0	( 0)	0	( 0)	1	( 3)

TABLE K 1

ORGAN WEIGHT, ABSOLUTE: MALE

STUDY NO. : 0641  
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	40	401±	45	0.076±	0.019	2.832±	0.974	1.239±	0.097	1.404±	0.183	2.864±	0.579
800 ppm	45	402±	38	0.106±	0.222	2.715±	1.097	1.238±	0.097	1.367±	0.146	2.740±	0.312
2400 ppm	38	406±	26	0.085±	0.096	2.763±	0.839	1.228±	0.092	1.345±	0.110	2.675±	0.172
7200 ppm	40	369±	60**	0.079±	0.073	2.142±	0.935**	1.152±	0.107**	1.245±	0.090**	2.714±	0.282

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

Test of Dunnett

(HCL040)

BAIS 4



STUDY NO. : 0641  
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	40	1.158±	0.552	11.774±	1.703	2.104±	0.054
800 ppm	45	0.933±	0.403**	10.539±	1.113**	2.105±	0.041
2400 ppm	38	0.885±	0.282**	10.166±	0.914**	2.108±	0.038
7200 ppm	40	0.680±	0.113**	9.046±	1.367**	2.078±	0.037*

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

Test of Dunnett

(HCL040)

BAIS 4

**TABLE K 2**

**ORGAN WEIGHT, ABSOLUTE: FEMALE**

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1  
 SEX : FEMALE  
 UNIT: g

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

PAGE : 3

Group Name	NO. of Animals	Body Weight		ADRENALS		OVARIES		HEART		LUNGS		KIDNEYS	
Control	38	263±	31	0.069±	0.007	0.129±	0.021	0.886±	0.089	0.976±	0.172	1.819±	0.163
800 ppm	38	264±	30	0.070±	0.007	0.142±	0.097	0.903±	0.076	1.065±	0.442	1.864±	0.165
2400 ppm	42	267±	29	0.072±	0.008	0.163±	0.231	0.890±	0.068	0.977±	0.078	1.952±	0.155**
7200 ppm	33	207±	25**	0.076±	0.041	0.119±	0.022	0.783±	0.083**	0.881±	0.056**	2.078±	0.244**

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

Test of Dunnett

(HCL040)

BAIS 4

STUDY NO. : 0641  
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
REPORT TYPE : A1  
SEX : FEMALE  
UNIT: g

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

PAGE : 4

Group Name	NO. of Animals	SPLEEN		LIVER		BRAIN	
Control	38	0.759±	0.901	6.814±	1.095	1.925±	0.041
800 ppm	38	1.236±	2.217	7.237±	1.153	1.913±	0.049
2400 ppm	42	0.666±	0.293	7.161±	1.116	1.921±	0.046
7200 ppm	33	0.478±	0.232**	5.858±	0.676**	1.869±	0.037**

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

Test of Dunnett

(HCL040)

BAIS 4

TABLE L 1

ORGAN WEIGHT, RELATIVE: MALE

STUDY NO. : 0641  
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	40	401±	45	0.019± 0.006	0.710± 0.244	0.312± 0.041	0.354± 0.061	0.731± 0.238
800 ppm	45	402±	38	0.027± 0.057	0.673± 0.257	0.311± 0.044	0.345± 0.075	0.690± 0.129
2400 ppm	38	406±	26	0.021± 0.024	0.684± 0.228	0.303± 0.022	0.332± 0.031	0.660± 0.039
7200 ppm	40	369±	60**	0.022± 0.020	0.591± 0.261	0.317± 0.035	0.344± 0.045	0.751± 0.125*

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

Test of Dunnett

(HCL042)

BAIS 4

STUDY NO. : 0641  
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	40	0.291± 0.139	2.960± 0.501	0.531± 0.058
800 ppm	45	0.240± 0.156**	2.647± 0.433**	0.529± 0.057
2400 ppm	38	0.219± 0.072**	2.508± 0.199**	0.521± 0.031
7200 ppm	40	0.188± 0.033**	2.485± 0.400**	0.576± 0.081**

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

Test of Dunnett

(HCL042)

BAIS 4

TABLE L 2

ORGAN WEIGHT, RELATIVE: FEMALE



STUDY NO. : 0641  
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
REPORT TYPE : A1  
SEX : FEMALE  
UNIT: %

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

PAGE : 3

Group Name	NO. of Animals	Body Weight (g)	ADRENALS	OVARIES	HEART	LUNGS	KIDNEYS
Control	38	263± 31	0.027± 0.005	0.049± 0.007	0.340± 0.032	0.376± 0.069	0.703± 0.117
800 ppm	38	264± 30	0.027± 0.004	0.054± 0.035	0.345± 0.043	0.411± 0.191	0.714± 0.113
2400 ppm	42	267± 29	0.027± 0.005	0.059± 0.074	0.337± 0.039	0.371± 0.053	0.740± 0.100**
7200 ppm	33	207± 25**	0.038± 0.020**	0.057± 0.008**	0.382± 0.046**	0.433± 0.063**	1.028± 0.268**

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

Test of Dunnett

(ICL042)

BAIS 4

STUDY NO. : 0641  
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]  
REPORT TYPE : A1  
SEX : FEMALE  
UNIT: %

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

PAGE : 4

Group Name	NO. of Animals	SPLEEN	LIVER	BRAIN
Control	38	0.289± 0.325	2.608± 0.376	0.745± 0.109
800 ppm	38	0.505± 0.978	2.759± 0.468	0.734± 0.092
2400 ppm	42	0.255± 0.121	2.707± 0.458	0.730± 0.089
7200 ppm	33	0.235± 0.129	2.854± 0.328	0.919± 0.133**

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

Test of Dunnett

(HCL042)

BAIS 4

TABLE M 1

HISTOPATHOLOGICAL FINDINGS:

NON-NEOPLASTIC LESIONS:

MALE: ALL ANIMALS

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 1

		Group Name	Control				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Organ	Findings		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Integumentary system/appendage)																		
skin/app			<50>				<50>				<50>				<50>			
	mineralization		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )
	fibrosis:focal		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 )
	scab		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 )
subcutis			<50>				<50>				<50>				<50>			
	cyst		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	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 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	abscess		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 )
	fibrosis		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 )
(Respiratory system)																		
nasal cavit			<50>				<50>				<50>				<50>			
	thrombus		1	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0
			( 2 )	( 0 )	( 0 )	( 0 )	( 2 )	( 2 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )

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. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 2

Organ	Findings	Group Name No. of Animals on Study				Control 50				800 ppm 50				2400 ppm 50				7200 ppm 50			
		Grade																			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Respiratory system)																					
nasal cavit	mineralization	28 ( 56)	0 ( 0)	0 ( 0)	0 ( 0)	25 ( 50)	1 ( 2)	0 ( 0)	0 ( 0)	32 ( 64)	0 ( 0)	0 ( 0)	0 ( 0)	25 ( 50)	0 ( 0)	0 ( 0)	0 ( 0)	25 ( 50)	0 ( 0)	0 ( 0)	0 ( 0)
	eosinophilic change:olfactory epithelium	38 ( 76)	7 ( 14)	0 ( 0)	0 ( 0)	42 ( 84)	5 ( 10)	0 ( 0)	0 ( 0)	37 ( 74)	9 ( 18)	0 ( 0)	0 ( 0)	34 ( 68)	13 ( 26)	0 ( 0)	0 ( 0)	34 ( 68)	13 ( 26)	0 ( 0)	0 ( 0)
	eosinophilic change:respiratory epithelium	11 ( 22)	0 ( 0)	0 ( 0)	0 ( 0)	17 ( 34)	0 ( 0)	0 ( 0)	0 ( 0)	19 ( 38)	0 ( 0)	0 ( 0)	0 ( 0)	17 ( 34)	0 ( 0)	0 ( 0)	0 ( 0)	17 ( 34)	0 ( 0)	0 ( 0)	0 ( 0)
	inflammation:foreign body	15 ( 30)	0 ( 0)	0 ( 0)	0 ( 0)	15 ( 30)	0 ( 0)	0 ( 0)	0 ( 0)	16 ( 32)	0 ( 0)	0 ( 0)	0 ( 0)	14 ( 28)	0 ( 0)	0 ( 0)	0 ( 0)	14 ( 28)	0 ( 0)	0 ( 0)	0 ( 0)
	respiratory metaplasia:olfactory epithelium	12 ( 24)	0 ( 0)	0 ( 0)	0 ( 0)	7 ( 14)	0 ( 0)	0 ( 0)	0 ( 0)	6 ( 12)	1 ( 2)	0 ( 0)	0 ( 0)	10 ( 20)	0 ( 0)	0 ( 0)	0 ( 0)	10 ( 20)	0 ( 0)	0 ( 0)	0 ( 0)
	respiratory metaplasia:gland	50 (100)	0 ( 0)	0 ( 0)	0 ( 0)	50 (100)	0 ( 0)	0 ( 0)	0 ( 0)	48 ( 96)	0 ( 0)	0 ( 0)	0 ( 0)	47 ( 94)	0 ( 0)	0 ( 0)	0 ( 0)	47 ( 94)	0 ( 0)	0 ( 0)	0 ( 0)
	squamous cell metaplasia:respiratory epithelium	6 ( 12)	1 ( 2)	0 ( 0)	0 ( 0)	2 ( 4)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 2)	1 ( 2)	0 ( 0)	0 ( 0)	4 ( 8)	0 ( 0)	0 ( 0)	0 ( 0)	4 ( 8)	0 ( 0)	0 ( 0)	0 ( 0)
larynx	inflammation	2 ( 4)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)

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

STUDY NO. : 0641  
 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 50				800 ppm 50				2400 ppm 50				7200 ppm 50			
		Grade																			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Respiratory system)																					
lung		<50>				<50>				<50>				<50>				<50>			
	congestion	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
		( 4 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )
	inflammatory infiltration	1	0	0	0	2	0	0	0	1	1	0	0	1	1	0	0	1	0	0	0
		( 2 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )	( 2 )	( 2 )	( 0 )	( 0 )	( 2 )	( 2 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )
	accumulation of foamy cells	2	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
		( 4 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )
	bronchiolar-alveolar cell hyperplasia	4	2	0	0	2	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
		( 8 )	( 4 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )
	inflammation:foreign body	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )
(Hematopoietic system)																					
bone marrow		<50>				<50>				<50>				<50>				<50>			
	granulation	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	increased hematopoiesis	9	2	0	0	4	2	0	0	4	0	0	0	4	0	0	0	3	0	0	0
		( 18 )	( 4 )	( 0 )	( 0 )	( 8 )	( 4 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )	( 0 )

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

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

PAGE : 4

Organ	Findings	Group Name No. of Animals on Study				Control 50				800 ppm 50				2400 ppm 50				7200 ppm 50			
		Grade																			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Hematopoietic system)																					
bone marrow		<50>				<50>				<50>				<50>				<50>			
	decreased hematopoiesis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )
spleen		<50>				<50>				<50>				<50>				<50>			
	congestion	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		( 4 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	deposit of hemosiderin	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )
	inflammatory infiltration	0	0	0	0	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 )
	fibrosis:focal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )
	extramedullary hematopoiesis	12	5	0	0	13	1	0	0	11	2	0	0	7	1	0	0	7	1	0	0
		( 24 )	( 10 )	( 0 )	( 0 )	( 26 )	( 2 )	( 0 )	( 0 )	( 22 )	( 4 )	( 0 )	( 0 )	( 14 )	( 2 )	( 0 )	( 0 )	( 14 )	( 2 )	( 0 )	( 0 )
(Circulatory system)																					
heart		<50>				<50>				<50>				<50>				<50>			
	thrombus	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe  
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 ( c ) c : b / a \* 100  
 Significant difference ; \* : P ≤ 0.05 \*\* : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr-j]  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 5

		Group Name	Control				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Organ_____	Findings_____		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Circulatory system)																		
heart			<50>				<50>				<50>				<50>			
	necrosis:focal		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 )
	mineralization		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 )
	myocardial fibrosis		15	1	0	0	14	0	0	0	19	1	0	0	15	1	0	0
			( 30 )	( 2 )	( 0 )	( 0 )	( 28 )	( 0 )	( 0 )	( 0 )	( 38 )	( 2 )	( 0 )	( 0 )	( 30 )	( 2 )	( 0 )	( 0 )
artery/aort			<50>				<50>				<50>				<50>			
	mineralization		0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )
(Digestive system)																		
tongue			<50>				<50>				<50>				<50>			
	squamous cell 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 )
stomach			<50>				<50>				<50>				<50>			
	erosion:forestomach		1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			( 2 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )

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



STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 6

Organ	Findings	Group Name No. of Animals on Study				Control 50				800 ppm 50				2400 ppm 50				7200 ppm 50			
		Grade																			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Digestive system)																					
stomach		<50>				<50>				<50>				<50>				<50>			
	ulcer:forestomach	0	0	1	0	0	1	0	0	0	0	1	0	0	0	1	0	0	0	0	0
		( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	hyperplasia:forestomach	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	erosion:glandular stomach	5	2	0	0	1	0	0	0	5	0	0	0	2	0	0	0	2	0	0	0
		( 10 )	( 4 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 10 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )
small intes	ulcer:glandular stomach	1	0	0	0	1	1	0	0	2	1	0	0	0	0	0	0	0	0	0	0
		( 2 )	( 0 )	( 0 )	( 0 )	( 2 )	( 2 )	( 0 )	( 0 )	( 4 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	hyperplasia:glandular stomach	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
		( 2 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )
	mineralization:glandular stomach	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 )
small intes	ulcer	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 )
small intes	erosion	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		( 4 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe  
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 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. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 7

Organ_____	Findings_____	Group Name	Control				800 ppm				2400 ppm				7200 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)																		
small intes			<50>				<50>				<50>				<50>			
	necrosis		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
large intes			<50>				<50>				<50>				<50>			
	mineralization		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
liver			<50>				<50>				<50>				<50>			
	herniation		3	0	0	0	5	0	0	0	6	0	0	0	3	0	0	0
			( 6 )	( 0 )	( 0 )	( 0 )	( 10 )	( 0 )	( 0 )	( 0 )	( 12 )	( 0 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )	( 0 )
			<50>				<50>				<50>				<50>			
	necrosis:central		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 )
			<50>				<50>				<50>				<50>			
	necrosis:focal		1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
		( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	
		<50>				<50>				<50>				<50>				
	fatty change:peripheral		0	1	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 )	( 2 )	( 0 )	( 0 )	
		<50>				<50>				<50>				<50>				
	cyst		0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	

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 ALL ANIMALS (0-105W)

PAGE : 8

Organ	Findings	Group Name No. of Animals on Study				Control 50				800 ppm 50				2400 ppm 50				7200 ppm 50			
		Grade																			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Digestive system)																					
liver	granulation	<50>				<50>				<50>				<50>				<50>			
		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		( 2)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
	inflammatory cell nest	38	1	0	0	45	0	0	0	41	0	0	0	41	0	0	0	41	0	0	0
		( 76)	( 2)	( 0)	( 0)	( 90)	( 0)	( 0)	( 0)	( 82)	( 0)	( 0)	( 0)	( 82)	( 0)	( 0)	( 0)	( 82)	( 0)	( 0)	( 0)
	extramedullary hematopoiesis	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		( 0)	( 0)	( 0)	( 0)	( 2)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
	acidophilic cell focus	16	2	0	0	10	1	0	0	12	1	0	0	6	0	0	0	6	0	0	0 *
		( 32)	( 4)	( 0)	( 0)	( 20)	( 2)	( 0)	( 0)	( 24)	( 2)	( 0)	( 0)	( 12)	( 0)	( 0)	( 0)	( 12)	( 0)	( 0)	( 0)
	basophilic cell focus	4	0	0	0	7	0	0	0	9	0	0	0	5	0	0	0	5	0	0	0
		( 8)	( 0)	( 0)	( 0)	( 14)	( 0)	( 0)	( 0)	( 18)	( 0)	( 0)	( 0)	( 10)	( 0)	( 0)	( 0)	( 10)	( 0)	( 0)	( 0)
	spongiosis hepatitis	2	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		( 4)	( 0)	( 0)	( 0)	( 2)	( 0)	( 0)	( 0)	( 2)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
	bile duct hyperplasia	44	0	0	0	47	0	0	0	45	0	0	0	48	0	0	0	48	0	0	0
		( 88)	( 0)	( 0)	( 0)	( 94)	( 0)	( 0)	( 0)	( 90)	( 0)	( 0)	( 0)	( 96)	( 0)	( 0)	( 0)	( 96)	( 0)	( 0)	( 0)
	bile ductular proliferation	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 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. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr:j]  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 9

Organ	Findings	Group Name No. of Animals on Study Grade	Control				800 ppm				2400 ppm				7200 ppm			
			50				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>			
	choolangiofibrosis		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 )
			<50>				<50>				<50>				<50>			
	focal fatty change		0	0	0	0	1	0	0	0	2	1	0	0	1	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 4 )	( 2 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )
pancreas			<50>				<50>				<50>				<50>			
	atrophy:focal		3	1	0	0	3	0	0	0	6	1	0	0	5	1	0	0
			( 6 )	( 2 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )	( 0 )	( 12 )	( 2 )	( 0 )	( 0 )	( 10 )	( 2 )	( 0 )	( 0 )
			<50>				<50>				<50>				<50>			
	islet cell hyperplasia		1	1	0	0	0	0	0	0	2	0	0	0	2	0	0	0
			( 2 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )
(Urinary system)																		
kidney			<50>				<50>				<50>				<50>			
	cyst		0	0	0	0	2	0	0	0	0	0	0	0	2	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )
			<50>				<50>				<50>				<50>			
	hyaline droplet		0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )

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. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 10

Organ_____	Findings_____	Group Name	Control				800 ppm				2400 ppm				7200 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>			
	scar	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	chronic nephropathy	9	21	11	3	21	15	9	0	28	12	2	0 **	24	7	3	0 **	
		( 18 )	( 42 )	( 22 )	( 6 )	( 42 )	( 30 )	( 18 )	( 0 )	( 56 )	( 24 )	( 4 )	( 0 )	( 48 )	( 14 )	( 6 )	( 0 )	
	papillary necrosis	0	0	0	0	0	0	0	0	7	0	0	0 *	37	0	0	0 **	
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 14 )	( 0 )	( 0 )	( 0 )	( 74 )	( 0 )	( 0 )	( 0 )	
	mineralization:papilla	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	
	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )		
mineralization:pelvis	2	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0		
	( 4 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )		
dilatation:tubular lumen	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 )		
urothelial hyperplasia:pelvis	2	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0		
	( 4 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 2 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )		
inflammation: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 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. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 11

Organ	Findings	Group Name No. of Animals on Study				Control 50				800 ppm 50				2400 ppm 50				7200 ppm 50			
		Grade																			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																					
urin bladd		<50>				<50>				<50>				<50>				<50>			
	inflammation	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )
		<50>				<50>				<50>				<50>				<50>			
	transitional cell hyperplasia	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
		( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )
{Endocrine system}																					
pituitary		<49>				<50>				<50>				<50>				<50>			
	angiectasis	0	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	2	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 2 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )
		<50>				<50>				<50>				<50>				<50>			
	cyst	4	0	0	0	3	1	0	0	3	0	0	0	6	0	0	0	6	0	0	0
		( 8 )	( 0 )	( 0 )	( 0 )	( 6 )	( 2 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )	( 0 )	( 12 )	( 0 )	( 0 )	( 0 )	( 12 )	( 0 )	( 0 )	( 0 )
		<50>				<50>				<50>				<50>				<50>			
	hyperplasia	12	9	2	0	14	8	0	0	12	9	3	0	13	4	2	0	13	4	2	0
		( 24 )	( 18 )	( 4 )	( 0 )	( 28 )	( 16 )	( 0 )	( 0 )	( 24 )	( 18 )	( 6 )	( 0 )	( 26 )	( 8 )	( 4 )	( 0 )	( 26 )	( 8 )	( 4 )	( 0 )
		<50>				<50>				<50>				<50>				<50>			
	Rathke pouch	2	0	0	0	2	1	0	0	0	0	0	0	3	0	0	0	3	0	0	0
		( 4 )	( 0 )	( 0 )	( 0 )	( 4 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )	( 0 )
		<50>				<50>				<50>				<50>				<50>			
	aberrant craniopharyngeal tissue	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 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. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr-j]  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 12

		Group Name	Control				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Organ_____	Findings_____		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Endocrine system)																		
thyroid			<50>				<50>				<50>				<50>			
	ultimobranchial body remanet		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 )
	C-cell hyperplasia		8	0	0	0	6	2	0	0	3	2	1	0	5	3	2	0
			( 16 )	( 0 )	( 0 )	( 0 )	( 12 )	( 4 )	( 0 )	( 0 )	( 6 )	( 4 )	( 2 )	( 0 )	( 10 )	( 6 )	( 4 )	( 0 )
	cystic thyroid follicle		1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
			( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )
parathyroid			<50>				<50>				<50>				<50>			
	hyperplasia		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
adrenal			<50>				<50>				<50>				<50>			
	cyst		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	osseous metaplasia		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	hyperplasia:cortical cell		3	0	0	0	2	0	0	0	1	1	0	0	2	1	0	0
			( 6 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )	( 2 )	( 2 )	( 0 )	( 0 )	( 4 )	( 2 )	( 0 )	( 0 )

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

STUDY NO. : 0641  
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
REPORT TYPE : A1  
SEX : MALE

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

PAGE : 13

Organ_____	Findings_____	Group Name	Control				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																		
adrenal			<50>				<50>				<50>				<50>			
	hyperplasia:medulla		3 ( 6)	3 ( 6)	0 ( 0)	0 ( 0)	2 ( 4)	1 ( 2)	0 ( 0)	0 ( 0)	2 ( 4)	2 ( 4)	0 ( 0)	0 ( 0)	1 ( 2)	3 ( 6)	1 ( 2)	0 ( 0)
	focal fatty change:cortex		1 ( 2)	1 ( 2)	0 ( 0)	0 ( 0)	2 ( 4)	0 ( 0)	0 ( 0)	0 ( 0)	3 ( 6)	0 ( 0)	0 ( 0)	0 ( 0)	4 ( 8)	1 ( 2)	0 ( 0)	0 ( 0)
{Reproductive system}																		
testis			<50>				<50>				<50>				<50>			
	mineralization		0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	2 ( 4)	0 ( 0)	0 ( 0)	0 ( 0)	2 ( 4)	0 ( 0)	0 ( 0)	0 ( 0)	3 ( 6)	0 ( 0)	0 ( 0)	0 ( 0)
	inflammatory infiltration		1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)
	arteritis		3 ( 6)	0 ( 0)	0 ( 0)	0 ( 0)	2 ( 4)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)
	interstitial cell hyperplasia		8 ( 16)	0 ( 0)	0 ( 0)	0 ( 0)	5 ( 10)	0 ( 0)	0 ( 0)	0 ( 0)	9 ( 18)	0 ( 0)	0 ( 0)	0 ( 0)	11 ( 22)	0 ( 0)	0 ( 0)	0 ( 0)
prostate			<50>				<50>				<50>				<50>			
	inflammation		6 ( 12)	0 ( 0)	0 ( 0)	0 ( 0)	2 ( 4)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)	4 ( 8)	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. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 14

		Group Name	Control				800 ppm				2400 ppm				7200 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
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Reproductive system)																		
prostate			<50>				<50>				<50>				<50>			
	hyperplasia		7 ( 14)	1 ( 2)	0 ( 0)	0 ( 0)	6 ( 12)	0 ( 0)	0 ( 0)	0 ( 0)	4 ( 8)	1 ( 2)	0 ( 0)	0 ( 0)	2 ( 4)	0 ( 0)	0 ( 0)	0 ( 0)
mammary gl			<50>				<50>				<50>				<50>			
	galactocoele		0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)
(Nervous system)																		
brain			<50>				<50>				<50>				<50>			
	hemorrhage		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)
spinal cord			<50>				<50>				<50>				<50>			
	hemorrhage		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)
(Special sense organs/appendage)																		
eye			<50>				<50>				<50>				<50>			
	cataract		8 ( 16)	1 ( 2)	0 ( 0)	0 ( 0)	6 ( 12)	0 ( 0)	0 ( 0)	0 ( 0)	3 ( 6)	1 ( 2)	0 ( 0)	0 ( 0)	4 ( 8)	3 ( 6)	0 ( 0)	0 ( 0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe  
 < a > a : Number of animals examined at the site  
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STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr-j]  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 15

		Control				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study				50				50				50			
		Grade															
Organ	Findings	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>			
	retinal atrophy	10	4	6	0	4	4	6	0	1	2	4	0 *	10	4	8	0
		( 20 )	( 8 )	( 12 )	( 0 )	( 8 )	( 8 )	( 12 )	( 0 )	( 2 )	( 4 )	( 8 )	( 0 )	( 20 )	( 8 )	( 16 )	( 0 )
	keratitis	2	3	0	0	3	1	0	0	3	2	0	0	2	3	0	0
		( 4 )	( 6 )	( 0 )	( 0 )	( 6 )	( 2 )	( 0 )	( 0 )	( 6 )	( 4 )	( 0 )	( 0 )	( 4 )	( 6 )	( 0 )	( 0 )
	iritis	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		( 4 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )
	degeneration:optic nerve	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 )
Harder gl		<50>				<50>				<50>				<50>			
	degeneration	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	lymphocytic infiltration	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	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 )
(Musculoskeletal system)																	
muscle		<50>				<50>				<50>				<50>			
	mineralization	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )

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

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 16

Organ_____	Findings_____	Group Name	Control				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
<hr/>																		
(Musculoskeletal system)																		
bone			<50>				<50>				<50>				<50>			
	osteosclerosis		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)
 (Body cavities)																		
peritoneum			<50>				<50>				<50>				<50>			
	inflammatory infiltration		0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
			( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 2)	( 0)	( 0)	( 0)	( 0)

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 M 2

HISTOPATHOLOGICAL FINDINGS:

NON-NEOPLASTIC LESIONS:

MALE: DEAD AND MORIBUND ANIMALS

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr-j]  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 1

Organ_____	Findings_____	Group Name	Control				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study	10				5				12				10			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Integumentary system/appandage}																		
skin/app			<10>				< 5>				<12>				<10>			
	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 )	( 10 )	( 0 )	( 0 )	( 0 )	
	scab		0	0	0	0	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 )	
subcutis			<10>				< 5>				<12>				<10>			
	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 )	
{Respiratory system}																		
nasal cavit			<10>				< 5>				<12>				<10>			
	thrombus		1	0	0	0	1	1	0	0	2	0	0	0	0	0	0	
		( 10 )	( 0 )	( 0 )	( 0 )	( 20 )	( 20 )	( 0 )	( 0 )	( 17 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )		
	mineralization		4	0	0	0	2	0	0	0	7	0	0	0	6	0	0	
		( 40 )	( 0 )	( 0 )	( 0 )	( 40 )	( 0 )	( 0 )	( 0 )	( 58 )	( 0 )	( 0 )	( 0 )	( 60 )	( 0 )	( 0 )		
	eosinophilic change:olfactory epithelium		7	0	0	0	2	0	0	0	9	1	0	0	7	0	0	
		( 70 )	( 0 )	( 0 )	( 0 )	( 40 )	( 0 )	( 0 )	( 0 )	( 75 )	( 8 )	( 0 )	( 0 )	( 70 )	( 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. : 0641  
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
REPORT TYPE : A1  
SEX : MALE

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

PAGE : 2

Organ	Findings	Group Name	Control				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study	10				5				12				10			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Respiratory system)																		
nasal cavit			<10>				< 5>				<12>				<10>			
	eosinophilic change:respiratory epithelium	1	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0
		( 10)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 8)	( 0)	( 0)	( 0)	( 20)	( 0)	( 0)	( 0)
	inflammation:foreign body	4	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0
		( 40)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 17)	( 0)	( 0)	( 0)	( 10)	( 0)	( 0)	( 0)
	respiratory metaplasia:olfactory epithelium	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	
		( 10)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 8)	( 0)	( 0)	( 0)	( 10)	( 0)	( 0)	( 0)	
	respiratory metaplasia:gland	10	0	0	0	0	5	0	0	0	11	0	0	0	8	0	0	0
		(100)	( 0)	( 0)	( 0)	( 0)	(100)	( 0)	( 0)	( 0)	( 92)	( 0)	( 0)	( 0)	( 80)	( 0)	( 0)	( 0)
	squamous cell metaplasia:respiratory epithelium	3	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0
		( 30)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 8)	( 0)	( 0)	( 0)	( 20)	( 0)	( 0)	( 0)
larynx			<10>				< 5>				<12>				<10>			
	inflammation	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 8)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
lung			<10>				< 5>				<12>				<10>			
	congestion	2	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
		( 20)	( 10)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 20)	( 0)	( 0)	( 0)

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

STUDY NO. : 0641  
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	Control				800 ppm				2400 ppm				7200 ppm				
		No. of Animals on Study	10				5				12				10				
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
<hr/>																			
{Respiratory system}																			
lung			<10>				< 5>				<12>				<10>				
	inflammatory infiltration		1	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0
			( 10 )	( 0 )	( 0 )	( 0 )	( 20 )	( 0 )	( 0 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	leukemic cell infiltration		1	0	0	0	1	0	0	0	4	1	0	0	0	0	0	0	0
			( 10 )	( 0 )	( 0 )	( 0 )	( 20 )	( 0 )	( 0 )	( 0 )	( 33 )	( 8 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	metastasis:adrenal tumor		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 )	( 10 )	( 0 )	( 0 )
	metastasis:thyroid tumor		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 20 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	metastasis:peritoneum tumor		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 )	( 10 )	( 0 )	( 0 )	( 0 )	
metastasis:bone tumor		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 20 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	
metastasis:Zymbal gland tumor		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 )	( 8 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	
accumulation of foamy cells		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		( 10 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	

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. : 0641  
 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

		Group Name	Control				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study	10				5				12				10			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Organ_____	Findings_____		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Hematopoietic system)																		
bone marrow			<10>				< 5>				<12>				<10>			
	leukemic cell infiltration		1	0	0	0	0	1	0	0	5	0	0	0	0	0	0	0
			( 10)	( 0)	( 0)	( 0)	( 0)	( 20)	( 0)	( 0)	( 42)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
	metastasis:peritoneum tumor		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 10)	( 0)	( 0)	( 0)
	increased hematopoiesis		3	0	0	0	0	2	0	0	4	0	0	0	1	0	0	0
			( 30)	( 0)	( 0)	( 0)	( 0)	( 40)	( 0)	( 0)	( 33)	( 0)	( 0)	( 0)	( 10)	( 0)	( 0)	( 0)
	decreased hematopoiesis		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 10)	( 0)	( 0)	( 0)
lymph node			<10>				< 5>				<12>				<10>			
	leukemic cell 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)	( 8)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
	metastasis:adrenal tumor		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
			( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 10)	( 0)	( 0)
	metastasis:peritoneum tumor		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 10)	( 0)	( 0)	( 0)
spleen			<10>				< 5>				<12>				<10>			
	congestion		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			( 10)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)

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



STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 5

		Group Name	Control				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study	10				5				12				10			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Hematopoietic system)																		
spleen			<10>				< 5>				<12>				<10>			
	deposit of hemosiderin		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 10 )	( 0 )	( 0 )	( 0 )
	extramedullary hematopoiesis		2	2	0	0	1	1	0	0	3	1	0	0	1	1	0	0
			( 20 )	( 20 )	( 0 )	( 0 )	( 20 )	( 20 )	( 0 )	( 0 )	( 25 )	( 8 )	( 0 )	( 0 )	( 10 )	( 10 )	( 0 )	( 0 )
(Circulatory system)																		
heart			<10>				< 5>				<12>				<10>			
	thrombus		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 20 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	mineralization		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			( 0 )	( 10 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	myocardial fibrosis		2	1	0	0	3	0	0	0	5	0	0	0	5	1	0	0
			( 20 )	( 10 )	( 0 )	( 0 )	( 60 )	( 0 )	( 0 )	( 0 )	( 42 )	( 0 )	( 0 )	( 0 )	( 50 )	( 10 )	( 0 )	( 0 )
artery/aort			<10>				< 5>				<12>				<10>			
	mineralization		0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			( 0 )	( 10 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 10 )	( 0 )	( 0 )	( 0 )

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe  
 < a > a : Number of animals examined at the site  
 b 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. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 6

Organ_____	Findings_____	Group Name	Control				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study	10				5				12				10			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Digestive system)																		
stomach	leukemic cell infiltration		<10>				< 5>				<12>				<10>			
			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 )
	ulcer:forestomach		0	0	1	0	0	1	0	0	0	0	1	0	0	0	0	0
			( 0 )	( 0 )	( 10 )	( 0 )	( 0 )	( 20 )	( 0 )	( 0 )	( 0 )	( 0 )	( 8 )	( 0 )	( 10 )	( 0 )	( 0 )	( 0 )
	hyperplasia:forestomach		1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		( 10 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	
	erosion:glandular stomach		1	2	0	0	0	0	0	0	2	0	0	0	1	0	0	0
			( 10 )	( 20 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 17 )	( 0 )	( 0 )	( 0 )	( 10 )	( 0 )	( 0 )	( 0 )
	ulcer:glandular stomach		1	0	0	0	0	1	0	0	2	1	0	0	0	0	0	0
			( 10 )	( 0 )	( 0 )	( 0 )	( 0 )	( 20 )	( 0 )	( 0 )	( 17 )	( 8 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	mineralization:glandular stomach		1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			( 10 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 10 )	( 0 )	( 0 )	( 0 )
small intes	erosion		<10>				< 5>				<12>				<10>			
			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			( 10 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	necrosis		0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 10 )	( 0 )	( 0 )	( 0 )	( 0 )

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. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 7

		Group Name	Control				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study	10				5				12				10			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Organ_____	Findings_____		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
<hr/>																		
(Digestive system)																		
small intes			<10>				< 5>				<12>				<10>			
	leukemic cell 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 )	( 8 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
large intes			<10>				< 5>				<12>				<10>			
	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 )	( 10 )	( 0 )	( 0 )	( 0 )
liver			<10>				< 5>				<12>				<10>			
	herniation		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 10 )	( 0 )	( 0 )	( 0 )
	necrosis:central		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 20 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	necrosis:focal		1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
			( 10 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 17 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	fatty change:peripheral		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			( 0 )	( 10 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	cyst		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 10 )	( 0 )	( 0 )	( 0 )

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. : 0641  
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HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)  
 DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 8

		Group Name	Control				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study	10				5				12				10			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Organ_____	Findings_____		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
<hr/>																		
(Digestive system)																		
liver			<10>				< 5>				<12>				<10>			
	granulation		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			( 10 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	inflammatory cell nest		6	0	0	0	1	0	0	0	5	0	0	0	10	0	0	0
			( 60 )	( 0 )	( 0 )	( 0 )	( 20 )	( 0 )	( 0 )	( 0 )	( 42 )	( 0 )	( 0 )	( 0 )	( 100 )	( 0 )	( 0 )	( 0 )
	leukemic cell infiltration		1	0	0	0	1	0	0	0	5	0	0	0	0	0	0	0
			( 10 )	( 0 )	( 0 )	( 0 )	( 20 )	( 0 )	( 0 )	( 0 )	( 42 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	metastasis:bone tumor		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 20 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	
acidophilic cell focus		0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 10 )	( 0 )	( 0 )	( 0 )	
spongiosis hepatitis		1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	
		( 10 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	
bile duct hyperplasia		7	0	0	0	3	0	0	0	7	0	0	0	9	0	0	0	
		( 70 )	( 0 )	( 0 )	( 0 )	( 60 )	( 0 )	( 0 )	( 0 )	( 58 )	( 0 )	( 0 )	( 0 )	( 90 )	( 0 )	( 0 )	( 0 )	
pancreas			<10>				< 5>				<12>				<10>			
	atrophy:focal		0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 17 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 10 )	( 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  
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 Significant difference ; \* : P ≤ 0.05 \*\* : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
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HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)  
 DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 9

		Group Name	Control				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study	10				5				12				10			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Digestive system)																		
pancreas			<10>				< 5>				<12>				<10>			
	leukemic cell infiltration		1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			( 10)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 8)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
	islet cell hyperplasia		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 10)	( 0)	( 0)	( 0)
(Urinary system)																		
kidney			<10>				< 5>				<12>				<10>			
	hyaline droplet		0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
			( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 10)	( 0)
	leukemic cell infiltration		1	0	0	0	1	0	0	0	4	0	0	0	0	0	0	0
			( 10)	( 0)	( 0)	( 0)	( 20)	( 0)	( 0)	( 0)	( 33)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
	chronic nephropathy		1	1	1	2	0	0	0	0	4	1	1	0	1	0	1	0
			( 10)	( 10)	( 10)	( 20)	( 0)	( 0)	( 0)	( 0)	( 33)	( 8)	( 8)	( 0)	( 10)	( 0)	( 10)	( 0)
	papillary necrosis		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)	( 60)	( 0)	( 0)	( 0)
	mineralization:papilla		0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
			( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 8)	( 0)	( 0)	( 0)	( 10)	( 0)	( 0)	( 0)

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe  
 < a > a : Number of animals examined at the site  
 b 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. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
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 SEX : MALE

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

PAGE : 10

		Group Name	Control				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study	10				5				12				10			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Organ	Findings		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																		
kidney			<10>				< 5>				<12>				<10>			
	mineralization:pelvis		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			( 10 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	dilatation:tubular lumen		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 10 )	( 0 )	( 0 )
	urothelial hyperplasia:pelvis		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			( 10 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
urin bladd			<10>				< 5>				<12>				<10>			
	inflammation		0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 10 )	( 0 )	( 0 )	( 0 )
	leukemic cell 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 )	( 8 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	transitional cell hyperplasia		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
{Endocrine system}																		
pituitary			<10>				< 5>				<12>				<10>			
	hyperplasia		1	0	0	0	1	1	0	0	4	1	0	0	1	0	0	0
		( 10 )	( 0 )	( 0 )	( 0 )	( 20 )	( 20 )	( 0 )	( 0 )	( 33 )	( 8 )	( 0 )	( 0 )	( 10 )	( 0 )	( 0 )	( 0 )	

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe  
 < a > a : Number of animals examined at the site  
 b b : Number of animals with lesion  
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HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)  
DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 11

Organ	Findings	Group Name No. of Animals on Study Grade	Control 10				800 ppm 5				2400 ppm 12				7200 ppm 10			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Endocrine system)																		
pituitary	Rathke pouch		<10>				< 5>				<12>				<10>			
		0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	1 ( 10 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	
thyroid	C-cell hyperplasia		<10>				< 5>				<12>				<10>			
		0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	1 ( 20 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	1 ( 8 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	
	cystic thyroid follicle		0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	1 ( 8 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	
parathyroid	hyperplasia		<10>				< 5>				<12>				<10>			
		1 ( 10 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	
adrenal	hyperplasia:cortical cell		<10>				< 5>				<12>				<10>			
		1 ( 10 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	
	hyperplasia:medulla		0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	2 ( 20 )	0 ( 0 )	0 ( 0 )	
	focal fatty change:cortex		0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	1 ( 20 )	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  
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 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1  
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HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)  
 DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 12

Organ_____	Findings_____	Group Name	Control				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study	10				5				12				10			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
<hr/>																		
{Reproductive system}																		
testis	mineralization		<10>				< 5>				<12>				<10>			
		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 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 30 )	( 0 )	( 0 )	( 0 )
	inflammatory infiltration		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			( 10 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
arteritis		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		( 10 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	
	interstitial cell hyperplasia		4	0	0	0	1	0	0	0	4	0	0	0	0	0	0	0
			( 40 )	( 0 )	( 0 )	( 0 )	( 20 )	( 0 )	( 0 )	( 0 )	( 0 )	( 33 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
prostate	inflammation		<10>				< 5>				<12>				<10>			
		2	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0
			( 20 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 20 )	( 0 )	( 0 )	( 0 )
<hr/>																		
{Nervous system}																		
brain	leukemic cell infiltration		<10>				< 5>				<12>				<10>			
		1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
		( 10 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 17 )	( 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  
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 REPORT TYPE : A1  
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HISTOPATHOLOGICAL FINDINGS :NON-NEOPLASTIC LESIONS (SUMMARY)  
 DEAD AND MORIBUND ANIMALS (0-105W)

PAGE : 13

Organ	Findings	Group Name	Control				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study	10				5				12				10			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Nervous system)																		
spinal cord	hemorrhage		<10>				< 5>				<12>				<10>			
		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			( 10)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
	leukemic cell infiltration		1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
			( 10)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 8)	( 8)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
(Special sense organs/appendage)																		
eye	cataract		<10>				< 5>				<12>				<10>			
		3	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
			( 30)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 8)	( 0)	( 0)	( 0)	( 10)	( 0)	( 0)	( 0)
	retinal atrophy		0	0	3	0	0	0	0	0	0	0	1	0	1	0	2	0
			( 0)	( 0)	( 30)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 8)	( 0)	( 10)	( 0)	( 20)	( 0)
	keratitis		0	2	0	0	0	0	0	0	1	1	0	0	0	2	0	0
			( 0)	( 20)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 8)	( 8)	( 0)	( 0)	( 0)	( 20)	( 0)	( 0)
	iritis		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			( 10)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
Harder gl	lymphocytic infiltration		<10>				< 5>				<12>				<10>			
		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)	( 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. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 14

Organ_____	Findings_____	Group Name	Control				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study	10				5				12				10			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Special sense organs/appendage)																		
Harder gl			<10>				< 5>				<12>				<10>			
	leukemic cell 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 )	( 8 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
(Musculoskeletal system)																		
muscle			<10>				< 5>				<12>				<10>			
	mineralization		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
bone			<10>				< 5>				<12>				<10>			
	osteosclerosis		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			( 10 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
(Body cavities)																		
pleura			<10>				< 5>				<12>				<10>			
	metastasis:lung tumor		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 10 )	( 0 )	( 0 )

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

TABLE M 3

HISTOPATHOLOGICAL FINDINGS:

NON-NEOPLASTIC LESIONS:

MALE: SACRIFICED ANIMALS

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 1

		Group Name	Control				800 ppm				2400 ppm				7200 ppm				
		No. of Animals on Study	40				45				38				40				
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
{Integumentary system/appendage}																			
skin/app			<40>				<45>				<38>				<40>				
	fibrosis:focal		0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	1 ( 3 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )
subcutis			<40>				<45>				<38>				<40>				
	cyst		1 ( 3 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )
	abscess		0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	1 ( 3 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )
	fibrosis		1 ( 3 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	1 ( 3 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )
{Respiratory system}																			
nasal cavit			<40>				<45>				<38>				<40>				
	mineralization		24 ( 60 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	23 ( 51 )	1 ( 2 )	0 ( 0 )	0 ( 0 )	25 ( 66 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	19 ( 48 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )
	eosinophilic change:olfactory epithelium		31 ( 78 )	7 ( 18 )	0 ( 0 )	0 ( 0 )	40 ( 89 )	5 ( 11 )	0 ( 0 )	0 ( 0 )	28 ( 74 )	8 ( 21 )	0 ( 0 )	0 ( 0 )	27 ( 68 )	13 ( 33 )	0 ( 0 )	0 ( 0 )	0 ( 0 )

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe  
 < a > a : Number of animals examined at the site  
 b 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. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 2

Organ	Findings	Group Name No. of Animals on Study Grade	Control 40				800 ppm 45				2400 ppm 38				7200 ppm 40			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
nasal cavit	eosinophilic change:respiratory epithelium		10 ( 25)	0 ( 0)	0 ( 0)	0 ( 0)	17 ( 38)	0 ( 0)	0 ( 0)	0 ( 0)	18 ( 47)	0 ( 0)	0 ( 0)	0 ( 0)	15 ( 38)	0 ( 0)	0 ( 0)	0 ( 0)
	inflammation:foreign body		11 ( 28)	0 ( 0)	0 ( 0)	0 ( 0)	15 ( 33)	0 ( 0)	0 ( 0)	0 ( 0)	14 ( 37)	0 ( 0)	0 ( 0)	0 ( 0)	13 ( 33)	0 ( 0)	0 ( 0)	0 ( 0)
	respiratory metaplasia:olfactory epithelium		11 ( 28)	0 ( 0)	0 ( 0)	0 ( 0)	7 ( 16)	0 ( 0)	0 ( 0)	0 ( 0)	5 ( 13)	1 ( 3)	0 ( 0)	0 ( 0)	9 ( 23)	0 ( 0)	0 ( 0)	0 ( 0)
	respiratory metaplasia:gland		40 (100)	0 ( 0)	0 ( 0)	0 ( 0)	45 (100)	0 ( 0)	0 ( 0)	0 ( 0)	37 ( 97)	0 ( 0)	0 ( 0)	0 ( 0)	39 ( 98)	0 ( 0)	0 ( 0)	0 ( 0)
	squamous cell metaplasia:respiratory epithelium		3 ( 8)	1 ( 3)	0 ( 0)	0 ( 0)	2 ( 4)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 3)	0 ( 0)	0 ( 0)	2 ( 5)	0 ( 0)	0 ( 0)	0 ( 0)
larynx	inflammation		2 ( 5)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 3)	0 ( 0)	0 ( 0)	0 ( 0)
lung	inflammatory infiltration		0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 3)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 3)	0 ( 0)	0 ( 0)	0 ( 0)
Grade	1 : Slight	2 : Moderate	3 : Marked	4 : Severe														
< a >	a : Number of animals examined at the site																	
b	b : Number of animals with lesion																	
( c )	c : b / a * 100																	
Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square																		

STUDY NO. : 0641  
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
REPORT TYPE : A1  
SEX : MALE

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

PAGE : 3

Organ	Findings	Control 40				800 ppm 45				2400 ppm 38				7200 ppm 40			
		Grade				Grade				Grade				Grade			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Respiratory system)																	
lung		<40>				<45>				<38>				<40>			
	leukemic cell infiltration	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		( 5)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 3)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
	accumulation of foamy cells	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
		( 3)	( 0)	( 0)	( 0)	( 2)	( 0)	( 0)	( 0)	( 3)	( 0)	( 0)	( 0)	( 3)	( 0)	( 0)	( 0)
	bronchiolar-alveolar cell hyperplasia	4	2	0	0	2	0	0	0	1	0	0	0	1	0	0	0
		( 10)	( 5)	( 0)	( 0)	( 4)	( 0)	( 0)	( 0)	( 3)	( 0)	( 0)	( 0)	( 3)	( 0)	( 0)	( 0)
	inflammation:foreign body	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 3)	( 0)	( 0)	( 0)
(Hematopoietic system)																	
bone marrow		<40>				<45>				<38>				<40>			
	granulation	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
		( 0)	( 0)	( 0)	( 0)	( 2)	( 0)	( 0)	( 0)	( 3)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
	leukemic cell infiltration	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		( 5)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 3)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
	increased hematopoiesis	6	2	0	0	4	0	0	0	0	0	0	0 *	2	0	0	0
		( 15)	( 5)	( 0)	( 0)	( 9)	( 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 : 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. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 4

Organ_____	Findings_____	Group Name	Control				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study	40				45				38				40			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Hematopoietic system)																		
lymph node			<40>				<45>				<38>				<40>			
	leukemic cell 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 )	( 3 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	metastasis:adrenal tumor	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
spleen			<40>				<45>				<38>				<40>			
	congestion	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		( 3 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	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 )	( 3 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	fibrosis:focal	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )
	extramedullary hematopoiesis	10	3	0	0	12	0	0	0	8	1	0	0	6	0	0	0	0
		( 25 )	( 8 )	( 0 )	( 0 )	( 27 )	( 0 )	( 0 )	( 0 )	( 21 )	( 3 )	( 0 )	( 0 )	( 15 )	( 0 )	( 0 )	( 0 )	( 0 )
(Circulatory system)																		
heart			<40>				<45>				<38>				<40>			
	thrombus	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )

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. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 5

		Group Name	Control				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study	40				45				38				40			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Circulatory system)																		
heart			<40>				<45>				<38>				<40>			
	necrosis:focal		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	myocardial fibrosis		13	0	0	0	11	0	0	0	14	1	0	0	10	0	0	0
			( 33 )	( 0 )	( 0 )	( 0 )	( 24 )	( 0 )	( 0 )	( 0 )	( 37 )	( 3 )	( 0 )	( 0 )	( 25 )	( 0 )	( 0 )	( 0 )
(Digestive system)																		
tongue			<40>				<45>				<38>				<40>			
	squamous cell 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 )
stomach			<40>				<45>				<38>				<40>			
	metastasis:peritoneum tumor		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 )
	erosion:forestomach		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 )
			<40>				<45>				<38>				<40>			
	erosion:glandular stomach		4	0	0	0	1	0	0	0	3	0	0	0	1	0	0	0
			( 10 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )

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



STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr-j]  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 6

		Group Name	Control				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study	40				45				38				40			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Digestive system)																		
stomach			<40>				<45>				<38>				<40>			
	ulcer:glandular stomach		0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	1 ( 2 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )
	hyperplasia:glandular stomach		1 ( 3 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	1 ( 2 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	1 ( 3 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	1 ( 3 )	0 ( 0 )	0 ( 0 )	0 ( 0 )
small intes			<40>				<45>				<38>				<40>			
	ulcer		0 ( 0 )	1 ( 3 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )
	erosion		1 ( 3 )	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 )
liver			<40>				<45>				<38>				<40>			
	herniation		3 ( 8 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	5 ( 11 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	6 ( 16 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	2 ( 5 )	0 ( 0 )	0 ( 0 )	0 ( 0 )
	fatty change:peripheral		0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	1 ( 3 )	0 ( 0 )	0 ( 0 )	0 ( 0 )
	inflammatory cell nest		32 ( 80 )	1 ( 3 )	0 ( 0 )	0 ( 0 )	44 ( 98 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	36 ( 95 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	31 ( 78 )	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. : 0641  
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]  
REPORT TYPE : A1  
SEX : MALE

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

PAGE : 7

Organ_____	Findings_____	Group Name	Control				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study	40				45				38				40			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
liver			<40>				<45>				<38>				<40>			
	leukemic cell infiltration	3 ( 8)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)
	metastasis:peritoneum tumor	1 ( 3)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)
	extramedullary hematopoiesis	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)
	acidophilic cell focus	16 ( 40)	2 ( 5)	0 ( 0)	0 ( 0)	10 ( 22)	1 ( 2)	0 ( 0)	0 ( 0)	11 ( 29)	1 ( 3)	0 ( 0)	0 ( 0)	5 ( 13)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0) **
	basophilic cell focus	4 ( 10)	0 ( 0)	0 ( 0)	0 ( 0)	7 ( 16)	0 ( 0)	0 ( 0)	0 ( 0)	9 ( 24)	0 ( 0)	0 ( 0)	0 ( 0)	5 ( 13)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)
	spongiosis hepatitis	1 ( 3)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)
	bile duct hyperplasia	37 ( 93)	0 ( 0)	0 ( 0)	0 ( 0)	44 ( 98)	0 ( 0)	0 ( 0)	0 ( 0)	38 ( 100)	0 ( 0)	0 ( 0)	0 ( 0)	39 ( 98)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)
	bile ductular proliferation	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 3)	0 ( 0)	0 ( 0)	0 ( 0)	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. : 0641  
 ANIMAL : RAT F344/DuCr1j[F344/DuCrj]  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 8

		Group Name	Control				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study	40				45				38				40			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
liver			<40>				<45>				<38>				<40>			
	cholangiofibrosis		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	focal fatty change		0	0	0	0	1	0	0	0	2	1	0	0	1	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 5 )	( 3 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )
pancreas			<40>				<45>				<38>				<40>			
	atrophy:focal		3	1	0	0	3	0	0	0	4	1	0	0	5	0	0	0
			( 8 )	( 3 )	( 0 )	( 0 )	( 7 )	( 0 )	( 0 )	( 0 )	( 11 )	( 3 )	( 0 )	( 0 )	( 13 )	( 0 )	( 0 )	( 0 )
	leukemic cell 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 )	( 3 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	metastasis:peritoneum tumor		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 )	
	islet cell hyperplasia		1	1	0	0	0	0	0	0	2	0	0	0	1	0	0	0
			( 3 )	( 3 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 5 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )
{Urinary system}																		
kidney			<40>				<45>				<38>				<40>			
	cyst		0	0	0	0	2	0	0	0	0	0	0	0	2	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 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 ≤ 0.05 \*\* : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr-j]  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 9

Organ_____	Findings_____	Group Name	Control				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study	40				45				38				40			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Urinary system)																		
kidney			<40>				<45>				<38>				<40>			
	scar	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	metastasis:peritoneum tumor	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		( 3 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	chronic nephropathy	8	20	10	1	21	15	9	0	24	11	1	0 **	23	7	2	0 **	
		( 20 )	( 50 )	( 25 )	( 3 )	( 47 )	( 33 )	( 20 )	( 0 )	( 63 )	( 29 )	( 3 )	( 0 )	( 58 )	( 18 )	( 5 )	( 0 )	
	papillary necrosis	0	0	0	0	0	0	0	0	7	0	0	0 *	31	0	0	0 **	
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 18 )	( 0 )	( 0 )	( 0 )	( 78 )	( 0 )	( 0 )	( 0 )	
mineralization:papilla	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0		
	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )		
mineralization:pelvis	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0		
	( 3 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )		
urothelial hyperplasia:pelvis	1	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0		
	( 3 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 3 )	( 3 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )		
inflammation:papilla	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0		
	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )		

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. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 10

		Group Name	Control				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study	40				45				38				40			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Urinary system)																		
urin bladd			<40>				<45>				<38>				<40>			
	transitional cell hyperplasia		0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			( 0 )	( 3 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )
(Endocrine system)																		
pituitary			<39>				<45>				<38>				<40>			
	angiectasis		0	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 3 )	( 3 )	( 0 )	( 0 )	( 5 )	( 0 )	( 0 )	( 0 )
	cyst		4	0	0	0	3	1	0	0	3	0	0	0	6	0	0	0
			( 10 )	( 0 )	( 0 )	( 0 )	( 7 )	( 2 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 15 )	( 0 )	( 0 )	( 0 )
	hyperplasia		11	9	2	0	13	7	0	0	8	8	3	0	12	4	2	0
			( 28 )	( 23 )	( 5 )	( 0 )	( 29 )	( 16 )	( 0 )	( 0 )	( 21 )	( 21 )	( 8 )	( 0 )	( 30 )	( 10 )	( 5 )	( 0 )
	Rathke pouch		2	0	0	0	2	1	0	0	0	0	0	0	2	0	0	0
			( 5 )	( 0 )	( 0 )	( 0 )	( 4 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 5 )	( 0 )	( 0 )	( 0 )
	aberrant craniopharyngeal tissue		0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
thyroid			<40>				<45>				<38>				<40>			
	leukemic cell 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 )	( 3 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )

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

STUDY NO. : 0641  
 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	Control				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study	40				45				38				40			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Endocrine system)																		
thyroid			<40>				<45>				<38>				<40>			
	ultimobranchial body remanet	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 )	( 3 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	C-cell hyperplasia	8	0	0	0	5	2	0	0	3	1	1	0	5	3	2	0	0
		( 20 )	( 0 )	( 0 )	( 0 )	( 11 )	( 4 )	( 0 )	( 0 )	( 8 )	( 3 )	( 3 )	( 0 )	( 13 )	( 8 )	( 5 )	( 0 )	( 0 )
	cystic thyroid follicle	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
		( 3 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )	( 0 )
adrenal			<40>				<45>				<38>				<40>			
	cyst	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	osseous metaplasia	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 )
	leukemic cell 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 )	( 3 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
hyperplasia:cortical cell	2	0	0	0	2	0	0	0	1	1	0	0	2	1	0	0	0	
		( 5 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )	( 3 )	( 3 )	( 0 )	( 0 )	( 5 )	( 3 )	( 0 )	( 0 )	
hyperplasia:medulla	3	3	0	0	2	1	0	0	2	2	0	0	1	1	1	0	0	
		( 8 )	( 8 )	( 0 )	( 0 )	( 4 )	( 2 )	( 0 )	( 0 )	( 5 )	( 5 )	( 0 )	( 0 )	( 3 )	( 3 )	( 3 )	( 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. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 12

Organ_____	Findings_____	Group Name	Control				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study	40				45				38				40			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Endocrine system)																		
adrenal			<40>				<45>				<38>				<40>			
	focal fatty change:cortex		1	1	0	0	1	0	0	0	3	0	0	0	4	1	0	0
		( 3 )	( 3 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 10 )	( 3 )	( 0 )	( 0 )	
(Reproductive system)																		
testis			<40>				<45>				<38>				<40>			
	mineralization		0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	
	inflammatory infiltration		0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )	
	arteritis		2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	
		( 5 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	
	interstitial cell hyperplasia		4	0	0	0	4	0	0	0	5	0	0	0	11	0	0	
		( 10 )	( 0 )	( 0 )	( 0 )	( 9 )	( 0 )	( 0 )	( 0 )	( 13 )	( 0 )	( 0 )	( 0 )	( 28 )	( 0 )	( 0 )	( 0 )	
semin ves			<40>				<45>				<38>				<40>			
	metastasis:peritoneum tumor		1	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 )	

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. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 13

Organ	Findings	Group Name No. of Animals on Study Grade	Control 40				800 ppm 45				2400 ppm 38				7200 ppm 40			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Reproductive system}																		
prostate	inflammation		<40>				<45>				<38>				<40>			
		4 ( 10)	0 ( 0)	0 ( 0)	0 ( 0)	2 ( 4)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	2 ( 5)	0 ( 0)	0 ( 0)	0 ( 0)	
	hyperplasia		7 ( 18)	1 ( 3)	0 ( 0)	0 ( 0)	6 ( 13)	0 ( 0)	0 ( 0)	0 ( 0)	4 ( 11)	1 ( 3)	0 ( 0)	0 ( 0)	2 ( 5)	0 ( 0)	0 ( 0)	0 ( 0)
mammary gl	galactocele		<40>				<45>				<38>				<40>			
		0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 3)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)
{Nervous system}																		
brain	hemorrhage		<40>				<45>				<38>				<40>			
		1 ( 3)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)
	leukemic cell infiltration		0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)
	metastasis:pituitary tumor		0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 3)	0 ( 0)	0 ( 0)	0 ( 0)
Grade	1 : Slight      2 : Moderate      3 : Marked      4 : Severe																	
< a >	a : Number of animals examined at the site																	
b	b : Number of animals with lesion																	
( c )	c : b / a * 100																	
Significant difference :    * : P ≤ 0.05    ** : P ≤ 0.01    Test of Chi Square																		



STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 14

		Group Name	Control				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study	40				45				38				40			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Special sense organs/appendage)																		
eye			<40>				<45>				<38>				<40>			
	cataract		5	1	0	0	6	0	0	0	2	1	0	0	3	3	0	0
			( 13 )	( 3 )	( 0 )	( 0 )	( 13 )	( 0 )	( 0 )	( 0 )	( 5 )	( 3 )	( 0 )	( 0 )	( 8 )	( 8 )	( 0 )	( 0 )
	retinal atrophy		10	4	3	0	4	4	6	0	1	2	3	0 *	9	4	6	0
			( 25 )	( 10 )	( 8 )	( 0 )	( 9 )	( 9 )	( 13 )	( 0 )	( 3 )	( 5 )	( 8 )	( 0 )	( 23 )	( 10 )	( 15 )	( 0 )
	keratitis		2	1	0	0	3	1	0	0	2	1	0	0	2	1	0	0
		( 5 )	( 3 )	( 0 )	( 0 )	( 7 )	( 2 )	( 0 )	( 0 )	( 5 )	( 3 )	( 0 )	( 0 )	( 5 )	( 3 )	( 0 )	( 0 )	
	iritis		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 )	( 3 )	( 0 )	( 0 )	( 0 )
	degeneration:optic nerve		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 )
	Harder gl		<40>				<45>				<38>				<40>			
	degeneration		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	
	hyperplasia		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 )
	(Body cavities)																	
peritoneum			<40>				<45>				<38>				<40>			
	inflammatory infiltration		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )

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

TABLE M 4

HISTOPATHOLOGICAL FINDINGS:

NON-NEOPLASTIC LESIONS:

FEMALE: ALL ANIMALS

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 17

Organ	Findings	Group Name No. of Animals on Study Grade	Control				800 ppm				2400 ppm				7200 ppm						
			50				50				50				50						
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
(Integumentary system/appandage)																					
skin/app			<50>				<50>				<50>				<50>						
	ulcer	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	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 )
	scab	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	1 ( 2 )	0 ( 0 )	0 ( 0 )	0 ( 0 )
(Respiratory system)																					
nasal cavit			<50>				<50>				<50>				<50>						
	thrombus	2 ( 4 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	3 ( 6 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	3 ( 6 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )
	mineralization	24 ( 48 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	24 ( 48 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	18 ( 36 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	19 ( 38 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )
	eosinophilic change:olfactory epithelium	18 ( 36 )	30 ( 60 )	2 ( 4 )	0 ( 0 )	0 ( 0 )	10 ( 20 )	39 ( 78 )	1 ( 2 )	0 ( 0 )	10 ( 20 )	34 ( 68 )	6 ( 12 )	0 ( 0 )	11 ( 22 )	31 ( 62 )	6 ( 12 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )
	eosinophilic change:respiratory epithelium	36 ( 72 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	39 ( 78 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	37 ( 74 )	1 ( 2 )	0 ( 0 )	0 ( 0 )	26 ( 52 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )
	inflammation:foreign body	6 ( 12 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	5 ( 10 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	2 ( 4 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	1 ( 2 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )

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. : 0641  
 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	Control				800 ppm				2400 ppm				7200 ppm						
		No. of Animals on Study	50				50				50				50						
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)			
(Respiratory system)																					
nasal cavit		<50>					<50>					<50>					<50>				
	respiratory metaplasia:olfactory epithelium	2	0	0	0	2	0	0	0	2	0	0	0	6	0	0	0	6	0	0	0
		( 4)	( 0)	( 0)	( 0)	( 4)	( 0)	( 0)	( 0)	( 4)	( 0)	( 0)	( 0)	( 12)	( 0)	( 0)	( 0)	( 12)	( 0)	( 0)	( 0)
	respiratory metaplasia:gland	49	0	0	0	50	0	0	0	49	0	0	0	49	0	0	0	49	0	0	0
		( 98)	( 0)	( 0)	( 0)	(100)	( 0)	( 0)	( 0)	( 98)	( 0)	( 0)	( 0)	( 98)	( 0)	( 0)	( 0)	( 98)	( 0)	( 0)	( 0)
	squamous cell metaplasia:respiratory epithelium	5	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0
		( 10)	( 0)	( 0)	( 0)	( 2)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 4)	( 0)	( 0)	( 0)	( 4)	( 0)	( 0)	( 0)
lung		<50>					<50>					<50>					<50>				
	congestion	4	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		( 8)	( 0)	( 0)	( 0)	( 2)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
	inflammatory infiltration	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		( 2)	( 0)	( 0)	( 0)	( 4)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
	accumulation of foamy cells	1	0	0	0	1	0	0	0	1	0	0	0	2	0	0	0	2	0	0	0
		( 2)	( 0)	( 0)	( 0)	( 2)	( 0)	( 0)	( 0)	( 2)	( 0)	( 0)	( 0)	( 4)	( 0)	( 0)	( 0)	( 4)	( 0)	( 0)	( 0)
	bronchiolar-alveolar cell hyperplasia	0	2	0	0	1	1	0	0	0	1	0	0	1	0	0	0	1	0	0	0
		( 0)	( 4)	( 0)	( 0)	( 2)	( 2)	( 0)	( 0)	( 0)	( 2)	( 0)	( 0)	( 2)	( 0)	( 0)	( 0)	( 2)	( 0)	( 0)	( 0)
(Hematopoietic system)																					
bone marrow		<50>					<50>					<50>					<50>				
	granulation	1	0	0	0	3	0	0	0	3	1	1	0	1	0	0	0	1	0	0	0
		( 2)	( 0)	( 0)	( 0)	( 6)	( 0)	( 0)	( 0)	( 6)	( 2)	( 2)	( 0)	( 2)	( 0)	( 0)	( 2)	( 0)	( 0)	( 0)	( 0)

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

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 19

Organ_____	Findings_____	Group Name No. of Animals on Study Grade	Control 50				800 ppm 50				2400 ppm 50				7200 ppm 50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Hematopoietic system)																		
bone marrow	increased hematopoiesis		6 ( 12)	0 ( 0)	0 ( 0)	0 ( 0)	3 ( 6)	0 ( 0)	0 ( 0)	0 ( 0)	5 ( 10)	0 ( 0)	0 ( 0)	0 ( 0)	7 ( 14)	0 ( 0)	0 ( 0)	0 ( 0)
	decreased hematopoiesis		1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)
spleen	congestion		0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)
	deposit of hemosiderin		1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)	2 ( 4)	0 ( 0)	0 ( 0)	0 ( 0)
	extramedullary hematopoiesis		17 ( 34)	3 ( 6)	2 ( 4)	0 ( 0)	14 ( 28)	1 ( 2)	2 ( 4)	0 ( 0)	16 ( 32)	2 ( 4)	1 ( 2)	0 ( 0)	16 ( 32)	5 ( 10)	1 ( 2)	0 ( 0)
(Circulatory system)																		
heart	thrombus		0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 2)	0 ( 0)	0 ( 0)

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

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 20

		Group Name No. of Animals on Study Grade				Control 50				800 ppm 50				2400 ppm 50				7200 ppm 50			
Organ	Findings	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)				
{Circulatory system}																					
heart		<50>				<50>				<50>				<50>							
	myocardial fibrosis	5 ( 10)	0 ( 0)	0 ( 0)	0 ( 0)	8 ( 16)	0 ( 0)	0 ( 0)	0 ( 0)	5 ( 10)	0 ( 0)	0 ( 0)	0 ( 0)	7 ( 14)	0 ( 0)	0 ( 0)	0 ( 0)				
{Digestive system}																					
oral cavity		<50>				<50>				<50>				<50>							
	inflammatory infiltration	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)				
	squamous cell hyperplasia	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)				
tongue		<50>				<50>				<50>				<50>							
	ulcer	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)				
	squamous cell hyperplasia	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)				
stomach		<50>				<50>				<50>				<50>							
	erosion:forestomach	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)				

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. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 21

Organ	Findings	Group Name No. of Animals on Study				Control 50				800 ppm 50				2400 ppm 50				7200 ppm 50			
		Grade																			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Digestive system)																					
stomach	ulcer:forestomach	<50>				<50>				<50>				<50>				<50>			
		1	1	1	0	0	1	0	0	1	2	0	0	0	2	0	0	0	2	0	0
		( 2 )	( 2 )	( 2 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 2 )	( 4 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )
	hyperplasia:forestomach	0	0	0	0	1	1	0	0	3	0	0	0	2	2	0	0	2	2	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 2 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )	( 0 )	( 4 )	( 4 )	( 0 )	( 0 )	( 4 )	( 4 )	( 0 )	( 0 )
small intes	erosion:glandular stomach	4	1	0	0	2	0	0	0	2	0	0	0	2	0	0	0	2	0	0	0
		( 8 )	( 2 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )
	ulcer:glandular stomach	1	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0
		( 2 )	( 4 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )
	hyperplasia:glandular stomach	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	1	0	0	0
large intes		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )
	hyperplasia	<50>				<50>				<50>				<50>				<50>			
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )
	invagination	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  
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 ( c ) c : b / a \* 100  
 Significant difference ; \* : P ≤ 0.05 \*\* : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0641  
 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 No. of Animals on Study Grade	Control 50				800 ppm 50				2400 ppm 50				7200 ppm 50					
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)		
(Digestive system)																				
liver	herniation		9 ( 18)	0 ( 0)	0 ( 0)	0 ( 0)	7 ( 14)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	7 ( 14)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	8 ( 16)	0 ( 0)	0 ( 0)	0 ( 0)
	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)	0 ( 0)	0 ( 0)
	necrosis:central		0 ( 0)	0 ( 0)	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)
	necrosis:focal		0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	3 ( 6)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	3 ( 6)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	2 ( 4)	0 ( 0)	0 ( 0)	0 ( 0)
	fatty change:central		0 ( 0)	0 ( 0)	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)
	fatty change:peripheral		1 ( 2)	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 2)	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)
	granulation		0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	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)
	inflammatory cell nest		28 ( 56)	4 ( 8)	0 ( 0)	0 ( 0)	31 ( 62)	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)	27 ( 54)	4 ( 8)	0 ( 0)	0 ( 0)	0 ( 0)	27 ( 54)	2 ( 4)	0 ( 0)	0 ( 0)

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



STUDY NO. : 0641  
 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				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study	50				50				50				50			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Digestive system)																		
liver			<50>				<50>				<50>				<50>			
	acidophilic cell focus		5	0	0	0	6	1	0	0	5	1	0	0	0	2	0	0 *
			( 10)	( 0)	( 0)	( 0)	( 12)	( 2)	( 0)	( 0)	( 10)	( 2)	( 0)	( 0)	( 0)	( 0)	( 4)	( 0)
	basophilic cell focus		25	0	0	0	26	0	0	0	25	1	0	0	18	0	0	0
			( 50)	( 0)	( 0)	( 0)	( 52)	( 0)	( 0)	( 0)	( 50)	( 2)	( 0)	( 0)	( 36)	( 0)	( 0)	( 0)
	bile duct hyperplasia		28	0	0	0	24	0	0	0	19	0	0	0	22	0	0	0
			( 56)	( 0)	( 0)	( 0)	( 48)	( 0)	( 0)	( 0)	( 38)	( 0)	( 0)	( 0)	( 44)	( 0)	( 0)	( 0)
	bile ductular proliferation		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 2)	( 0)	( 0)	( 0)
pancreas			<50>				<50>				<50>				<50>			
	atrophy:focal		1	0	0	0	1	0	0	0	2	0	0	0	2	0	0	0
			( 2)	( 0)	( 0)	( 0)	( 2)	( 0)	( 0)	( 0)	( 4)	( 0)	( 0)	( 0)	( 4)	( 0)	( 0)	( 0)
	islet cell hyperplasia		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 2)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
(Urinary system)																		
kidney			<50>				<50>				<50>				<50>			
	cyst		0	0	0	0	0	1	0	0	0	1	0	0	2	0	0	0
		( 0)	( 0)	( 0)	( 0)	( 0)	( 2)	( 0)	( 0)	( 0)	( 2)	( 0)	( 0)	( 4)	( 0)	( 0)	( 0)	

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

STUDY NO. : 0641  
 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	Control				800 ppm				2400 ppm				7200 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>				
	hyaline droplet		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)
	scar		0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	
		(	0)	(	0)	(	0)	(	0)	(	0)	(	0)	(	0)	(	2)	(	0)
	chronic nephropathy		17	4	1	0	19	4	1	0	19	0	0	0	7	3	1	0	
		(	34)	(	8)	(	2)	(	0)	(	38)	(	0)	(	0)	(	14)	(	0)
	hydronephrosis		0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	
	(	0)	(	0)	(	0)	(	0)	(	0)	(	0)	(	0)	(	4)	(	0)	
papillary necrosis		0	0	0	0	0	0	0	0	17	0	0	0 **	13	18	14	0 **		
	(	0)	(	0)	(	0)	(	0)	(	0)	(	34)	(	0)	(	26)	(	0)	
mineralization:papilla		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0		
	(	0)	(	0)	(	0)	(	0)	(	0)	(	0)	(	0)	(	0)	(	0)	
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)	
mineralization:cortex		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0		
	(	0)	(	0)	(	0)	(	0)	(	0)	(	0)	(	0)	(	2)	(	0)	

Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe  
 < a > a : Number of animals examined at the site  
 b 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. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 25

Organ_____	Findings_____	Group Name	Control				800 µm				2400 µm				7200 µm			
		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>			
	urothelial hyperplasia:pelvis		0	0	0	0	0	0	0	0	1	0	0	0	20	3	0	0 **
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 40 )	( 6 )	( 0 )	( 0 )
	inflammation: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 )	( 2 )	( 0 )	( 0 )	( 0 )	
urin bladd			<50>				<50>				<50>				<50>			
	dilatation		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 )	( 2 )	( 0 )	( 0 )	( 0 )	
{Endocrine system}																		
pituitary			<50>				<50>				<50>				<50>			
	angiectasis		6	3	0	0	4	4	0	0	7	4	0	0	3	8	0	0
			( 12 )	( 6 )	( 0 )	( 0 )	( 8 )	( 8 )	( 0 )	( 0 )	( 14 )	( 8 )	( 0 )	( 0 )	( 6 )	( 16 )	( 0 )	( 0 )
	cyst		17	1	0	0	11	0	0	0	9	1	0	0	13	2	0	0
			( 34 )	( 2 )	( 0 )	( 0 )	( 22 )	( 0 )	( 0 )	( 0 )	( 18 )	( 2 )	( 0 )	( 0 )	( 26 )	( 4 )	( 0 )	( 0 )
	deposit of hemosiderin		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 )

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. : 0641  
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
REPORT TYPE : A1  
SEX : FEMALE

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

PAGE : 26

Organ_____	Findings_____	Group Name	Control				800 ppm				2400 ppm				7200 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>			
	hyperplasia		5 ( 10)	5 ( 10)	0 ( 0)	0 ( 0)	4 ( 8)	3 ( 6)	0 ( 0)	0 ( 0)	4 ( 8)	1 ( 2)	0 ( 0)	0 ( 0)	1 ( 2)	2 ( 4)	0 ( 0)	0 ( 0)
	Rathke pouch		0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)	2 ( 4)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)
thyroid			<50>				<50>				<50>				<50>			
	C-cell hyperplasia		6 ( 12)	1 ( 2)	0 ( 0)	0 ( 0)	7 ( 14)	2 ( 4)	0 ( 0)	0 ( 0)	5 ( 10)	0 ( 0)	0 ( 0)	0 ( 0)	3 ( 6)	0 ( 0)	0 ( 0)	0 ( 0)
adrenal			<50>				<50>				<50>				<50>			
	angiectasis		2 ( 4)	0 ( 0)	0 ( 0)	0 ( 0)	2 ( 4)	1 ( 2)	0 ( 0)	0 ( 0)	2 ( 4)	0 ( 0)	0 ( 0)	0 ( 0)	4 ( 8)	0 ( 0)	0 ( 0)	0 ( 0)
	cyst		1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)
	hyperplasia:cortical cell		5 ( 10)	0 ( 0)	0 ( 0)	0 ( 0)	4 ( 8)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)	2 ( 4)	1 ( 2)	0 ( 0)	0 ( 0)
	hyperplasia:medulla		0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 2)	0 ( 0)	0 ( 0)	2 ( 4)	1 ( 2)	0 ( 0)	0 ( 0)

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

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 27

		Group Name	Control				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Organ_____	Findings_____		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																		
adrenal			<50>				<50>				<50>				<50>			
	focal fatty change:cortex		6	2	0	0	3	1	0	0	3	1	0	0	3	1	0	0
			( 12 )	( 4 )	( 0 )	( 0 )	( 6 )	( 2 )	( 0 )	( 0 )	( 6 )	( 2 )	( 0 )	( 0 )	( 6 )	( 2 )	( 0 )	( 0 )
{Reproductive system}																		
ovary			<50>				<50>				<50>				<50>			
	cyst		1	0	0	0	3	0	0	0	1	0	0	0	0	0	0	0
			( 2 )	( 0 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
uterus			<50>				<50>				<50>				<50>			
	cystic endometrial hyperplasia		2	0	0	0	3	0	0	0	3	0	0	0	4	0	0	0
			( 4 )	( 0 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )
mammary gl			<50>				<50>				<50>				<50>			
	cyst		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
{Special sense organs/appendage}																		
eye			<50>				<50>				<50>				<50>			
	cataract		4	1	0	0	3	2	0	0	2	1	0	0	0	3	0	0
			( 8 )	( 2 )	( 0 )	( 0 )	( 6 )	( 4 )	( 0 )	( 0 )	( 4 )	( 2 )	( 0 )	( 0 )	( 0 )	( 6 )	( 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. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 28

		Group Name	Control				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Organ	Findings		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Special sense organs/appendage)																		
eye			<50>				<50>				<50>				<50>			
	retinal atrophy		15	6	4	0	15	3	5	0	6	4	2	0	16	10	3	0
			( 30)	( 12)	( 8)	( 0)	( 30)	( 6)	( 10)	( 0)	( 12)	( 8)	( 4)	( 0)	( 32)	( 20)	( 6)	( 0)
	keratitis		5	0	0	0	2	0	0	0	1	0	0	0	0	0	1	0 *
			( 10)	( 0)	( 0)	( 0)	( 4)	( 0)	( 0)	( 0)	( 2)	( 0)	( 0)	( 0)	( 0)	( 0)	( 2)	( 0)
	iritis		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			( 2)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
Harder gl			<50>				<50>				<50>				<50>			
	hyperplasia		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 2)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
(Musculoskeletal system)																		
muscle			<50>				<50>				<50>				<50>			
	mineralization		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		( 2)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
bone			<50>				<50>				<50>				<50>			
	osteosclerosis		5	0	0	0	2	0	0	0	2	2	0	0	2	0	0	0
		( 10)	( 0)	( 0)	( 0)	( 0)	( 4)	( 0)	( 0)	( 0)	( 4)	( 4)	( 0)	( 0)	( 4)	( 0)	( 0)	( 0)

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

TABLE M 5

HISTOPATHOLOGICAL FINDINGS:

NON-NEOPLASTIC LESIONS:

FEMALE: DEAD AND MORIBUND ANIMALS

STUDY NO. : 0641  
 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	Control				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study	12				12				8				17			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Integumentary system/appendage)																		
skin/app			<12>				<12>				< 8>				<17>			
	scab		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 )	( 6 )	( 0 )	( 0 )	( 0 )	( 0 )
(Respiratory system)																		
nasal cavit			<12>				<12>				< 8>				<17>			
	thrombus		2	0	0	0	0	0	0	0	3	0	0	0	3	0	0	0
			( 17 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 38 )	( 0 )	( 0 )	( 0 )	( 18 )	( 0 )	( 0 )	( 0 )
		mineralization	6	0	0	0	3	0	0	0	4	0	0	0	6	0	0	0
			( 50 )	( 0 )	( 0 )	( 0 )	( 25 )	( 0 )	( 0 )	( 0 )	( 50 )	( 0 )	( 0 )	( 0 )	( 35 )	( 0 )	( 0 )	( 0 )
		leukemic cell infiltration	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
		eosinophilic change:olfactory epithelium	8	3	1	0	3	9	0	0 *	4	4	0	0	7	9	0	0
			( 67 )	( 25 )	( 8 )	( 0 )	( 25 )	( 75 )	( 0 )	( 0 )	( 50 )	( 50 )	( 0 )	( 0 )	( 41 )	( 53 )	( 0 )	( 0 )
		eosinophilic change:respiratory epithelium	4	0	0	0	8	0	0	0	3	1	0	0	7	0	0	0
			( 33 )	( 0 )	( 0 )	( 0 )	( 67 )	( 0 )	( 0 )	( 0 )	( 38 )	( 13 )	( 0 )	( 0 )	( 41 )	( 0 )	( 0 )	( 0 )
		inflammation:foreign body	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			( 8 )	( 0 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
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. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 16

Organ	Findings	Group Name No. of Animals on Study Grade	Control 12				800 ppm 12				2400 ppm 8				7200 ppm 17			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Respiratory system)																		
nasal cavit			<12>				<12>				< 8>				<17>			
	respiratory metaplasia:olfactory epithelium		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			( 8)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 6)	( 0)	( 0)
	respiratory metaplasia:gland		11	0	0	0	12	0	0	0	7	0	0	0	16	0	0	0
			( 92)	( 0)	( 0)	( 0)	(100)	( 0)	( 0)	( 0)	( 88)	( 0)	( 0)	( 0)	( 94)	( 0)	( 0)	( 0)
	squamous cell metaplasia:respiratory epithelium		2	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0
			( 17)	( 0)	( 0)	( 0)	( 8)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 6)	( 0)	( 0)	( 0)
trachea			<12>				<12>				< 8>				<17>			
	leukemic cell infiltration		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			( 0)	( 0)	( 0)	( 0)	( 8)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
lung			<12>				<12>				< 8>				<17>			
	congestion		4	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0 *
			( 33)	( 0)	( 0)	( 0)	( 8)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
	leukemic cell infiltration		0	0	0	0	3	0	0	0	2	0	0	0	2	0	0	0
			( 0)	( 0)	( 0)	( 0)	( 25)	( 0)	( 0)	( 0)	( 25)	( 0)	( 0)	( 0)	( 12)	( 0)	( 0)	( 0)
	metastasis:uterus tumor		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)	( 12)	( 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. : 0641  
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]  
REPORT TYPE : A1  
SEX : FEMALE

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

PAGE : 17

Organ_____	Findings_____	Group Name No. of Animals on Study Grade	Control				800 ppm				2400 ppm				7200 ppm			
			12				12				8				17			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
(Respiratory system)																		
lung	metastasis:thyroid tumor		<12>				<12>				< 8>				<17>			
			0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 13 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	metastasis:Zymbal gland tumor		<12>				<12>				< 8>				<17>			
			0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )	( 0 )
(Hematopoietic system)																		
bone marrow	granulation		<12>				<12>				< 8>				<17>			
			0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )	( 0 )
	leukemic cell infiltration		<12>				<12>				< 8>				<17>			
			1	0	0	0	3	0	0	0	2	0	0	0	5	0	0	0
			( 8 )	( 0 )	( 0 )	( 0 )	( 25 )	( 0 )	( 0 )	( 0 )	( 25 )	( 0 )	( 0 )	( 0 )	( 29 )	( 0 )	( 0 )	( 0 )
	increased hematopoiesis		<12>				<12>				< 8>				<17>			
			3	0	0	0	2	0	0	0	1	0	0	0	4	0	0	0
			( 25 )	( 0 )	( 0 )	( 0 )	( 17 )	( 0 )	( 0 )	( 0 )	( 13 )	( 0 )	( 0 )	( 0 )	( 24 )	( 0 )	( 0 )	( 0 )
	decreased hematopoiesis		<12>				<12>				< 8>				<17>			
			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			( 8 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
lymph node	leukemic cell infiltration		<12>				<12>				< 8>				<17>			
			0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 17 )	( 8 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
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. : 0641  
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

		Group Name	Control				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study	12				12				8				17			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Organ	Findings		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Hematopoietic system}																		
lymph node			<12>				<12>				< 8>				<17>			
	metastasis:thyroid tumor		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 13 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
spleen			<12>				<12>				< 8>				<17>			
	deposit of hemosiderin		0	0	0	0	1	0	0	0	1	0	0	0	2	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 13 )	( 0 )	( 0 )	( 0 )	( 12 )	( 0 )	( 0 )	( 0 )
	extramedullary hematopoiesis		2	1	1	0	1	0	2	0	0	1	1	0	2	2	1	0
			( 17 )	( 8 )	( 8 )	( 0 )	( 8 )	( 0 )	( 17 )	( 0 )	( 0 )	( 13 )	( 13 )	( 0 )	( 12 )	( 12 )	( 6 )	( 0 )
{Circulatory system}																		
heart			<12>				<12>				< 8>				<17>			
	thrombus		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )
	leukemic cell infiltration		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	myocardial fibrosis		4	0	0	0	4	0	0	0	3	0	0	0	4	0	0	0
			( 33 )	( 0 )	( 0 )	( 0 )	( 33 )	( 0 )	( 0 )	( 0 )	( 38 )	( 0 )	( 0 )	( 0 )	( 24 )	( 0 )	( 0 )	( 0 )

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

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 19

Organ	Findings	Group Name No. of Animals on Study Grade	Control				800 ppm				2400 ppm				7200 ppm			
			12				12				8				17			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
tongue	ulcer		<12>				<12>				< 8>				<17>			
			0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )	( 0 )
	squamous cell hyperplasia		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			( 8 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
stomach	leukemic cell infiltration		<12>				<12>				< 8>				<17>			
			0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	erosion:forestomach		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	ulcer:forestomach		1	1	1	0	0	1	0	0	1	2	0	0	0	2	0	0
			( 8 )	( 8 )	( 8 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 13 )	( 25 )	( 0 )	( 0 )	( 0 )	( 12 )	( 0 )	( 0 )
	hyperplasia:forestomach		0	0	0	0	0	1	0	0	1	0	0	0	1	2	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 13 )	( 0 )	( 0 )	( 0 )	( 6 )	( 12 )	( 0 )	( 0 )
	erosion:glandular stomach		3	1	0	0	1	0	0	0	1	0	0	0	0	0	0	0 *
			( 25 )	( 8 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 13 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	ulcer:glandular stomach		1	2	0	0	0	1	0	0	0	0	0	0	0	2	0	0
			( 8 )	( 17 )	( 0 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 12 )	( 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. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 20

Organ	Findings	Group Name No. of Animals on Study				Control				800 ppm				2400 ppm				7200 ppm			
		Grade				12				12				8				17			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Digestive system)																					
stomach	hyperplasia:glandular stomach	<12>				<12>				< 8>				<17>							
		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 )	( 13 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
small intes	hyperplasia	<12>				<12>				< 8>				<17>							
		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 )	( 6 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	leukemic cell infiltration	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
large intes	leukemic cell infiltration	<12>				<12>				< 8>				<17>							
		0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	invagination	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
liver	herniation	<12>				<12>				< 8>				<17>							
		1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
		( 8 )	( 0 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 13 )	( 0 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	necrosis:central	0	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0
		( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 13 )	( 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. : 0641  
ANIMAL : RAT F344/DuCr1j[F344/DuCrj]  
REPORT TYPE : A1  
SEX : FEMALE

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

PAGE : 21

Organ_____	Findings_____	Group Name No. of Animals on Study Grade				Control 12				800 ppm 12				2400 ppm 8				7200 ppm 17			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)				
(Digestive system)																					
liver		<12>				<12>				< 8>				<17>							
	necrosis:focal	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0				
		( 0 )	( 0 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 13 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )				
	fatty change:central	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0				
		( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )				
	fatty change:peripheral	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
		( 8 )	( 8 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )				
	granulation	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 )	( 0 )	( 0 )	( 0 )				
inflammatory cell nest	1	0	0	0	4	0	0	0	1	0	0	0	4	0	0	0					
	( 8 )	( 0 )	( 0 )	( 0 )	( 33 )	( 0 )	( 0 )	( 0 )	( 13 )	( 0 )	( 0 )	( 0 )	( 24 )	( 0 )	( 0 )	( 0 )					
leukemic cell infiltration	0	1	0	0	2	1	0	0	1	1	0	0	3	1	0	0					
	( 0 )	( 8 )	( 0 )	( 0 )	( 17 )	( 8 )	( 0 )	( 0 )	( 13 )	( 13 )	( 0 )	( 0 )	( 18 )	( 6 )	( 0 )	( 0 )					
metastasis:uterus tumor	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 )	( 12 )	( 0 )	( 0 )	( 0 )					
acidophilic cell focus	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0					
	( 0 )	( 0 )	( 0 )	( 0 )	( 17 )	( 8 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )					

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. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr-j]  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 22

		Group Name	Control				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study	12				12				8				17			
Organ_____	Findings_____	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Digestive system)																		
liver			<12>				<12>				< 8>				<17>			
	basophilic cell focus		2	0	0	0	1	0	0	0	1	0	0	0	3	0	0	0
			( 17)	( 0)	( 0)	( 0)	( 8)	( 0)	( 0)	( 0)	( 13)	( 0)	( 0)	( 0)	( 18)	( 0)	( 0)	( 0)
	bile duct hyperplasia		5	0	0	0	3	0	0	0	0	0	0	0	4	0	0	0
			( 42)	( 0)	( 0)	( 0)	( 25)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 24)	( 0)	( 0)	( 0)
pancreas			<12>				<12>				< 8>				<17>			
	leukemic cell 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)	( 6)	( 0)	( 0)
	metastasis:uterus tumor		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)	( 12)	( 0)	( 0)	( 0)
(Urinary system)																		
kidney			<12>				<12>				< 8>				<17>			
	leukemic cell infiltration		1	0	0	0	3	0	0	0	2	0	0	0	2	0	0	0
			( 8)	( 0)	( 0)	( 0)	( 25)	( 0)	( 0)	( 0)	( 25)	( 0)	( 0)	( 0)	( 12)	( 0)	( 0)	( 0)
	chronic nephropathy		2	2	1	0	2	1	1	0	1	0	0	0	0	0	0	0 *
			( 17)	( 17)	( 8)	( 0)	( 17)	( 8)	( 8)	( 0)	( 13)	( 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. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 23

Organ_____	Findings_____	Group Name	Control				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study	12				12				8				17			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Urinary system)																		
kidney			<12>				<12>				< 8>				<17>			
	hydronephrosis	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	
		( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 12)	( 6)	( 0)	( 0)	
	papillary necrosis	0	0	0	0	0	0	0	0	2	0	0	0	7	5	4	0 **	
		( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 25)	( 0)	( 0)	( 0)	( 41)	( 29)	( 24)	( 0)	
	mineralization:pelvis	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		( 8)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	
	mineralization:cortex	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
		( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 6)	( 0)	( 0)	( 0)	
	urothelial hyperplasia:pelvis	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	
		( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 29)	( 0)	( 0)	( 0)	
	inflammation:papilla	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
		( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 6)	( 0)	( 0)	( 0)	
			<12>				<12>				< 8>				<17>			
dilatation	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0		
	( 8)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 6)	( 0)	( 0)	( 0)		
urin bladd	leukemic cell infiltration	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	
		( 0)	( 0)	( 0)	( 0)	( 8)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 6)	( 0)	( 0)	( 0)	

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



STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr-j]  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 24

		Group Name No. of Animals on Study				Control 12				800 ppm 12				2400 ppm 8				7200 ppm 17			
Organ_____	Findings_____	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)			
{Endocrine system}																					
pituitary			<12>				<12>				< 8>				<17>						
	angiectasis		0	1	0	0	2	1	0	0	1	0	0	0	1	4	0	0			
			( 0 )	( 8 )	( 0 )	( 0 )	( 17 )	( 8 )	( 0 )	( 0 )	( 13 )	( 0 )	( 0 )	( 0 )	( 6 )	( 24 )	( 0 )	( 0 )			
	cyst		1	0	0	0	1	0	0	0	0	0	0	0	2	1	0	0			
			( 8 )	( 0 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 12 )	( 6 )	( 0 )	( 0 )			
	leukemic cell infiltration		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
			( 0 )	( 0 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )			
	Rathke pouch		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0			
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )	( 0 )			
thyroid			<12>				<12>				< 8>				<17>						
	C-cell hyperplasia		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
			( 0 )	( 0 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )			
panc islet			<12>				<12>				< 8>				<17>						
	leukemic cell infiltration		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
			( 0 )	( 0 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )			
adrenal			<12>				<12>				< 8>				<17>						
	angiectasis		0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0			
			( 0 )	( 0 )	( 0 )	( 0 )	( 8 )	( 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 : Number of animals with lesion  
 ( c ) c : b / a \* 100  
 Significant difference : \* : P ≤ 0.05 \*\* : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0641  
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
REPORT TYPE : A1  
SEX : FEMALE

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

PAGE : 25

Organ_____	Findings_____	Group Name	Control				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study	12				12				8				17			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Endocrine system)																		
adrenal			<12>				<12>				< 8>				<17>			
	cyst		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )	( 0 )
	leukemic cell infiltration		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )	( 0 )
	hyperplasia:cortical cell		1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			( 8 )	( 0 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	hyperplasia:medulla		0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )	( 0 )	( 0 )
	focal fatty change:cortex		2	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 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )

{Reproductive system}

ovary	cyst	<12>				<12>				< 8>				<17>							
		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
		( 8 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )				
	leukemic cell infiltration	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0				
		( 0 )	( 0 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )				

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

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

b : Number of animals with lesion

( c ) c : b / a \* 100

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

STUDY NO. : 0641  
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
REPORT TYPE : A1  
SEX : FEMALE

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

PAGE : 26

Organ	Findings	Group Name	Control				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study	12				12				8				17			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Reproductive system}																		
ovary			<12>				<12>				< 8>				<17>			
	metastasis:uterus tumor		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 )	( 12 )	( 0 )	( 0 )	( 0 )	
uterus			<12>				<12>				< 8>				<17>			
	leukemic cell infiltration		0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )
	cystic endometrial hyperplasia		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 )	( 6 )	( 0 )	( 0 )	( 0 )	
vagina			<12>				<12>				< 8>				<17>			
	leukemic cell infiltration		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 )	( 6 )	( 0 )	( 0 )	( 0 )	
{Nervous system}																		
brain			<12>				<12>				< 8>				<17>			
	leukemic cell infiltration		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 )	( 0 )	( 0 )	( 0 )	( 0 )
	metastasis:pituitary tumor		1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	
			( 8 )	( 0 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	

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. : 0641  
 ANIMAL : RAT F344/DuCr1j[F344/DuCrj]  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 27

Organ_____	Findings_____	Group Name	Control				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study	12				12				8				17			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Nervous system}																		
spinal cord			<12>				<12>				< 8>				<17>			
	leukemic cell infiltration		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)	( 0)	( 0)	( 0)	( 0)
{Special sense organs/appendage}																		
eye			<12>				<12>				< 8>				<17>			
	cataract		1	0	0	0	1	1	0	0	1	0	0	0	0	1	0	0
			( 8)	( 0)	( 0)	( 0)	( 8)	( 8)	( 0)	( 0)	( 13)	( 0)	( 0)	( 0)	( 0)	( 0)	( 6)	( 0)
	retinal atrophy		2	2	0	0	1	0	2	0	0	0	0	0	0	0	1	0
			( 17)	( 17)	( 0)	( 0)	( 8)	( 0)	( 17)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 6)	( 0)
	keratitis		2	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0
			( 17)	( 0)	( 0)	( 0)	( 8)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 6)	( 0)
	iritis		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			( 8)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
{Musculoskeletal system}																		
muscle			<12>				<12>				< 8>				<17>			
	mineralization		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			( 8)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)

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

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1j[F344/DuCrj]  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 28

Organ_____	Findings_____	Group Name	Control				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study	12				12				8				17			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Musculoskeletal system}																		
bone			<12>				<12>				< 8>				<17>			
	osteosclerosis		0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 13 )	( 0 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )	( 0 )
{Body cavities}																		
peritoneum			<12>				<12>				< 8>				<17>			
	leukemic cell infiltration		0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 6 )	( 6 )	( 0 )	( 0 )
	metastasis:uterus tumor		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )	( 0 )

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 M 6**

**HISTOPATHOLOGICAL FINDINGS:**

**NON-NEOPLASTIC LESIONS:**

**FEMALE: SACRIFICED ANIMALS**

STUDY NO. : 0641  
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
REPORT TYPE : A1  
SEX : FEMALE

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

PAGE : 15

		Group Name	Control				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study	38				38				42				33			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Integumentary system/appandage}																		
skin/app			<38>				<38>				<42>				<33>			
	ulcer		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )
{Respiratory system}																		
nasal cavit			<38>				<38>				<42>				<33>			
	mineralization		18	0	0	0	21	0	0	0	14	0	0	0	13	0	0	0
			( 47 )	( 0 )	( 0 )	( 0 )	( 55 )	( 0 )	( 0 )	( 0 )	( 33 )	( 0 )	( 0 )	( 0 )	( 39 )	( 0 )	( 0 )	( 0 )
	eosinophilic change:olfactory epithelium		10	27	1	0	7	30	1	0	6	30	6	0	4	22	6	0
			( 26 )	( 71 )	( 3 )	( 0 )	( 18 )	( 79 )	( 3 )	( 0 )	( 14 )	( 71 )	( 14 )	( 0 )	( 12 )	( 67 )	( 18 )	( 0 )
	eosinophilic change:respiratory epithelium		32	0	0	0	31	0	0	0	34	0	0	0	19	0	0	0 *
			( 84 )	( 0 )	( 0 )	( 0 )	( 82 )	( 0 )	( 0 )	( 0 )	( 81 )	( 0 )	( 0 )	( 0 )	( 58 )	( 0 )	( 0 )	( 0 )
	inflammation:foreign body		5	0	0	0	4	0	0	0	2	0	0	0	1	0	0	0
			( 13 )	( 0 )	( 0 )	( 0 )	( 11 )	( 0 )	( 0 )	( 0 )	( 5 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )
	respiratory metaplasia:olfactory epithelium		1	0	0	0	2	0	0	0	2	0	0	0	5	0	0	0
			( 3 )	( 0 )	( 0 )	( 0 )	( 5 )	( 0 )	( 0 )	( 0 )	( 5 )	( 0 )	( 0 )	( 0 )	( 15 )	( 0 )	( 0 )	( 0 )
	respiratory metaplasia:gland		38	0	0	0	38	0	0	0	42	0	0	0	33	0	0	0
			( 100 )	( 0 )	( 0 )	( 0 )	( 100 )	( 0 )	( 0 )	( 0 )	( 100 )	( 0 )	( 0 )	( 0 )	( 100 )	( 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  
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 ANIMAL : RAT F344/DuCr1j[F344/DuCrj]  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 16

		Group Name	Control				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study	38				38				42				33			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Organ_____	Findings_____		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
nasal cavit			<38>				<38>				<42>				<33>			
	squamous cell metaplasia:respiratory epithelium	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		( 8)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 3)	( 0)	( 0)	( 0)	( 0)
lung			<38>				<38>				<42>				<33>			
	inflammatory infiltration	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
		( 3)	( 0)	( 0)	( 0)	( 0)	( 5)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
	leukemic cell infiltration	0	1	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0
		( 0)	( 3)	( 0)	( 0)	( 0)	( 5)	( 3)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
	metastasis:skin/appendage tumor	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		( 0)	( 0)	( 0)	( 0)	( 0)	( 3)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	
	accumulation of foamy cells	1	0	0	0	0	1	0	0	0	1	0	0	0	2	0	0	0
		( 3)	( 0)	( 0)	( 0)	( 0)	( 3)	( 0)	( 0)	( 0)	( 2)	( 0)	( 0)	( 0)	( 6)	( 0)	( 0)	( 0)
	bronchiolar-alveolar cell hyperplasia	0	2	0	0	0	1	1	0	0	0	1	0	0	1	0	0	0
		( 0)	( 5)	( 0)	( 0)	( 0)	( 3)	( 3)	( 0)	( 0)	( 0)	( 2)	( 0)	( 0)	( 3)	( 0)	( 0)	( 0)
{Hematopoietic system}																		
bone marrow			<38>				<38>				<42>				<33>			
	granulation	1	0	0	0	0	3	0	0	0	3	1	1	0	0	0	0	0
		( 3)	( 0)	( 0)	( 0)	( 0)	( 8)	( 0)	( 0)	( 0)	( 7)	( 2)	( 2)	( 0)	( 0)	( 0)	( 0)	( 0)

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



STUDY NO. : 0641  
 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				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study	38				38				42				33			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Hematopoietic system)																		
bone marrow			<38>				<38>				<42>				<33>			
	leukemic cell infiltration		1	0	0	0	3	0	0	0	0	0	0	0	0	1	0	0
			( 3 )	( 0 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )
	increased hematopoiesis		3	0	0	0	1	0	0	0	4	0	0	0	3	0	0	0
			( 8 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )	( 10 )	( 0 )	( 0 )	( 0 )	( 9 )	( 0 )	( 0 )	( 0 )
	decreased hematopoiesis		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
spleen			<38>				<38>				<42>				<33>			
	congestion		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 )
	deposit of hemosiderin		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 )
	extramedullary hematopoiesis		15	2	1	0	13	1	0	0	16	1	0	0	14	3	0	0
			( 39 )	( 5 )	( 3 )	( 0 )	( 34 )	( 3 )	( 0 )	( 0 )	( 38 )	( 2 )	( 0 )	( 0 )	( 42 )	( 9 )	( 0 )	( 0 )
(Circulatory system)																		
heart			<38>				<38>				<42>				<33>			
	myocardial fibrosis		1	0	0	0	4	0	0	0	2	0	0	0	3	0	0	0
			( 3 )	( 0 )	( 0 )	( 0 )	( 11 )	( 0 )	( 0 )	( 0 )	( 5 )	( 0 )	( 0 )	( 0 )	( 9 )	( 0 )	( 0 )	( 0 )

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

STUDY NO. : 0641  
 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				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study	38				38				42				33			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Digestive system)																		
oral cavity			<38>				<38>				<42>				<33>			
	inflammatory infiltration		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )
	squamous cell hyperplasia		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )
stomach			<38>				<38>				<42>				<33>			
	hyperplasia:forestomach		0	0	0	0	1	0	0	0	2	0	0	0	1	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )	( 5 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )
	erosion:glandular stomach		1	0	0	0	1	0	0	0	1	0	0	0	2	0	0	0
			( 3 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )	( 0 )
	hyperplasia:glandular stomach		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )
liver			<38>				<38>				<42>				<33>			
	herniation		8	0	0	0	6	0	0	0	6	0	0	0	7	0	0	0
			( 21 )	( 0 )	( 0 )	( 0 )	( 16 )	( 0 )	( 0 )	( 0 )	( 14 )	( 0 )	( 0 )	( 0 )	( 21 )	( 0 )	( 0 )	( 0 )
	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 )

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. : 0641  
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr-j]  
REPORT TYPE : A1  
SEX : FEMALE

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

PAGE : 19

		Group Name No. of Animals on Study Grade				Control 38				800 ppm 38				2400 ppm 42				7200 ppm 33			
Organ	Findings	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Digestive system)																					
liver		<38>				<38>				<42>				<33>							
	necrosis:focal	0	0	0	0	2	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 5 )	( 0 )	( 0 )	( 0 )	( 5 )	( 0 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	fatty change:peripheral	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	inflammatory cell nest	27	4	0	0	27	1	0	0	26	4	0	0	23	2	0	0	0	0	0	0
		( 71 )	( 11 )	( 0 )	( 0 )	( 71 )	( 3 )	( 0 )	( 0 )	( 62 )	( 10 )	( 0 )	( 0 )	( 70 )	( 6 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	leukemic cell infiltration	0	0	0	0	4	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 11 )	( 0 )	( 0 )	( 0 )	( 2 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
acidophilic cell focus	5	0	0	0	4	0	0	0	5	1	0	0	0	2	0	0	0	*			
	( 13 )	( 0 )	( 0 )	( 0 )	( 11 )	( 0 )	( 0 )	( 0 )	( 12 )	( 2 )	( 0 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	
basophilic cell focus	23	0	0	0	25	0	0	0	24	1	0	0	15	0	0	0	0	0	0	0	
	( 61 )	( 0 )	( 0 )	( 0 )	( 66 )	( 0 )	( 0 )	( 0 )	( 57 )	( 2 )	( 0 )	( 0 )	( 45 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	
bile duct hyperplasia	23	0	0	0	21	0	0	0	19	0	0	0	18	0	0	0	0	0	0	0	
	( 61 )	( 0 )	( 0 )	( 0 )	( 55 )	( 0 )	( 0 )	( 0 )	( 45 )	( 0 )	( 0 )	( 0 )	( 55 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	
bile ductular proliferation	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	
	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	

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

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 20

		Group Name	Control				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study	38				38				42				33			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Digestive system)																		
pancreas			<38>				<38>				<42>				<33>			
	atrophy:focal		1	0	0	0	1	0	0	0	2	0	0	0	2	0	0	0
			( 3)	( 0)	( 0)	( 0)	( 3)	( 0)	( 0)	( 0)	( 5)	( 0)	( 0)	( 0)	( 6)	( 0)	( 0)	( 0)
	leukemic cell infiltration		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			( 3)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
	islet cell hyperplasia		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 2)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
(Urinary system)																		
kidney			<38>				<38>				<42>				<33>			
	cyst		0	0	0	0	0	1	0	0	0	1	0	0	2	0	0	0
			( 0)	( 0)	( 0)	( 0)	( 0)	( 3)	( 0)	( 0)	( 0)	( 2)	( 0)	( 0)	( 6)	( 0)	( 0)	( 0)
	hyaline droplet		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)
	scar		0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
			( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 3)	( 3)	( 0)	( 0)
	chronic nephropathy		15	2	0	0	17	3	0	0	18	0	0	0	7	3	1	0
			( 39)	( 5)	( 0)	( 0)	( 45)	( 8)	( 0)	( 0)	( 43)	( 0)	( 0)	( 0)	( 21)	( 9)	( 3)	( 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. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr-j]  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 21

Organ	Findings	Group Name	Control				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study	38				38				42				33			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)

---

(Urinary system)

kidney

papillary necrosis

0000

( 0 ) ( 0 ) ( 0 ) ( 0 )

<38>

0000

( 0 ) ( 0 ) ( 0 ) ( 0 )

<38>

0000

( 0 ) ( 0 ) ( 0 ) ( 0 )

<42>

15000 \*\*

( 36 ) ( 0 ) ( 0 ) ( 0 )

<33>

613100 \*\*

( 18 ) ( 39 ) ( 30 ) ( 0 )

mineralization:papilla

0000

( 0 ) ( 0 ) ( 0 ) ( 0 )

<38>

1000

( 3 ) ( 0 ) ( 0 ) ( 0 )

<38>

1000

( 3 ) ( 0 ) ( 0 ) ( 0 )

<42>

0000

( 0 ) ( 0 ) ( 0 ) ( 0 )

<33>

0000

( 0 ) ( 0 ) ( 0 ) ( 0 )

urothelial hyperplasia:pelvis

0000

( 0 ) ( 0 ) ( 0 ) ( 0 )

<38>

0000

( 0 ) ( 0 ) ( 0 ) ( 0 )

<38>

0000

( 0 ) ( 0 ) ( 0 ) ( 0 )

<42>

1000

( 2 ) ( 0 ) ( 0 ) ( 0 )

<33>

15300 \*\*

( 45 ) ( 9 ) ( 0 ) ( 0 )

(Endocrine system)

pituitary

angiectasis

6200

( 16 ) ( 5 ) ( 0 ) ( 0 )

<38>

2300

( 5 ) ( 8 ) ( 0 ) ( 0 )

<38>

2300

( 5 ) ( 8 ) ( 0 ) ( 0 )

<42>

6400

( 14 ) ( 10 ) ( 0 ) ( 0 )

<33>

2400

( 6 ) ( 12 ) ( 0 ) ( 0 )

cyst

161000

( 42 ) ( 3 ) ( 0 ) ( 0 )

<38>

100000

( 26 ) ( 0 ) ( 0 ) ( 0 )

<38>

100000

( 26 ) ( 0 ) ( 0 ) ( 0 )

<42>

91000

( 21 ) ( 2 ) ( 0 ) ( 0 )

<33>

111000

( 33 ) ( 3 ) ( 0 ) ( 0 )

deposit of hemosiderin

1000

( 3 ) ( 0 ) ( 0 ) ( 0 )

<38>

0000

( 0 ) ( 0 ) ( 0 ) ( 0 )

<38>

0000

( 0 ) ( 0 ) ( 0 ) ( 0 )

<42>

1000

( 2 ) ( 0 ) ( 0 ) ( 0 )

<33>

0000

( 0 ) ( 0 ) ( 0 ) ( 0 )

hyperplasia

5500

( 13 ) ( 13 ) ( 0 ) ( 0 )

<38>

4300

( 11 ) ( 8 ) ( 0 ) ( 0 )

<38>

4300

( 11 ) ( 8 ) ( 0 ) ( 0 )

<42>

41000

( 10 ) ( 2 ) ( 0 ) ( 0 )

<33>

12000

( 3 ) ( 6 ) ( 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. : 0641  
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
REPORT TYPE : A1  
SEX : FEMALE

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

PAGE : 22

		Group Name	Control				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study	38				38				42				33			
Organ_____	Findings_____	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
<hr/>																		
{Endocrine system}																		
pituitary			<38>				<38>				<42>				<33>			
	Ratlike pouch		0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )	( 5 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
thyroid			<38>				<38>				<42>				<33>			
	C-cell hyperplasia		6	1	0	0	6	2	0	0	5	0	0	0	3	0	0	0
			( 16 )	( 3 )	( 0 )	( 0 )	( 16 )	( 5 )	( 0 )	( 0 )	( 12 )	( 0 )	( 0 )	( 0 )	( 9 )	( 0 )	( 0 )	( 0 )
adrenal			<38>				<38>				<42>				<33>			
	angiectasis		2	0	0	0	1	0	0	0	2	0	0	0	4	0	0	0
			( 5 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )	( 5 )	( 0 )	( 0 )	( 0 )	( 12 )	( 0 )	( 0 )	( 0 )
	cyst		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:cortical cell		4	0	0	0	3	0	0	0	1	0	0	0	2	1	0	0
			( 11 )	( 0 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 6 )	( 3 )	( 0 )	( 0 )
	hyperplasia:medulla		0	0	0	0	0	1	0	0	0	1	0	0	1	1	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 3 )	( 3 )	( 0 )	( 0 )
	focal fatty change:cortex		4	2	0	0	3	1	0	0	3	1	0	0	3	1	0	0
			( 11 )	( 5 )	( 0 )	( 0 )	( 8 )	( 3 )	( 0 )	( 0 )	( 7 )	( 2 )	( 0 )	( 0 )	( 9 )	( 3 )	( 0 )	( 0 )

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

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 23

		Group Name	Control				800 ppm				2400 ppm				7200 ppm				
		No. of Animals on Study	38				38				42				33				
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
{Reproductive system}																			
ovary	cyst		<38>				<38>				<42>				<33>				
		0	0	0	0	3	0	0	0	0	1	0	0	0	0	0	0	0	
			( 0 )	( 0 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	
uterus	cystic endometrial hyperplasia		<38>				<38>				<42>				<33>				
		2	0	0	0	3	0	0	0	0	3	0	0	0	3	0	0	0	
			( 5 )	( 0 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 0 )	( 7 )	( 0 )	( 0 )	( 0 )	( 9 )	( 0 )	( 0 )	( 0 )
mammary gl	cyst		<38>				<38>				<42>				<33>				
		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
			( 0 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	
{Nervous system}																			
brain	leukemic cell infiltration		<38>				<38>				<42>				<33>				
		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
			( 0 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	
	metastasis:pituitary tumor		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 )	( 0 )	( 0 )	( 0 )	( 0 )	
{Special sense organs/appendage}																			
eye	cataract		<38>				<38>				<42>				<33>				
		3	1	0	0	2	1	0	0	1	1	0	0	0	2	0	0	0	
			( 8 )	( 3 )	( 0 )	( 0 )	( 5 )	( 3 )	( 0 )	( 0 )	( 2 )	( 2 )	( 0 )	( 0 )	( 0 )	( 6 )	( 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. : 0641  
 ANIMAL : RAT F344/DuCr1j[F344/DuCrj]  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 24

		Group Name	Control				800 ppm				2400 ppm				7200 ppm			
		No. of Animals on Study	38				38				42				33			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Special sense organs/appendage)																		
eye			<38>				<38>				<42>				<33>			
	retinal atrophy		13 ( 34)	4 ( 11)	4 ( 11)	0 ( 0)	14 ( 37)	3 ( 8)	3 ( 8)	0 ( 0)	6 ( 14)	4 ( 10)	2 ( 5)	0 ( 0)	16 ( 48)	10 ( 30)	2 ( 6)	0 * ( 0)
	keratitis		3 ( 8)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 3)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)
Harder gl			<38>				<38>				<42>				<33>			
	hyperplasia		0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)
(Musculoskeletal system)																		
bone			<38>				<38>				<42>				<33>			
	osteosclerosis		5 ( 13)	0 ( 0)	0 ( 0)	0 ( 0)	2 ( 5)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 2)	2 ( 5)	0 ( 0)	0 ( 0)	1 ( 3)	0 ( 0)	0 ( 0)	0 ( 0)
(Body cavities)																		
pleura			<38>				<38>				<42>				<33>			
	metastasis:bone tumor		0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 3)	0 ( 0)	0 ( 0)

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



TABLE N 1

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

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]  
 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	800 ppm	2400 ppm	7200 ppm
0 - 52	NO. OF EXAMINED ANIMALS		1	1	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		2	2	0	2
	NO. OF ANIMALS WITH TUMORS		2	2	0	2
	NO. OF ANIMALS WITH SINGLE TUMORS		2	2	0	2
	NO. OF ANIMALS WITH MULTIPLE TUMORS		0	0	0	0
	NO. OF BENIGN TUMORS		0	0	0	1
	NO. OF MALIGNANT TUMORS		2	2	0	1
	NO. OF TOTAL TUMORS		2	2	0	2
79 - 104	NO. OF EXAMINED ANIMALS		7	2	12	8
	NO. OF ANIMALS WITH TUMORS		7	2	12	6
	NO. OF ANIMALS WITH SINGLE TUMORS		4	0	7	2
	NO. OF ANIMALS WITH MULTIPLE TUMORS		3	2	5	4
	NO. OF BENIGN TUMORS		11	1	11	6
	NO. OF MALIGNANT TUMORS		1	3	8	6
	NO. OF TOTAL TUMORS		12	4	19	12
105 - 105	NO. OF EXAMINED ANIMALS		40	45	38	40
	NO. OF ANIMALS WITH TUMORS		40	43	36	39
	NO. OF ANIMALS WITH SINGLE TUMORS		7	22	16	24
	NO. OF ANIMALS WITH MULTIPLE TUMORS		33	21	20	15
	NO. OF BENIGN TUMORS		86	68	57	49
	NO. OF MALIGNANT TUMORS		12	12	7	9
	NO. OF TOTAL TUMORS		98	80	64	58

STUDY NO. : 0641  
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]  
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	800 ppm	2400 ppm	7200 ppm
0 - 105	NO. OF EXAMINED ANIMALS		50	50	50	50
	NO. OF ANIMALS WITH TUMORS		49	47	48	47
	NO. OF ANIMALS WITH SINGLE TUMORS		13	24	23	28
	NO. OF ANIMALS WITH MULTIPLE TUMORS		36	23	25	19
	NO. OF BENIGN TUMORS		97	69	68	56
	NO. OF MALIGNANT TUMORS		15	17	15	16
	NO. OF TOTAL TUMORS		112	86	83	72

(HPT070)

BATS4

TABLE N 2

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

STUDY NO. : 0641  
ANIMAL : RAT F344/DuCr1j[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	800 ppm	2400 ppm	7200 ppm
0 - 52	NO. OF EXAMINED ANIMALS		0	0	0	1
	NO. OF ANIMALS WITH TUMORS		0	0	0	1
	NO. OF ANIMALS WITH SINGLE TUMORS		0	0	0	1
	NO. OF ANIMALS WITH MULTIPLE TUMORS		0	0	0	0
	NO. OF BENIGN TUMORS		0	0	0	0
	NO. OF MALIGNANT TUMORS		0	0	0	1
	NO. OF TOTAL TUMORS		0	0	0	1
53 - 78	NO. OF EXAMINED ANIMALS		0	2	0	5
	NO. OF ANIMALS WITH TUMORS		0	2	0	3
	NO. OF ANIMALS WITH SINGLE TUMORS		0	1	0	2
	NO. OF ANIMALS WITH MULTIPLE TUMORS		0	1	0	1
	NO. OF BENIGN TUMORS		0	2	0	2
	NO. OF MALIGNANT TUMORS		0	1	0	2
	NO. OF TOTAL TUMORS		0	3	0	4
79 - 104	NO. OF EXAMINED ANIMALS		12	10	8	11
	NO. OF ANIMALS WITH TUMORS		12	10	8	10
	NO. OF ANIMALS WITH SINGLE TUMORS		3	2	4	9
	NO. OF ANIMALS WITH MULTIPLE TUMORS		9	8	4	1
	NO. OF BENIGN TUMORS		18	15	8	3
	NO. OF MALIGNANT TUMORS		6	3	4	8
	NO. OF TOTAL TUMORS		24	18	12	11
105 - 105	NO. OF EXAMINED ANIMALS		38	38	42	33
	NO. OF ANIMALS WITH TUMORS		26	23	31	21
	NO. OF ANIMALS WITH SINGLE TUMORS		19	15	19	12
	NO. OF ANIMALS WITH MULTIPLE TUMORS		7	8	12	9
	NO. OF BENIGN TUMORS		28	26	45	29
	NO. OF MALIGNANT TUMORS		5	9	6	5
	NO. OF TOTAL TUMORS		33	35	51	34

STUDY NO. : 0641  
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]  
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	800 ppm	2400 ppm	7200 ppm
0 - 105	NO. OF EXAMINED ANIMALS		50	50	50	50
	NO. OF ANIMALS WITH TUMORS		38	35	39	35
	NO. OF ANIMALS WITH SINGLE TUMORS		22	18	23	24
	NO. OF ANIMALS WITH MULTIPLE TUMORS		16	17	16	11
	NO. OF BENIGN TUMORS		46	43	53	34
	NO. OF MALIGNANT TUMORS		11	13	10	16
	NO. OF TOTAL TUMORS		57	56	63	50

(HPT070)

BATS4

TABLE O 1

HISTOPATHOLOGICAL FINDINGS:  
NEOPLASTIC LESIONS: MALE

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]  
 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	800 ppm 50	2400 ppm 50	7200 ppm 50
(Integumentary system/appandage)						
skin/app			<50>	<50>	<50>	<50>
	squamous cell papilloma	4 ( 8%)	0 ( 0%)	1 ( 2%)	0 ( 0%)	
	schwannoma	0 ( 0%)	0 ( 0%)	0 ( 0%)	2 ( 4%)	
	keratoacanthoma	6 ( 12%)	2 ( 4%)	2 ( 4%)	1 ( 2%)	
	sebaceous adenoma	1 ( 2%)	0 ( 0%)	0 ( 0%)	0 ( 0%)	
	squamous cell carcinoma	1 ( 2%)	0 ( 0%)	0 ( 0%)	0 ( 0%)	
	trichoepithelioma:malignant	1 ( 2%)	0 ( 0%)	0 ( 0%)	1 ( 2%)	
subcutis			<50>	<50>	<50>	<50>
	fibroma	6 ( 12%)	1 ( 2%)	6 ( 12%)	4 ( 8%)	
	lipoma	0 ( 0%)	0 ( 0%)	2 ( 4%)	0 ( 0%)	
	schwannoma	0 ( 0%)	1 ( 2%)	0 ( 0%)	0 ( 0%)	
	leiomyosarcoma	1 ( 2%)	0 ( 0%)	0 ( 0%)	0 ( 0%)	
	schwannoma:malignant	0 ( 0%)	1 ( 2%)	0 ( 0%)	0 ( 0%)	
(Respiratory system)						
nasal cavit			<50>	<50>	<50>	<50>
	squamous cell papilloma	0 ( 0%)	0 ( 0%)	0 ( 0%)	1 ( 2%)	
<div>&lt; a &gt; a : Number of animals examined at the site</div> <div>b ( c ) b : Number of animals with neoplasm c : b / a * 100</div>						



STUDY NO. : 0641  
 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	800 ppm 50	2400 ppm 50	7200 ppm 50
(Respiratory system)						
lung	bronchiolar-alveolar adenoma		<50> 2 ( 4%)	<50> 2 ( 4%)	<50> 1 ( 2%)	<50> 0 ( 0%)
	bronchiolar-alveolar carcinoma		1 ( 2%)	1 ( 2%)	0 ( 0%)	1 ( 2%)
(Hematopoietic system)						
bone marrow	hemangioma		<50> 0 ( 0%)	<50> 1 ( 2%)	<50> 0 ( 0%)	<50> 0 ( 0%)
lymph node	malignant lymphoma		<50> 0 ( 0%)	<50> 0 ( 0%)	<50> 0 ( 0%)	<50> 1 ( 2%)
spleen	mononuclear cell leukemia		<50> 4 ( 8%)	<50> 2 ( 4%)	<50> 7 ( 14%)	<50> 0 ( 0%)
(Digestive system)						
oral cavity	squamous cell papilloma		<50> 1 ( 2%)	<50> 0 ( 0%)	<50> 2 ( 4%)	<50> 0 ( 0%)
tongue	squamous cell papilloma		<50> 1 ( 2%)	<50> 0 ( 0%)	<50> 0 ( 0%)	<50> 0 ( 0%)
stomach	squamous cell papilloma		<50> 0 ( 0%)	<50> 0 ( 0%)	<50> 1 ( 2%)	<50> 0 ( 0%)
liver	hepatocellular adenoma		<50> 1 ( 2%)	<50> 1 ( 2%)	<50> 0 ( 0%)	<50> 1 ( 2%)
	hepatocellular carcinoma		1 ( 2%)	1 ( 2%)	1 ( 2%)	1 ( 2%)
pancreas	hemangioma		<50> 1 ( 2%)	<50> 0 ( 0%)	<50> 0 ( 0%)	<50> 0 ( 0%)

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

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Crlj[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	800 ppm 50	2400 ppm 50	7200 ppm 50
(Digestive system)						
pancreas	islet cell adenoma		<50> 3 ( 6%)	<50> 5 ( 10%)	<50> 2 ( 4%)	<50> 4 ( 8%)
	islet cell adenocarcinoma		1 ( 2%)	3 ( 6%)	1 ( 2%)	3 ( 6%)
(Urinary system)						
kidney	renal cell carcinoma		<50> 0 ( 0%)	<50> 1 ( 2%)	<50> 0 ( 0%)	<50> 0 ( 0%)
	transitional cell papilloma		<50> 2 ( 4%)	<50> 0 ( 0%)	<50> 1 ( 2%)	<50> 1 ( 2%)
(Endocrine system)						
pituitary	adenoma		<49> 13 ( 27%)	<50> 7 ( 14%)	<50> 6 ( 12%)	<50> 8 ( 16%)
	adenocarcinoma		1 ( 2%)	1 ( 2%)	2 ( 4%)	3 ( 6%)
thyroid	C-cell adenoma		<50> 12 ( 24%)	<50> 12 ( 24%)	<50> 8 ( 16%)	<50> 7 ( 14%)
	follicular adenoma		1 ( 2%)	0 ( 0%)	1 ( 2%)	0 ( 0%)
	C-cell carcinoma		0 ( 0%)	1 ( 2%)	1 ( 2%)	1 ( 2%)
	follicular adenocarcinoma		0 ( 0%)	1 ( 2%)	0 ( 0%)	2 ( 4%)
adrenal	pheochromocytoma		<50> 4 ( 8%)	<50> 4 ( 8%)	<50> 3 ( 6%)	<50> 5 ( 10%)

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

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]  
 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	800 ppm 50	2400 ppm 50	7200 ppm 50
{Endocrine system}						
adrenal	pheochromocytoma:malignant		<50> 1 ( 2%)	<50> 1 ( 2%)	<50> 0 ( 0%)	<50> 1 ( 2%)
{Reproductive system}						
testis	interstitial cell tumor		<50> 35 ( 70%)	<50> 31 ( 62%)	<50> 31 ( 62%)	<50> 20 ( 40%)
mammary gl	adenoma		<50> 0 ( 0%)	<50> 0 ( 0%)	<50> 1 ( 2%)	<50> 0 ( 0%)
	fibroadenoma		1 ( 2%)	1 ( 2%)	0 ( 0%)	0 ( 0%)
prep/cli gl	adenoma		<50> 1 ( 2%)	<50> 0 ( 0%)	<50> 0 ( 0%)	<50> 0 ( 0%)
{Nervous system}						
brain	glioma		<50> 0 ( 0%)	<50> 1 ( 2%)	<50> 0 ( 0%)	<50> 1 ( 2%)
	ependymoma		1 ( 2%)	0 ( 0%)	0 ( 0%)	0 ( 0%)
{Special sense organs/appendage}						
Zymbal gl	Zmbal gland tumor:benign		<50> 2 ( 4%)	<50> 0 ( 0%)	<50> 0 ( 0%)	<50> 2 ( 4%)
	Zymbal gland tumor:malignant		0 ( 0%)	0 ( 0%)	1 ( 2%)	0 ( 0%)
{Musculoskeletal system}						
bone	osteosarcoma		<50> 0 ( 0%)	<50> 1 ( 2%)	<50> 1 ( 2%)	<50> 0 ( 0%)

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

STUDY NO. : 0641  
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
REPORT TYPE : A1  
SEX : MALE

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

PAGE : 5

Organ	Findings	Group Name No. of animals on Study	Control 50	800 ppm 50	2400 ppm 50	7200 ppm 50
{Body cavities}						
pleura			<50>	<50>	<50>	<50>
	mesothelioma		0 ( 0%)	0 ( 0%)	1 ( 2%)	0 ( 0%)
peritoneum			<50>	<50>	<50>	<50>
	leiomyoma		0 ( 0%)	1 ( 2%)	0 ( 0%)	0 ( 0%)
	leiomyosarcoma		0 ( 0%)	1 ( 2%)	0 ( 0%)	0 ( 0%)
	mesothelioma		1 ( 2%)	1 ( 2%)	0 ( 0%)	0 ( 0%)
	histiocytic sarcoma		1 ( 2%)	0 ( 0%)	0 ( 0%)	1 ( 2%)
<hr/>						
< a >	a : Number of animals examined at the site					
b ( c )	b : Number of animals with neoplasm      c : b / a * 100					

(HPT085)

BAIS4

TABLE O 2

HISTOPATHOLOGICAL FINDINGS:  
NEOPLASTIC LESIONS: FEMALE

STUDY NO. : 0641  
 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	800 ppm 50	2400 ppm 50	7200 ppm 50
(Integumentary system/appandage)						
skin/app			<50>	<50>	<50>	<50>
	schwannoma		2 ( 4%)	0 ( 0%)	0 ( 0%)	1 ( 2%)
	basal cell carcinoma		0 ( 0%)	1 ( 2%)	0 ( 0%)	0 ( 0%)
subcutis			<50>	<50>	<50>	<50>
	lipoma		1 ( 2%)	0 ( 0%)	0 ( 0%)	0 ( 0%)
	schwannoma		1 ( 2%)	0 ( 0%)	0 ( 0%)	0 ( 0%)
	hemangiosarcoma		0 ( 0%)	1 ( 2%)	0 ( 0%)	0 ( 0%)
(Hematopoietic system)						
bone marrow			<50>	<50>	<50>	<50>
	histiocytic sarcoma		0 ( 0%)	0 ( 0%)	0 ( 0%)	1 ( 2%)
lymph node			<50>	<50>	<50>	<50>
	malignant lymphoma		0 ( 0%)	0 ( 0%)	0 ( 0%)	2 ( 4%)
thymus			<50>	<50>	<50>	<50>
	thymoma:malignant		1 ( 2%)	0 ( 0%)	0 ( 0%)	0 ( 0%)
spleen			<50>	<50>	<50>	<50>
	mononuclear cell leukemia		4 ( 8%)	7 ( 14%)	5 ( 10%)	5 ( 10%)
(Digestive system)						
tongue			<50>	<50>	<50>	<50>
	squamous cell papilloma		0 ( 0%)	0 ( 0%)	1 ( 2%)	0 ( 0%)
liver			<50>	<50>	<50>	<50>
	hepatocellular adenoma		2 ( 4%)	0 ( 0%)	1 ( 2%)	0 ( 0%)
< a > a : Number of animals examined at the site b ( c ) b : Number of animals with neoplasm c : b / a * 100						

STUDY NO. : 0641  
 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	800 ppm 50	2400 ppm 50	7200 ppm 50
{Digestive system}						
pancreas	islet cell adenocarcinoma		<50> 0 ( 0%)	<50> 0 ( 0%)	<50> 1 ( 2%)	<50> 0 ( 0%)
{Endocrine system}						
pituitary	adenoma		<50> 12 ( 24%)	<50> 17 ( 34%)	<50> 16 ( 32%)	<50> 14 ( 28%)
	adenocarcinoma		2 ( 4%)	2 ( 4%)	1 ( 2%)	0 ( 0%)
thyroid	C-cell adenoma		<50> 6 ( 12%)	<50> 8 ( 16%)	<50> 11 ( 22%)	<50> 4 ( 8%)
	follicular adenoma		0 ( 0%)	0 ( 0%)	1 ( 2%)	0 ( 0%)
	C-cell carcinoma		0 ( 0%)	0 ( 0%)	1 ( 2%)	0 ( 0%)
	follicular adenocarcinoma		0 ( 0%)	0 ( 0%)	1 ( 2%)	0 ( 0%)
adrenal	pheochromocytoma		<50> 1 ( 2%)	<50> 1 ( 2%)	<50> 1 ( 2%)	<50> 3 ( 6%)
	pheochromocytoma:malignant		0 ( 0%)	0 ( 0%)	0 ( 0%)	1 ( 2%)
{Reproductive system}						
uterus	adenoma		<50> 1 ( 2%)	<50> 0 ( 0%)	<50> 0 ( 0%)	<50> 0 ( 0%)
	endometrial stromal polyp		7 ( 14%)	5 ( 10%)	9 ( 18%)	5 ( 10%)

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

(HPT085)

BAIS4

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]  
 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	800 ppm 50	2400 ppm 50	7200 ppm 50
{Reproductive system}						
uterus			<50>	<50>	<50>	<50>
	adenocarcinoma		1 ( 2%)	0 ( 0%)	0 ( 0%)	1 ( 2%)
	fibrosarcoma		0 ( 0%)	0 ( 0%)	0 ( 0%)	1 ( 2%)
	histiocytic sarcoma		0 ( 0%)	0 ( 0%)	0 ( 0%)	1 ( 2%)
	endometrial stromal sarcoma		1 ( 2%)	1 ( 2%)	0 ( 0%)	1 ( 2%)
vagina			<50>	<50>	<50>	<50>
	squamous cell papilloma		0 ( 0%)	0 ( 0%)	1 ( 2%)	0 ( 0%)
mammary gl			<50>	<50>	<50>	<50>
	adenoma		2 ( 4%)	2 ( 4%)	1 ( 2%)	1 ( 2%)
	fibroadenoma		7 ( 14%)	7 ( 14%)	10 ( 20%)	4 ( 8%)
	adenocarcinoma		2 ( 4%)	1 ( 2%)	1 ( 2%)	1 ( 2%)
prep/cli gl			<50>	<50>	<50>	<50>
	adenoma		3 ( 6%)	3 ( 6%)	1 ( 2%)	2 ( 4%)
{Special sense organs/appendage}						
Zymbal gl			<50>	<50>	<50>	<50>
	Zymbal gland tumor:benign		1 ( 2%)	0 ( 0%)	0 ( 0%)	0 ( 0%)
	Zymbal gland tumor:malignant		0 ( 0%)	0 ( 0%)	0 ( 0%)	1 ( 2%)
{Musculoskeletal system}						
bone			<50>	<50>	<50>	<50>
	osteosarcoma		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 P 1

NEOPLASTIC LESIONS-INCIDENCE AND  
STATISTICAL ANALYSIS: MALE

STUDY No. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 1

Group Name	Control	800 ppm	2400 ppm	7200 ppm
SITE : skin/appendage TUMOR : squamous cell papilloma				
Tumor rate				
Overall rates(a)	4/50( 8.0)	0/50( 0.0)	1/50( 2.0)	0/50( 0.0)
Adjusted rates(b)	10.00	0.0	2.63	0.0
Terminal rates(c)	4/40( 10.0)	0/45( 0.0)	1/38( 2.6)	0/40( 0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.9725			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.0856			
Fisher Exact test(e)		P = 0.0587	P = 0.1811	P = 0.0587
SITE : skin/appendage TUMOR : keratoacanthoma				
Tumor rate				
Overall rates(a)	6/50( 12.0)	2/50( 4.0)	2/50( 4.0)	1/50( 2.0)
Adjusted rates(b)	15.00	4.44	2.63	2.50
Terminal rates(c)	6/40( 15.0)	2/45( 4.4)	1/38( 2.6)	1/40( 2.5)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.3775			
Prevalence method(d)	P = 0.9621			
Combined analysis(d)	P = 0.9554			
Cochran-Armitage test(e)	P = 0.0957			
Fisher Exact test(e)		P = 0.1343	P = 0.1343	P = 0.0559
SITE : subcutis TUMOR : fibroma				
Tumor rate				
Overall rates(a)	6/50( 12.0)	1/50( 2.0)	6/50( 12.0)	4/50( 8.0)
Adjusted rates(b)	12.20	2.22	10.53	10.00
Terminal rates(c)	4/40( 10.0)	1/45( 2.2)	4/38( 10.5)	4/40( 10.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.6908			
Prevalence method(d)	P = 0.3527			
Combined analysis(d)	P = 0.4684			
Cochran-Armitage test(e)	P = 0.9855			
Fisher Exact test(e)		P = 0.0559	P = 0.6202	P = 0.3703

STUDY No. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr.j]  
 SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 2

Group Name	Control	800 ppm	2400 ppm	7200 ppm
SITE : lung				
TUMOR : bronchiolar-alveolar adenoma, bronchiolar-alveolar carcinoma				
Tumor rate				
Overall rates(a)	3/50( 6.0)	3/50( 6.0)	1/50( 2.0)	1/50( 2.0)
Adjusted rates(b)	7.50	6.67	2.63	0.0
Terminal rates(c)	3/40( 7.5)	3/45( 6.7)	1/38( 2.6)	0/40( 0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.1415			
Prevalence method(d)	P = 0.9781			
Combined analysis(d)	P = 0.8614			
Cochran-Armitage test(e)	P = 0.2555			
Fisher Exact test(e)		P = 0.6611	P = 0.3087	P = 0.3087
SITE : spleen				
TUMOR : mononuclear cell leukemia				
Tumor rate				
Overall rates(a)	4/50( 8.0)	2/50( 4.0)	7/50( 14.0)	0/50( 0.0)
Adjusted rates(b)	7.50	2.22	5.26	0.0
Terminal rates(c)	3/40( 7.5)	1/45( 2.2)	2/38( 5.3)	0/40( 0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.7552			
Prevalence method(d)	P = 0.9371			
Combined analysis(d)	P = 0.9428			
Cochran-Armitage test(e)	P = 0.1137			
Fisher Exact test(e)		P = 0.3389	P = 0.2623	P = 0.0587
SITE : pancreas				
TUMOR : islet cell adenoma				
Tumor rate				
Overall rates(a)	3/50( 6.0)	5/50( 10.0)	2/50( 4.0)	4/50( 8.0)
Adjusted rates(b)	7.50	11.11	4.76	10.00
Terminal rates(c)	3/40( 7.5)	5/45( 11.1)	0/38( 0.0)	4/40( 10.0)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.4460			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.9052			
Fisher Exact test(e)		P = 0.3575	P = 0.5000	P = 0.5000

STUDY No. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 3

Group Name	Control	800 ppm	2400 ppm	7200 ppm
SITE : pancreas TUMOR : islet cell adenocarcinoma				
Tumor rate				
Overall rates(a)	1/50( 2.0)	3/50( 6.0)	1/50( 2.0)	3/50( 6.0)
Adjusted rates(b)	2.50	6.67	2.63	7.50
Terminal rates(c)	1/40( 2.5)	3/45( 6.7)	1/38( 2.6)	3/40( 7.5)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.2165			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.4694			
Fisher Exact test(e)		P = 0.3087	P = 0.7525	P = 0.3087
SITE : pancreas TUMOR : islet cell adenoma, islet cell adenocarcinoma				
Tumor rate				
Overall rates(a)	4/50( 8.0)	8/50( 16.0)	3/50( 6.0)	7/50( 14.0)
Adjusted rates(b)	10.00	17.78	7.14	17.50
Terminal rates(c)	4/40( 10.0)	8/45( 17.8)	1/38( 2.6)	7/40( 17.5)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.2846			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.5822			
Fisher Exact test(e)		P = 0.1783	P = 0.5000	P = 0.2623
SITE : pituitary gland TUMOR : adenoma				
Tumor rate				
Overall rates(a)	13/49( 26.5)	7/50( 14.0)	6/50( 12.0)	8/50( 16.0)
Adjusted rates(b)	27.50	15.56	15.00	17.50
Terminal rates(c)	10/39( 25.6)	7/45( 15.6)	5/38( 13.2)	7/40( 17.5)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.5007			
Prevalence method(d)	P = 0.7361			
Combined analysis(d)	P = 0.7375			
Cochran-Armitage test(e)	P = 0.4484			
Fisher Exact test(e)		P = 0.0961	P = 0.0564	P = 0.1502

STUDY No. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr.j]  
 SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 4

Group Name	Control	800 ppm	2400 ppm	7200 ppm
SITE : pituitary gland TUMOR : adenocarcinoma				
Tumor rate				
Overall rates(a)	1/49( 2.0)	1/50( 2.0)	2/50( 4.0)	3/50( 6.0)
Adjusted rates(b)	2.56	2.22	5.26	5.00
Terminal rates(c)	1/39( 2.6)	1/45( 2.2)	2/38( 5.3)	2/40( 5.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.1345			
Prevalence method(d)	P = 0.2426			
Combined analysis(d)	P = 0.1111			
Cochran-Armitage test(e)	P = 0.2198			
Fisher Exact test(e)		P = 0.7576	P = 0.5077	P = 0.3163
SITE : pituitary gland TUMOR : adenoma, adenocarcinoma				
Tumor rate				
Overall rates(a)	14/49( 28.6)	8/50( 16.0)	8/50( 16.0)	11/50( 22.0)
Adjusted rates(b)	30.00	17.78	20.00	22.50
Terminal rates(c)	11/39( 28.2)	8/45( 17.8)	7/38( 18.4)	9/40( 22.5)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.2342			
Prevalence method(d)	P = 0.6103			
Combined analysis(d)	P = 0.5031			
Cochran-Armitage test(e)	P = 0.8835			
Fisher Exact test(e)		P = 0.1032	P = 0.1032	P = 0.3013
SITE : thyroid TUMOR : C-cell adenoma				
Tumor rate				
Overall rates(a)	12/50( 24.0)	12/50( 24.0)	8/50( 16.0)	7/50( 14.0)
Adjusted rates(b)	25.00	26.67	21.05	16.67
Terminal rates(c)	10/40( 25.0)	12/45( 26.7)	8/38( 21.1)	6/40( 15.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 1.0000 ?			
Prevalence method(d)	P = 0.8906			
Combined analysis(d)	P = 0.9165			
Cochran-Armitage test(e)	P = 0.1560			
Fisher Exact test(e)		P = 0.5924	P = 0.2270	P = 0.1540

STUDY No. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]  
 SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 5

Group Name	Control	800 ppm	2400 ppm	7200 ppm
SITE : thyroid TUMOR : C-cell adenoma,C-cell carcinoma				
Tumor rate				
Overall rates(a)	12/50( 24.0)	13/50( 26.0)	9/50( 18.0)	8/50( 16.0)
Adjusted rates(b)	25.00	28.89	21.05	19.05
Terminal rates(c)	10/40( 25.0)	13/45( 28.9)	8/38( 21.1)	7/40( 17.5)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.6947			
Prevalence method(d)	P = 0.8459			
Combined analysis(d)	P = 0.8773			
Cochran-Armitage test(e)	P = 0.2231			
Fisher Exact test(e)		P = 0.5000	P = 0.3121	P = 0.2270
SITE : adrenal gland TUMOR : pheochromocytoma				
Tumor rate				
Overall rates(a)	4/50( 8.0)	4/50( 8.0)	3/50( 6.0)	5/50( 10.0)
Adjusted rates(b)	7.50	8.89	7.14	12.20
Terminal rates(c)	3/40( 7.5)	4/45( 8.9)	2/38( 5.3)	4/40( 10.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 1.0000 ?			
Prevalence method(d)	P = 0.2410			
Combined analysis(d)	P = 0.3277			
Cochran-Armitage test(e)	P = 0.6542			
Fisher Exact test(e)		P = 0.6425	P = 0.5000	P = 0.5000
SITE : adrenal gland TUMOR : pheochromocytoma,pheochromocytoma:malignant				
Tumor rate				
Overall rates(a)	5/50( 10.0)	5/50( 10.0)	3/50( 6.0)	6/50( 12.0)
Adjusted rates(b)	10.00	11.11	7.14	12.20
Terminal rates(c)	4/40( 10.0)	5/45( 11.1)	2/38( 5.3)	4/40( 10.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.3001			
Prevalence method(d)	P = 0.3898			
Combined analysis(d)	P = 0.3358			
Cochran-Armitage test(e)	P = 0.6659			
Fisher Exact test(e)		P = 0.6297	P = 0.3575	P = 0.5000

STUDY No. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]  
 SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 6

Group Name	Control	800 ppm	2400 ppm	7200 ppm
SITE : testis				
TUMOR : interstitial cell tumor				
Tumor rate				
Overall rates(a)	35/50( 70.0)	31/50( 62.0)	31/50( 62.0)	20/50( 40.0)
Adjusted rates(b)	85.00	67.39	71.79	50.00
Terminal rates(c)	34/40( 85.0)	30/45( 66.7)	27/38( 71.1)	20/40( 50.0)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.9994			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.0017**			
Fisher Exact test(e)		P = 0.2634	P = 0.2634	P = 0.0023**

(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 P 2

NEOPLASTIC LESIONS-INCIDENCE AND  
STATISTICAL ANALYSIS: FEMALE



STUDY No. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]  
 SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 7

Group Name	Control	800 ppm	2400 ppm	7200 ppm
SITE : spleen TUMOR : mononuclear cell leukemia				
Tumor rate				
Overall rates(a)	4/50( 8.0)	7/50( 14.0)	5/50( 10.0)	5/50( 10.0)
Adjusted rates(b)	5.26	10.53	7.14	3.03
Terminal rates(c)	2/38( 5.3)	4/38( 10.5)	3/42( 7.1)	1/33( 3.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.1545			
Prevalence method(d)	P = 0.7892			
Combined analysis(d)	P = 0.4100			
Cochran-Armitage test(e)	P = 0.9342			
Fisher Exact test(e)		P = 0.2623	P = 0.5000	P = 0.5000
SITE : pituitary gland TUMOR : adenoma				
Tumor rate				
Overall rates(a)	12/50( 24.0)	17/50( 34.0)	16/50( 32.0)	14/50( 28.0)
Adjusted rates(b)	14.63	29.27	33.33	30.30
Terminal rates(c)	5/38( 13.2)	11/38( 28.9)	14/42( 33.3)	10/33( 30.3)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.9062			
Prevalence method(d)	P = 0.1222			
Combined analysis(d)	P = 0.3917			
Cochran-Armitage test(e)	P = 0.9734			
Fisher Exact test(e)		P = 0.1891	P = 0.2522	P = 0.4100
SITE : pituitary gland TUMOR : adenoma, adenocarcinoma				
Tumor rate				
Overall rates(a)	14/50( 28.0)	19/50( 38.0)	17/50( 34.0)	14/50( 28.0)
Adjusted rates(b)	17.50	31.71	35.71	30.30
Terminal rates(c)	6/38( 15.8)	12/38( 31.6)	15/42( 35.7)	10/33( 30.3)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.9510			
Prevalence method(d)	P = 0.2005			
Combined analysis(d)	P = 0.5784			
Cochran-Armitage test(e)	P = 0.6023			
Fisher Exact test(e)		P = 0.1976	P = 0.3329	P = 0.5880

STUDY No. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 8

Group Name	Control	800 ppm	2400 ppm	7200 ppm
SITE : thyroid TUMOR : C-cell adenoma				
Tumor rate				
Overall rates(a)	6/50( 12.0)	8/50( 16.0)	11/50( 22.0)	4/50( 8.0)
Adjusted rates(b)	13.16	17.39	22.45	12.12
Terminal rates(c)	5/38( 13.2)	5/38( 13.2)	9/42( 21.4)	4/33( 12.1)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.7582			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.3210			
Fisher Exact test(e)		P = 0.3871	P = 0.1434	P = 0.3703
SITE : thyroid TUMOR : C-cell adenoma, C-cell carcinoma				
Tumor rate				
Overall rates(a)	6/50( 12.0)	8/50( 16.0)	12/50( 24.0)	4/50( 8.0)
Adjusted rates(b)	13.16	17.39	22.92	12.12
Terminal rates(c)	5/38( 13.2)	5/38( 13.2)	9/42( 21.4)	4/33( 12.1)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.3509			
Prevalence method(d)	P = 0.7579			
Combined analysis(d)	P = 0.7545			
Cochran-Armitage test(e)	P = 0.3209			
Fisher Exact test(e)		P = 0.3871	P = 0.0961	P = 0.3703
SITE : adrenal gland TUMOR : pheochromocytoma				
Tumor rate				
Overall rates(a)	1/50( 2.0)	1/50( 2.0)	1/50( 2.0)	3/50( 6.0)
Adjusted rates(b)	2.33	2.04	2.38	7.69
Terminal rates(c)	0/38( 0.0)	0/38( 0.0)	1/42( 2.4)	2/33( 6.1)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.0800			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.1721			
Fisher Exact test(e)		P = 0.7525	P = 0.7525	P = 0.3087

STUDY No. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 9

Group Name	Control	800 ppm	2400 ppm	7200 ppm
SITE : adrenal gland TUMOR : pheochromocytoma, pheochromocytoma:malignant				
Tumor rate				
Overall rates(a)	1/50( 2.0)	1/50( 2.0)	1/50( 2.0)	4/50( 8.0)
Adjusted rates(b)	2.33	2.04	2.38	10.26
Terminal rates(c)	0/38( 0.0)	0/38( 0.0)	1/42( 2.4)	3/33( 9.1)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.0284*			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.0573			
Fisher Exact test(e)		P = 0.7525	P = 0.7525	P = 0.1811
SITE : uterus TUMOR : endometrial stromal polyp				
Tumor rate				
Overall rates(a)	7/50( 14.0)	5/50( 10.0)	9/50( 18.0)	5/50( 10.0)
Adjusted rates(b)	14.29	10.53	19.05	15.15
Terminal rates(c)	5/38( 13.2)	4/38( 10.5)	8/42( 19.0)	5/33( 15.2)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.3536			
Prevalence method(d)	P = 0.5626			
Combined analysis(d)	P = 0.5630			
Cochran-Armitage test(e)	P = 0.6515			
Fisher Exact test(e)		P = 0.3798	P = 0.3929	P = 0.3798
SITE : mammary gland TUMOR : fibroadenoma				
Tumor rate				
Overall rates(a)	7/50( 14.0)	7/50( 14.0)	10/50( 20.0)	4/50( 8.0)
Adjusted rates(b)	14.00	13.04	20.93	12.12
Terminal rates(c)	3/38( 7.9)	4/38( 10.5)	8/42( 19.0)	4/33( 12.1)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.5859			
Prevalence method(d)	P = 0.7653			
Combined analysis(d)	P = 0.7933			
Cochran-Armitage test(e)	P = 0.2934			
Fisher Exact test(e)		P = 0.6129	P = 0.2977	P = 0.2623

STUDY No. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
 SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 10

Group Name	Control	800 ppm	2400 ppm	7200 ppm
SITE : mammary gland TUMOR : adenoma, fibroadenoma, adenocarcinoma				
Tumor rate				
Overall rates(a)	11/50( 22.0)	10/50( 20.0)	11/50( 22.0)	6/50( 12.0)
Adjusted rates(b)	22.00	20.00	20.93	15.15
Terminal rates(c)	6/38( 15.8)	6/38( 15.8)	8/42( 19.0)	5/33( 15.2)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.2528			
Prevalence method(d)	P = 0.9141			
Combined analysis(d)	P = 0.8625			
Cochran-Armitage test(e)	P = 0.1712			
Fisher Exact test(e)		P = 0.5000	P = 0.5952	P = 0.1434
SITE : preputial/clitoral gland TUMOR : adenoma				
Tumor rate				
Overall rates(a)	3/50( 6.0)	3/50( 6.0)	1/50( 2.0)	2/50( 4.0)
Adjusted rates(b)	5.26	4.88	2.38	6.06
Terminal rates(c)	2/38( 5.3)	1/38( 2.6)	1/42( 2.4)	2/33( 6.1)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.8633			
Prevalence method(d)	P = 0.3970			
Combined analysis(d)	P = 0.6076			
Cochran-Armitage test(e)	P = 0.6080			
Fisher Exact test(e)		P = 0.6611	P = 0.3087	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 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 Q 1

HISTOPATHOLOGICAL FINDINGS:  
METASTASIS OF TUMOR: MALE

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 1

Group Name		Control	800 ppm	2400 ppm	7200 ppm
No. of Animals on Study		50	50	50	50
Organ	Findings				
(Respiratory system)					
lung		<50>	<50>	<50>	<50>
	leukemic cell infiltration	3	1	6	0
	metastasis:adrenal tumor	0	0	0	1
	metastasis:thyroid tumor	0	1	0	0
	metastasis:peritoneum tumor	0	0	0	1
	metastasis:bone tumor	0	1	0	0
	metastasis:Zymbal gland tumor	0	0	1	0
(Hematopoietic system)					
bone marrow		<50>	<50>	<50>	<50>
	leukemic cell infiltration	3	1	6	0
	metastasis:peritoneum tumor	0	0	0	1
lymph node		<50>	<50>	<50>	<50>
	leukemic cell infiltration	0	0	2	0
	metastasis:adrenal tumor	0	1	0	1
	metastasis:peritoneum tumor	0	0	0	1
(Digestive system)					
stomach		<50>	<50>	<50>	<50>
	leukemic cell infiltration	0	0	1	0
	metastasis:peritoneum tumor	0	1	0	0

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

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]  
 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	800 ppm 50	2400 ppm 50	7200 ppm 50
(Digestive system)						
small intes			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	0	1	0
liver			<50>	<50>	<50>	<50>
	leukemic cell infiltration		4	1	5	0
	metastasis:peritoneum tumor		1	0	0	0
	metastasis:bone tumor		0	1	0	0
pancreas			<50>	<50>	<50>	<50>
	leukemic cell infiltration		1	0	2	0
	metastasis:peritoneum tumor		1	0	0	0
(Urinary system)						
kidney			<50>	<50>	<50>	<50>
	leukemic cell infiltration		1	1	4	0
	metastasis:peritoneum tumor		1	0	0	0
urin bladd			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	0	1	0
(Endocrine system)						
thyroid			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	0	1	0
adrenal			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	0	1	0
(Reproductive system)						
semin ves			<50>	<50>	<50>	<50>
	metastasis:peritoneum tumor		1	0	0	0

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

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 3

Group Name		Control	800 ppm	2400 ppm	7200 ppm
No. of Animals on Study		50	50	50	50
Organ	Findings				
(Nervous system)					
brain	leukemic cell infiltration	<50> 1	<50> 1	<50> 2	<50> 0
	metastasis:pituitary tumor	0	0	0	1
spinal cord	leukemic cell infiltration	<50> 1	<50> 0	<50> 2	<50> 0
(Special sense organs/appendage)					
Harder gl	leukemic cell infiltration	<50> 0	<50> 0	<50> 1	<50> 0
(Body cavities)					
pleura	metastasis:lung tumor	<50> 0	<50> 0	<50> 0	<50> 1
< a >		a : Number of animals examined at the site			
b		b : Number of animals with lesion			

(JPT150)

BAIS4



TABLE Q 2

HISTOPATHOLOGICAL FINDINGS:  
METASTASIS OF TUMOR: FEMALE

STUDY NO. : 0641  
 ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCr1j]  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 4

Group Name No. of Animals on Study		Control 50	800 ppm 50	2400 ppm 50	7200 ppm 50
Organ	Findings				
(Respiratory system)					
nasal cavit		<50>	<50>	<50>	<50>
	leukemic cell infiltration	0	1	0	0
trachea		<50>	<50>	<50>	<50>
	leukemic cell infiltration	0	1	0	0
lung		<50>	<50>	<50>	<50>
	leukemic cell infiltration	1	6	2	2
	metastasis:uterus tumor	0	0	0	2
	metastasis:thyroid tumor	0	0	1	0
	metastasis:Zymbal gland tumor	0	0	0	1
	metastasis:skin/appendage tumor	0	1	0	0
(Hematopoietic system)					
bone marrow		<50>	<50>	<50>	<50>
	leukemic cell infiltration	2	6	2	6
lymph node		<50>	<50>	<50>	<50>
	leukemic cell infiltration	0	3	0	0
	metastasis:thyroid tumor	0	0	1	0
(Circulatory system)					
heart		<50>	<50>	<50>	<50>
	leukemic cell infiltration	0	1	0	0
(Digestive system)					
stomach		<50>	<50>	<50>	<50>
	leukemic cell infiltration	0	1	0	0

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

STUDY NO. : 0641  
 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	800 ppm 50	2400 ppm 50	7200 ppm 50
(Digestive system)						
small intes	leukemic cell infiltration		<50> 0	<50> 1	<50> 0	<50> 1
large intes	leukemic cell infiltration		<50> 0	<50> 1	<50> 0	<50> 1
liver	leukemic cell infiltration		<50> 1	<50> 7	<50> 4	<50> 4
	metastasis:uterus tumor		0	0	0	2
pancreas	leukemic cell infiltration		<50> 1	<50> 0	<50> 0	<50> 1
	metastasis:uterus tumor		0	0	0	2
(Urinary system)						
kidney	leukemic cell infiltration		<50> 1	<50> 3	<50> 2	<50> 2
urin bladd	leukemic cell infiltration		<50> 0	<50> 1	<50> 0	<50> 1
(Endocrine system)						
pituitary	leukemic cell infiltration		<50> 0	<50> 1	<50> 0	<50> 0
pane islet	leukemic cell infiltration		<50> 0	<50> 1	<50> 0	<50> 0
adrenal	leukemic cell infiltration		<50> 0	<50> 0	<50> 0	<50> 1

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

STUDY NO. : 0641  
 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	800 ppm 50	2400 ppm 50	7200 ppm 50
{Reproductive system}						
ovary	leukemic cell infiltration		<50> 0	<50> 1	<50> 0	<50> 0
	metastasis:uterus tumor		0	0	0	2
uterus	leukemic cell infiltration		<50> 0	<50> 1	<50> 0	<50> 1
	leukemic cell infiltration		<50> 0	<50> 0	<50> 0	<50> 1
{Nervous system}						
brain	leukemic cell infiltration		<50> 0	<50> 3	<50> 0	<50> 0
	metastasis:pituitary tumor		2	2	1	0
spinal cord	leukemic cell infiltration		<50> 0	<50> 2	<50> 0	<50> 0
{Body cavities}						
pleura	metastasis:bone tumor		<50> 0	<50> 0	<50> 0	<50> 1
	leukemic cell infiltration		<50> 0	<50> 1	<50> 0	<50> 2
peritoneum	metastasis:uterus tumor		0	0	0	1

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

TABLE R

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

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

Organs Tumors	No. of animals examined	No. of animals bearing tumor	Incidence (%)	Min. - Max. (%)
Adrenal	2446			
Pheochromocytoma 1)		81	3.3	0 - 16
Pheochromocytoma:malignant 2)		22	0.9	0 - 6
1)+2)		103	4.2	0 - 18

49 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, 0296, 0318, 0328, 0342,  
0347, 0365, 0371, 0399, 0401, 0417, 0421, 0437, 0448, 0457, 0461, 0497, 0535, 0560,  
0579, 0610, 0612, 0667, 0675, 0686, 0691

TABLE S 1

CAUSE OF DEATH: MALE

STUDY NO. : 0641  
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
SEX : MALE

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

PAGE : 1

Group Name	Control	800 ppm	2400 ppm	7200 ppm
Number of Dead and Moribund Animal	10	5	12	10
no microscop confirm	1	1	0	1
integumentary sy les	0	0	1	0
renal lesion	0	0	0	1
chronic nephropathy	1	0	0	0
tumor d:leukemia	1	1	5	0
tumor d:skin/app	1	0	1	0
tumor d:subcutis	1	0	2	0
tumor d:lung	0	0	0	1
tumor d:urin bladd	0	0	0	1
tumor d:pituitary	2	0	0	2
tumor d:thyroid	1	1	1	1
tumor d:adrenal	1	0	0	1
tumor d:brain	1	0	0	0
tumor d:Zymbal gl	0	0	1	1
tumor d:bone	0	1	1	0
tumor d:peritoneum	0	1	0	1

(BI0120)

BAIS4



TABLE S 2

CAUSE OF DEATH: FEMALE

STUDY NO. : 0641  
ANIMAL : RAT F344/DuCr1Cr1j[F344/DuCrj]  
SEX : FEMALE

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

PAGE : 2

Group Name	Control	800 ppm	2400 ppm	7200 ppm
Number of Dead and Moribund Animal	12	12	8	17
no microscop confirm	0	1	1	2
renal lesion	0	0	0	2
tumor d:leukemia	2	3	2	6
tumor d:thymus	1	0	0	0
tumor d:pituitary	7	6	2	2
tumor d:thyroid	0	0	1	0
tumor d:uterus	1	0	1	3
tumor d:mammary gl	0	1	1	1
tumor d:prep/cli gl	1	1	0	0
tumor d:Zymbal gl	0	0	0	1

(BIO120)

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