

2,4-ジクロロ-1-ニトロベンゼンのマウスを用いた  
経口投与によるがん原性試験(混餌試験)報告書

試験番号：0422

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## APPENDIX A 1

### IDENTITY AND IMPURITY OF 2,4-DICHLORO-1-NITROBENZENE IN THE 2-YEAR FEED STUDY

## IDENTITY AND IMPURITY OF 2,4-DICHLORO-1-NITROBENZENE IN THE 2-YEAR FEED STUDY

Test Substance : 2,4-Dichloro-1-nitrobenzene (Wako Pure Chemical Industries, Ltd.)

Lot No. : SEF4737

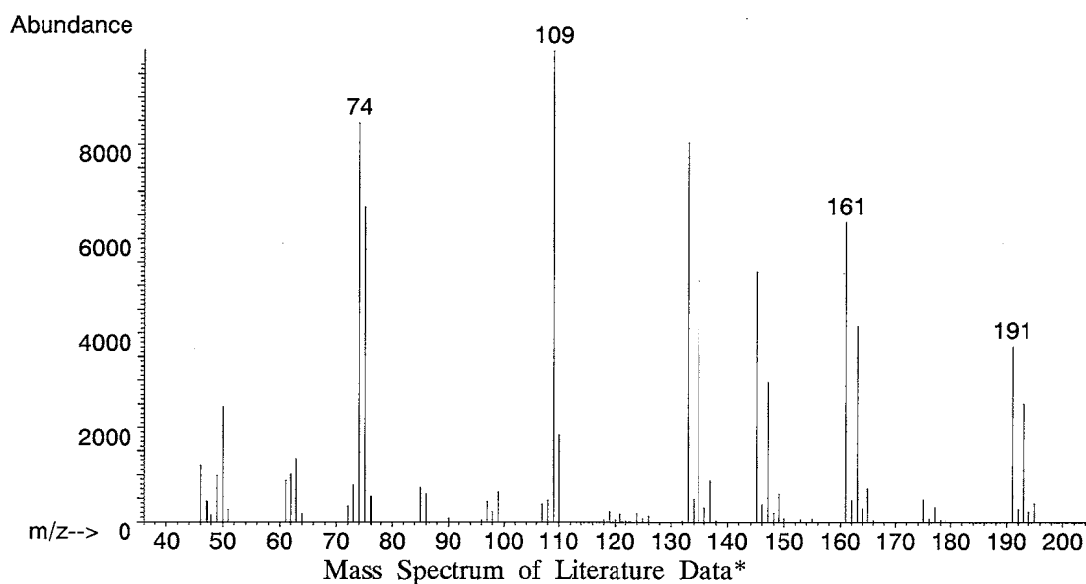
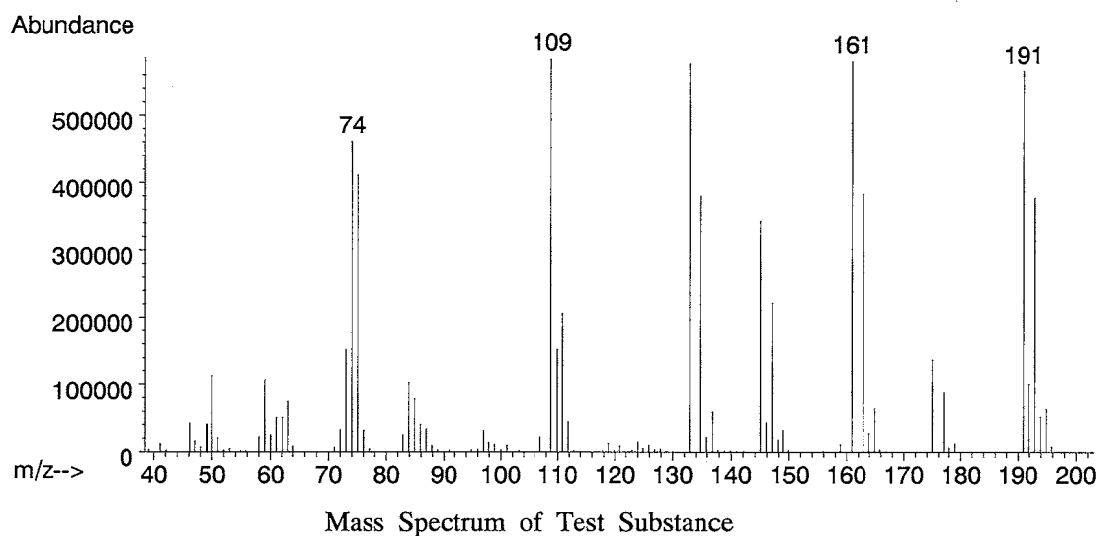
## 1. Spectral Data

Mass Spectrometry

Instrument : Hewlett Packard 5989B Mass Spectrometer

Ionization : EI (Electron Ionization)

Ionization Voltage : 70eV



Result: The mass spectrum was consistent with literature spectrum.

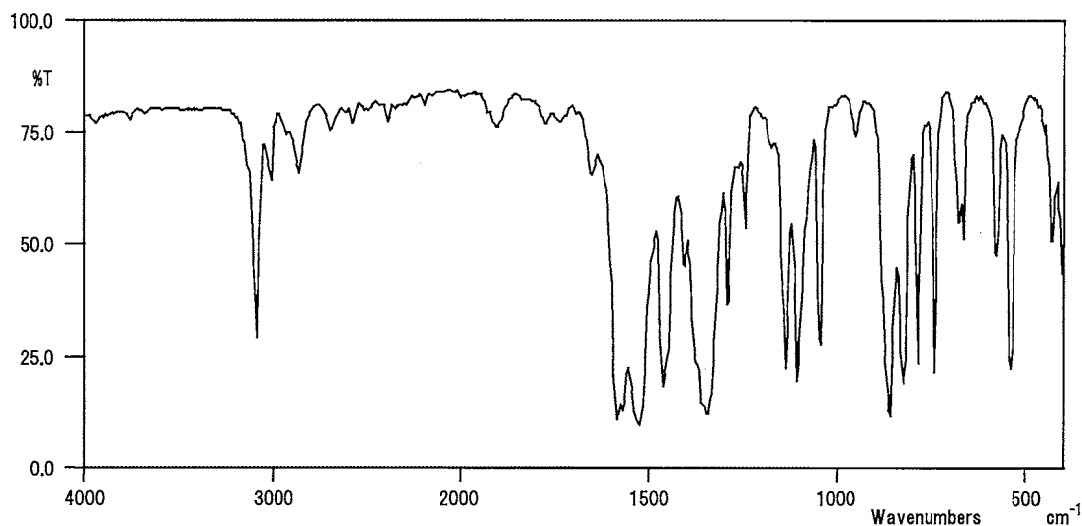
(\*McLafferty FW, ed. 1994. Wiley Registry of Mass Spectral Data. 6th ed.  
New York, NY : John Wiley and Sons.)

Infrared Spectrometry

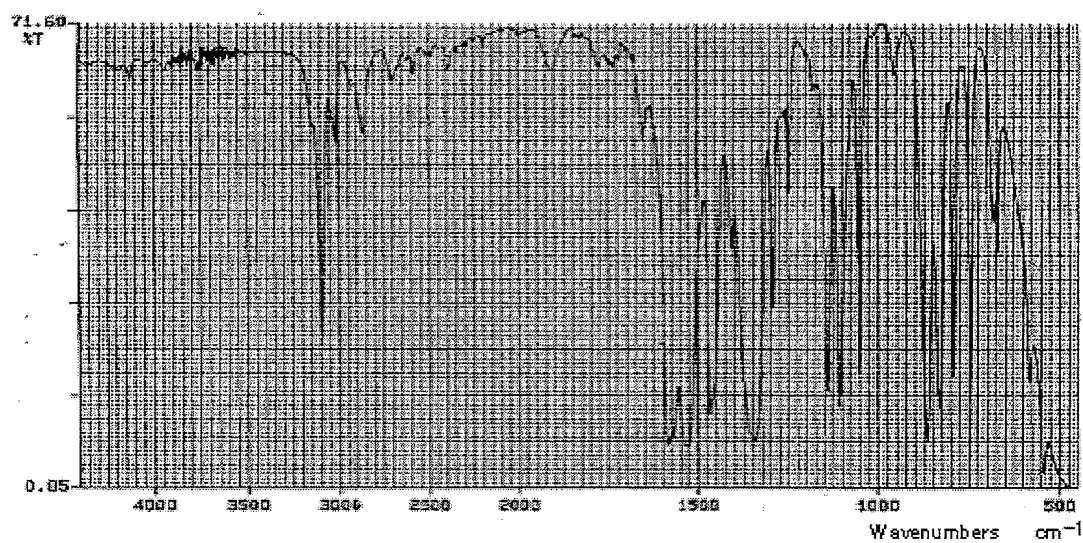
Instrument : Shimadzu FTIR-8200PC Infrared Spectrometer

Cell : KBr Liquid Cell

Resolution : 2  $\text{cm}^{-1}$



Infrared Spectrum of Test Substance



Infrared Spectrum of Literature Data\*

Result: The infrared spectrum was consistent with literature spectrum.

(\*Performed by Wako Pure Chemical Industries, Ltd.)

## 2. Impurity

Instrument : Hewlett Packard 6890 Gas Chromatograph

Column : Ultra1 (0.2 mm $\phi$   $\times$  50 m)

Column Temperature : 160 °C (5 min)  $\rightarrow$  (20 °C/min)  $\rightarrow$  260 °C

Flow Rate : 1 mL/min

Detector : FID (Flame Ionization Detector)

Injection Volume : 1  $\mu$ L

Sample Name	Peak No.	Area (%)	Peak Name
Test Substance	1	99.969	2,4-Dichloro-1-nitrobenzene
	2	0.018	1,5-Dichloro-2,3-dinitrobenzene
	3	0.013	1,2-Dichloro-4,5-dinitrobenzene

Result: Gas chromatography indicated one major peak (peak No.1) and two impurities. Those were identified by comparing GC-MS with that of 1,5-dichloro-2,3-dinitrobenzene (peak No.2) and 1,2-dichloro-4,5-dinitrobenzene (peak No.3) in the 2,4-dichloro-1-nitrobenzene. Those amounts in the test substance were 0.018% (The quantity value by the standard sample was 0.018%.) and 0.013% (The quantity value by the standard sample was 0.014%.) with a gas chromatograph.

3. Conclusion: The test substance was identified as 2,4-dichloro-1-nitrobenzene by mass spectrum and infrared spectrum. Gas chromatography indicated one major peak (2,4-dichloro-1-nitrobenzene) and two impurities. Those impurities were 1,5-dichloro-2,3-dinitrobenzene and 1,2-dichloro-4,5-dinitrobenzene in the test substance.



## APPENDIX A 2

### STABILITY OF 2,4-DICHLORO-1-NITROBENZENE IN THE 2-YEAR FEED STUDY

## STABILITY OF 2,4-DICHLORO-1-NITROBENZENE IN THE 2-YEAR FEED STUDY

Test Substance : 2,4-Dichloro-1-nitrobenzene (Wako Pure Chemical Industries, Ltd.)

Lot No. : SEF4737

1. Sample : This lot was used from 2001.4.17 to 2003.4.22. Test substance was stored in a dark place at room temperature.

## 2. Gas Chromatography

Instrument : Hewlett Packard 6890 Gas Chromatograph

Column : Ultra1 (0.2 mm  $\phi$   $\times$  50 m)

Column Temperature : 160 °C (5 min)  $\rightarrow$  (20 °C/min)  $\rightarrow$  260 °C

Flow Rate : 1 mL/min

Detector : FID (Flame Ionization Detector)

Injection Volume : 1  $\mu$ L

Date (date analyzed)	Peak No.	Retention Time (min)	Area (%)
2001.03.19	1	5.407	99.969
	2	7.556	0.018
	3	7.745	0.013
2003.04.25	1	5.400	99.969
	2	7.565	0.018
	3	7.755	0.013

Result: Gas chromatography indicated one major peak (peak No.1) and two impurities (peak No.2, 3 < 0.1% of total area) analyzed on 2001.3.19 and one major peak (peak No.1) and two impurities (peak No.2, 3 < 0.1% of total area) analyzed on 2003.4.25.  
No new trace impurity peak in the test substance analyzed on 2003.4.25 was detected.

3. Conclusion: The test substance was stable for about 25 months in a dark place at room temperature.

## APPENDIX A 3

CONCENTRATION OF 2,4-DICHLORO-1-NITROBENZENE  
IN FORMULATED DIETS IN THE 2-YEAR FEED STUDY

# CONCENTRATION OF 2,4-DICHLORO-1-NITROBENZENE IN FORMULATED DIETS IN THE 2-YEAR FEED STUDY

Date Analyzed	Target Concentration			
	Male	Male and Female	Male and Female	Female
	750 <sup>a</sup>	1500	3000	6000
2001.04.17	745 ( 99.3) <sup>b</sup>	1450 ( 96.7)	2750 ( 91.7)	5550 ( 92.5)
2001.06.26	716 ( 95.5)	1380 ( 92.0)	2870 ( 95.7)	5610 ( 93.5)
2001.09.18	727 ( 96.9)	1420 ( 94.7)	2860 ( 95.3)	5810 ( 96.8)
2001.12.11	733 ( 97.7)	1480 ( 98.7)	2940 ( 98.0)	6080 (101)
2002.03.05	790 (105)	1590 (106)	3140 (105)	6350 (106)
2002.05.28	726 ( 96.8)	1430 ( 95.3)	2870 ( 95.7)	5680 ( 94.7)
2002.08.20	747 ( 99.6)	1490 ( 99.3)	2760 ( 92.0)	5770 ( 96.2)
2002.11.05	721 ( 96.1)	1480 ( 98.7)	3180 (106)	5700 ( 95.0)
2003.02.04	797 (106)	1570 (105)	2960 ( 98.7)	6000 (100)

<sup>a</sup> ppm

<sup>b</sup> %

Analytical method : The samples were analyzed by gas chromatography.

Instrument : Hewlett Packard 6890 Gas Chromatograph

Column : Ultra 1 (0.2 mm  $\phi$   $\times$  50 m)

Column Temperature : 160 °C (5 min)  $\rightarrow$  (20 °C/min)  $\rightarrow$  260 °C (5 min)

Flow Rate : 1 mL/min

Detector : FID (Flame Ionization Detector)

Injection Volume : 1  $\mu$ L

## APPENDIX A 4

### HOMOGENEITY OF 2,4-DICHLORO-1-NITROBENZENE IN FORMULATED DIETS IN THE 2-YEAR FEED STUDY

# HOMOGENEITY OF 2,4-DICHLORO-1-NITROBENZENE IN FORMULATED DIETS IN THE 2-YEAR FEED STUDY

	Target Concentration			
	Male	Male and Female	Male and Female	Female
	750 <sup>a</sup>	1500	3000	6000
Coefficient Variation	1.13 <sup>b</sup>	1.99	3.01	2.77

<sup>a</sup> ppm

<sup>b</sup> % (n=7)

Analytical method : The samples were analyzed by gas chromatography.

Instrument : Hewlett Packard 6890 Gas Chromatograph

Column : Ultra 1 (0.2 mm  $\phi$   $\times$  50 m)

Column Temperature : 160 °C (5 min)  $\rightarrow$  (20 °C/min)  $\rightarrow$  260 °C (5 min)

Flow Rate : 1 mL/min

Detector : FID (Flame Ionization Detector)

Injection Volume : 1  $\mu$ L

## APPENDIX A 5

### STABILITY OF 2,4-DICHLORO-1-NITROBENZENE IN FORMULATED DIETS

## STABILITY OF 2,4-DICHLORO-1-NITROBENZENE IN FORMULATED DIETS

Date Prepared	Date Analyzed	Target Concentration	
		200 <sup>a</sup>	10000
1999.06.09	1999.06.09	210 (100) <sup>b</sup>	9900 (100)
	1999.06.18 <sup>c</sup>	177 ( 84.3)	8780 ( 88.7)
	1999.07.07 <sup>d</sup>	214 (102)	9080 ( 91.7)

<sup>a</sup> ppm

<sup>b</sup> % (Percentage was based on the concentration on date of preparation.)

<sup>c</sup> Animal room samples

<sup>d</sup> Cold storage samples

Analytical method : The samples were analyzed by gas chromatography.

Instrument : Hewlett Packard 6890 Gas Chromatograph

Column : Ultra 1 (0.2 mm  $\phi$   $\times$  50 m)

Column Temperature : 160 °C (5 min)  $\rightarrow$  (20 °C/min)  $\rightarrow$  260 °C (5 min)

Flow Rate : 1 mL/min

Detector : FID (Flame Ionization Detector)

Injection Volume : 1  $\mu$ L



## APPENDIX B 1

### CLINICAL OBSERVATION : MALE

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HUNCHBACK POSITION	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	control	0	0	1	0	1	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	1	1	1	1	1	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HUNCHBACK POSITION	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HUNCHBACK POSITION	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0422  
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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	1	1	1
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	3000 ppm	0	0	0	0	0	0	0	0	0	1	1	1	1	1
MORIBUND SACRIFICE	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HUNCHBACK POSITION	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	3000 ppm	0	0	0	0	1	1	1	1	1	0	0	0	0	0
FROG BELLY	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		57-7	58-7	59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
DEATH	control	1	1	1	1	1	1	1	2	2	2	2	2	2	2
	750 ppm	0	0	1	1	1	1	1	1	1	1	1	1	1	1
	1500 ppm	1	1	1	1	1	2	2	2	3	3	3	3	3	3
	3000 ppm	1	1	1	1	2	2	2	2	2	2	2	2	2	2
MORIBUND SACRIFICE	control	0	0	0	0	0	0	0	0	0	0	2	2	2	2
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HUNCHBACK POSITION	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	1	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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	1	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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	1	0	0	0	0
	750 ppm	1	1	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	2	2	2	2	2	1	1	1	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
DEATH	control	2	2	3	3	3	4	4	4	4	4	4	4	4	4
	750 ppm	1	1	1	2	2	2	2	2	2	2	2	2	2	2
	1500 ppm	3	3	3	4	4	4	4	4	4	4	4	5	5	5
	3000 ppm	2	3	3	4	5	5	5	8	10	12	13	14	14	14
MORIBUND SACRIFICE	control	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	1	1	1	1	2	2
HUNCHBACK POSITION	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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	1	1	1
	750 ppm	1	1	1	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	1	2	2	1	1	0	0	0	0	0	0	0	1	1
	3000 ppm	0	0	0	1	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
	750 ppm	1	1	1	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day				88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
		85-7	86-7	87-7												
DEATH	control	4	6	6		6	7	8	8	8	8	8	8	9	10	10
	750 ppm	3	3	3		4	5	5	5	5	5	5	7	8	8	9
	1500 ppm	6	7	7		7	7	7	8	9	10	11	12	12	12	13
	3000 ppm	14	15	16		16	16	16	16	16	17	20	21	21	22	23
MORIBUND SACRIFICE	control	2	2	2		2	2	2	2	2	2	2	2	2	2	2
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	2	3	3		3	3	3	3	3	3	3	3	3	3	3
HUNCHBACK POSITION	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	control	0	1	1		1	1	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	1
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
SOILED	control	0	0	0		0	1	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	control	1	0	0		0	1	0	0	0	0	0	1	1	0	1
	750 ppm	0	0	0		0	0	0	0	0	0	1	1	1	1	1
	1500 ppm	1	0	0		0	0	0	1	0	0	0	0	1	2	2
	3000 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
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 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	1	1	1	1	1
	750 ppm	0	0	0		0	0	0	0	0	0	0	1	1	1	1
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	1	1	1
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0



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Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
DEATH	control	11	11	11	11	11	13
	750 ppm	9	10	10	11	12	12
	1500 ppm	14	16	17	18	19	20
	3000 ppm	23	23	23	23	23	23
MORIBUND SACRIFICE	control	2	2	2	2	2	2
	750 ppm	0	0	0	0	0	0
	1500 ppm	0	0	0	1	1	1
	3000 ppm	4	4	4	4	4	4
HUNCHBACK POSITION	control	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0
PARALYTIC GAIT	control	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0
	1500 ppm	1	1	0	0	0	0
	3000 ppm	0	0	0	0	0	0
SOILED	control	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0
PILOERECTION	control	0	0	0	0	1	1
	750 ppm	2	2	2	2	1	2
	1500 ppm	2	1	0	0	0	0
	3000 ppm	0	0	0	0	1	2
FROG BELLY	control	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0
SOILED PERI-GENITALIA	control	1	1	1	0	0	0
	750 ppm	1	0	0	0	0	0
	1500 ppm	1	1	0	0	0	0
	3000 ppm	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
EXOPHTHALMOS	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GUM	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CLOSED EYELID	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEFECT OF TEETH	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GROWTH OF TEETH	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	control	0	0	0	0	0	0	0	0	0	1	2	2	2	2
	750 ppm	0	0	0	0	1	1	1	1	1	1	1	1	1	1
	1500 ppm	0	0	0	1	1	1	1	1	1	1	1	1	1	1
	3000 ppm	0	0	0	0	0	0	2	2	1	1	1	1	1	1
M. NOSE	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
EXOPHTHALMOS	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GUM	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CLOSED EYELID	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEFECT OF TEETH	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GROWTH OF TEETH	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	control	2	2	3	3	3	3	3	2	2	2	2	2	2	2
	750 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1500 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	3000 ppm	1	2	1	1	1	1	1	1	1	1	1	1	1	1
M. NOSE	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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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
EXOPHTHALMOS	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GUM	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CLOSED EYELID	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEFECT OF TEETH	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GROWTH OF TEETH	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	control	2	2	2	3	3	3	3	3	3	3	3	3	4	3
	750 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1500 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	3000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. NOSE	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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CLINICAL OBSERVATION (SUMMARY)  
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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												
EXOPHTHALMOS	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
GUM	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
CLOSED EYELID	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
DEFECT OF TEETH	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GROWTH OF TEETH	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	control	3	3	3		3	3	3	3	3	3	3	3	3	3	3
	750 ppm	1	1	1		1	1	1	1	1	1	1	1	1	1	2
	1500 ppm	1	1	1		1	1	1	1	0	0	0	0	0	0	0
	3000 ppm	1	1	1		1	1	1	1	1	1	1	1	1	1	1
M. NOSE	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day				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												
EXOPHTHALMOS	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
GUM	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
CLOSED EYELID	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
DEFECT OF TEETH	control	1	1	1		1	1	1	1	1	1	1	1	1	1	1
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GROWTH OF TEETH	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	control	0	0	0		0	1	1	1	1	1	1	1	1	1	1
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	1	1	1	1	1	1
	3000 ppm	0	0	0		0	0	0	0	0	0	0	1	1	1	1
INTERNAL MASS	control	3	3	3		3	2	2	3	2	2	2	2	2	2	2
	750 ppm	2	3	3		3	3	3	3	3	4	2	2	3	3	3
	1500 ppm	1	1	1		1	1	1	1	1	2	2	2	2	2	2
	3000 ppm	1	1	1		1	1	1	1	1	2	2	2	3	3	3
M. NOSE	control	0	0	0		0	0	0	0	0	0	1	1	1	1	1
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day				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												
EXOPHTHALMOS	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	1	1	1		1	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
GUM	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		1	1	1	1	1	1	1	1	1	1	1
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
CLOSED EYELID	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	1	1	1	1	1	1	1	1	1	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
DEFECT OF TEETH	control	2	2	2		2	2	2	2	2	2	2	2	2	2	2
	750 ppm	0	0	0		0	0	0	0	0	0	0	2	2	2	2
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	1	1
	3000 ppm	0	0	0		0	0	0	0	0	0	0	1	1	1	1
ABNORMAL GROWTH OF TEETH	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	1	1	1		1	0	0	0	0	0	0	0	0	0	0
	3000 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	1	1	1
	750 ppm	0	0	0		1	1	1	1	1	1	1	2	2	2	2
	1500 ppm	1	1	2		3	3	3	2	2	2	2	2	2	2	2
	3000 ppm	1	1	1		1	1	1	1	1	1	1	1	1	1	1
INTERNAL MASS	control	2	3	3		3	3	3	3	4	3	7	9	16	17	16
	750 ppm	2	3	4		4	2	2	2	2	3	4	4	5	5	6
	1500 ppm	2	2	2		3	3	3	3	4	4	5	5	5	5	6
	3000 ppm	3	4	5		4	5	5	5	5	3	2	2	3	2	2
M. NOSE	control	1	1	1		1	1	1	1	1	1	1	1	1	1	1
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
EXOPHTHALMOS	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GUM	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	1	1	1	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CLOSED EYELID	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEFECT OF TEETH	control	2	2	2	2	6	6	6	7	7	7	7	7	7	7
	750 ppm	2	2	3	3	5	5	5	6	6	6	6	6	5	7
	1500 ppm	1	0	0	0	0	0	0	0	1	1	1	1	0	0
	3000 ppm	1	1	1	1	1	1	1	1	1	0	0	0	0	0
ABNORMAL GROWTH OF TEETH	control	2	2	2	2	2	2	2	2	2	1	1	1	1	1
	750 ppm	1	1	1	1	1	1	1	1	1	0	0	0	0	0
	1500 ppm	0	0	2	2	2	2	2	1	1	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	control	2	1	2	2	1	1	1	1	1	1	1	1	2	2
	750 ppm	2	2	3	3	3	3	3	3	3	3	4	4	4	4
	1500 ppm	2	2	2	2	2	2	2	2	2	2	2	2	3	3
	3000 ppm	1	1	0	0	0	0	0	1	0	0	0	0	0	0
INTERNAL MASS	control	12	12	11	8	7	7	7	7	6	6	6	6	7	7
	750 ppm	8	8	8	6	5	5	5	5	5	5	5	5	5	5
	1500 ppm	7	6	6	7	8	8	8	7	5	5	4	4	5	8
	3000 ppm	7	6	5	6	6	6	6	6	7	6	6	6	5	7
M. NOSE	control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0



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Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
EXOPHTHALMOS	control	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0
GUM	control	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0
CLOSED EYELID	control	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0
DEFECT OF TEETH	control	6	6	6	7	7	8
	750 ppm	7	7	7	7	7	7
	1500 ppm	0	0	0	1	1	1
	3000 ppm	0	0	0	0	0	0
ABNORMAL GROWTH OF TEETH	control	1	1	1	1	1	1
	750 ppm	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0
EXTERNAL MASS	control	2	2	3	3	4	5
	750 ppm	5	4	4	4	3	2
	1500 ppm	5	4	4	5	5	5
	3000 ppm	0	0	0	0	0	0
INTERNAL MASS	control	7	7	7	8	8	7
	750 ppm	6	5	8	7	7	7
	1500 ppm	8	7	8	9	10	10
	3000 ppm	8	8	8	10	13	14
M. NOSE	control	1	1	1	1	1	1
	750 ppm	0	0	0	0	0	0
	1500 ppm	1	1	1	1	1	1
	3000 ppm	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
M. EYE	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
M. EYE	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day				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. EYE	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
M. EYE	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		57-7	58-7	59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
M. EYE	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	1	1	1	1	1
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	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	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1

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Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
M. EYE	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	3000 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	1	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	1	1	1	1	1	1	1	1	1	1	1
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	1500 ppm	0	0	1	1	1	1	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1

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Clinical sign	Group Name	Administration Week-day				88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
		85-7	86-7	87-7												
M. EYE	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	1	1	1		1	1	1	1	1	1	1	1	1	1	1
	3000 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
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
M. EAR	control	1	0	0		0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
M. PERI EAR	control	0	0	1		1	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	1	1	1		1	1	1	1	1	1	1	1	1	2	2
	3000 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
	750 ppm	1	1	1		1	1	1	1	1	1	1	1	1	1	1
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 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	1	1
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	1	1	0		0	0	0	0	0	0	0	0	0	0	0



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Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
M. EYE	control	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0
	1500 ppm	1	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0
M. PERI-MOUTH	control	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0
M. EAR	control	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0
M. PERI EAR	control	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0
M. NECK	control	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0
M. ABDOMEN	control	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0
	1500 ppm	2	2	2	2	2	2
	3000 ppm	0	0	0	0	0	0
M. ANTERIOR. DORSUM	control	0	0	0	0	0	0
	750 ppm	1	1	1	1	1	1
	1500 ppm	0	0	0	1	1	1
	3000 ppm	0	0	0	0	0	0
M. GENITALIA	control	1	1	2	2	3	3
	750 ppm	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
M. ANUS	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. TAIL	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESPIRATORY SOUND ABNOR	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day				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												
M. ANUS	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
M. TAIL	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
RESPIRATORY SOUND ABNOR	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
M. ANUS	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. TAIL	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
TORTICOLLIS	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESPIRATORY SOUND ABNOR	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day				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. ANUS	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
M. TAIL	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	1	0	1		1	1	1	1	1	1	1	1	1	1	1
TORTICOLLIS	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	1	1	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	1	1	1
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
RESPIRATORY SOUND ABNOR	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		57-7	58-7	59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
M. ANUS	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. TAIL	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	1	1	1	1	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	control	0	0	0	0	0	0	0	0	0	1	1	1	1	1
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	1	2	2	2	1	1	2	1	1	1	1	1	1
	3000 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	2	1	1	1	1
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	1	1	1	1	3	2	2	2	1	1	1	1	1	1
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESPIRATORY SOUND ABNOR	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	1	1	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
M. ANUS	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	1	1	1	1	1	1	1	1	1	1	1
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. TAIL	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	1	1	1	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	1	1	1	1	0	0	0	0	0
CRUSTA	control	0	0	1	1	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	control	1	1	1	1	1	1	1	1	1	1	2	2	2	2
	750 ppm	0	0	0	0	0	0	0	0	1	1	1	1	1	1
	1500 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	3000 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
	750 ppm	1	1	1	0	0	0	0	0	0	0	0	0	0	1
	1500 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	3000 ppm	0	0	0	1	0	1	1	2	1	0	0	0	0	0
RESPIRATORY SOUND ABNOR	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
M. ANUS	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	1	0	0	0	0	0	0
M. TAIL	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	1	1	1	1	1	1	1	1	1	1	1	1
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	control	2	1	1	1	1	1	1	1	1	1	1	1	1	1
	750 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1500 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	control	0	0	0	0	1	0	0	0	0	0	1	1	0	1
	750 ppm	0	0	0	0	0	0	0	0	0	1	1	1	1	1
	1500 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	2
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESPIRATORY SOUND ABNOR	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0



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Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
M. ANUS	control	0	0	0	0	0	0
	750 ppm	2	2	2	2	2	1
	1500 ppm	1	1	1	1	1	1
	3000 ppm	0	0	0	0	0	0
M. SCROTUM	control	0	0	0	0	0	0
	750 ppm	1	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0
M. TAIL	control	0	0	0	0	0	1
	750 ppm	1	1	1	1	0	0
	1500 ppm	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0
ANEMIA	control	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0
	1500 ppm	0	0	0	0	1	0
	3000 ppm	0	0	0	0	0	0
CRUSTA	control	0	0	0	0	0	0
	750 ppm	1	1	0	0	0	0
	1500 ppm	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0
TORTICOLLIS	control	1	1	1	1	1	1
	750 ppm	1	1	1	1	1	1
	1500 ppm	1	1	0	0	0	0
	3000 ppm	0	0	0	0	0	0
IRREGULAR BREATHING	control	0	0	0	0	0	0
	750 ppm	1	1	1	1	1	1
	1500 ppm	2	1	0	0	1	0
	3000 ppm	0	0	0	0	0	1
RESPIRATORY SOUND ABNOR	control	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
ABNORMAL RESPIRATION	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TACHYPNEA	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRA. SOUND	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	1500 ppm	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	3000 ppm	50	50	50	50	50	50	50	50	50	50	50	50	50	50
SMALL STOOL	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	2	0	0	0	0	0	0	0	0	0	0	0	0	0
OLIGO-STOOL	control	0	0	1	0	0	0	0	0	0	1	1	0	0	0
	750 ppm	0	0	0	1	0	0	0	0	0	0	1	0	0	0
	1500 ppm	0	0	0	3	0	2	2	1	1	1	0	0	0	1
	3000 ppm	1	0	0	0	0	0	0	0	0	1	0	0	0	1

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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
ABNORMAL RESPIRATION	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TACHYPNEA	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRA. SOUND	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	1500 ppm	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	3000 ppm	50	50	50	50	50	50	50	50	50	50	50	50	50	50
SMALL STOOL	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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	1	2	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	2	0	0	0	0	0	0	0	0	0	0	0	0

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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												
ABNORMAL RESPIRATION	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
TACHYPNEA	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRA. SOUND	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	50	50	50		50	50	50	50	50	50	50	50	50	50	50
	1500 ppm	50	50	50		50	50	50	50	50	50	50	50	50	50	50
	3000 ppm	50	50	50		50	50	50	50	50	50	50	50	50	50	50
SMALL STOOL	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 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	1	0	0	0	0	0
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	1	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	1	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
ABNORMAL RESPIRATION	control	0	0	0	1	1	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	2
	3000 ppm	0	0	0	1	1	1	1	1	1	0	0	0	0	0
TACHYPNEA	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	1	1	1	1	1	1	0	0	0	0	0
DEEP BREATHING	control	0	0	0	1	1	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRA. SOUND	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	1500 ppm	50	50	50	50	50	50	50	49	49	49	49	49	49	49
	3000 ppm	50	50	50	50	50	50	50	50	50	49	49	49	49	49
SMALL STOOL	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	3000 ppm	0	0	0	0	0	0	1	0	0	0	0	0	0	0
OLIGO-STOOL	control	0	0	0	1	1	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	1500 ppm	0	0	0	0	0	1	1	0	0	0	0	0	0	1
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		57-7	58-7	59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
ABNORMAL RESPIRATION	control	0	0	0	0	0	0	0	0	0	2	1	1	1	1
	750 ppm	1	1	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	1	1	1	1	3	2	2	2	1	1	1	1	1	1
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TACHYPNEA	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	1	1	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRA. SOUND	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	1	1	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	50	50	49	49	49	49	49	49	49	49	49	49	49	49
	1500 ppm	49	49	49	49	49	48	48	48	47	47	47	47	47	47
	3000 ppm	49	49	49	49	48	48	48	48	48	48	48	48	48	48
SMALL STOOL	control	0	0	0	0	0	0	0	0	0	1	0	0	1	1
	750 ppm	1	1	0	0	0	0	0	0	0	1	0	0	0	0
	1500 ppm	0	1	1	0	1	0	1	1	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OLIGO-STOOL	control	0	0	0	0	0	2	0	0	0	2	0	1	0	1
	750 ppm	1	1	0	0	0	1	0	0	0	0	0	1	0	1
	1500 ppm	0	1	1	2	1	3	0	2	0	1	0	1	1	1
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0

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Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
ABNORMAL RESPIRATION	control	1	1	1	1	0	0	0	0	0	0	0	0	0	0
	750 ppm	1	1	1	0	0	0	0	0	0	0	0	0	0	1
	1500 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	3000 ppm	0	0	0	1	0	1	1	2	1	0	0	0	0	0
TACHYPNEA	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	1	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRA. SOUND	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 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
	750 ppm	49	49	49	48	48	48	48	48	48	48	48	48	48	48
	1500 ppm	47	47	47	46	46	46	46	46	46	46	46	45	45	45
	3000 ppm	48	47	47	46	45	45	45	42	39	37	36	35	34	34
SMALL STOOL	control	1	1	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	1	1	0	0	0	0	0	0	0	0	0	0	0	1
	1500 ppm	1	3	1	0	0	0	0	0	0	0	0	0	0	1
	3000 ppm	0	0	0	1	0	0	0	0	0	0	0	0	0	0
OLIGO-STOOL	control	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	1	1	0	0	0	0	0	1	1	0	0	0	0	1
	1500 ppm	2	3	1	0	0	1	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	3	2	3	3	4	2	0	0	0	0	0

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day				88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
		85-7	86-7	87-7												
ABNORMAL RESPIRATION	control	0	0	0	0	1	0	0	0	0	0	1	1	0	0	
	750 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0
	1500 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TACHYPNEA	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRA. SOUND	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RED URINE	control	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	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	0
	750 ppm	47	47	47	45	45	45	45	45	45	45	45	43	42	42	41
	1500 ppm	44	43	43	43	43	43	43	42	41	40	39	38	38	38	37
	3000 ppm	34	32	31	31	31	31	31	31	31	30	27	26	26	25	24
SMALL STOOL	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
OLIGO-STOOL	control	0	0	0	0	0	0	0	0	1	1	0	1	0	0	1
	750 ppm	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1



STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
 ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
ABNORMAL RESPIRATION	control	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0
TACHYPNEA	control	0	0	0	0	0	0
	750 ppm	0	0	0	1	0	0
	1500 ppm	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0
DEEP BREATHING	control	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0
ABNORMAL RESPIRA. SOUND	control	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0
RED URINE	control	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0
YELLOW URINE	control	0	0	0	0	0	0
	750 ppm	41	40	40	39	38	38
	1500 ppm	36	34	33	31	30	29
	3000 ppm	23	23	23	23	23	23
SMALL STOOL	control	0	0	0	0	0	0
	750 ppm	2	1	3	2	0	0
	1500 ppm	3	2	2	1	1	0
	3000 ppm	0	0	1	1	0	0
OLIGO-STOOL	control	0	0	0	1	1	1
	750 ppm	1	1	2	1	2	2
	1500 ppm	1	1	1	1	1	0
	3000 ppm	0	0	0	0	1	0

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
SUBNORMAL TEMP	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	control	50	50	48	50	49	50	50	50	50	49	48	48	48	48
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190)

BATS 4

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
ALL ANIMALS

SEX : MALE

PAGE : 42

Clinical sign	Group Name	Administration Week-day													
		15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
SUBNORMAL TEMP	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	control	48	48	47	47	47	47	47	48	48	48	48	47	46	48
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190)

BATS 4

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
ALL ANIMALS

SEX : MALE

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Clinical sign	Group Name	Administration Week-day				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												
SUBNORMAL TEMP	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	control	48	48	48		47	47	47	47	47	46	47	47	47	46	47
	750 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0

(HAN190)

BATS 4

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
ALL ANIMALS

SEX : MALE

PAGE : 44

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
SUBNORMAL TEMP	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	control	47	47	47	46	46	47	47	47	47	47	47	46	46	46
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190)

BATS 4

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
ALL ANIMALS

SEX : MALE

PAGE : 45

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
SUBNORMAL TEMP	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	control	45	45	45	45	45	44	44	44	44	43	42	41	42	42
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190)

BATS 4

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
ALL ANIMALS

SEX : MALE

PAGE : 46

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
SUBNORMAL TEMP	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	control	41	40	38	38	39	38	38	37	38	34	30	24	23	24
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190)

BAIS 4

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
ALL ANIMALS

SEX : MALE

PAGE : 47

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
SUBNORMAL TEMP	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	1	0	0	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	control	27	24	25	28	25	25	25	23	23	24	22	22	21	22
	750 ppm	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(HAN190)

BATS 4



STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
ALL ANIMALS

SEX : MALE

PAGE : 48

Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
SUBNORMAL TEMP	control	0	0	0	0	0	0
	750 ppm	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0
NON REMARKABLE	control	21	21	20	19	18	15
	750 ppm	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0

(HAN190)

BATS 4

## APPENDIX B 2

CLINICAL OBSERVATION : FEMALE

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
ALL ANIMALS

SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day				4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
		1-7	2-7	3-7												
DEATH	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	1	1	1	1	1	1	1	1	1
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
HUNCHBACK POSITION	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
ALL ANIMALS

SEX : FEMALE

PAGE : 50

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
	1500 ppm	1	1	1	1	1	1	1	1	1	1	1	1	2	2
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HUNCHBACK POSITION	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
DEATH	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HUNCHBACK POSITION	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0	0	0	0	0	0	1	1	1	1	1	1
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
DEATH	control	0	0	1	1	1	1	1	1	1	1	1	1	1	1
	1500 ppm	3	3	3	3	3	3	3	3	3	3	3	4	4	4
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	1	1	1	1	1	1	1	1	1	1	2	2	2	2
MORIBUND SACRIFICE	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HUNCHBACK POSITION	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
PARALYTIC GAIT	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0	0	0	1	1	1	1	1	1	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
FROG BELLY	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day			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											
DEATH	control	1	2	2	2	2	2	2	2	3	3	3	3	3	3
	1500 ppm	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	3000 ppm	0	0	0	0	0	0	1	1	1	1	1	2	2	3
	6000 ppm	2	2	2	2	2	2	2	2	2	2	2	2	2	3
MORIBUND SACRIFICE	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	1	1	1	1	1	1	1	1	1	1	1
HUNCHBACK POSITION	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	1	1	1	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
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	control	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	0
	6000 ppm	1	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
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	1	1	1	1	1	1	0
	6000 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	1	1	1	1	1	1
	1500 ppm	0	0	0	0	0	0	0	0	1	1	1	1	1	1
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
DEATH	control	3	3	3	3	3	3	3	5	5	5	5	5	5	5
	1500 ppm	4	4	5	5	5	5	5	5	5	5	6	6	6	7
	3000 ppm	3	4	4	4	4	4	4	4	4	4	4	5	5	5
	6000 ppm	3	3	3	3	3	4	6	6	7	8	10	12	13	15
MORIBUND SACRIFICE	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	6000 ppm	1	1	1	1	1	1	1	2	2	2	2	2	2	2
HUNCHBACK POSITION	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	1	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
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	control	0	0	0	0	0	1	1	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	1	1	1	0	0
	6000 ppm	0	0	0	0	0	1	0	0	0	1	1	1	0	0
FROG BELLY	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1500 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0



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Clinical sign	Group Name	Administration Week-day													
		85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
DEATH	control	5	5	5	5	6	6	7	8	9	10	11	12	14	15
	1500 ppm	8	8	8	8	10	10	11	12	12	13	16	18	18	18
	3000 ppm	5	7	7	9	11	12	14	15	17	17	21	22	23	23
	6000 ppm	16	17	18	18	19	20	21	21	22	23	24	24	27	27
MORIBUND SACRIFICE	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	1	1	1	1	1	1	1	1	2	2	3	3	3	3
	6000 ppm	2	2	2	2	2	2	2	2	2	2	2	2	2	2
HUNCHBACK POSITION	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	control	0	0	1	1	1	1	1	1	1	1	2	2	2	1
	1500 ppm	0	0	0	1	0	0	1	1	1	0	0	0	1	1
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	6000 ppm	0	0	1	0	0	0	0	0	0	0	0	0	1	1
FROG BELLY	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	1500 ppm	1	1	1	1	1	1	1	1	1	1	1	0	0	0
	3000 ppm	0	0	1	1	2	2	2	2	2	2	2	2	2	2
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
DEATH	control	16	16	17	17	18	20
	1500 ppm	18	18	20	20	20	20
	3000 ppm	23	24	24	26	28	28
	6000 ppm	27	27	28	28	28	28
MORIBUND SACRIFICE	control	0	0	0	0	0	1
	1500 ppm	0	0	0	1	1	2
	3000 ppm	3	3	4	4	4	4
	6000 ppm	2	2	2	2	3	3
HUNCHBACK POSITION	control	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0
PARALYTIC GAIT	control	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0
PILOERECTON	control	1	1	1	1	2	2
	1500 ppm	1	1	1	0	1	1
	3000 ppm	2	1	2	1	0	0
	6000 ppm	2	1	0	0	1	2
FROG BELLY	control	0	0	0	0	1	0
	1500 ppm	0	0	1	1	1	1
	3000 ppm	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0
SOILED PERI GENITALIA	control	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0
	3000 ppm	0	0	0	1	0	0
	6000 ppm	0	0	0	0	0	0
EXOPHTHALMOS	control	1	1	1	1	1	1
	1500 ppm	0	0	0	0	0	0
	3000 ppm	2	2	2	1	1	1
	6000 ppm	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
GUM	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEFECT OF TEETH	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GROWTH OF TEETH	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. MANDIBULAR	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
GUM	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEFECT OF TEETH	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GROWTH OF TEETH	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	1	1	3	1	1	1	1	1	1	1	1	1	1
M. EYE	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. MANDIBULAR	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day				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												
GUM	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
DEFECT OF TEETH	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GROWTH OF TEETH	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	control	0	0	0		0	0	0	0	0	0	1	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	1	1	1	1	1	1	1
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	1	1	1		1	1	1	1	1	1	1	1	1	1	2
M. EYE	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
M. MANDIBULAR	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day				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												
GUM	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
DEFECT OF TEETH	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GROWTH OF TEETH	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	control	1	1	0		0	0	0	0	0	0	0	1	1	1	1
	1500 ppm	1	1	1		1	1	1	1	1	1	1	1	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	1	1	1
	6000 ppm	1	1	1		1	1	1	1	1	1	1	1	1	1	1
M. EYE	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
M. MANDIBULAR	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day				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												
GUM	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
DEFECT OF TEETH	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GROWTH OF TEETH	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 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	1
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	control	1	0	0		0	0	0	0	0	0	0	0	0	0	1
	1500 ppm	0	0	0		0	0	0	0	0	0	0	1	2	2	2
	3000 ppm	1	1	1		2	2	1	0	0	1	1	1	0	2	2
	6000 ppm	1	1	2		2	2	2	2	2	3	3	4	6	6	5
M. EYE	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
M. MANDIBULAR	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
GUM	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEFECT OF TEETH	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GROWTH OF TEETH	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	3000 ppm	0	0	0	1	1	0	0	0	0	0	0	0	0	0
	6000 ppm	1	1	1	1	1	1	0	0	0	0	0	0	0	0
EXTERNAL MASS	control	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	1	1	1	1	1	1
INTERNAL MASS	control	1	1	1	1	1	1	2	0	0	0	0	0	0	1
	1500 ppm	2	2	1	1	1	1	1	1	3	3	2	3	6	6
	3000 ppm	2	1	1	1	1	2	2	2	4	4	5	6	7	8
	6000 ppm	5	6	8	11	11	11	10	12	13	13	11	12	12	16
M. EYE	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. MANDIBULAR	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	1	1	1	1	1	1



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Clinical sign	Group Name	Administration Week-day													
		85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
GUM	control	0	0	0	0	0	0	0	0	0	0	0	1	1	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEFECT OF TEETH	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	1
	3000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
ABNORMAL GROWTH OF TEETH	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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	2	2	3	2	1
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	control	1	1	2	2	2	2	2	2	3	3	7	7	5	5
	1500 ppm	5	5	7	8	8	7	6	6	6	6	8	6	6	7
	3000 ppm	8	8	10	9	8	10	8	9	7	8	9	9	8	8
	6000 ppm	16	17	16	16	15	15	14	14	13	12	14	14	12	12
M. EYE	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. MANDIBULAR	control	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
GUM	control	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0
DEFECT OF TEETH	control	0	0	0	0	0	0
	1500 ppm	1	1	1	1	1	1
	3000 ppm	0	0	0	0	0	0
	6000 ppm	1	1	0	0	0	0
ABNORMAL GROWTH OF TEETH	control	0	0	0	0	0	0
	1500 ppm	1	1	1	1	1	1
	3000 ppm	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0
EXTERNAL MASS	control	0	0	0	0	0	1
	1500 ppm	0	0	0	0	0	0
	3000 ppm	1	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0
INTERNAL MASS	control	4	4	4	4	4	2
	1500 ppm	7	9	7	7	8	8
	3000 ppm	8	9	8	6	6	8
	6000 ppm	12	12	13	13	12	12
M. EYE	control	0	0	0	0	0	1
	1500 ppm	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0
M. MANDIBULAR	control	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0
M. EAR	control	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
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SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day													
		1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
M. NECK	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. FORELIMB	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GASPING	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0422  
ANIMAL : MOUSE C<sub>3</sub>H:BDP1  
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
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SEX : FEMALE

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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												
M. NECK	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
M. FORELIMB	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
GASPING	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1 104

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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. NECK	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
M. FORELIMB	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	1
CRUSTA	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
GASPING	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day			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. NECK	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. FORELIMB	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	6000 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
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GASPING	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		57-7	58-7	59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
M. NECK	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. FORELIMB	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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	1
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
CRUSTA	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	1	1	1	1	1	1	1	1	1	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GASPING	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Clinical sign	Group Name	Administration Week-day													
		71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
M. NECK	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. FORELIMB	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	control	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GASPING	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0



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Clinical sign	Group Name	Administration Week-day													
		85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
M. NECK	control	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. FORELIMB	control	0	0	0	0	0	0	0	0	1	1	1	1	1	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	6000 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	1	1	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	1	0	0	0	0	0	1	1	1
	6000 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
	1500 ppm	0	0	0	0	0	0	0	1	1	1	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TORTICOLLIS	control	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GASPING	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
 ALL ANIMALS

SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
M. NECK	control	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0
M. FORELIMB	control	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0
M. BREAST	control	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0
	3000 ppm	1	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0
M. POSTERIOR DORSUM	control	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0
ANEMIA	control	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0
	3000 ppm	1	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0
CRUSTA	control	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0
TORTICOLLIS	control	1	1	1	1	1	1
	1500 ppm	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0
GASPING	control	0	0	0	0	0	0
	1500 ppm	0	1	0	0	0	0
	3000 ppm	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
ALL ANIMALS

SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day				4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
		1-7	2-7	3-7												
IRREGULAR BREATHING	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRATION	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
TACHYPNEA	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRA. SOUND	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	50	50	49		50	50	49	49	49	49	49	49	49	49	49
	3000 ppm	50	50	50		50	50	50	50	50	50	50	50	50	50	50
	6000 ppm	50	50	50		50	50	50	50	50	50	50	50	50	50	50
SMALL STOOL	control	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0		0	0	1	0	0	0	0	0	0	0	0
OLIGO STOOL	control	0	0	2		1	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	1		0	0	0	0	0	0	1	0	0	0	0
	3000 ppm	2	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	13	5	6		0	0	0	0	0	0	0	1	0	0	0
NON REMARKABLE	control	49	49	47		48	49	49	49	49	49	49	49	49	49	49
	1500 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0		0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0422  
ANIMAL : MOUSE C<sub>7</sub>J:BDF<sub>1</sub>  
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
IRREGULAR BREATHING	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRATION	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TACHYPNEA	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIR. SOUND	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	49	49	49	49	49	49	49	49	49	49	49	49	48	48
	3000 ppm	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	6000 ppm	50	50	50	50	50	50	50	50	50	50	50	50	50	50
SMALL STOOL	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	1	0	0	0	0	0	0	0	0	0	0	0
NON REMARKABLE	control	49	49	49	49	49	49	49	49	49	49	49	49	49	49
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
ALL ANIMALS

SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day				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												
IRREGULAR BREATHING	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRATION	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TACHYPNEA	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRA. SOUND	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	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	0
	1500 ppm	48	48	48	48	47	48	48	48	48	48	48	48	48	48	48
	3000 ppm	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	6000 ppm	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
SMALL STOOL	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
OLIGO STOOL	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
NON REMARKABLE	control	49	49	49	49	49	49	49	49	49	49	48	49	49	49	49
	1500 ppm	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
ALL ANIMALS

SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day													
		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	1	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	1	1	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
ABNORMAL RESPIRATION	control	0	1	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	1	1	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
TACHYPNEA	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRA. SOUND	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	47	47	47	47	47	47	47	47	47	47	47	46	46	46
	3000 ppm	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	6000 ppm	49	49	49	49	49	49	49	49	49	49	48	48	48	48
SMALL STOOL	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
OLIGO STOOL	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	1	1	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
NON REMARKABLE	control	48	48	48	48	48	48	48	48	48	48	47	47	47	47
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0422  
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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
IRREGULAR BREATHING	control	0	0	0	0	0	0	0	1	1	1	1	1	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	2	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	1	0	1	0
	6000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	2
ABNORMAL RESPIRATION	control	0	0	0	0	0	0	0	1	1	1	1	1	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	2	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	1	0	1	0
	6000 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	2
TACHYPNEA	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRA. SOUND	control	0	0	0	0	0	0	0	0	1	1	1	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	46	46	46	46	46	46	46	46	46	46	46	46	46	46
	3000 ppm	50	50	50	50	50	50	49	49	49	49	49	48	48	47
	6000 ppm	48	48	48	47	47	47	47	47	47	47	47	47	47	46
SMALL STOOL	control	1	0	0	0	0	0	0	0	1	1	1	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	1	1	0	0	0
	3000 ppm	0	0	0	0	0	1	0	0	0	0	1	0	0	0
	6000 ppm	1	1	2	1	1	0	0	0	0	0	0	0	0	0
OLIGO STOOL	control	1	1	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	1	1	0	0	0
	3000 ppm	0	0	0	0	0	0	1	0	0	0	1	0	0	0
	6000 ppm	1	1	2	1	0	0	0	0	0	0	2	1	0	1
NON REMARKABLE	control	47	46	47	47	47	47	47	46	44	44	44	44	45	43
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
 ALL ANIMALS

SEX : FEMALE

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Clinical sign	Group Name	Administration Week-day													
		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
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	1	1	1	0	0
	6000 ppm	2	2	2	0	0	1	0	0	0	0	0	0	0	0
ABNORMAL RESPIRATION	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	1	1	1	0	0
	6000 ppm	2	2	2	0	0	1	0	0	0	0	0	0	0	0
TACHYPNEA	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIR. SOUND	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	46	46	45	45	45	45	45	45	45	45	44	44	44	43
	3000 ppm	47	46	46	46	46	45	46	46	46	46	46	45	44	44
	6000 ppm	46	46	46	46	46	45	43	42	41	40	38	36	35	33
SMALL STOOL	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	1	1	1	0	0
	6000 ppm	0	0	0	0	0	1	0	0	0	0	0	0	1	0
OLIGO STOOL	control	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	1	0	1	0	0	0	1	0
	3000 ppm	0	0	0	0	0	0	0	0	1	0	0	0	1	1
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	0
NON REMARKABLE	control	43	44	44	44	44	44	42	43	43	43	43	43	43	42
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0



STUDY NO. : 0422  
ANIMAL : MOUSE C<sub>7</sub>j:BDF1  
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
ALL ANIMALS

SEX : FEMALE

PAGE : 79

Clinical sign	Group Name	Administration Week-day													
		85-7	86-7	87-7	88-7	89-7	90-7	91-7	92-7	93-7	94-7	95-7	96-7	97-7	98-7
IRREGULAR BREATHING	control	0	0	1	1	1	1	1	1	1	1	1	1	2	1
	1500 ppm	0	0	0	1	0	0	1	1	1	0	1	0	0	0
	3000 ppm	1	0	0	0	0	0	0	0	0	0	0	0	1	1
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRATION	control	0	0	1	1	1	1	1	1	1	1	1	1	0	0
	1500 ppm	0	0	0	1	0	0	1	1	1	0	1	0	0	0
	3000 ppm	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TACHYPNEA	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL RESPIRA. SOUND	control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 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
	1500 ppm	42	42	42	42	40	40	39	38	38	37	34	32	32	32
	3000 ppm	44	42	42	40	38	37	35	34	31	31	26	25	24	24
	6000 ppm	32	31	30	30	29	28	27	27	26	25	24	24	21	21
SMALL STOOL	control	0	0	1	1	0	0	0	0	0	2	1	1	0	0
	1500 ppm	0	1	1	1	0	0	0	0	0	0	0	0	0	0
	3000 ppm	1	0	0	0	0	0	0	0	0	1	0	1	0	1
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OLIGO STOOL	control	0	0	1	1	0	1	0	1	0	2	1	3	2	2
	1500 ppm	0	1	1	0	0	1	2	0	0	0	1	1	1	1
	3000 ppm	2	0	0	0	0	3	1	0	0	1	0	1	0	0
	6000 ppm	0	0	0	0	0	1	0	0	0	0	0	0	0	0
NON REMARKABLE	control	42	42	40	40	39	38	38	36	35	32	28	25	26	26
	1500 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)  
ALL ANIMALS

SEX : FEMALE

PAGE : 80

Clinical sign	Group Name	Administration Week-day					
		99-7	100-7	101-7	102-7	103-7	104-7
IRREGULAR BREATHING	control	1	1	1	1	1	2
	1500 ppm	1	2	2	1	1	1
	3000 ppm	1	1	2	3	1	1
	6000 ppm	1	1	0	0	0	0
ABNORMAL RESPIRATION	control	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0
TACHYPNEA	control	1	1	0	0	0	0
	1500 ppm	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0
ABNORMAL RESPIRA. SOUND	control	0	0	0	0	0	0
	1500 ppm	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0
YELLOW URINE	control	0	0	0	0	0	0
	1500 ppm	32	32	30	29	29	28
	3000 ppm	24	23	22	20	18	18
	6000 ppm	21	21	20	20	19	19
SMALL STOOL	control	0	1	0	0	0	2
	1500 ppm	0	0	0	1	1	1
	3000 ppm	0	0	0	1	0	0
	6000 ppm	1	1	0	0	0	1
OLIGO STOOL	control	2	2	1	2	2	2
	1500 ppm	0	0	0	0	0	0
	3000 ppm	0	0	0	1	0	0
	6000 ppm	1	0	0	0	0	0
NON REMARKABLE	control	25	25	25	25	23	22
	1500 ppm	0	0	0	0	0	0
	3000 ppm	0	0	0	0	0	0
	6000 ppm	0	0	0	0	0	0

## APPENDIX C 1

### BODY WEIGHT CHANGES : MALE

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 UNIT : g  
 REPORT TYPE : A1 104  
 SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)  
 ALL ANIMALS

PAGE : 1

Group Name	Administration week						
	0	1	2	3	4	5	6
control	23.7± 0.9	24.9± 0.9	25.7± 1.2	26.0± 1.4	27.0± 1.4	27.9± 1.6	28.7± 1.8
750 ppm	23.7± 0.9	24.7± 1.0	25.2± 1.0	25.8± 1.3	26.6± 1.4	27.6± 1.6	28.2± 1.7
1500 ppm	23.7± 0.9	24.3± 1.1*	24.9± 1.0**	25.7± 1.2	26.1± 1.7*	27.3± 1.7	27.7± 2.1*
3000 ppm	23.7± 0.9	23.7± 1.2**	24.3± 1.1**	25.1± 1.5**	25.7± 1.5**	26.5± 1.3**	26.9± 1.4**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 UNIT : g  
 REPORT TYPE : A1 104  
 SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)  
 ALL ANIMALS

PAGE : 2

Group Name	Administration week						
	7	8	9	10	11	12	13
control	29.5± 1.8	30.2± 2.1	31.2± 2.0	31.9± 2.6	32.6± 2.2	33.2± 2.4	34.0± 2.5
750 ppm	29.0± 1.8	30.0± 1.9	30.8± 2.0	31.5± 2.1	32.1± 2.4	32.7± 2.5	33.4± 2.6
1500 ppm	28.6± 2.4	29.3± 2.6	30.1± 2.4*	30.9± 2.5	31.6± 2.5	31.9± 2.5*	32.8± 2.8*
3000 ppm	27.6± 1.5**	28.2± 1.7**	28.6± 1.8**	29.3± 2.0**	29.8± 2.1**	30.1± 2.2**	30.9± 2.3**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
UNIT : g  
REPORT TYPE : A1 104  
SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)  
ALL ANIMALS

PAGE : 3

Group Name	Administration week	14	18	22	26	30	34	38
control		35.0± 2.5	38.0± 3.1	40.4± 3.3	43.0± 3.7	45.2± 3.7	47.4± 3.7	48.6± 3.9
750 ppm		34.4± 2.6	36.9± 3.1	39.7± 3.8	42.0± 4.0	44.0± 4.3	45.9± 4.2	47.2± 3.9
1500 ppm		33.8± 2.9	36.5± 3.4*	38.9± 3.7	40.6± 4.3**	42.2± 4.9**	43.7± 5.0**	45.0± 5.0**
3000 ppm		31.7± 2.6**	33.9± 2.9**	36.1± 3.2**	37.7± 3.7**	39.1± 4.2**	40.5± 4.5**	41.4± 5.0**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 UNIT : g  
 REPORT TYPE : AI 104  
 SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)  
 ALL ANIMALS

PAGE : 4

Group Name	Administration week						
	42	46	50	54	58	62	66
control	49.9± 3.6	50.8± 4.1	51.6± 4.2	52.6± 3.3	54.0± 3.4	53.8± 4.0	53.4± 5.4
750 ppm	48.5± 3.8	49.8± 3.7	50.5± 3.7	51.3± 4.3	51.4± 5.7*	53.5± 3.7	53.7± 4.1
1500 ppm	46.9± 5.2**	48.0± 5.5*	48.7± 5.2*	49.2± 6.2**	49.3± 7.1**	50.3± 7.0**	51.5± 6.0
3000 ppm	42.5± 5.5**	43.6± 6.1**	44.1± 6.7**	45.2± 6.5**	45.7± 7.1**	47.2± 6.1**	47.0± 6.2**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 UNIT : g  
 REPORT TYPE : A1 104  
 SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)  
 ALL ANIMALS

PAGE : 5

Group Name	Administration week						
	70	74	78	82	86	90	94
control	54.5± 5.7	54.4± 6.6	54.9± 6.4	54.4± 7.1	53.8± 7.6	53.8± 7.9	53.0± 8.5
750 ppm	54.8± 4.0	54.3± 4.5	55.3± 5.1	55.8± 5.4	54.7± 5.7	55.1± 6.5	53.8± 7.5
1500 ppm	51.6± 6.3*	51.3± 7.0*	51.9± 6.9	52.3± 6.6	51.5± 6.7	49.7± 8.4*	49.5± 7.9
3000 ppm	47.3± 6.8**	46.9± 7.2**	46.4± 7.3**	47.4± 5.6**	45.0± 5.6**	43.5± 5.1**	42.1± 5.2**

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

Test of Dunnett

(HAN260)

BAIS 4



STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
UNIT : g  
REPORT TYPE : A1 104  
SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)  
ALL ANIMALS

PAGE : 6

Group Name	Administration week		
	98	102	104
control	51.7± 8.3	50.9± 8.9	50.9± 9.3
750 ppm	52.1± 7.8	50.7± 8.7	50.8± 8.5
1500 ppm	46.4± 8.7*	46.4± 8.7	45.9± 8.5
3000 ppm	40.2± 5.4**	37.5± 4.5**	37.1± 4.9**

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

Test of Dunnett

(HAN260)

BAIS 4

## APPENDIX C 2

### BODY WEIGHT CHANGES : FEMALE

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 UNIT : g  
 REPORT TYPE : A1 104  
 SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)  
 ALL ANIMALS

PAGE : 7

Group Name	Administration week						
	0	1	2	3	4	5	6
control	19.4± 0.9	19.9± 1.0	20.0± 0.9	20.2± 1.0	20.8± 1.0	21.3± 1.0	21.7± 1.1
1500 ppm	19.3± 0.9	19.5± 1.0	19.8± 1.0	20.3± 0.9	20.5± 1.1	21.3± 1.2	21.6± 1.2
3000 ppm	19.3± 0.9	19.4± 1.2	19.8± 1.3	20.3± 1.2	20.6± 1.3	21.2± 1.1	21.5± 1.1
6000 ppm	19.3± 0.9	15.6± 1.3**	18.7± 1.2**	19.4± 1.5*	20.2± 1.3	20.5± 1.1**	20.4± 1.2**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 UNIT : g  
 REPORT TYPE : AI 104  
 SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)  
 ALL ANIMALS

PAGE : 8

Group Name	Administration week						
	7	8	9	10	11	12	13
control	22.1± 1.2	22.9± 1.1	23.4± 1.3	23.7± 1.5	23.9± 1.7	23.9± 1.9	24.8± 2.0
1500 ppm	22.2± 1.6	22.5± 1.5	23.1± 1.3	23.4± 1.5	23.7± 1.9	23.5± 1.9	24.2± 2.0
3000 ppm	22.0± 1.3	22.6± 1.3	23.0± 1.5	23.4± 1.6	23.5± 1.6	23.7± 1.6	24.2± 1.7
6000 ppm	20.6± 1.2**	20.8± 1.3**	20.7± 1.3**	20.9± 1.3**	21.3± 1.4**	21.4± 1.5**	21.7± 1.4**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
UNIT : g  
REPORT TYPE : A1 104  
SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)  
ALL ANIMALS

PAGE : 9

Group Name	Administration week						
	14	18	22	26	30	34	38
control	25.0± 2.1	27.0± 2.8	29.0± 2.9	29.9± 3.5	31.5± 3.6	33.2± 3.8	34.7± 4.0
1500 ppm	24.9± 2.1	28.0± 2.4	27.9± 3.3	29.1± 3.5	30.6± 4.1	31.6± 4.2	32.8± 4.3
3000 ppm	24.6± 1.6	25.9± 2.1	27.1± 2.3*	28.1± 2.7	28.6± 2.9**	29.8± 3.3**	30.7± 3.9**
6000 ppm	21.9± 1.3**	22.6± 1.5**	23.4± 1.6**	24.0± 1.9**	24.7± 1.9**	25.1± 2.1**	25.4± 2.3**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 UNIT : g  
 REPORT TYPE : A1 104  
 SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)  
 ALL ANIMALS

PAGE : 10

Group Name	Administration week									
	42	46	50	54	58	62	66			
control	36.2± 4.1	37.3± 4.1	38.2± 4.2	38.5± 4.4	39.6± 4.7	40.4± 5.0	40.6± 5.8			
1500 ppm	34.1± 5.1	36.0± 4.8	36.7± 4.6	37.7± 4.7	37.6± 4.4*	38.7± 4.5	39.3± 5.1			
3000 ppm	31.7± 4.1**	32.4± 4.0**	33.0± 4.4**	33.8± 4.2**	34.1± 4.2**	34.3± 4.2**	34.7± 4.2**			
6000 ppm	26.0± 2.6**	26.5± 2.7**	26.2± 2.5**	26.8± 2.4**	27.0± 3.2**	27.3± 2.6**	27.2± 2.5**			

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 UNIT : g  
 REPORT TYPE : A1 104  
 SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)  
 ALL ANIMALS

PAGE : 11

Group Name	Administration week						
	70	74	78	82	86	90	94
control	40.7± 5.6	41.3± 5.7	42.2± 6.3	41.7± 6.2	41.0± 6.2	40.2± 6.6	40.4± 7.2
1500 ppm	39.0± 4.8	39.0± 4.7	39.2± 4.5	38.9± 5.0	38.4± 5.1	37.9± 5.1	37.8± 5.4
3000 ppm	35.2± 4.3**	35.4± 4.4**	35.2± 4.5**	34.6± 4.6**	33.7± 4.6**	32.6± 4.3**	32.6± 4.1**
6000 ppm	27.2± 2.3**	27.1± 2.3**	26.6± 2.6**	26.5± 2.4**	26.1± 2.5**	25.7± 3.3**	25.3± 2.6**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
UNIT : g  
REPORT TYPE : A1 104  
SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)  
ALL ANIMALS

PAGE : 12

Group Name	Administration week		
	98	102	104
control	40.7± 6.2	40.5± 6.6	40.3± 7.2
1500 ppm	37.3± 5.6	36.7± 4.8	36.9± 4.9
3000 ppm	31.4± 3.8**	31.3± 3.7**	30.8± 3.3**
6000 ppm	24.8± 2.8**	24.6± 2.4**	24.2± 2.6**

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

Test of Dunnett

(HAN260)

BAIS 4



## APPENDIX D 1

### FOOD CONSUMPTION CHANGES : MALE

STUDY NO. : 0422  
 ANIMAL : MOUSE Cri:BDF1  
 UNIT : g  
 REPORT TYPE : A1 104  
 SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)  
 ALL ANIMALS

PAGE : 1

Group Name	Administration week						
	1	2	3	4	5	6	7
control	4.1± 0.4	3.9± 0.6	3.8± 0.5	3.9± 0.5	4.0± 0.6	4.2± 0.5	4.2± 0.7
750 ppm	4.1± 0.4	3.7± 0.4	3.8± 0.6	3.8± 0.5	4.0± 0.5	4.0± 0.4	4.1± 0.5
1500 ppm	3.9± 0.5	3.7± 0.4	3.9± 0.5	3.8± 0.6	4.1± 0.6	3.9± 0.5	4.1± 0.6
3000 ppm	3.8± 0.7**	3.8± 0.4	3.8± 0.5	3.9± 0.5	3.9± 0.5	3.8± 0.4**	3.9± 0.4

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 UNIT : g  
 REPORT TYPE : A1 104  
 SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)  
 ALL ANIMALS

PAGE : 2

Group Name	Administration week 8	9	10	11	12	13	14
control	4.1± 0.6	4.2± 0.7	4.2± 0.5	4.1± 0.6	4.2± 0.6	4.1± 0.6	4.3± 0.6
750 ppm	4.0± 0.4	4.0± 0.4	4.1± 0.4	3.9± 0.5	4.0± 0.5	3.9± 0.5	4.0± 0.4
1500 ppm	4.0± 0.8	4.2± 0.6	4.2± 0.6	4.0± 0.5	4.1± 0.5	4.1± 0.5	4.1± 0.4
3000 ppm	3.8± 0.4	3.8± 0.4**	3.9± 0.4*	3.8± 0.5**	3.8± 0.4**	3.9± 0.3*	3.9± 0.4**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 UNIT : g  
 REPORT TYPE : A1 104  
 SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)  
 ALL ANIMALS

PAGE : 3

Group Name	Administration week						
	18	22	26	30	34	38	42
control	4.2± 0.6	4.1± 0.6	4.3± 0.6	4.2± 0.6	4.6± 0.6	4.7± 0.7	4.6± 0.5
750 ppm	3.9± 0.5	3.9± 0.6	4.1± 0.6*	4.0± 0.6*	4.2± 0.6**	4.3± 0.5**	4.3± 0.6
1500 ppm	4.0± 0.5	4.1± 0.6	4.1± 0.7*	4.1± 0.6	4.2± 0.8**	4.2± 0.7**	4.3± 0.7
3000 ppm	3.7± 0.4**	3.9± 0.4**	4.0± 0.4**	3.9± 0.5**	4.1± 0.4**	4.1± 0.5**	4.0± 0.7**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
UNIT : g  
REPORT TYPE : A1 104  
SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)  
ALL ANIMALS

PAGE : 4

Group Name	Administration week						
	46	50	54	58	62	66	70
control	4.4± 0.8	4.7± 0.7	4.7± 0.6	5.0± 0.7	4.9± 0.9	4.8± 1.1	5.0± 0.7
750 ppm	4.2± 0.4	4.5± 0.7*	4.5± 0.7	4.5± 0.9*	4.9± 0.7	4.9± 0.8	4.9± 0.8
1500 ppm	4.4± 0.6	4.5± 0.7*	4.4± 0.6	4.4± 0.8**	4.7± 0.7	4.9± 0.7	4.7± 1.0
3000 ppm	4.1± 0.5*	4.3± 0.4**	4.5± 0.5	4.4± 0.8**	4.6± 0.6**	4.7± 0.8	4.7± 0.8

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 UNIT : g  
 REPORT TYPE : A1 104  
 SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)  
 ALL ANIMALS

PAGE : 5

Group Name	Administration week						
	74	78	82	86	90	94	98
control	5.0± 1.1	5.1± 1.0	5.2± 1.1	5.1± 1.0	5.1± 1.1	5.2± 1.1	5.0± 1.3
750 ppm	5.0± 0.8	4.9± 0.9	5.0± 0.8	4.8± 0.9	4.7± 0.9	4.8± 1.0	4.8± 1.3
1500 ppm	5.0± 1.0	4.8± 0.8	5.0± 0.8	4.9± 1.0	4.6± 1.0	4.9± 1.1	4.7± 1.2
3000 ppm	4.6± 1.0	4.5± 1.1	4.6± 0.8*	4.6± 1.0	4.8± 1.0	4.9± 1.0	5.0± 0.9

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
UNIT : g  
REPORT TYPE : A1 104  
SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)  
ALL ANIMALS

PAGE : 6

Group Name	Administration week	
	102	104
control	5.1± 1.3	5.4± 1.0
750 ppm	4.8± 1.2	5.0± 0.8
1500 ppm	4.8± 1.0	5.2± 1.0
3000 ppm	4.7± 1.4	5.3± 1.0

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

Test of Dunnett

(HAN260)

BAIS 4

## APPENDIX D 2

### FOOD CONSUMPTION CHANGES : FEMALE



STUDY NO. : 0422  
 ANIMAL : MOUSE Crl:BDF1  
 UNIT : g  
 REPORT TYPE : A1 104  
 SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)  
 ALL ANIMALS

PAGE : 7

Group Name	Administration week						
	1	2	3	4	5	6	7
control	3.6± 0.3	3.4± 0.3	3.4± 0.4	3.5± 0.3	3.5± 0.3	3.5± 0.4	3.6± 0.4
1500 ppm	3.5± 0.4	3.3± 0.3	3.4± 0.4	3.4± 0.4	3.6± 0.4	3.5± 0.3	3.6± 0.3
3000 ppm	3.5± 0.7	3.5± 0.7	3.3± 0.5	3.2± 0.4**	3.4± 0.4	3.3± 0.4	3.5± 0.4
6000 ppm	2.7± 0.9**	4.5± 1.1**	3.3± 0.9*	3.4± 0.9**	3.2± 0.8**	3.0± 0.7**	3.4± 0.9**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 UNIT : g  
 REPORT TYPE : A1 104  
 SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)  
 ALL ANIMALS

PAGE : 8

Group Name	Administration week						
	8	9	10	11	12	13	14
control	3.5± 0.3	3.6± 0.3	3.6± 0.3	3.5± 0.5	3.7± 0.4	3.6± 0.3	3.6± 0.4
1500 ppm	3.6± 0.4	3.6± 0.4	3.7± 0.4	3.6± 0.5	3.5± 0.5	3.6± 0.6	3.7± 0.4
3000 ppm	3.4± 0.4	3.5± 0.4	3.5± 0.4	3.3± 0.3	3.4± 0.4**	3.4± 0.5*	3.5± 0.3
6000 ppm	3.2± 1.3**	3.3± 1.2**	3.1± 0.9**	3.1± 0.8**	3.1± 0.7**	3.2± 0.7**	3.1± 0.6**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 UNIT : g  
 REPORT TYPE : A1 104  
 SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)  
 ALL ANIMALS

PAGE : 9

Group Name	Administration week						
	18	22	26	30	34	38	42
control	3.6± 0.5	4.0± 0.5	3.9± 0.5	3.9± 0.6	4.2± 0.6	4.1± 0.6	4.0± 0.6
1500 ppm	3.5± 0.4	3.9± 0.6	4.0± 0.7	4.0± 0.7	4.1± 0.7	3.9± 0.6	3.9± 0.5
3000 ppm	3.5± 0.4	3.6± 0.5**	3.7± 0.4*	3.6± 0.5*	3.9± 0.6*	3.9± 0.6	3.8± 0.6
6000 ppm	3.2± 0.6**	3.2± 0.5**	3.4± 0.5**	3.4± 0.6**	3.7± 0.7**	3.5± 0.6**	3.8± 0.8**

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
UNIT : g  
REPORT TYPE : A1 104  
SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)  
ALL ANIMALS

PAGE : 10

Group Name	Administration week						
	46	50	54	58	62	66	70
control	3.9± 0.6	4.2± 0.5	4.2± 0.6	4.1± 0.6	4.1± 0.8	4.5± 0.7	4.4± 0.8
1500 ppm	4.2± 0.7*	4.2± 0.6	4.2± 0.7	4.0± 0.8	4.0± 0.8	4.2± 0.7	4.3± 0.9
3000 ppm	3.9± 0.5	3.9± 0.7**	4.0± 0.5	4.1± 0.6	3.8± 0.9	4.1± 0.8	4.2± 0.9
6000 ppm	3.7± 0.8	3.8± 0.7**	3.8± 0.9	4.0± 1.0	4.2± 1.0	4.3± 0.9	4.4± 1.1

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

Test of Dunnett

(HAN260)

BAIS 4

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 UNIT : g  
 REPORT TYPE : A1 104  
 SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)  
 ALL ANIMALS

PAGE : 11

Group Name	Administration week						
	74	78	82	86	90	94	98
control	4.3± 0.7	4.6± 0.7	4.4± 1.0	4.2± 1.1	4.3± 1.1	4.4± 1.1	4.7± 0.9
1500 ppm	4.2± 0.8	4.4± 0.9	4.1± 0.9	4.2± 0.9	4.2± 0.8	4.3± 1.0	4.2± 0.9
3000 ppm	4.2± 0.9	4.5± 0.9	4.2± 0.8	4.3± 0.9	3.9± 1.0	4.6± 1.0	4.6± 1.2
6000 ppm	4.6± 1.0	4.5± 1.3	4.4± 1.1	4.8± 1.2	4.5± 1.2	4.8± 0.9	5.4± 0.8

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

Test of Dunnett

(HAN260)

BATS 4

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
UNIT : g  
REPORT TYPE : A1 104  
SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)  
ALL ANIMALS

PAGE : 12

Group Name	Administration week	
	102	104
control	4.7± 1.0	4.6± 1.2
1500 ppm	4.2± 1.1	4.8± 1.2
3000 ppm	5.4± 1.3	5.3± 1.1
6000 ppm	5.4± 1.0	6.2± 1.5**

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

Test of Dunnett

(HAN260)

BAIS 4

## APPENDIX E 1

### CHEMICAL INTAKE CHANGES : MALE

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
UNIT : g/kg/day  
REPORT TYPE : A1 104  
SEX : MALE

CHEMICAL INTAKE CHANGES (SUMMARY)  
ALL ANIMALS

PAGE : 1

Group Name	Administration (weeks)											
	1	2	3	4	5	6	7					
control	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000		
750 ppm	0.123± 0.011	0.111± 0.011	0.112± 0.015	0.107± 0.012	0.108± 0.012	0.106± 0.010	0.107± 0.012					
1500 ppm	0.243± 0.028	0.226± 0.024	0.226± 0.028	0.216± 0.030	0.225± 0.044	0.212± 0.028	0.211± 0.029					
3000 ppm	0.476± 0.086	0.467± 0.052	0.456± 0.054	0.449± 0.052	0.439± 0.055	0.422± 0.042	0.429± 0.045					

(HAN300)

BAIS 4



STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 UNIT : g/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	
control	0.000± 0.000		0.000± 0.000		0.000± 0.000		0.000± 0.000		0.000± 0.000		0.000± 0.000	
750 ppm	0.100± 0.009		0.097± 0.009		0.098± 0.009		0.091± 0.010		0.091± 0.010		0.088± 0.010	
1500 ppm	0.207± 0.062		0.211± 0.048		0.205± 0.040		0.191± 0.023		0.191± 0.025		0.186± 0.024	
3000 ppm	0.407± 0.042		0.398± 0.047		0.403± 0.039		0.378± 0.049		0.380± 0.038		0.375± 0.034	

(HAN300)

BAIS 4

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
UNIT : g/kg/day  
REPORT TYPE : A1 104  
SEX : MALE

CHEMICAL INTAKE CHANGES (SUMMARY)  
ALL ANIMALS

PAGE : 3

Group Name	Administration (weeks)											
	18		22		26		30		34		38	
control	0.000±	0.000	0.000±	0.000	0.000±	0.000	0.000±	0.000	0.000±	0.000	0.000±	0.000
750 ppm	0.079±	0.011	0.074±	0.009	0.073±	0.009	0.067±	0.010	0.069±	0.009	0.068±	0.008
1500 ppm	0.166±	0.022	0.157±	0.020	0.150±	0.021	0.145±	0.020	0.142±	0.024	0.141±	0.022
3000 ppm	0.332±	0.037	0.321±	0.030	0.316±	0.034	0.298±	0.028	0.306±	0.038	0.296±	0.033

(HAN300)

BAIS 4

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 UNIT : g/kg/day  
 REPORT TYPE : AI 104  
 SEX : MALE

CHEMICAL INTAKE CHANGES (SUMMARY)  
 ALL ANIMALS

PAGE : 4

Group Name	Administration (weeks)											
	46		50		54		58		62		66	
control	0.000± 0.000		0.000± 0.000		0.000± 0.000		0.000± 0.000		0.000± 0.000		0.000± 0.000	
750 ppm	0.064± 0.006		0.067± 0.009		0.066± 0.010		0.066± 0.011		0.068± 0.008		0.069± 0.011	
1500 ppm	0.139± 0.019		0.140± 0.020		0.137± 0.022		0.136± 0.026		0.144± 0.035		0.144± 0.027	
3000 ppm	0.287± 0.033		0.297± 0.042		0.303± 0.049		0.285± 0.045		0.294± 0.046		0.303± 0.053	

(HAN300)

BAIS 4

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 UNIT : g/kg/day  
 REPORT TYPE : AI 104  
 SEX : MALE

CHEMICAL INTAKE CHANGES (SUMMARY)  
 ALL ANIMALS

PAGE : 5

Group Name	Administration (weeks)									
	74		78		82		86		90	
control	0.000± 0.000		0.000± 0.000		0.000± 0.000		0.000± 0.000		0.000± 0.000	
750 ppm	0.069± 0.011		0.067± 0.013		0.068± 0.014		0.066± 0.012		0.065± 0.012	
1500 ppm	0.147± 0.029		0.141± 0.028		0.146± 0.030		0.144± 0.031		0.144± 0.033	
3000 ppm	0.291± 0.050		0.293± 0.070		0.295± 0.057		0.311± 0.075		0.338± 0.087	

(HAN300)

BAIS 4

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
UNIT : g/kg/day  
REPORT TYPE : AI 104  
SEX : MALE

CHEMICAL INTAKE CHANGES (SUMMARY)  
ALL ANIMALS

PAGE : 6

Group Name	Administration (weeks)			
	102		104	
control	0.000±	0.000	0.000±	0.000
750 ppm	0.071±	0.016	0.076±	0.015
1500 ppm	0.162±	0.040	0.174±	0.043
3000 ppm	0.380±	0.122	0.433±	0.092

(HAN300)

BAIS 4

## APPENDIX E 2

### CHEMICAL INTAKE CHANGES : FEMALE

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 UNIT : g/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	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000	0.000± 0.000		
1500 ppm	0.266± 0.028	0.253± 0.023	0.252± 0.027	0.250± 0.024	0.254± 0.025	0.244± 0.019	0.245± 0.021			
3000 ppm	0.541± 0.089	0.536± 0.096	0.486± 0.076	0.461± 0.057	0.484± 0.057	0.467± 0.055	0.480± 0.053			
6000 ppm	1.052± 0.347	1.430± 0.360	1.022± 0.260	1.004± 0.281	0.931± 0.247	0.888± 0.210	0.974± 0.248			

(HAN300)

BAIS 4

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
UNIT : g/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	
control	0.000± 0.000		0.000± 0.000		0.000± 0.000		0.000± 0.000		0.000± 0.000		0.000± 0.000	
1500 ppm	0.240± 0.023		0.235± 0.023		0.236± 0.023		0.228± 0.020		0.224± 0.029		0.224± 0.029	
3000 ppm	0.454± 0.050		0.456± 0.054		0.448± 0.054		0.425± 0.043		0.430± 0.046		0.424± 0.052	
6000 ppm	0.939± 0.408		0.955± 0.372		0.903± 0.280		0.867± 0.234		0.872± 0.198		0.874± 0.193	

(HAN300)

BAIS 4



STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 UNIT : g/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	0.000±	0.000	0.000±	0.000	0.000±	0.000	0.000±	0.000	0.000±	0.000	0.000±	0.000	0.000±	0.000
1500 ppm	0.203±	0.028	0.208±	0.030	0.207±	0.032	0.197±	0.025	0.194±	0.032	0.179±	0.025	0.175±	0.026
3000 ppm	0.401±	0.042	0.396±	0.060	0.393±	0.054	0.382±	0.059	0.395±	0.072	0.380±	0.056	0.368±	0.065
6000 ppm	0.847±	0.154	0.829±	0.124	0.841±	0.105	0.833±	0.155	0.879±	0.159	0.835±	0.151	0.876±	0.197

(HAN300)

BAIS 4

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 UNIT : g/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	0.000±	0.000	0.000±	0.000	0.000±	0.000	0.000±	0.000	0.000±	0.000	0.000±	0.000	0.000±	0.000
1500 ppm	0.179±	0.040	0.174±	0.026	0.171±	0.027	0.159±	0.028	0.155±	0.026	0.159±	0.021	0.165±	0.029
3000 ppm	0.365±	0.056	0.355±	0.056	0.361±	0.055	0.364±	0.061	0.336±	0.072	0.362±	0.076	0.364±	0.073
6000 ppm	0.838±	0.176	0.883±	0.169	0.854±	0.182	0.877±	0.191	0.916±	0.200	0.949±	0.188	0.984±	0.224

(HAN300)

BAIS 4

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
UNIT : g/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	
control	0.000±	0.000	0.000±	0.000	0.000±	0.000	0.000±	0.000	0.000±	0.000	0.000±	0.000
1500 ppm	0.164±	0.031	0.169±	0.031	0.160±	0.036	0.164±	0.032	0.167±	0.034	0.175±	0.046
3000 ppm	0.362±	0.070	0.389±	0.085	0.364±	0.071	0.386±	0.066	0.364±	0.088	0.424±	0.089
6000 ppm	1.020±	0.218	1.036±	0.326	1.012±	0.301	1.130±	0.333	1.072±	0.320	1.119±	0.203

(HAN300)

BAIS 4

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
UNIT : g/kg/day  
REPORT TYPE : A1 104  
SEX : FEMALE

CHEMICAL INTAKE CHANGES (SUMMARY)  
ALL ANIMALS

PAGE : 12

Group Name	Administration (weeks)	
	102	104
control	0.000± 0.000	0.000± 0.000
1500 ppm	0.174± 0.058	0.199± 0.062
3000 ppm	0.524± 0.133	0.534± 0.118
6000 ppm	1.276± 0.202	1.598± 0.420

(HAN300)

BAIS 4

## APPENDIX F 1

### HEMATOLOGY : MALE

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 MEASURE. TIME : 1  
 SEX : MALE

HEMATOLOGY (SUMMARY)  
 ALL ANIMALS (105W)

REPORT TYPE : A1

PAGE : 1

Group Name	NO. of Animals	RED BLOOD CELL 10 <sup>6</sup> /μl		HEMOGLOBIN g/dl		HEMATOCRIT %		MCV fl		MCH pg		MCHC g/dl		PLATELET 10 <sup>9</sup> /μl	
control	33	9.68±	0.87	13.4±	1.2	40.9±	3.2	42.4±	1.6	13.8±	0.5	32.7±	0.7	1911±	299
750 ppm	36	9.69±	1.19	13.2±	1.7	41.0±	4.8	42.5±	3.0	13.6±	0.9	32.1±	1.0*	1707±	379
1500 ppm	29	9.28±	2.07	12.4±	2.8	39.1±	8.0	42.3±	3.1	13.4±	1.0	31.6±	1.2**	1702±	473
3000 ppm	20	8.22±	1.92*	11.3±	2.5*	36.1±	6.5	44.7±	4.1*	13.9±	0.8	31.1±	2.0**	1878±	368

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

Test of Dunnett

(HCL070)

BAIS 4

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 MEASURE. TIME : 1  
 SEX : MALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)  
 ALL ANIMALS (105W)

PAGE : 2

Group Name	NO. of Animals	WBC 10 <sup>3</sup> /μl		Differential N-BAND		WBC (%) N-SEG		EOSINO		BASO		MONO		LYMPHO		OTHER	
control	33	2.30±	0.85	1±	1	26±	9	2±	1	0±	0	4±	2	67±	9	0±	1
750 ppm	36	2.47±	1.00	1±	1	25±	10	2±	1	0±	0	4±	2	67±	10	1±	2
1500 ppm	29	2.54±	1.26	2±	4*	28±	10	2±	2	0±	0	4±	2	63±	14	1±	2
3000 ppm	20	2.03±	1.16	3±	5*	32±	14	1±	1	0±	0	4±	2	58±	15	1±	3

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

\*\* :  $P \leq 0.01$

Test of Dunnett

(HCL070)

BAIS 4

## APPENDIX F 2

### HEMATOLOGY : FEMALE



STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 MEASURE. TIME : 1  
 SEX : FEMALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)  
 ALL ANIMALS (105W)

PAGE : 3

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	27	9.44±	1.67	13.2±	2.5	40.8±	6.9	43.5±	3.6	14.0±	0.6	32.3±	1.8	1129±	314
1500 ppm	26	9.09±	2.18	12.5±	3.1	39.0±	8.2	43.7±	4.6	13.7±	0.7	31.6±	2.4	1079±	401
3000 ppm	17	8.78±	2.23	11.8±	2.5	35.4±	8.0	44.8±	7.9	13.7±	1.6*	30.9±	1.8**	1136±	523
6000 ppm	18	10.17±	2.01	13.5±	2.5	42.2±	7.3	41.7±	1.5**	13.3±	0.3**	31.9±	1.1	1196±	401

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

Test of Dunnett

(HCL070)

BAIS 4

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
MEASURE TIME : 1  
SEX : FEMALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)  
ALL ANIMALS (105#)

PAGE : 4

Group Name	NO. of Animals	WBC 10 <sup>3</sup> /μl		Differential N-BAND		WBC (%) N-SEG		EOSINO		BASO		MONO		LYMPHO		OTHER	
control	27	1.86±	1.40	2±	3	23±	10	1±	1	0±	0	4±	2	68±	11	1±	3
1500 ppm	26	6.41±	15.39	2±	1	20±	10	1±	1	0±	0	4±	2	65±	20	8±	24
3000 ppm	17	1.61±	0.85	2±	4	28±	11	1±	1	0±	0	4±	2	63±	15	1±	2
6000 ppm	18	1.70±	1.16	2±	2	35±	15**	1±	1	0±	0	3±	2	58±	16	0±	1

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

\*\* :  $P \leq 0.01$

Test of Dunnett

(HCL070)

BAIS 4

## APPENDIX G 1

### BIOCHEMISTRY : MALE

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 MEASURE. TIME : 1  
 SEX : MALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)  
 ALL ANIMALS (105#)

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	34	5.3±	0.7	2.8±	0.4	1.2±	0.2	0.11±	0.02	200±	26	119±	59	40±	18
750 ppm	36	5.2±	0.8	2.8±	0.4	1.2±	0.2	0.13±	0.06	187±	54	133±	44*	43±	25
1500 ppm	29	5.4±	0.9	3.0±	0.5	1.2±	0.3	0.14±	0.05*	183±	47	149±	75*	38±	26
3000 ppm	21	5.6±	0.6	3.1±	0.4*	1.3±	0.2	0.24±	0.17**	166±	45**	179±	78**	26±	14*

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

Test of Dunnett

(HCL074)

BAIS 4

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 MEASURE, TIME : 1  
 SEX : MALE

BIOCHEMISTRY (SUMMARY)  
 ALL ANIMALS (105W)

REPORT TYPE : A1

PAGE : 2

Group Name	NO. of Animals	PHOSPHOLIPID mg/dl		GOT IU/l		GPT IU/l		LDH IU/l		ALP IU/l		G-GTP IU/l		CPK IU/l	
control	34	213±	78	60±	20	47±	51	258±	98	143±	154	2±	1	48±	28
750 ppm	36	231±	67	134±	179*	100±	117*	851±	2586	179±	142*	2±	1	70±	91
1500 ppm	29	267±	120*	470±	1254**	545±	1593**	1932±	3818**	468±	727**	3±	6	87±	149**
3000 ppm	21	342±	148**	568±	789**	575±	856**	6313±	8684**	952±	1025**	5±	5**	95±	99**

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

\*\* :  $P \leq 0.01$

Test of Dunnett

(HCL074)

BAIS 4

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 MEASURE. TIME : 1  
 SEX : MALE

BIOCHEMISTRY (SUMMARY)  
 ALL ANIMALS (105W)

REPORT TYPE : A1

PAGE : 3

Group Name	No. of Animals	UREA NITROGEN mg/dl		SODIUM mEq/l		POTASSIUM mEq/l		CHLORIDE mEq/l		CALCIUM mg/dl		INORGANIC PHOSPHORUS mg/dl	
control	34	22.1±	3.8	152±	1	4.1±	0.3	119±	2	9.0±	0.5	6.5±	0.7
750 ppm	36	25.3±	18.4	153±	2	4.1±	0.4	120±	4	8.9±	0.5	6.4±	0.9
1500 ppm	29	25.3±	19.4	153±	2	4.3±	0.7	119±	3	9.1±	0.8	6.8±	1.9
3000 ppm	21	25.8±	9.8	154±	2**	4.2±	0.5	120±	3	9.3±	0.6	6.7+	1.1

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

Test of Dunnett

(HCL074)

BAIS 4

## APPENDIX G 2

### BIOCHEMISTRY : FEMALE

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 MEASURE. TIME : 1  
 SEX : FEMALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)  
 ALL ANIMALS (105W)

PAGE : 4

Group Name	NO. of Animals	TOTAL PROTEIN g/dl		ALBUMIN g/dl		A/G RATIO		T-BILIRUBIN mg/dl		GLUCOSE mg/dl		T-CHOLESTEROL mg/dl		TRIGLYCERIDE mg/dl	
control	27	4.8±	0.8	2.7±	0.3	1.3±	0.3	0.13±	0.10	163±	35	74±	16	32±	15
1500 ppm	27	4.9±	0.6	2.9±	0.4	1.5±	0.3*	0.17±	0.11	158±	38	105±	29*	37±	23
3000 ppm	17	5.1±	0.9*	3.1±	0.5**	1.6±	0.2**	0.19±	0.11	152±	31	154±	70**	24±	11
6000 ppm	18	5.8±	0.4**	3.5±	0.2**	1.5±	0.2	0.24±	0.09**	132±	33*	269±	89**	20±	10*

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

Test of Dunnett

(HCL074)

BAIS 4



STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 MEASURE. TIME : 1  
 SEX : FEMALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)  
 ALL ANIMALS (105W)

PAGE : 5

Group Name	NO. of Animals	PHOSPHOLIPID mg/dl		GOT IU/l		GPT IU/l		LDH IU/l		ALP IU/l		G-GTP IU/l		CPK IU/l	
control	27	138±	26	124±	208	59±	105	1208±	4813	179±	43	1±	1	150±	345
1500 ppm	27	201±	57**	203±	294	174±	352	1647±	4070*	500±	629**	3±	5	157±	173*
3000 ppm	17	299±	137**	352±	384*	356±	531**	3378±	5731**	972±	1441**	11±	12**	186±	155**
6000 ppm	18	466±	152**	342±	284*	696±	659**	2268±	1957**	1592±	1056**	58±	59**	139±	76**

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

Test of Dunnett

(HCL074)

BAIS 4

STUDY NO. : 0422  
 ANIMAL : MOUSE Crl:BDF1  
 MEASURE. TIME : 1  
 SEX : FEMALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)  
 ALL ANIMALS (105W)

PAGE : 6

Group Name	NO. of Animals	UREA NITROGEN mg/dl		SODIUM mEq/l		POTASSIUM mEq/l		CHLORIDE mEq/l		CALCIUM mg/dl		INORGANIC PHOSPHORUS mg/dl	
control	27	18.7±	13.5	151±	2	4.2±	0.6	120±	2	8.8±	0.4	6.5±	1.8
1500 ppm	27	24.6±	22.1	153±	4	4.1±	0.5	121±	4	9.0±	0.5	7.1±	2.1
3000 ppm	17	23.8±	14.0**	152±	2	4.5±	0.9	120±	3	9.2±	0.5*	6.8±	1.6
6000 ppm	18	23.7±	5.4**	153±	2	4.3±	0.5	119±	3	9.9±	0.6**	6.9±	0.9
Significant difference : * : P ≤ 0.05      ** : P ≤ 0.01      Test of Dunnett													

(HCL074)

BAIS 4

## APPENDIX H 1

### URINALYSIS : MALE

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
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	Occult blood					CHI
		5.0	6.0	6.5	7.0	7.5	8.0	8.5	—		±	+	2+	3+	4+	—		±	+	2+	3+	4+	—		±	+	2+	3+	4+	—		±	+	2+	3+		
control	37	0	5	14	10	8	0	0		0	10	19	7	1	0		37	0	0	0	0	0		26	7	3	1	0	0		34	0	0	0	3		
750 ppm	38	0	3	11	14	7	1	2		1	12	22	3	0	0		38	0	0	0	0	0		23	11	4	0	0	0		36	0	1	1	0		
1500 ppm	30	0	5	2	6	10	7	0	**	1	18	7	4	0	0	*	30	0	0	0	0	0		17	9	4	0	0	0		28	0	0	1	1		
3000 ppm	23	0	2	3	7	7	3	1		1	17	5	0	0	0	**	23	0	0	0	0	0		13	8	2	0	0	0		22	0	0	0	1		

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

Test of CHI SQUARE

(HCL101)

BAIS 4

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
MEASURE. TIME : 1  
SEX : MALE

URINALYSIS

REPORT TYPE : A1

PAGE : 2

Group Name	NO. of Animals	Urobilinogen ± + 2+ 3+ 4+ CHI
control	37	37 0 0 0 0
750 ppm	38	37 1 0 0 0
1500 ppm	30	29 1 0 0 0
3000 ppm	23	23 0 0 0 0

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

Test of CHI SQUARE

(HCL101)

BAIS 4

## APPENDIX H 2

### URINALYSIS : FEMALE

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 MEASURE. TIME : 1  
 SEX : FEMALE

URINALYSIS

REPORT TYPE : A1

PAGE : 3

Group Name	NO. of Animals	pH_____							CHI	Protein_____						CHI	Glucose_____						CHI	Ketone body						CHI	Occult blood					CHI
		5.0	6.0	6.5	7.0	7.5	8.0	8.5		-	±	+	2+	3+	4+		-	±	+	2+	3+	4+		-	±	+	2+	3+	4+		-	±	+	2+	3+	
control	29	0	2	7	6	11	3	0		0	10	15	4	0	0		29	0	0	0	0	0		7	19	2	1	0	0		23	0	1	1	4	
1500 ppm	29	0	3	6	5	8	6	1		0	16	7	5	1	0		29	0	0	0	0	0		3	10	10	6	0	0	**	26	0	0	0	3	
3000 ppm	18	0	1	4	3	5	5	0		2	11	5	0	0	0	*	18	0	0	0	0	0		2	7	6	3	0	0	*	17	0	1	0	0	
6000 ppm	19	0	2	4	3	4	6	0		7	11	1	0	0	0	**	19	0	0	0	0	0		3	8	6	2	0	0		18	0	0	0	1	

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

Test of CHI SQUARE

(HCL101)

BAIS 4

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
MEASURE. TIME : 1  
SEX : FEMALE

URINALYSIS

REPORT TYPE : A1

PAGE : 4

Group Name	NO. of Animals	Urobilinogen ± + 2+ 3+ 4+ CHI
control	29	29 0 0 0 0
1500 ppm	29	28 1 0 0 0
3000 ppm	18	18 0 0 0 0
6000 ppm	19	19 0 0 0 0

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

Test of CHI SQUARE

(HCL101)

BAIS 4



## APPENDIX I 1

GROSS FINDINGS : MALE

ALL ANIMALS

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : MALE

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

PAGE : 1

Organ	Findings	Group Name NO. of Animals	control		750 ppm		1500 ppm		3000 ppm	
			50	(%)	50	(%)	50	(%)	50	(%)
skin/app	nodule		2	( 4)	1	( 2)	1	( 2)	0	( 0)
	ulcer		0	( 0)	1	( 2)	0	( 0)	0	( 0)
	thick		0	( 0)	0	( 0)	0	( 0)	1	( 2)
	scab		0	( 0)	0	( 0)	0	( 0)	1	( 2)
subcutis	edema		1	( 2)	2	( 4)	0	( 0)	0	( 0)
	nodule		0	( 0)	0	( 0)	1	( 2)	0	( 0)
	mass		6	( 12)	2	( 4)	2	( 4)	2	( 4)
lung	red		0	( 0)	0	( 0)	1	( 2)	0	( 0)
	white zone		0	( 0)	0	( 0)	0	( 0)	1	( 2)
	red zone		1	( 2)	0	( 0)	0	( 0)	0	( 0)
	edema		0	( 0)	0	( 0)	1	( 2)	1	( 2)
	nodule		9	( 18)	11	( 22)	9	( 18)	7	( 14)
lymph node	enlarged		0	( 0)	4	( 8)	2	( 4)	3	( 6)
	nodule		1	( 2)	0	( 0)	0	( 0)	0	( 0)
spleen	enlarged		1	( 2)	0	( 0)	1	( 2)	3	( 6)
	red zone		1	( 2)	0	( 0)	0	( 0)	0	( 0)
	black zone		1	( 2)	0	( 0)	1	( 2)	0	( 0)
	nodule		3	( 6)	1	( 2)	1	( 2)	2	( 4)
heart	white zone		0	( 0)	0	( 0)	1	( 2)	0	( 0)
salivary gl	nodule		0	( 0)	0	( 0)	1	( 2)	0	( 0)
forestomach	nodule		0	( 0)	1	( 2)	0	( 0)	1	( 2)
gl stomach	nodule		0	( 0)	0	( 0)	1	( 2)	0	( 0)

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : MALE

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

PAGE : 2

Organ	Findings	Group Name NO. of Animals	control		750 ppm		1500 ppm		3000 ppm	
			50	(%)	50	(%)	50	(%)	50	(%)
small intes	nodule		0	( 0)	1	( 2)	0	( 0)	0	( 0)
large intes	nodule		0	( 0)	1	( 2)	0	( 0)	0	( 0)
liver	enlarged		0	( 0)	0	( 0)	2	( 4)	1	( 2)
	pale		0	( 0)	1	( 2)	0	( 0)	0	( 0)
	white zone		1	( 2)	3	( 6)	2	( 4)	1	( 2)
	red zone		3	( 6)	1	( 2)	1	( 2)	0	( 0)
	brown zone		0	( 0)	1	( 2)	0	( 0)	2	( 4)
	nodule		20	( 40)	37	( 74)	43	( 86)	44	( 88)
	rough		1	( 2)	0	( 0)	0	( 0)	0	( 0)
	nodular		0	( 0)	0	( 0)	1	( 2)	0	( 0)
	adhesion		0	( 0)	1	( 2)	1	( 2)	0	( 0)
	black		1	( 2)	0	( 0)	0	( 0)	0	( 0)
gall bladd	black		1	( 2)	0	( 0)	0	( 0)	0	( 0)
pancreas	nodule		0	( 0)	1	( 2)	1	( 2)	1	( 2)
kidney	enlarged		1	( 2)	0	( 0)	0	( 0)	0	( 0)
	atrophic		0	( 0)	1	( 2)	0	( 0)	0	( 0)
	pale		1	( 2)	0	( 0)	0	( 0)	0	( 0)
	white zone		0	( 0)	0	( 0)	0	( 0)	1	( 2)
	red zone		0	( 0)	0	( 0)	1	( 2)	0	( 0)
	nodule		1	( 2)	1	( 2)	0	( 0)	1	( 2)
	mass		0	( 0)	1	( 2)	0	( 0)	0	( 0)
	hydronephrosis		6	( 12)	2	( 4)	2	( 4)	2	( 4)
urin bladd	nodule		1	( 2)	0	( 0)	1	( 2)	0	( 0)

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 3

Organ	Findings	Group Name NO. of Animals	control		750 ppm		1500 ppm		3000 ppm	
			50	(%)	50	(%)	50	(%)	50	(%)
urin bladd	urine:marked retention		6	( 12)	1	( 2)	3	( 6)	1	( 2)
	urine:red		1	( 2)	0	( 0)	0	( 0)	0	( 0)
pituitary	nodule		0	( 0)	1	( 2)	0	( 0)	0	( 0)
testis	nodule		0	( 0)	0	( 0)	0	( 0)	1	( 2)
	cyst		1	( 2)	0	( 0)	0	( 0)	0	( 0)
epididymis	nodule		1	( 2)	0	( 0)	0	( 0)	2	( 4)
semin ves	enlarged		4	( 8)	1	( 2)	1	( 2)	0	( 0)
	brown		1	( 2)	0	( 0)	0	( 0)	0	( 0)
	brown zone		1	( 2)	0	( 0)	0	( 0)	0	( 0)
prostate	enlarged		0	( 0)	0	( 0)	0	( 0)	1	( 2)
prep/cli gl	enlarged		0	( 0)	0	( 0)	1	( 2)	0	( 0)
	nodule		0	( 0)	0	( 0)	2	( 4)	0	( 0)
brain	adhesion		0	( 0)	1	( 2)	0	( 0)	0	( 0)
periph nerv	nodule		0	( 0)	0	( 0)	1	( 2)	0	( 0)
Harder gl	enlarged		0	( 0)	0	( 0)	0	( 0)	1	( 2)
	nodule		1	( 2)	0	( 0)	1	( 2)	0	( 0)
bone	nodule		0	( 0)	1	( 2)	0	( 0)	0	( 0)
mediastinum	mass		0	( 0)	1	( 2)	0	( 0)	0	( 0)
peritoneum	nodule		1	( 2)	0	( 0)	4	( 8)	5	( 10)
retroperit	mass		1	( 2)	0	( 0)	0	( 0)	0	( 0)
abdominal c	hemorrhage		1	( 2)	0	( 0)	2	( 4)	8	( 16)
	ascites		1	( 2)	2	( 4)	1	( 2)	1	( 2)

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : MALE

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

PAGE : 4

Organ	Findings	Group Name NO. of Animals	control		750 ppm		1500 ppm		3000 ppm	
			50	(%)	50	(%)	50	(%)	50	(%)
adipose	nodule		0	( 0)	1	( 2)	0	( 0)	0	( 0)
thoracic ca	hemorrhage		1	( 2)	2	( 4)	1	( 2)	1	( 2)
	pleural fluid		1	( 2)	3	( 6)	0	( 0)	0	( 0)
other	tail:nodule		1	( 2)	0	( 0)	0	( 0)	0	( 0)
	nose:nodule		0	( 0)	0	( 0)	1	( 2)	0	( 0)
whole body	anemic		0	( 0)	1	( 2)	0	( 0)	0	( 0)

(HPT080)

BAIS 4

## APPENDIX I 2

### GROSS FINDINGS : MALE DEAD AND MORIBUND ANIMALS

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : MALE

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

PAGE : 1

Organ	Findings	Group Name NO. of Animals	control		750 ppm		1500 ppm		3000 ppm	
			15	(%)	12	(%)	21	(%)	27	(%)
skin/app	nodule		0	( 0)	0	( 0)	1	( 5)	0	( 0)
	ulcer		0	( 0)	1	( 8)	0	( 0)	0	( 0)
	thick		0	( 0)	0	( 0)	0	( 0)	1	( 4)
	scab		0	( 0)	0	( 0)	0	( 0)	1	( 4)
subcutis	edema		1	( 7)	2	( 17)	0	( 0)	0	( 0)
	mass		3	( 20)	1	( 8)	1	( 5)	2	( 7)
lung	red		0	( 0)	0	( 0)	1	( 5)	0	( 0)
	white zone		0	( 0)	0	( 0)	0	( 0)	1	( 4)
	red zone		1	( 7)	0	( 0)	0	( 0)	0	( 0)
	edema		0	( 0)	0	( 0)	1	( 5)	1	( 4)
	nodule		2	( 13)	3	( 25)	2	( 10)	4	( 15)
lymph node	enlarged		0	( 0)	2	( 17)	0	( 0)	1	( 4)
	nodule		1	( 7)	0	( 0)	0	( 0)	0	( 0)
spleen	enlarged		1	( 7)	0	( 0)	1	( 5)	3	( 11)
	red zone		1	( 7)	0	( 0)	0	( 0)	0	( 0)
	black zone		1	( 7)	0	( 0)	0	( 0)	0	( 0)
	nodule		1	( 7)	0	( 0)	1	( 5)	1	( 4)
heart	white zone		0	( 0)	0	( 0)	1	( 5)	0	( 0)
forestomach	nodule		0	( 0)	1	( 8)	0	( 0)	1	( 4)
liver	enlarged		0	( 0)	0	( 0)	2	( 10)	1	( 4)
	pale		0	( 0)	1	( 8)	0	( 0)	0	( 0)
	white zone		1	( 7)	3	( 25)	0	( 0)	1	( 4)

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 2

Organ	Findings	Group Name NO. of Animals	control		750 ppm		1500 ppm		3000 ppm	
			15	(%)	12	(%)	21	(%)	27	(%)
liver	red zone		0	( 0)	0	( 0)	1	( 5)	0	( 0)
	brown zone		0	( 0)	1	( 8)	0	( 0)	2	( 7)
	nodule		2	( 13)	6	( 50)	16	( 76)	21	( 78)
	rough		1	( 7)	0	( 0)	0	( 0)	0	( 0)
	nodular		0	( 0)	0	( 0)	1	( 5)	0	( 0)
	adhesion		0	( 0)	1	( 8)	1	( 5)	0	( 0)
gall bladd	black		1	( 7)	0	( 0)	0	( 0)	0	( 0)
kidney	enlarged		1	( 7)	0	( 0)	0	( 0)	0	( 0)
	pale		1	( 7)	0	( 0)	0	( 0)	0	( 0)
	red zone		0	( 0)	0	( 0)	1	( 5)	0	( 0)
	nodule		1	( 7)	0	( 0)	0	( 0)	1	( 4)
	mass		0	( 0)	1	( 8)	0	( 0)	0	( 0)
	hydronephrosis		3	( 20)	1	( 8)	1	( 5)	1	( 4)
urin bladd	urine:marked retention		6	( 40)	1	( 8)	3	( 14)	1	( 4)
	urine:red		1	( 7)	0	( 0)	0	( 0)	0	( 0)
testis	nodule		0	( 0)	0	( 0)	0	( 0)	1	( 4)
	cyst		1	( 7)	0	( 0)	0	( 0)	0	( 0)
epididymis	nodule		1	( 7)	0	( 0)	0	( 0)	1	( 4)
semin ves	enlarged		1	( 7)	1	( 8)	1	( 5)	0	( 0)
	brown		1	( 7)	0	( 0)	0	( 0)	0	( 0)
prostate	enlarged		0	( 0)	0	( 0)	0	( 0)	1	( 4)
prep/cli gl	nodule		0	( 0)	0	( 0)	1	( 5)	0	( 0)



STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 3

Organ	Findings	Group Name		control		750 ppm		1500 ppm		3000 ppm	
		NO. of Animals		15	(%)	12	(%)	21	(%)	27	(%)
brain	adhesion			0	( 0)	1	( 8)	0	( 0)	0	( 0)
periph nerv	nodule			0	( 0)	0	( 0)	1	( 5)	0	( 0)
Harder gl	enlarged			0	( 0)	0	( 0)	0	( 0)	1	( 4)
	nodule			1	( 7)	0	( 0)	1	( 5)	0	( 0)
bone	nodule			0	( 0)	1	( 8)	0	( 0)	0	( 0)
mediastinum	mass			0	( 0)	1	( 8)	0	( 0)	0	( 0)
peritoneum	nodule			0	( 0)	0	( 0)	2	( 10)	3	( 11)
retroperit	mass			1	( 7)	0	( 0)	0	( 0)	0	( 0)
abdominal c	hemorrhage			0	( 0)	0	( 0)	2	( 10)	7	( 26)
	ascites			1	( 7)	1	( 8)	1	( 5)	1	( 4)
thoracic ca	hemorrhage			1	( 7)	2	( 17)	1	( 5)	1	( 4)
	pleural fluid			1	( 7)	2	( 17)	0	( 0)	0	( 0)
whole body	anemic			0	( 0)	1	( 8)	0	( 0)	0	( 0)

## APPENDIX I 3

### GROSS FINDINGS : MALE SACRIFICED ANIMALS

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : MALE

GROSS FINDINGS (SUMMARY)  
SACRIFICED ANIMALS (105W)

PAGE : 1

Organ	Findings	Group Name NO. of Animals	control		750 ppm		1500 ppm		3000 ppm	
			35	(%)	38	(%)	29	(%)	23	(%)
skin/app	nodule		2	( 6)	1	( 3)	0	( 0)	0	( 0)
subcutis	nodule		0	( 0)	0	( 0)	1	( 3)	0	( 0)
	mass		3	( 9)	1	( 3)	1	( 3)	0	( 0)
lung	nodule		7	( 20)	8	( 21)	7	( 24)	3	( 13)
lymph node	enlarged		0	( 0)	2	( 5)	2	( 7)	2	( 9)
spleen	black zone		0	( 0)	0	( 0)	1	( 3)	0	( 0)
	nodule		2	( 6)	1	( 3)	0	( 0)	1	( 4)
salivary gl	nodule		0	( 0)	0	( 0)	1	( 3)	0	( 0)
gl stomach	nodule		0	( 0)	0	( 0)	1	( 3)	0	( 0)
small intes	nodule		0	( 0)	1	( 3)	0	( 0)	0	( 0)
large intes	nodule		0	( 0)	1	( 3)	0	( 0)	0	( 0)
liver	white zone		0	( 0)	0	( 0)	2	( 7)	0	( 0)
	red zone		3	( 9)	1	( 3)	0	( 0)	0	( 0)
	nodule		18	( 51)	31	( 82)	27	( 93)	23	( 100)
pancreas	nodule		0	( 0)	1	( 3)	1	( 3)	1	( 4)
kidney	atrophic		0	( 0)	1	( 3)	0	( 0)	0	( 0)
	white zone		0	( 0)	0	( 0)	0	( 0)	1	( 4)
	nodule		0	( 0)	1	( 3)	0	( 0)	0	( 0)
	hydronephrosis		3	( 9)	1	( 3)	1	( 3)	1	( 4)
urin bladd	nodule		1	( 3)	0	( 0)	1	( 3)	0	( 0)
pituitary	nodule		0	( 0)	1	( 3)	0	( 0)	0	( 0)
epididymis	nodule		0	( 0)	0	( 0)	0	( 0)	1	( 4)

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : MALE

GROSS FINDINGS (SUMMARY)  
 SACRIFICED ANIMALS (105W)

PAGE : 2

Organ	Findings	Group Name NO. of Animals	control		750 ppm		1500 ppm		3000 ppm	
			35	(%)	38	(%)	29	(%)	23	(%)
semin ves	enlarged		3	( 9)	0	( 0)	0	( 0)	0	( 0)
	brown zone		1	( 3)	0	( 0)	0	( 0)	0	( 0)
prep/cli gl	enlarged		0	( 0)	0	( 0)	1	( 3)	0	( 0)
	nodule		0	( 0)	0	( 0)	1	( 3)	0	( 0)
peritoneum	nodule		1	( 3)	0	( 0)	2	( 7)	2	( 9)
abdominal c	hemorrhage		1	( 3)	0	( 0)	0	( 0)	1	( 4)
	ascites		0	( 0)	1	( 3)	0	( 0)	0	( 0)
adipose	nodule		0	( 0)	1	( 3)	0	( 0)	0	( 0)
thoracic ca	pleural fluid		0	( 0)	1	( 3)	0	( 0)	0	( 0)
other	tail:nodule		1	( 3)	0	( 0)	0	( 0)	0	( 0)
	nose:nodule		0	( 0)	0	( 0)	1	( 3)	0	( 0)

(HPT080)

BAIS 4

## APPENDIX I 4

GROSS FINDINGS : FEMALE

ALL ANIMALS

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : FEMALE

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

PAGE : 5

Organ	Findings	Group Name NO. of Animals	control		1500 ppm		3000 ppm		6000 ppm	
			49	(%)	50	(%)	50	(%)	50	(%)
subcutis	edema		6	( 12)	3	( 6)	6	( 12)	1	( 2)
	mass		3	( 6)	0	( 0)	2	( 4)	1	( 2)
lung	red		0	( 0)	2	( 4)	2	( 4)	0	( 0)
	red zone		1	( 2)	2	( 4)	1	( 2)	1	( 2)
	edema		0	( 0)	1	( 2)	0	( 0)	1	( 2)
	nodule		3	( 6)	5	( 10)	2	( 4)	4	( 8)
lymph node	enlarged		8	( 16)	11	( 22)	5	( 10)	2	( 4)
thymus	atrophic		0	( 0)	1	( 2)	0	( 0)	0	( 0)
	nodule		0	( 0)	1	( 2)	0	( 0)	0	( 0)
spleen	enlarged		5	( 10)	13	( 26)	8	( 16)	8	( 16)
	black zone		0	( 0)	1	( 2)	0	( 0)	0	( 0)
	nodule		1	( 2)	1	( 2)	2	( 4)	2	( 4)
heart	white zone		0	( 0)	0	( 0)	0	( 0)	1	( 2)
	hypertrophy		0	( 0)	0	( 0)	0	( 0)	1	( 2)
forestomach	nodule		0	( 0)	2	( 4)	0	( 0)	1	( 2)
gl stomach	red zone		0	( 0)	1	( 2)	0	( 0)	0	( 0)
	black zone		0	( 0)	0	( 0)	1	( 2)	0	( 0)
small intes	nodule		0	( 0)	1	( 2)	1	( 2)	0	( 0)
liver	enlarged		4	( 8)	1	( 2)	6	( 12)	2	( 4)
	white zone		7	( 14)	6	( 12)	4	( 8)	1	( 2)
	red zone		6	( 12)	3	( 6)	0	( 0)	3	( 6)
	nodule		9	( 18)	27	( 54)	43	( 86)	42	( 84)

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : FEMALE

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

PAGE : 6

Organ	Findings	Group Name NO. of Animals	control		1500 ppm		3000 ppm		6000 ppm	
			49	(%)	50	(%)	50	(%)	50	(%)
liver	rough		1	( 2)	1	( 2)	0	( 0)	0	( 0)
gall bladd	nodule		0	( 0)	0	( 0)	0	( 0)	1	( 2)
pancreas	red		0	( 0)	0	( 0)	0	( 0)	1	( 2)
	nodule		0	( 0)	0	( 0)	1	( 2)	1	( 2)
kidney	enlarged		1	( 2)	1	( 2)	0	( 0)	0	( 0)
	pale		0	( 0)	1	( 2)	0	( 0)	0	( 0)
	white zone		0	( 0)	1	( 2)	0	( 0)	0	( 0)
	nodule		0	( 0)	2	( 4)	1	( 2)	1	( 2)
	hydronephrosis		1	( 2)	2	( 4)	1	( 2)	1	( 2)
urin bladd	nodule		0	( 0)	0	( 0)	1	( 2)	0	( 0)
	urine:marked retention		0	( 0)	0	( 0)	1	( 2)	0	( 0)
pituitary	enlarged		0	( 0)	0	( 0)	1	( 2)	0	( 0)
ovary	enlarged		3	( 6)	1	( 2)	6	( 12)	2	( 4)
	nodule		1	( 2)	0	( 0)	0	( 0)	0	( 0)
	cyst		8	( 16)	11	( 22)	6	( 12)	3	( 6)
uterus	nodule		12	( 24)	9	( 18)	15	( 30)	11	( 22)
	dilated		1	( 2)	0	( 0)	0	( 0)	0	( 0)
	dilated lumen		1	( 2)	1	( 2)	0	( 0)	0	( 0)
brain	black zone		0	( 0)	1	( 2)	0	( 0)	0	( 0)
spinal cord	red zone		0	( 0)	1	( 2)	0	( 0)	0	( 0)
periph nerv	yellow		0	( 0)	1	( 2)	0	( 0)	0	( 0)
Harder gl	enlarged		0	( 0)	1	( 2)	0	( 0)	0	( 0)

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 7

Organ	Findings	Group Name		control		1500 ppm		3000 ppm		6000 ppm	
		NO. of Animals		49	(%)	50	(%)	50	(%)	50	(%)
Harder gl	nodule			1	( 2)	0	( 0)	1	( 2)	1	( 2)
bone	nodule			0	( 0)	0	( 0)	0	( 0)	1	( 2)
mediastinum	nodule			0	( 0)	1	( 2)	0	( 0)	0	( 0)
	mass			2	( 4)	2	( 4)	1	( 2)	0	( 0)
peritoneum	nodule			2	( 4)	6	( 12)	5	( 10)	11	( 22)
	mass			0	( 0)	0	( 0)	2	( 4)	1	( 2)
	thick			0	( 0)	0	( 0)	1	( 2)	0	( 0)
abdominal c	hemorrhage			6	( 12)	4	( 8)	5	( 10)	8	( 16)
	ascites			8	( 16)	5	( 10)	5	( 10)	7	( 14)
mesenterium	nodule			1	( 2)	0	( 0)	0	( 0)	0	( 0)
thoracic ca	hemorrhage			0	( 0)	1	( 2)	0	( 0)	0	( 0)
	pleural fluid			8	( 16)	9	( 18)	5	( 10)	3	( 6)
whole body	anemic			1	( 2)	1	( 2)	1	( 2)	1	( 2)



## APPENDIX I 5

### GROSS FINDINGS : FEMALE DEAD AND MORIBUND ANIMALS

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : FEMALE

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

PAGE : 4

Organ	Findings	Group Name NO. of Animals	control		1500 ppm		3000 ppm		6000 ppm	
			21	(%)	22	(%)	32	(%)	31	(%)
subcutis	edema		6	( 29)	3	( 14)	6	( 19)	1	( 3)
	mass		3	( 14)	0	( 0)	2	( 6)	1	( 3)
lung	red		0	( 0)	2	( 9)	2	( 6)	0	( 0)
	red zone		0	( 0)	1	( 5)	1	( 3)	1	( 3)
	edema		0	( 0)	1	( 5)	0	( 0)	1	( 3)
	nodule		1	( 5)	1	( 5)	0	( 0)	1	( 3)
lymph node	enlarged		6	( 29)	7	( 32)	4	( 13)	2	( 6)
thymus	atrophic		0	( 0)	1	( 5)	0	( 0)	0	( 0)
spleen	enlarged		4	( 19)	8	( 36)	6	( 19)	8	( 26)
	black zone		0	( 0)	1	( 5)	0	( 0)	0	( 0)
	nodule		0	( 0)	0	( 0)	0	( 0)	1	( 3)
heart	white zone		0	( 0)	0	( 0)	0	( 0)	1	( 3)
	hypertrophy		0	( 0)	0	( 0)	0	( 0)	1	( 3)
forestomach	nodule		0	( 0)	1	( 5)	0	( 0)	1	( 3)
gl stomach	red zone		0	( 0)	1	( 5)	0	( 0)	0	( 0)
	black zone		0	( 0)	0	( 0)	1	( 3)	0	( 0)
small intes	nodule		0	( 0)	1	( 5)	1	( 3)	0	( 0)
liver	enlarged		4	( 19)	1	( 5)	6	( 19)	2	( 6)
	white zone		5	( 24)	5	( 23)	4	( 13)	1	( 3)
	red zone		1	( 5)	1	( 5)	0	( 0)	3	( 10)
	nodule		2	( 10)	6	( 27)	25	( 78)	23	( 74)
	rough		1	( 5)	1	( 5)	0	( 0)	0	( 0)

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : FEMALE

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

PAGE : 5

Organ	Findings	Group Name NO. of Animals	control		1500 ppm		3000 ppm		6000 ppm	
			21	(%)	22	(%)	32	(%)	31	(%)
gall bladd	nodule		0	( 0)	0	( 0)	0	( 0)	1	( 3)
pancreas	red		0	( 0)	0	( 0)	0	( 0)	1	( 3)
	nodule		0	( 0)	0	( 0)	0	( 0)	1	( 3)
kidney	enlarged		1	( 5)	1	( 5)	0	( 0)	0	( 0)
	pale		0	( 0)	1	( 5)	0	( 0)	0	( 0)
	nodule		0	( 0)	2	( 9)	0	( 0)	1	( 3)
	hydronephrosis		1	( 5)	1	( 5)	1	( 3)	1	( 3)
urin bladd	nodule		0	( 0)	0	( 0)	1	( 3)	0	( 0)
	urine:marked retention		0	( 0)	0	( 0)	1	( 3)	0	( 0)
ovary	enlarged		3	( 14)	0	( 0)	4	( 13)	2	( 6)
	nodule		1	( 5)	0	( 0)	0	( 0)	0	( 0)
	cyst		2	( 10)	3	( 14)	2	( 6)	2	( 6)
uterus	nodule		9	( 43)	6	( 27)	11	( 34)	10	( 32)
	dilated		1	( 5)	0	( 0)	0	( 0)	0	( 0)
	dilated lumen		0	( 0)	1	( 5)	0	( 0)	0	( 0)
brain	black zone		0	( 0)	1	( 5)	0	( 0)	0	( 0)
spinal cord	red zone		0	( 0)	1	( 5)	0	( 0)	0	( 0)
periph nerv	yellow		0	( 0)	1	( 5)	0	( 0)	0	( 0)
Harder gl	enlarged		0	( 0)	1	( 5)	0	( 0)	0	( 0)
	nodule		0	( 0)	0	( 0)	0	( 0)	1	( 3)
bone	nodule		0	( 0)	0	( 0)	0	( 0)	1	( 3)
mediastinum	nodule		0	( 0)	1	( 5)	0	( 0)	0	( 0)

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 6

Organ	Findings	Group Name		control		1500 ppm		3000 ppm		6000 ppm	
		NO. of Animals		21	(%)	22	(%)	32	(%)	31	(%)
mediastinum	mass			2	( 10)	1	( 5)	1	( 3)	0	( 0)
peritoneum	nodule			2	( 10)	2	( 9)	4	( 13)	7	( 23)
	mass			0	( 0)	0	( 0)	2	( 6)	1	( 3)
	thick			0	( 0)	0	( 0)	1	( 3)	0	( 0)
abdominal c	hemorrhage			4	( 19)	4	( 18)	4	( 13)	8	( 26)
	ascites			7	( 33)	2	( 9)	5	( 16)	6	( 19)
mesenterium	nodule			1	( 5)	0	( 0)	0	( 0)	0	( 0)
thoracic ca	hemorrhage			0	( 0)	1	( 5)	0	( 0)	0	( 0)
	pleural fluid			8	( 38)	5	( 23)	5	( 16)	3	( 10)
whole body	anemic			1	( 5)	1	( 5)	1	( 3)	1	( 3)

(HPT080)

BAIS 4

## APPENDIX I 6

### GROSS FINDINGS : FEMALE SACRIFICED ANIMALS

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : FEMALE

GROSS FINDINGS (SUMMARY)  
SACRIFICED ANIMALS (105W)

PAGE : 3

Organ	Findings	Group Name NO. of Animals	control		1500 ppm		3000 ppm		6000 ppm	
			28	(%)	28	(%)	18	(%)	19	(%)
lung	red zone		1	( 4)	1	( 4)	0	( 0)	0	( 0)
	nodule		2	( 7)	4	( 14)	2	( 11)	3	( 16)
lymph node	enlarged		2	( 7)	4	( 14)	1	( 6)	0	( 0)
thymus	nodule		0	( 0)	1	( 4)	0	( 0)	0	( 0)
spleen	enlarged		1	( 4)	5	( 18)	2	( 11)	0	( 0)
	nodule		1	( 4)	1	( 4)	2	( 11)	1	( 5)
forestomach	nodule		0	( 0)	1	( 4)	0	( 0)	0	( 0)
liver	white zone		2	( 7)	1	( 4)	0	( 0)	0	( 0)
	red zone		5	( 18)	2	( 7)	0	( 0)	0	( 0)
	nodule		7	( 25)	21	( 75)	18	(100)	19	(100)
pancreas	nodule		0	( 0)	0	( 0)	1	( 6)	0	( 0)
kidney	white zone		0	( 0)	1	( 4)	0	( 0)	0	( 0)
	nodule		0	( 0)	0	( 0)	1	( 6)	0	( 0)
	hydronephrosis		0	( 0)	1	( 4)	0	( 0)	0	( 0)
pituitary	enlarged		0	( 0)	0	( 0)	1	( 6)	0	( 0)
ovary	enlarged		0	( 0)	1	( 4)	2	( 11)	0	( 0)
	cyst		6	( 21)	8	( 29)	4	( 22)	1	( 5)
uterus	nodule		3	( 11)	3	( 11)	4	( 22)	1	( 5)
	dilated lumen		1	( 4)	0	( 0)	0	( 0)	0	( 0)
Harder gl	nodule		1	( 4)	0	( 0)	1	( 6)	0	( 0)
mediastinum	mass		0	( 0)	1	( 4)	0	( 0)	0	( 0)
peritoneum	nodule		0	( 0)	4	( 14)	1	( 6)	4	( 21)

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : FEMALE

GROSS FINDINGS (SUMMARY)  
SACRIFICED ANIMALS (105W)

PAGE : 4

Organ	Findings	Group Name		control		1500 ppm		3000 ppm		6000 ppm	
		NO. of Animals		28	(%)	28	(%)	18	(%)	19	(%)
abdominal c	hemorrhage			2	( 7)	0	( 0)	1	( 6)	0	( 0)
	ascites			1	( 4)	3	( 11)	0	( 0)	1	( 5)
thoracic ca	pleural fluid			0	( 0)	4	( 14)	0	( 0)	0	( 0)

(HPT080)

BAIS 4

## APPENDIX J 1

ORGAN WEIGHT, ABSOLUTE : MALE



STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : MALE  
 UNIT: g

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

PAGE : 1

Group Name	NO. of Animals	Body Weight	ADRENALS		TESTES		HEART		LUNGS		KIDNEYS	
control	35	48.0± 9.2	0.014±	0.004	0.236±	0.039	0.222±	0.023	0.226±	0.042	0.619±	0.098
750 ppm	38	47.5± 8.2	0.013±	0.004	0.228±	0.030	0.231±	0.043	0.264±	0.172	0.631±	0.080
1500 ppm	29	43.2± 8.3	0.012±	0.004	0.230±	0.020	0.223±	0.023	0.223±	0.042	1.154±	2.863
3000 ppm	23	34.2± 4.7**	0.014±	0.005	0.220±	0.031	0.213±	0.029	0.213±	0.029	0.629±	0.120

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

Test of Dunnett

(HCL040)

BATS 4

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : MALE  
UNIT: g

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

PAGE : 2

Group Name	NO. of Animals	SPLEEN		LIVER		BRAIN	
control	35	0.092±	0.064	1.858±	0.768	0.452±	0.016
750 ppm	38	0.108±	0.098	2.150±	0.736	0.448±	0.021
1500 ppm	29	0.092±	0.034	3.238±	2.168**	0.446±	0.021
3000 ppm	23	0.113±	0.074	5.249±	3.279**	0.439±	0.021

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

(HCL040)

BAIS 4

## APPENDIX J 2

ORGAN WEIGHT, ABSOLUTE : FEMALE

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDf1  
 REPORT TYPE : A1  
 SEX : FEMALE  
 UNIT: g

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

PAGE : 3

Group Name	NO. of Animals	Body Weight	ADRENALS	OVARIES	HEART	LUNGS	KIDNEYS
control	28	38.0± 7.1	0.015± 0.005	0.060± 0.043	0.180± 0.038	0.246± 0.178	0.430± 0.058
1500 ppm	28	34.6± 4.8	0.014± 0.004	0.276± 1.148	0.171± 0.023	0.223± 0.053	0.541± 0.574
3000 ppm	18	28.5± 3.2**	0.013± 0.003	0.081± 0.098	0.156± 0.015*	0.213± 0.059	0.422± 0.060
6000 ppm	19	22.5± 2.7**	0.011± 0.003**	0.022± 0.009**	0.143± 0.019**	0.203± 0.055	0.374± 0.073**

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

Test of Dunnett

(HCL040)

BAIS 4

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : FEMALE  
UNIT: g

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

PAGE : 4

Group Name	NO. of Animals	SPLEEN		LIVER		BRAIN	
control	28	0.154±	0.113	1.536±	0.686	0.469±	0.018
1500 ppm	28	0.312±	0.493	2.257±	1.296**	0.461±	0.022
3000 ppm	18	0.233±	0.338	3.276±	1.525**	0.453±	0.018*
6000 ppm	19	0.089±	0.078*	3.790±	1.324**	0.429±	0.018**

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

(HCL040)

BAIS 4

## APPENDIX K 1

ORGAN WEIGHT, RELATIVE : MALE

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : MALE  
UNIT: %

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

PAGE : 1

Group Name	NO. of Animals	Body Weight (g)	ADRENALS	TESTES	HEART	LUNGS	KIDNEYS
control	35	48.0± 9.2	0.031± 0.011	0.510± 0.135	0.476± 0.081	0.498± 0.174	1.328± 0.304
750 ppm	38	47.5± 8.2	0.029± 0.012	0.497± 0.134	0.502± 0.137	0.636± 0.799	1.368± 0.307
1500 ppm	29	43.2± 8.3	0.028± 0.011	0.554± 0.121	0.531± 0.102*	0.542± 0.179	2.703± 6.545*
3000 ppm	23	34.2± 4.7**	0.040± 0.012*	0.654± 0.113**	0.630± 0.091**	0.632± 0.109**	1.850± 0.280**

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

Test of Dunnett

(HCL042)

BAIS 4

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : MALE  
UNIT: %

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

PAGE : 2

Group Name	NO. of Animals	SPLEEN	LIVER	BRAIN
control	35	0.196± 0.137	4.117± 2.669	0.984± 0.244
750 ppm	38	0.248± 0.257	4.680± 1.994	0.981± 0.234
1500 ppm	29	0.226± 0.116	8.252± 6.564**	1.069± 0.201
3000 ppm	23	0.331± 0.201**	15.710± 9.670**	1.303± 0.149**

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

(HCL042)

BAIS 4



## APPENDIX K 2

ORGAN WEIGHT, RELATIVE : FEMALE

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 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	28	38.0± 7.1	0.040± 0.014	0.163± 0.116	0.490± 0.149	0.763± 1.014	1.167± 0.261
1500 ppm	28	34.6± 4.8	0.042± 0.011	0.856± 3.600	0.507± 0.127	0.657± 0.177	1.628± 1.905
3000 ppm	18	28.5± 3.2**	0.046± 0.013	0.276± 0.304	0.552± 0.073*	0.759± 0.255**	1.490± 0.234**
6000 ppm	19	22.5± 2.7**	0.052± 0.014*	0.097± 0.037	0.635± 0.051**	0.909± 0.261**	1.661± 0.221**

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

Test of Dunnett

(HCL042)

BAIS 4

STUDY NO. : 0422  
ANIMAL : MOUSE Crl:BDF1  
REPORT TYPE : A1  
SEX : FEMALE  
UNIT: %

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

PAGE : 4

Group Name	NO. of Animals	SPLEEN	LIVER	BRAIN
control	28	0.428± 0.350	4.213± 2.167	1.290± 0.320
1500 ppm	28	0.926± 1.572	6.734± 4.371**	1.354± 0.180
3000 ppm	18	0.764± 0.956	11.616± 5.557**	1.601± 0.152**
6000 ppm	19	0.379± 0.269	17.271± 6.650**	1.927± 0.206**

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

(HCL042)

BAIS 4

## APPENDIX L 1

HISTOPATHOLOGICAL FINDINGS :  
NON-NEOPLASTIC LESIONS : MALE  
ALL ANIMALS

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : MALE

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

PAGE : 1

Organ	Findings	Group Name No. of Animals on Study				control				750 ppm				1500 ppm				3000 ppm			
		Grade				50				50				50				50			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Integumentary system/appandage}																					
skin/app		<50>				<50>				<50>				<50>				<50>			
	inflammation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )
subcutis		<50>				<50>				<50>				<50>				<50>			
	inflammation	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	epidermal cyst	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	xanthogranuloma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )
{Respiratory system}																					
nasal cavit		<50>				<50>				<50>				<50>				<50>			
	exudate	0	3	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		( 0 )	( 6 )	( 0 )	( 0 )	( 2 )	( 6 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	deposit of pigment	0	0	0	0	44	0	0	0 **	40	0	0	0 **	39	0	0	0 **	39	0	0	0 **
		( 0 )	( 0 )	( 0 )	( 0 )	( 88 )	( 0 )	( 0 )	( 0 )	( 80 )	( 0 )	( 0 )	( 0 )	( 78 )	( 0 )	( 0 )	( 0 )	( 78 )	( 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. : 0422  
ANIMAL : MOUSE Crj:BDF1  
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 Grade	control				750 ppm				1500 ppm				3000 ppm			
			50				50				50				50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
nasal cavit			<50>				<50>				<50>				<50>			
	mineralization		9	0	0	0	5	0	0	0	2	0	0	0	4	0	0	0
			( 18)	( 0)	( 0)	( 0)	( 10)	( 0)	( 0)	( 0)	( 4)	( 0)	( 0)	( 0)	( 8)	( 0)	( 0)	( 0)
	eosinophilic change:olfactory epithelium		17	2	0	0	16	3	0	0	9	2	0	0	17	7	1	0
			( 34)	( 4)	( 0)	( 0)	( 32)	( 6)	( 0)	( 0)	( 18)	( 4)	( 0)	( 0)	( 34)	( 14)	( 2)	( 0)
	eosinophilic change:respiratory epithelium		21	7	1	0	23	11	1	0	25	14	1	0	22	5	2	0
			( 42)	( 14)	( 2)	( 0)	( 46)	( 22)	( 2)	( 0)	( 50)	( 28)	( 2)	( 0)	( 44)	( 10)	( 4)	( 0)
	respiratory metaplasia:olfactory epithelium		20	0	0	0	15	0	0	0	26	23	0	0 **	1	46	3	0 **
			( 40)	( 0)	( 0)	( 0)	( 30)	( 0)	( 0)	( 0)	( 52)	( 46)	( 0)	( 0)	( 2)	( 92)	( 6)	( 0)
	respiratory metaplasia:gland		14	0	0	0	19	5	1	0 *	14	19	14	0 **	0	6	43	0 **
			( 28)	( 0)	( 0)	( 0)	( 38)	( 10)	( 2)	( 0)	( 28)	( 38)	( 28)	( 0)	( 0)	( 12)	( 86)	( 0)
nasopharynx			<50>				<50>				<50>				<50>			
	eosinophilic change		3	0	0	0	2	0	1	0	4	0	2	0	27	1	2	0 **
			( 6)	( 0)	( 0)	( 0)	( 4)	( 0)	( 2)	( 0)	( 8)	( 0)	( 4)	( 0)	( 54)	( 2)	( 4)	( 0)
lung			<50>				<50>				<50>				<50>			
	hemorrhage		2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			( 4)	( 2)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 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. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 3

		Group Name	control				750 ppm				1500 ppm				3000 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_____		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
<hr/>																		
{Respiratory system}																		
lung																		
			<50>				<50>				<50>				<50>			
	inflammatory infiltration		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	granulomatous inflammation		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	bronchiolar cell hyperplasia		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 )
	bronchiolar-alveolar cell hyperplasia		1	0	0	0	2	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 )
{Hematopoietic system}																		
bone marrow																		
			<50>				<50>				<50>				<50>			
	increased hematopoiesis		1	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0
			( 2 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 2 )	( 0 )	( 0 )
	decreased hematopoiesis		2	0	0	0	0	0	0	0	1	0	0	0	2	0	1	0
			( 4 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 2 )	( 0 )
	erythropoiesis:increased		0	0	0	0	3	1	0	0	13	5	0	0 **	24	0	0	0 **
			( 0 )	( 0 )	( 0 )	( 0 )	( 6 )	( 2 )	( 0 )	( 0 )	( 26 )	( 10 )	( 0 )	( 0 )	( 48 )	( 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. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 4

Organ_____	Findings_____	Group Name No. of Animals on Study Grade				control 50				750 ppm 50				1500 ppm 50				3000 ppm 50			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)				
(Hematopoietic system)																					
bone marrow		<50>				<50>				<50>				<50>							
	erythropoiesis:decreased	5 ( 10)	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)	3 ( 6)	0 ( 0)				
	granulopoiesis:increased	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	2 ( 4)	1 ( 2)	1 ( 2)	0 ( 0)	1 ( 2)	1 ( 2)	2 ( 4)	0 ( 0)				
lymph node		<50>				<50>				<50>				<50>							
	atrophy	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)				
	deposit of hemosiderin	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)	10 ( 20)	0 ( 0)	0 ( 0)	0 * ( 0)	8 ( 16)	0 ( 0)	0 ( 0)	0 * ( 0)	6 ( 12)	0 ( 0)	0 ( 0)	0 ( 0)				
spleen		<50>				<50>				<50>				<50>							
	atrophy	2 ( 4)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 2)	0 ( 0)	0 ( 0)	1 ( 2)	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)				
	congestion	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)				
	deposit of hemosiderin	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	2 ( 4)	0 ( 0)	0 ( 0)	0 ( 0)	7 ( 14)	2 ( 4)	0 ( 0)	0 ** ( 0)	5 ( 10)	0 ( 0)	0 ( 0)	0 ( 0)				

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



STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 5

		Group Name	control				750 ppm				1500 ppm				3000 ppm			
		No. of Animals on Study	50				50				50				50			
Organ_____	Findings_____	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>
{Hematopoietic system}																		
spleen			<50>				<50>				<50>				<50>			
	deposit of melanin		1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
			( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	extramedullary hematopoiesis		7	1	1	0	5	3	1	0	13	7	10	0 **	10	13	12	0 **
			( 14 )	( 2 )	( 2 )	( 0 )	( 10 )	( 6 )	( 2 )	( 0 )	( 26 )	( 14 )	( 20 )	( 0 )	( 20 )	( 26 )	( 24 )	( 0 )
	splenitis		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 )
	follicular hyperplasia		3	1	1	0	3	0	0	0	0	1	1	0	0	0	0	0
			( 6 )	( 2 )	( 2 )	( 0 )	( 6 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
{Circulatory system}																		
heart			<50>				<50>				<50>				<50>			
	mineralization		0	2	0	0	1	0	0	0	0	1	0	0	4	1	0	0
			( 0 )	( 4 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 8 )	( 2 )	( 0 )	( 0 )
	inflammatory infiltration		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	arteritis		1	1	0	0	0	0	0	0	2	1	0	1	1	1	0	
			( 2 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 4 )	( 2 )	( 0 )	( 2 )	( 2 )	( 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 ; \* :  $P \leq 0.05$  \*\* :  $P \leq 0.01$  Test of Chi Square

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
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				750 ppm				1500 ppm				3000 ppm			
		Grade				50				50				50				50			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																					
tooth	dysplasia	<50>				<50>				<50>				<50>				<50>			
		9	14	7	11	13	6	12	11	20	15	4	3 *	20	9	3	1 **	20	9	3	1 **
		( 18 )	( 28 )	( 14 )	( 22 )	( 26 )	( 12 )	( 24 )	( 22 )	( 40 )	( 30 )	( 8 )	( 6 )	( 40 )	( 18 )	( 6 )	( 2 )	( 40 )	( 18 )	( 6 )	( 2 )
	odontogenic cyst	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 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
tongue	mineralization	<50>				<50>				<50>				<50>				<50>			
		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 )
	inflammatory infiltration	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 )
	arteritis	0	3	0	0	0	1	0	0	0	2	0	0	2	0	0	0	2	0	0	0
		( 0 )	( 6 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )
salivary gl	inflammation	<50>				<50>				<50>				<50>				<50>			
		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	lymphocytic infiltration	4	0	0	0	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0
		( 8 )	( 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 : Number of animals with lesion  
( c ) c : b / a \* 100  
Significant difference ; \* : P ≤ 0.05 \*\* : P ≤ 0.01 Test of Chi Square

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 7

Organ	Findings	Group Name No. of Animals on Study				control				750 ppm				1500 ppm				3000 ppm			
		Grade				50				50				50				50			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																					
salivary gl		<50>				<50>				<50>				<50>				<50>			
	perivascular inflammation	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
stomach		<50>				<50>				<50>				<50>				<50>			
	hyperkeratosis	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	hyperplasia:glandular stomach	19	12	10	0	16	17	8	0	18	18	10	0	22	15	5	0				
		( 38 )	( 24 )	( 20 )	( 0 )	( 32 )	( 34 )	( 16 )	( 0 )	( 36 )	( 36 )	( 20 )	( 0 )	( 44 )	( 30 )	( 10 )	( 0 )				
liver		<50>				<50>				<50>				<50>				<50>			
	angiectasis	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		( 4 )	( 0 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	necrosis:central	0	0	0	0	0	0	0	0	2	2	0	0	3	1	0	0				
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 4 )	( 4 )	( 0 )	( 0 )	( 6 )	( 2 )	( 0 )	( 0 )				
	necrosis:focal	1	0	0	0	1	0	0	0	0	2	0	0	1	1	2	0				
		( 2 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 2 )	( 2 )	( 4 )	( 0 )				
	fatty change	4	1	0	0	4	0	0	0	2	1	1	0	0	0	0	0				
		( 8 )	( 2 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 4 )	( 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 : Number of animals with lesion																					
( c ) c : b / a * 100																					
Significant difference : * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square																					

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : MALE

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

PAGE : 8

Organ_____	Findings_____	Group Name	control				750 ppm				1500 ppm				3000 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/>																		
{Digestive system}																		
liver																		
	fatty change:central		<50>				<50>				<50>				<50>			
			1	0	0	0	1	1	0	0	0	0	0	0	3	1	0	0
			( 2)	( 0)	( 0)	( 0)	( 2)	( 2)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 6)	( 2)	( 0)	( 0)
	inflammatory infiltration		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			( 2)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
	granulation		0	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0
			( 0)	( 0)	( 0)	( 0)	( 4)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 2)	( 0)	( 0)	( 0)	( 0)
	clear cell focus		3	1	0	0	5	0	0	0	8	0	0	0	0	0	0	0
			( 6)	( 2)	( 0)	( 0)	( 10)	( 0)	( 0)	( 0)	( 16)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
	acidophilic cell focus		1	0	0	0	4	0	0	0	4	1	0	0	1	0	0	0
			( 2)	( 0)	( 0)	( 0)	( 8)	( 0)	( 0)	( 0)	( 8)	( 2)	( 0)	( 0)	( 2)	( 0)	( 0)	( 0)
	basophilic cell focus		2	0	0	0	3	0	0	0	1	0	1	0	0	0	0	0
			( 4)	( 0)	( 0)	( 0)	( 6)	( 0)	( 0)	( 0)	( 2)	( 0)	( 2)	( 0)	( 0)	( 0)	( 0)	( 0)
	vacuolated cell focus		2	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			( 4)	( 2)	( 0)	( 0)	( 2)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
	biliary cyst		1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0
			( 2)	( 2)	( 0)	( 0)	( 2)	( 2)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)

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

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 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				750 ppm				1500 ppm				3000 ppm			
			50				50				50				50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
liver	hepatocellular hypertrophy:central		<50>				<50>				<50>				<50>			
			0	0	0	0	7	0	0	0 *	22	0	0	0 **	7	22	0	0 **
			( 0 )	( 0 )	( 0 )	( 0 )	( 14 )	( 0 )	( 0 )	( 0 )	( 44 )	( 0 )	( 0 )	( 0 )	( 14 )	( 44 )	( 0 )	( 0 )
pancreas	islet cell hyperplasia		<50>				<50>				<50>				<50>			
			2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			( 4 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	hyperplasia:acinar cell		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )
{Urinary system}																		
kidney	basophilic change		<50>				<50>				<50>				<50>			
			31	5	0	0	28	11	1	0	27	5	1	0	28	9	0	0
			( 62 )	( 10 )	( 0 )	( 0 )	( 56 )	( 22 )	( 2 )	( 0 )	( 54 )	( 10 )	( 2 )	( 0 )	( 56 )	( 18 )	( 0 )	( 0 )
	deposit of amyloid		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	deposit of hemosiderin		0	0	0	0	0	1	1	0	0	5	6	0 **	0	3	15	0 **
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 2 )	( 0 )	( 0 )	( 10 )	( 12 )	( 0 )	( 0 )	( 6 )	( 30 )	( 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. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : MALE

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

PAGE : 10

Organ	Findings	control				750 ppm				1500 ppm				3000 ppm			
		50				50				50				50			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Urinary system)																	
kidney																	
	hyaline cast	<50>				<50>				<50>				<50>			
		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	inflammation	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 )
	inflammatory infiltration	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	lymphocytic infiltration	5	0	0	0	4	1	0	0	8	0	0	0	5	0	0	0
		( 10 )	( 0 )	( 0 )	( 0 )	( 8 )	( 2 )	( 0 )	( 0 )	( 16 )	( 0 )	( 0 )	( 0 )	( 10 )	( 0 )	( 0 )	( 0 )
	perivascular inflammation	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	inflammatory polyp	0	1	5	0	0	0	1	0	0	1	1	0	0	1	1	0
		( 0 )	( 2 )	( 10 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 2 )	( 2 )	( 0 )	( 0 )	( 2 )	( 2 )	( 0 )
	arteritis	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	hydronephrosis	0	1	5	1	0	1	1	1	0	0	0	2	0	0	1	1
		( 0 )	( 2 )	( 10 )	( 2 )	( 0 )	( 2 )	( 2 )	( 2 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 2 )	( 2 )
Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe																	
< a > a : Number of animals examined at the site																	
b : Number of animals with lesion																	
( c ) c : b / a * 100																	
Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square																	

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 11

		Group Name	control				750 ppm				1500 ppm				3000 ppm			
		No. of Animals on Study	50				50				50				50			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Urinary system)																		
kidney			<50>				<50>				<50>				<50>			
	retention cyst		0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )
	mineralization:papilla		1	1	0	0	0	0	0	0	3	0	0	0	0	0	0	0
			( 2 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	mineralization:cortex		0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )
dilatation:tubular lumen		4	1	0	0	0	0	0	0	3	0	0	0	1	0	0	0	
		( 8 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	
tubular cell hyperplasia:cystic		0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	
urothelial hyperplasia:pelvis		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 )	
eosinophilic droplet:proximal tubule		0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 4 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	
urin bladd			<50>				<50>				<50>				<50>			
	lymphocytic infiltration		1	1	0	0	2	0	0	0	1	0	0	0	1	0	0	0
		( 2 )	( 2 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	

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

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 12

Organ	Findings	Group Name No. of Animals on Study Grade	control				750 ppm				1500 ppm				3000 ppm			
			50				50				50				50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																		
pituitary			<50>				<49>				<49>				<50>			
	angiectasis		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	cyst		6	0	0	0	3	0	0	0	5	0	0	0	5	2	0	0
		( 12 )	( 0 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )	( 0 )	( 10 )	( 0 )	( 0 )	( 0 )	( 10 )	( 4 )	( 0 )	( 0 )	
	Rathke pouch		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 )
adrenal			<50>				<50>				<50>				<49>			
	deposit of amyloid		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	spindle-cell hyperplasia		24	14	0	0	31	5	0	0	26	3	0	0 **	16	5	0	0 **
		( 48 )	( 28 )	( 0 )	( 0 )	( 62 )	( 10 )	( 0 )	( 0 )	( 52 )	( 6 )	( 0 )	( 0 )	( 33 )	( 10 )	( 0 )	( 0 )	
	hyperplasia:cortical cell		0	0	0	0	3	0	0	0	1	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
{Reproductive system}																		
testis			<50>				<50>				<50>				<50>			
	cyst		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 )	( 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. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : MALE

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

PAGE : 13

Organ	Findings	Group Name No. of Animals on Study Grade				control 50				750 ppm 50				1500 ppm 50				3000 ppm 50			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)				
{Reproductive system}																					
testis	mineralization	<50>				<50>				<50>				<50>							
		33	12	0	0	26	19	2	0	36	10	0	0	35	0	0	0				
		( 66)	( 24)	( 0)	( 0)	( 52)	( 38)	( 4)	( 0)	( 72)	( 20)	( 0)	( 0)	( 70)	( 0)	( 0)	( 0) **				
	xanthogranuloma																				
		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0					
		( 0)	( 0)	( 0)	( 0)	( 2)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)					
epididymis	inflammatory infiltration	<50>				<50>				<50>				<50>							
		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0					
		( 0)	( 0)	( 0)	( 0)	( 2)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)					
	spermatogenic granuloma																				
		0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0				
		( 0)	( 4)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 2)	( 0)	( 0)	( 0)				
prep/cli gl	cyst	<50>				<50>				<50>				<50>							
		0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0				
		( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 6)	( 0)	( 0)	( 0)	( 0)	( 0)				
{Nervous system}																					
brain	mineralization	<50>				<50>				<50>				<50>							
		21	0	0	0	21	0	0	0	24	0	0	0	28	0	0	0				
		( 42)	( 0)	( 0)	( 0)	( 42)	( 0)	( 0)	( 0)	( 48)	( 0)	( 0)	( 0)	( 56)	( 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. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : MALE

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

PAGE : 14

Organ	Findings	Group Name No. of Animals on Study Grade	control				750 ppm				1500 ppm				3000 ppm			
			50				50				50				50			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Nervous system}																		
periph nerv			<50>				<50>				<50>				<50>			
	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 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
{Special sense organs/appendage}																		
eye			<50>				<50>				<50>				<50>			
	inflammatory infiltration		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
Harder gl			<50>				<50>				<50>				<50>			
	hyperplasia		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
{Musculoskeletal system}																		
muscle			<50>				<50>				<50>				<50>			
	mineralization		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 )
	arteritis		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )

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

## APPENDIX L 2

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

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 1

Organ	Findings	Group Name No. of Animals on Study Grade				control 15				750 ppm 12				1500 ppm 21				3000 ppm 27			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Integumentary system/appendage}																					
skin/app		<15>				<12>				<21>				<27>							
	inflammation	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
subcutis		<15>				<12>				<21>				<27>							
	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 )	( 0 )	( 0 )	( 0 )	( 0 )	( 5 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	xanthogranuloma	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 )	( 4 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
{Respiratory system}																					
nasal cavit		<15>				<12>				<21>				<27>							
	exudate	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		( 0 )	( 7 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	deposit of pigment	0	0	0	0	8	0	0	0 **	14	0	0	0 **	19	0	0	0 **	0	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 67 )	( 0 )	( 0 )	( 0 )	( 67 )	( 0 )	( 0 )	( 0 )	( 70 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	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 )	( 0 )	( 0 )	( 0 )	( 0 )	( 5 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )

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

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 2

Organ_____	Findings_____	Group Name No. of Animals on Study Grade				control 15				750 ppm 12				1500 ppm 21				3000 ppm 27			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)				
{Respiratory system}																					
nasal cavit		<15>				<12>				<21>				<27>							
	eosinophilic change:olfactory epithelium	3	0	0	0	3	0	0	0	3	0	0	0	7	4	1	0				
		( 20)	( 0)	( 0)	( 0)	( 25)	( 0)	( 0)	( 0)	( 14)	( 0)	( 0)	( 0)	( 26)	( 15)	( 4)	( 0)				
	eosinophilic change:respiratory epithelium	5	1	0	0	2	4	0	0	11	4	0	0	11	2	0	0				
		( 33)	( 7)	( 0)	( 0)	( 17)	( 33)	( 0)	( 0)	( 52)	( 19)	( 0)	( 0)	( 41)	( 7)	( 0)	( 0)				
	respiratory metaplasia:olfactory epithelium	3	0	0	0	2	0	0	0	14	7	0	0 **	1	26	0	0 **				
		( 20)	( 0)	( 0)	( 0)	( 17)	( 0)	( 0)	( 0)	( 67)	( 33)	( 0)	( 0)	( 4)	( 96)	( 0)	( 0)				
	respiratory metaplasia:gland	1	0	0	0	2	2	1	0	11	8	1	0 **	0	5	21	0 **				
		( 7)	( 0)	( 0)	( 0)	( 17)	( 17)	( 8)	( 0)	( 52)	( 38)	( 5)	( 0)	( 0)	( 19)	( 78)	( 0)				
nasopharynx		<15>				<12>				<21>				<27>							
	eosinophilic change	2	0	0	0	1	0	0	0	1	0	0	0	14	1	0	0 *				
		( 13)	( 0)	( 0)	( 0)	( 8)	( 0)	( 0)	( 0)	( 5)	( 0)	( 0)	( 0)	( 52)	( 4)	( 0)	( 0)				
lung		<15>				<12>				<21>				<27>							
	hemorrhage	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
		( 13)	( 7)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)				
{Hematopoietic system}																					
bone marrow		<15>				<12>				<21>				<27>							
	decreased hematopoiesis	2	0	0	0	0	0	0	0	1	0	0	0	2	0	1	0				
		( 13)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 5)	( 0)	( 0)	( 0)	( 7)	( 0)	( 4)	( 0)				

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

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 3

		Group Name	control				750 ppm				1500 ppm				3000 ppm			
		No. of Animals on Study	15				12				21				27			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Organ	Findings		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Hematopoietic system}																		
bone marrow			<15>				<12>				<21>				<27>			
	erythropoiesis:increased		0	0	0	0	1	1	0	0	8	5	0	0 **	14	0	0	0 **
			( 0 )	( 0 )	( 0 )	( 0 )	( 8 )	( 8 )	( 0 )	( 0 )	( 38 )	( 24 )	( 0 )	( 0 )	( 52 )	( 0 )	( 0 )	( 0 )
	erythropoiesis:decreased		2	0	0	0	0	0	0	0	1	0	0	0	1	0	3	0
			( 13 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 5 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 11 )	( 0 )
	granulopoiesis:increased		0	0	0	0	0	0	0	0	1	1	1	0	1	1	2	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 5 )	( 5 )	( 5 )	( 0 )	( 4 )	( 4 )	( 7 )	( 0 )
lymph node			<15>				<12>				<21>				<27>			
	atrophy		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 )	( 0 )	( 0 )
	deposit of hemosiderin		1	0	0	0	2	0	0	0	2	0	0	0	1	0	0	0
			( 7 )	( 0 )	( 0 )	( 0 )	( 17 )	( 0 )	( 0 )	( 0 )	( 10 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )
spleen			<15>				<12>				<21>				<27>			
	atrophy		2	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0
			( 13 )	( 0 )	( 0 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 5 )	( 5 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	congestion		1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			( 7 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )

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

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 4

Organ	Findings	Group Name	control				750 ppm				1500 ppm				3000 ppm			
		No. of Animals on Study	15				12				21				27			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Hematopoietic system}																		
spleen			<15>				<12>				<21>				<27>			
	deposit of hemosiderin		0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 10 )	( 0 )	( 0 )	( 0 )	( 7 )	( 0 )	( 0 )	( 0 )
	deposit of melanin		1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
			( 7 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 5 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	extramedullary hematopoiesis		2	1	1	0	3	0	1	0	1	5	10	0 **	3	7	10	0 *
			( 13 )	( 7 )	( 7 )	( 0 )	( 25 )	( 0 )	( 8 )	( 0 )	( 5 )	( 24 )	( 48 )	( 0 )	( 11 )	( 26 )	( 37 )	( 0 )
	splenitis		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 )
{Circulatory system}																		
heart			<15>				<12>				<21>				<27>			
	mineralization		0	2	0	0	1	0	0	0	0	1	0	0	3	1	0	0
			( 0 )	( 13 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 0 )	( 5 )	( 0 )	( 0 )	( 11 )	( 4 )	( 0 )	( 0 )
	inflammatory infiltration		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 5 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	arteritis		1	0	0	0	0	0	0	0	0	2	1	0	1	1	1	0
			( 7 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 10 )	( 5 )	( 0 )	( 4 )	( 4 )	( 4 )	( 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. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : MALE

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

PAGE : 5

Organ	Findings	control No. of Animals on Study Grade				750 ppm 12				1500 ppm 21				3000 ppm 27			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																	
tooth	dysplasia	<15>				<12>				<21>				<27>			
		3	4	1	2	4	1	4	1	7	4	3	1	10	1	1	1
		( 20 )	( 27 )	( 7 )	( 13 )	( 33 )	( 8 )	( 33 )	( 8 )	( 33 )	( 19 )	( 14 )	( 5 )	( 37 )	( 4 )	( 4 )	( 4 )
tongue	mineralization	<15>				<12>				<21>				<27>			
		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 )	( 4 )	( 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 )	( 4 )	( 0 )	( 0 )	( 0 )
	arteritis	0	1	0	0	0	0	0	0	0	2	0	0	2	0	0	0
		( 0 )	( 7 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 10 )	( 0 )	( 0 )	( 7 )	( 0 )	( 0 )	( 0 )
salivary gl	inflammation	<15>				<12>				<21>				<27>			
		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		( 7 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	lymphocytic 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 )	( 5 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	perivascular inflammation	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 5 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )

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



STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : MALE

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

PAGE : 6

Organ	Findings	control No. of Animals on Study Grade				750 ppm 12				1500 ppm 21				3000 ppm 27			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																	
stomach		<15>				<12>				<21>				<27>			
	hyperkeratosis	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	1 ( 8 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )
	hyperplasia:glandular stomach	8 ( 53 )	0 ( 0 )	2 ( 13 )	0 ( 0 )	2 ( 17 )	1 ( 8 )	1 ( 8 )	0 ( 0 )	10 ( 48 )	5 ( 24 )	3 ( 14 )	0 ( 0 )	12 ( 44 )	9 ( 33 )	0 ( 0 )	0 * ( 0 )
liver		<15>				<12>				<21>				<27>			
	necrosis:central	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	1 ( 5 )	2 ( 10 )	0 ( 0 )	0 ( 0 )	3 ( 11 )	1 ( 4 )	0 ( 0 )	0 ( 0 )
	necrosis:focal	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 ( 4 )	1 ( 4 )	2 ( 7 )	0 ( 0 )
	fatty change	2 ( 13 )	1 ( 7 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	1 ( 5 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )
	fatty change:central	1 ( 7 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	1 ( 8 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	3 ( 11 )	1 ( 4 )	0 ( 0 )
	acidophilic cell focus	1 ( 7 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	1 ( 5 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )
	basophilic cell focus	1 ( 7 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )

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

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : MALE

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

PAGE : 7

		Group Name	control				750 ppm				1500 ppm				3000 ppm			
		No. of Animals on Study	15				12				21				27			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Organ_____	Findings_____		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
<hr/>																		
(Digestive system)																		
liver			<15>				<12>				<21>				<27>			
	vacuolated cell focus		1 ( 7 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )
	hepatocellular hypertrophy:central		0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	1 ( 5 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	5 ( 19 )	9 ( 33 )	0 ( 0 )	0 ** ( 0 )
pancreas			<15>				<12>				<21>				<27>			
	hyperplasia:acinar cell		0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	1 ( 4 )	0 ( 0 )	0 ( 0 )
<hr/>																		
(Urinary system)																		
kidney			<15>				<12>				<21>				<27>			
	basophilic change		4 ( 27 )	1 ( 7 )	0 ( 0 )	0 ( 0 )	4 ( 33 )	0 ( 0 )	1 ( 8 )	0 ( 0 )	5 ( 24 )	1 ( 5 )	0 ( 0 )	0 ( 0 )	14 ( 52 )	2 ( 7 )	0 ( 0 )	0 ( 0 )
	deposit of amyloid		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 )	0 ( 0 )	0 ( 0 )	0 ( 0 )
	deposit of hemosiderin		0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	1 ( 8 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	3 ( 14 )	5 ( 24 )	0 * ( 0 )	0 ( 0 )	2 ( 7 )	10 ( 37 )	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. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : MALE

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

PAGE : 8

Organ	Findings	Group Name	control				750 ppm				1500 ppm				3000 ppm			
		No. of Animals on Study	15				12				21				27			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Urinary system)																		
kidney			<15>				<12>				<21>				<27>			
	inflammation		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			( 7 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	lymphocytic infiltration		0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 5 )	( 0 )	( 0 )	( 0 )	( 7 )	( 0 )	( 0 )	( 0 )
	perivascular inflammation		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 5 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	inflammatory polyp		0	0	2	0	0	0	1	0	0	1	0	0	0	0	1	0
		( 0 )	( 0 )	( 13 )	( 0 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 5 )	( 0 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	
	arteritis		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 5 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	
	hydronephrosis		0	1	1	1	0	0	1	0	0	0	0	1	0	0	0	1
			( 0 )	( 7 )	( 7 )	( 7 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 0 )	( 5 )	( 0 )	( 0 )	( 0 )	( 4 )
	mineralization:papilla		0	1	0	0	0	0	0	0	2	0	0	0	0	0	0	0
			( 0 )	( 7 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 10 )	( 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 )	( 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 ;    * : $P \leq 0.05$ ** : $P \leq 0.01$ Test of Chi Square																		

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 9

Organ	Findings	Group Name No. of Animals on Study Grade	control 15				750 ppm 12				1500 ppm 21				3000 ppm 27			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																		
kidney			<15>				<12>				<21>				<27>			
	dilatation:tubular lumen		4 ( 27)	1 ( 7)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	3 ( 14)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 4)	0 ( 0)	0 ( 0)	0 * ( 0)
	eosinophilic droplet:proximal tubule		0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	2 ( 17)	1 ( 8)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)
{Endocrine system}																		
pituitary			<15>				<11>				<21>				<27>			
	cyst		0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 9)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	2 ( 7)	1 ( 4)	0 ( 0)	0 ( 0)
adrenal			<15>				<12>				<21>				<26>			
	deposit of amyloid		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)	0 ( 0)	0 ( 0)	0 ( 0)
	spindle-cell hyperplasia		6 ( 40)	3 ( 20)	0 ( 0)	0 ( 0)	6 ( 50)	0 ( 0)	0 ( 0)	0 ( 0)	11 ( 52)	1 ( 5)	0 ( 0)	0 ( 0)	7 ( 27)	2 ( 8)	0 ( 0)	0 ( 0)
	hyperplasia:cortical cell		0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 8)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)
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. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 10

Organ	Findings	Group Name No. of Animals on Study Grade	control 15				750 ppm 12				1500 ppm 21				3000 ppm 27			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Reproductive system}																		
testis	cyst		<15>				<12>				<21>				<27>			
		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
		( 0 )	( 0 )	( 0 )	( 7 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	
	mineralization		10	2	0	0	7	3	0	0	13	4	0	0	14	0	0	0
		( 67 )	( 13 )	( 0 )	( 0 )	( 58 )	( 25 )	( 0 )	( 0 )	( 62 )	( 19 )	( 0 )	( 0 )	( 52 )	( 0 )	( 0 )	( 0 )	
epididymis	spermatogenic granuloma		<15>				<12>				<21>				<27>			
		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		( 0 )	( 7 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	
prep/cli gl	cyst		<15>				<12>				<21>				<27>			
		0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 5 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	
{Nervous system}																		
brain	mineralization		<15>				<12>				<21>				<27>			
		5	0	0	0	3	0	0	0	8	0	0	0	15	0	0	0	
		( 33 )	( 0 )	( 0 )	( 0 )	( 25 )	( 0 )	( 0 )	( 0 )	( 38 )	( 0 )	( 0 )	( 0 )	( 56 )	( 0 )	( 0 )	( 0 )	
periph nerv	inflammation		<15>				<12>				<21>				<27>			
		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 5 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	
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. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : MALE

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

PAGE : 11

		Group Name	control				750 ppm				1500 ppm				3000 ppm			
		No. of Animals on Study	15				12				21				27			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Organ	Findings		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Musculoskeletal system}																		
muscle			<15>				<12>				<21>				<27>			
	mineralization		1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			( 7 )	( 0 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	arteritis		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 5 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )

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

(HPT150)

BAIS4

## APPENDIX L 3

HISTOPATHOLOGICAL FINDINGS :  
NON-NEOPLASTIC LESIONS : MALE  
SACRIFICED ANIMALS

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : MALE

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

PAGE : 1

Organ	Findings	Group Name No. of Animals on Study				control				750 ppm				1500 ppm				3000 ppm			
		Grade				35				38				29				23			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Integumentary system/appandage}																					
subcutis		<35>				<38>				<29>				<23>							
	epidermal cyst	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		( 0 )	( 3 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
{Respiratory system}																					
nasal cavit		<35>				<38>				<29>				<23>							
	exudate	0	2	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		( 0 )	( 6 )	( 0 )	( 0 )	( 3 )	( 8 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	deposit of pigment	0	0	0	0	36	0	0	0 **	26	0	0	0 **	20	0	0	0	0 **	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 95 )	( 0 )	( 0 )	( 0 )	( 90 )	( 0 )	( 0 )	( 0 )	( 87 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	mineralization	9	0	0	0	5	0	0	0	1	0	0	0 *	4	0	0	0	0	0	0	0
		( 26 )	( 0 )	( 0 )	( 0 )	( 13 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )	( 17 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	eosinophilic change:olfactory epithelium	14	2	0	0	13	3	0	0	6	2	0	0	10	3	0	0	0	0	0	0
		( 40 )	( 6 )	( 0 )	( 0 )	( 34 )	( 8 )	( 0 )	( 0 )	( 21 )	( 7 )	( 0 )	( 0 )	( 43 )	( 13 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	eosinophilic change:respiratory epithelium	16	6	1	0	21	7	1	0	14	10	1	0	11	3	2	0	0	0	0	0
		( 46 )	( 17 )	( 3 )	( 0 )	( 55 )	( 18 )	( 3 )	( 0 )	( 48 )	( 34 )	( 3 )	( 0 )	( 48 )	( 13 )	( 9 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	respiratory metaplasia:olfactory epithelium	17	0	0	0	13	0	0	0	12	16	0	0 **	0	20	3	0 **	0	0	0	0
		( 49 )	( 0 )	( 0 )	( 0 )	( 34 )	( 0 )	( 0 )	( 0 )	( 41 )	( 55 )	( 0 )	( 0 )	( 0 )	( 87 )	( 13 )	( 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. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : MALE

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

PAGE : 2

Organ	Findings	control				750 ppm				1500 ppm				3000 ppm			
		No. of Animals on Study				38				29				23			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																	
nasal cavit		<35>				<38>				<29>				<23>			
	respiratory metaplasia:gland	13	0	0	0	17	3	0	0	3	11	13	0 **	0	1	22	0 **
		( 37)	( 0)	( 0)	( 0)	( 45)	( 8)	( 0)	( 0)	( 10)	( 38)	( 45)	( 0)	( 0)	( 4)	( 96)	( 0)
nasopharynx		<35>				<38>				<29>				<23>			
	eosinophilic change	1	0	0	0	1	0	1	0	3	0	2	0	13	0	2	0 **
		( 3)	( 0)	( 0)	( 0)	( 3)	( 0)	( 3)	( 0)	( 10)	( 0)	( 7)	( 0)	( 57)	( 0)	( 9)	( 0)
lung		<35>				<38>				<29>				<23>			
	inflammatory infiltration	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 3)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
	granulomatous inflammation	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		( 0)	( 3)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
	bronchiolar cell hyperplasia	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
		( 0)	( 0)	( 0)	( 0)	( 0)	( 3)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
	bronchiolar-alveolar cell hyperplasia	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)	( 0)	( 0)	( 0)	( 0)
{Hematopoietic system}																	
bone marrow		<35>				<38>				<29>				<23>			
	increased hematopoiesis	1	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0
		( 3)	( 0)	( 0)	( 0)	( 3)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 4)	( 4)	( 0)	( 0)

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

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : MALE

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

PAGE : 3

Organ	Findings	Group Name	control				750 ppm				1500 ppm				3000 ppm			
		No. of Animals on Study	35				38				29				23			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Hematopoietic system)																		
bone marrow			<35>				<38>				<29>				<23>			
	erythropoiesis:increased		0	0	0	0	2	0	0	0	5	0	0	0 *	10	0	0	0 **
			( 0 )	( 0 )	( 0 )	( 0 )	( 5 )	( 0 )	( 0 )	( 0 )	( 17 )	( 0 )	( 0 )	( 0 )	( 43 )	( 0 )	( 0 )	( 0 )
	erythropoiesis:decreased		3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			( 9 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	granulopoiesis:increased		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 )
lymph node			<35>				<38>				<29>				<23>			
	deposit of hemosiderin		0	0	0	0	8	0	0	0 *	6	0	0	0 *	5	0	0	0 *
			( 0 )	( 0 )	( 0 )	( 0 )	( 21 )	( 0 )	( 0 )	( 0 )	( 21 )	( 0 )	( 0 )	( 0 )	( 22 )	( 0 )	( 0 )	( 0 )
spleen			<35>				<38>				<29>				<23>			
	deposit of hemosiderin		0	0	0	0	2	0	0	0	5	2	0	0 **	3	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 5 )	( 0 )	( 0 )	( 0 )	( 17 )	( 7 )	( 0 )	( 0 )	( 13 )	( 0 )	( 0 )	( 0 )
	deposit of melanin		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 )
	extramedullary hematopoiesis		5	0	0	0	2	3	0	0	12	2	0	0 **	7	6	2	0 **
			( 14 )	( 0 )	( 0 )	( 0 )	( 5 )	( 8 )	( 0 )	( 0 )	( 41 )	( 7 )	( 0 )	( 0 )	( 30 )	( 26 )	( 9 )	( 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. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : MALE

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

PAGE : 4

Organ	Findings	control				750 ppm				1500 ppm				3000 ppm			
		No. of Animals on Study				38				29				23			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Hematopoietic system)																	
spleen		<35>				<38>				<29>				<23>			
	follicular hyperplasia	3	1	1	0	3	0	0	0	0	1	1	0	0	0	0	0
		( 9 )	( 3 )	( 3 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 0 )	( 3 )	( 3 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
(Circulatory system)																	
heart		<35>				<38>				<29>				<23>			
	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 )	( 4 )	( 0 )	( 0 )	( 0 )
	arteritis	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		( 0 )	( 3 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
(Digestive system)																	
tooth		<35>				<38>				<29>				<23>			
	dysplasia	6	10	6	9	9	5	8	10	13	11	1	2 *	10	8	2	0 *
		( 17 )	( 29 )	( 17 )	( 26 )	( 24 )	( 13 )	( 21 )	( 26 )	( 45 )	( 38 )	( 3 )	( 7 )	( 43 )	( 35 )	( 9 )	( 0 )
	odontogenic cyst	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )

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

(HPT150)

BAIS4

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 5

		Group Name	control				750 ppm				1500 ppm				3000 ppm			
		No. of Animals on Study	35				38				29				23			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Organ_____	Findings_____		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
<hr/>																		
{Digestive system}																		
tongue			<35>				<38>				<29>				<23>			
	arteritis		0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0
			( 0 )	( 6 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
salivary gl			<35>				<38>				<29>				<23>			
	lymphocytic infiltration		4	0	0	0	4	0	0	0	3	0	0	0	0	0	0	0
			( 11 )	( 0 )	( 0 )	( 0 )	( 11 )	( 0 )	( 0 )	( 0 )	( 10 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
stomach			<35>				<38>				<29>				<23>			
	hyperplasia:glandular stomach		11	12	8	0	14	16	7	0	8	13	7	0	10	6	5	0
			( 31 )	( 34 )	( 23 )	( 0 )	( 37 )	( 42 )	( 18 )	( 0 )	( 28 )	( 45 )	( 24 )	( 0 )	( 43 )	( 26 )	( 22 )	( 0 )
liver			<35>				<38>				<29>				<23>			
	angiectasis		2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
			( 6 )	( 0 )	( 0 )	( 0 )	( 0 )	( 5 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	necrosis:central		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 )
	necrosis:focal		1	0	0	0	1	0	0	0	0	2	0	0	0	0	0	0
			( 3 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )	( 0 )	( 7 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	fatty change		2	0	0	0	4	0	0	0	2	1	0	0	0	0	0	0
			( 6 )	( 0 )	( 0 )	( 0 )	( 11 )	( 0 )	( 0 )	( 0 )	( 7 )	( 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. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : MALE

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

PAGE : 6

		Group Name	control				750 ppm				1500 ppm				3000 ppm			
		No. of Animals on Study	35				38				29				23			
Organ_____	Findings_____	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
<hr/>																		
(Digestive system)																		
liver			<35>				<38>				<29>				<23>			
	fatty change:central		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
			( 0)	( 0)	( 0)	( 0)	( 0)	( 3)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
	inflammatory 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)
	granulation		0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0
			( 0)	( 0)	( 0)	( 0)	( 5)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 4)	( 0)	( 0)
	clear cell focus		3	1	0	0	5	0	0	0	8	0	0	0	0	0	0	0
			( 9)	( 3)	( 0)	( 0)	( 13)	( 0)	( 0)	( 0)	( 28)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
acidophilic cell focus		0	0	0	0	4	0	0	0	3	1	0	0	0	1	0	0	
		( 0)	( 0)	( 0)	( 0)	( 11)	( 0)	( 0)	( 0)	( 10)	( 3)	( 0)	( 0)	( 0)	( 4)	( 0)	( 0)	
basophilic cell focus		1	0	0	0	3	0	0	0	1	0	1	0	0	0	0	0	
		( 3)	( 0)	( 0)	( 0)	( 8)	( 0)	( 0)	( 0)	( 3)	( 0)	( 3)	( 0)	( 0)	( 0)	( 0)	( 0)	
vacuolated cell focus		1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
		( 3)	( 3)	( 0)	( 0)	( 3)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	
biliary cyst		1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	
		( 3)	( 3)	( 0)	( 0)	( 3)	( 3)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	

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

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : MALE

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

PAGE : 7

Organ_____	Findings_____	Group Name	control				750 ppm				1500 ppm				3000 ppm			
		No. of Animals on Study	35				38				29				23			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Digestive system)																		
liver			<35>				<38>				<29>				<23>			
	hepatocellular hypertrophy:central	0	0	0	0	7	0	0	0 *	21	0	0	0 **	2	13	0	0 **	
		( 0 )	( 0 )	( 0 )	( 0 )	( 18 )	( 0 )	( 0 )	( 0 )	( 72 )	( 0 )	( 0 )	( 0 )	( 9 )	( 57 )	( 0 )	( 0 )	
pancreas			<35>				<38>				<29>				<23>			
	islet cell hyperplasia	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		( 6 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	
(Urinary system)																		
kidney			<35>				<38>				<29>				<23>			
	basophilic change	27	4	0	0	24	11	0	0	22	4	1	0	14	7	0	0	
		( 77 )	( 11 )	( 0 )	( 0 )	( 63 )	( 29 )	( 0 )	( 0 )	( 76 )	( 14 )	( 3 )	( 0 )	( 61 )	( 30 )	( 0 )	( 0 )	
			<35>				<38>				<29>				<23>			
	deposit of hemosiderin	0	0	0	0	0	0	1	0	0	2	1	0	0	1	5	0 **	
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 7 )	( 3 )	( 0 )	( 0 )	( 4 )	( 22 )	( 0 )	
			<35>				<38>				<29>				<23>			
	hyaline cast	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 )	
			<35>				<38>				<29>				<23>			
	inflammatory 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 )	

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. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 8

Organ	Findings	Group Name	control				750 ppm				1500 ppm				3000 ppm			
		No. of Animals on Study	35				38				29				23			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Urinary system)																		
kidney			<35>				<38>				<29>				<23>			
	lymphocytic infiltration		5	0	0	0	4	1	0	0	7	0	0	0	3	0	0	0
			( 14)	( 0)	( 0)	( 0)	( 11)	( 3)	( 0)	( 0)	( 24)	( 0)	( 0)	( 0)	( 13)	( 0)	( 0)	( 0)
	inflammatory polyp		0	1	3	0	0	0	0	0	0	0	1	0	0	1	0	0
			( 0)	( 3)	( 9)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 3)	( 0)	( 0)	( 4)	( 0)	( 0)
	hydronephrosis		0	0	4	0	0	1	0	1	0	0	0	1	0	0	1	0
			( 0)	( 0)	( 11)	( 0)	( 0)	( 3)	( 0)	( 3)	( 0)	( 0)	( 0)	( 3)	( 0)	( 0)	( 4)	( 0)
	retention cyst		0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
			( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 3)	( 0)	( 0)	( 0)	( 4)	( 0)	( 0)	( 0)
mineralization:papilla		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)	
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)	( 4)	( 0)	( 0)	( 0)	
tubular cell hyperplasia:cystic		0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	
		( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 3)	( 0)	( 0)	( 0)	( 4)	( 0)	( 0)	( 0)	
urothelial hyperplasia:pelvis		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
		( 0)	( 0)	( 0)	( 0)	( 3)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	

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

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 9

		Group Name No. of Animals on Study				control 35				750 ppm 38				1500 ppm 29				3000 ppm 23			
Organ_____	Findings_____	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)			
(Urinary system)																					
urin bladd			<35>				<38>				<29>				<23>						
	lymphocytic infiltration		1	1	0	0	2	0	0	0	1	0	0	0	1	0	0	0			
			( 3)	( 3)	( 0)	( 0)	( 5)	( 0)	( 0)	( 0)	( 3)	( 0)	( 0)	( 0)	( 4)	( 0)	( 0)	( 0)			
(Endocrine system)																					
pituitary			<35>				<38>				<28>				<23>						
	angiectasis		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0			
			( 0)	( 0)	( 0)	( 0)	( 3)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)			
	cyst		6	0	0	0	2	0	0	0	5	0	0	0	3	1	0	0			
			( 17)	( 0)	( 0)	( 0)	( 5)	( 0)	( 0)	( 0)	( 18)	( 0)	( 0)	( 0)	( 13)	( 4)	( 0)	( 0)			
	Rathke pouch		1	0	0	0	3	0	0	0	1	0	0	0	0	0	0	0			
			( 3)	( 0)	( 0)	( 0)	( 8)	( 0)	( 0)	( 0)	( 4)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)			
adrenal			<35>				<38>				<29>				<23>						
	spindle-cell hyperplasia		18	11	0	0	25	5	0	0	15	2	0	0 *	9	3	0	0 *			
			( 51)	( 31)	( 0)	( 0)	( 66)	( 13)	( 0)	( 0)	( 52)	( 7)	( 0)	( 0)	( 39)	( 13)	( 0)	( 0)			
	hyperplasia:cortical cell		0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0			
			( 0)	( 0)	( 0)	( 0)	( 5)	( 0)	( 0)	( 0)	( 3)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)			

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



STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 10

Organ	Findings	Group Name	control				750 ppm				1500 ppm				3000 ppm			
		No. of Animals on Study	35				38				29				23			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Reproductive system)																		
testis	mineralization		<35>				<38>				<29>				<23>			
		23	10	0	0	19	16	2	0	23	6	0	0	21	0	0	0 *	
		( 66)	( 29)	( 0)	( 0)	( 50)	( 42)	( 5)	( 0)	( 79)	( 21)	( 0)	( 0)	( 91)	( 0)	( 0)	( 0)	
	xanthogranuloma		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		( 0)	( 0)	( 0)	( 0)	( 3)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
epididymis	inflammatory infiltration		<35>				<38>				<29>				<23>			
		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
		( 0)	( 0)	( 0)	( 0)	( 3)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	
	spermatogenic granuloma		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)	( 4)	( 0)	( 0)	( 0)	
prep/cli gl	cyst		<35>				<38>				<29>				<23>			
		0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	
		( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 7)	( 0)	( 0)	( 0)	( 0)	( 0)	
(Nervous system)																		
brain	mineralization		<35>				<38>				<29>				<23>			
		16	0	0	0	18	0	0	0	16	0	0	0	13	0	0	0	
		( 46)	( 0)	( 0)	( 0)	( 47)	( 0)	( 0)	( 0)	( 55)	( 0)	( 0)	( 0)	( 57)	( 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. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 11

		control				750 ppm				1500 ppm				3000 ppm			
		35				38				29				23			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Organ	Findings	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Special sense organs/appendage)																	
eye		<35>				<38>				<29>				<23>			
	inflammatory infiltration	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
Harder gl		<35>				<38>				<29>				<23>			
	hyperplasia	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 5 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 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															

(HPT150)

BAIS4

## APPENDIX L 4

HISTOPATHOLOGICAL FINDINGS :  
NON-NEOPLASTIC LESIONS : FEMALE  
ALL ANIMALS

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 15

Organ	Findings	Group Name No. of Animals on Study Grade				control 49				1500 ppm 50				3000 ppm 50				6000 ppm 50			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)				
{Respiratory system}																					
nasal cavit		<49>				<50>				<50>				<50>							
	exudate	0 ( 0 )	1 ( 2 )	0 ( 0 )	0 ( 0 )	1 ( 2 )	1 ( 2 )	0 ( 0 )	0 ( 0 )	1 ( 2 )	3 ( 6 )	0 ( 0 )	0 ( 0 )	1 ( 2 )	1 ( 2 )	0 ( 0 )	0 ( 0 )				
	deposit of pigment	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	43 ( 86 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	38 ( 76 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	47 ( 94 )	0 ( 0 )	0 ( 0 )	0 ( 0 )			
	mineralization	2 ( 4 )	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 )	0 ( 0 )			
	inflammation	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	1 ( 2 )	0 ( 0 )			
	eosinophilic change:olfactory epithelium	6 ( 12 )	1 ( 2 )	0 ( 0 )	0 ( 0 )	14 ( 28 )	3 ( 6 )	0 ( 0 )	0 ( 0 )	23 ( 46 )	1 ( 2 )	2 ( 4 )	0 ( 0 )	0 ( 0 )	22 ( 44 )	22 ( 44 )	1 ( 2 )	0 ( 0 )			
	eosinophilic change:respiratory epithelium	28 ( 57 )	4 ( 8 )	1 ( 2 )	0 ( 0 )	11 ( 22 )	34 ( 68 )	3 ( 6 )	0 ( 0 )	25 ( 50 )	21 ( 42 )	4 ( 8 )	0 ( 0 )	0 ( 0 )	44 ( 88 )	4 ( 8 )	0 ( 0 )	0 ( 0 )			
	respiratory metaplasia:olfactory epithelium	9 ( 18 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	7 ( 14 )	40 ( 80 )	1 ( 2 )	0 ( 0 )	0 ( 0 )	42 ( 84 )	8 ( 16 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	6 ( 12 )	44 ( 88 )	0 ( 0 )			
	respiratory metaplasia:gland	6 ( 12 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	4 ( 8 )	28 ( 56 )	15 ( 30 )	0 ( 0 )	0 ( 0 )	2 ( 4 )	47 ( 94 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	50 ( 100 )	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. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 16

Organ	Findings	Group Name No. of Animals on Study Grade				control 49				1500 ppm 50				3000 ppm 50				6000 ppm 50			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Respiratory system)																					
nasopharynx	eosinophilic change	<49>				<50>				<50>				<50>				<50>			
		0	0	3	0	20	6	7	2 **	23	6	6	1 **	19	14	3	0 **				
		( 0 )	( 0 )	( 6 )	( 0 )	( 40 )	( 12 )	( 14 )	( 4 )	( 46 )	( 12 )	( 12 )	( 2 )	( 38 )	( 28 )	( 6 )	( 0 )				
larynx	eosinophilic change	<49>				<50>				<50>				<50>				<50>			
		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 )
trachea	eosinophilic change	<49>				<50>				<50>				<50>				<50>			
		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
lung	hemorrhage	<49>				<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 )
	edema	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0			
		( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )			
	eosinophilic change	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 )
	inflammatory infiltration	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0				
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )				

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. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 17

		Group Name	control				1500 ppm				3000 ppm				6000 ppm			
		No. of Animals on Study	49				50				50				50			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
lung			<49>				<50>				<50>				<50>			
	lymphocytic infiltration		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 )
	granulomatous inflammation		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )
	bronchiolar-alveolar cell hyperplasia		0	0	0	0	3	0	0	0	1	0	0	0	3	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )	( 0 )
	accumulation:macrophage		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 )
{Hematopoietic system}																		
bone marrow			<49>				<50>				<50>				<50>			
	granulation		1	0	0	0	2	1	0	0	1	0	0	0	0	1	1	0
			( 2 )	( 0 )	( 0 )	( 0 )	( 4 )	( 2 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 2 )	( 0 )
	decreased hematopoiesis		0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	erythropoiesis:increased		2	0	0	0	5	2	0	0	7	3	0	0 *	10	0	0	0 *
			( 4 )	( 0 )	( 0 )	( 0 )	( 10 )	( 4 )	( 0 )	( 0 )	( 14 )	( 6 )	( 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 ; \* :  $P \leq 0.05$  \*\* :  $P \leq 0.01$  Test of Chi Square

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 18

Organ_____	Findings_____	Group Name No. of Animals on Study Grade				control 49				1500 ppm 50				3000 ppm 50				6000 ppm 50			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)				
(Hematopoietic system)																					
bone marrow		<49>				<50>				<50>				<50>							
	erythropoiesis:decreased	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)				
	granulopoiesis:increased	0 ( 0)	0 ( 0)	1 ( 2)	0 ( 0)	2 ( 4)	0 ( 0)	2 ( 4)	0 ( 0)	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)				
lymph node		<49>				<50>				<50>				<50>							
	deposit of hemosiderin	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)	2 ( 4)	0 ( 0)	0 ( 0)	0 ( 0)	4 ( 8)	0 ( 0)	0 ( 0)	0 ( 0)				
	lymphadenitis	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	2 ( 4)	0 ( 0)	0 ( 0)	0 ( 0)				
	follicular 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)				
thymus		<49>				<50>				<50>				<50>							
	atrophy	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)				
	accumulation:macrophage	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)				
Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe																					
< a > a : Number of animals examined at the site																					
b b : Number of animals with lesion																					
( c ) c : b / a * 100																					
Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square																					

(HPT150)

BAIS4

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 19

		Group Name	control				1500 ppm				3000 ppm				6000 ppm			
		No. of Animals on Study	49				50				50				50			
Organ_____	Findings_____	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
<hr/>																		
(Hematopoietic system)																		
spleen			<49>				<50>				<50>				<50>			
	atrophy		1	0	0	0	2	0	0	0	0	0	0	0	2	0	0	0
			( 2 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )
	deposit of hemosiderin		0	0	0	0	1	0	0	0	9	1	0	0 **	7	1	0	0 *
			( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 18 )	( 2 )	( 0 )	( 0 )	( 14 )	( 2 )	( 0 )	( 0 )
	inflammation		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	extramedullary hematopoiesis		4	6	5	0	3	3	8	0	11	10	13	0 **	10	10	13	0 **
			( 8 )	( 12 )	( 10 )	( 0 )	( 6 )	( 6 )	( 16 )	( 0 )	( 22 )	( 20 )	( 26 )	( 0 )	( 20 )	( 20 )	( 26 )	( 0 )
	follicular hyperplasia		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
<hr/>																		
(Circulatory system)																		
heart			<49>				<50>				<50>				<50>			
	thrombus		0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )
	necrosis:zonal		0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )

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. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 20

Organ	Findings	Group Name No. of Animals on Study Grade				control 49				1500 ppm 50				3000 ppm 50				6000 ppm 50			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Circulatory system}																					
heart		<49>				<50>				<50>				<50>				<50>			
	necrosis:focal	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 )	( 0 )	( 0 )	( 0 )
		<49>				<50>				<50>				<50>				<50>			
	mineralization	2	0	0	0	3	2	0	0	7	0	0	0	4	0	0	0	4	0	0	0
		( 4 )	( 0 )	( 0 )	( 0 )	( 6 )	( 4 )	( 0 )	( 0 )	( 14 )	( 0 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )
{Digestive system}																					
tooth		<49>				<50>				<50>				<50>				<50>			
	dysplasia	22	4	1	2	23	4	1	1	25	1	0	2	19	5	3	1	19	5	3	1
		( 45 )	( 8 )	( 2 )	( 4 )	( 46 )	( 8 )	( 2 )	( 2 )	( 50 )	( 2 )	( 0 )	( 4 )	( 38 )	( 10 )	( 6 )	( 2 )	( 38 )	( 10 )	( 6 )	( 2 )
tongue		<49>				<50>				<50>				<50>				<50>			
	arteritis	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
		( 4 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )
salivary gl		<49>				<50>				<50>				<50>				<50>			
	lymphocytic infiltration	3	0	0	0	8	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0
		( 6 )	( 0 )	( 0 )	( 0 )	( 16 )	( 0 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
stomach		<48>				<49>				<50>				<50>				<50>			
	erosion:glandular stomach	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 )

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. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : FEMALE

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

PAGE : 21

Organ	Findings	control No. of Animals on Study Grade				1500 ppm 50				3000 ppm 50				6000 ppm 50			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																	
stomach		<48>				<49>				<50>				<50>			
	hyperplasia:glandular stomach	20 ( 42)	15 ( 31)	5 ( 10)	0 ( 0)	18 ( 37)	13 ( 27)	4 ( 8)	0 ( 0)	22 ( 44)	14 ( 28)	1 ( 2)	0 ( 0)	24 ( 48)	11 ( 22)	1 ( 2)	0 ( 0)
liver		<49>				<50>				<50>				<50>			
	angiectasis	4 ( 8)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 2)	0 ( 0)	0 ( 0)	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)
	necrosis:central	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 2)	0 ( 0)	0 ( 0)
	necrosis:focal	2 ( 4)	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)
	fatty change	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)
	fatty change:central	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)
	deposit of amyloid	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)
	inflammatory infiltration	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 2)	1 ( 2)	0 ( 0)	0 ( 0)	1 ( 2)	0 ( 0)	0 ( 0)	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)

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

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 22

		Group Name No. of Animals on Study				control 49				1500 ppm 50				3000 ppm 50				6000 ppm 50			
Organ	Findings	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)				
{Digestive system}																					
liver		<49>				<50>				<50>				<50>							
	granulation	12 ( 24)	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)	0 ( 0)				
	clear cell focus	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	2 ( 4)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)				
	acidophilic cell focus	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	2 ( 4)	1 ( 2)	0 ( 0)	0 ( 0)	5 ( 10)	1 ( 2)	0 ( 0)	0 ( 0)	0 ( 0)	8 ( 16)	0 ( 0)	0 ( 0)				
	basophilic cell focus	1 ( 2)	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)				
	hepatocellular hypertrophy:central	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	2 ( 4)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	6 ( 12)	17 ( 34)	0 ( 0)				
{Urinary system}																					
kidney		<49>				<50>				<50>				<50>							
	infarct	0 ( 0)	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 ( 4)	0 ( 0)	0 ( 0)				
	basophilic change	4 ( 8)	0 ( 0)	0 ( 0)	0 ( 0)	2 ( 4)	0 ( 0)	0 ( 0)	0 ( 0)	4 ( 8)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	2 ( 4)	0 ( 0)	0 ( 0)				

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

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 23

Organ	Findings	Group Name No. of Animals on Study Grade				control 49				1500 ppm 50				3000 ppm 50				6000 ppm 50			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																					
kidney		<49>				<50>				<50>				<50>				<50>			
	deposit of amyloid	0	0	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	deposit of hemosiderin	0	0	0	0	0	1	2	0	2	1	4	0	1	3	3	0	2	6	6	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 4 )	( 2 )	( 8 )	( 0 )	( 2 )	( 6 )	( 6 )	( 0 )	( 2 )	( 6 )	( 6 )	( 0 )
	hyaline cast	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	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	lymphocytic infiltration	1	0	0	0	2	1	0	0	5	1	0	0	3	0	0	0	6	0	0	0
		( 2 )	( 0 )	( 0 )	( 0 )	( 4 )	( 2 )	( 0 )	( 0 )	( 10 )	( 2 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )	( 0 )
	inflammatory polyp	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 )
	ossification	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 )
	hydronephrosis	0	1	1	0	0	1	2	0	0	0	1	0	1	0	0	1	2	0	0	1
		( 0 )	( 2 )	( 2 )	( 0 )	( 0 )	( 2 )	( 4 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 2 )	( 0 )	( 2 )	( 2 )	( 0 )	( 0 )	( 2 )

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

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 24

Organ	Findings	Group Name No. of Animals on Study Grade				control 49				1500 ppm 50				3000 ppm 50				6000 ppm 50			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																					
kidney		<49>				<50>				<50>				<50>				<50>			
	retention cyst	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 )
	papillary necrosis	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	mineralization:papilla	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	glomerulosclerosis	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	dilated pelvis	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	eosinophilic droplet:proximal tubule	0	2	5	1	2	1	1	0	1	2	2	2	0	0	1	2	0	0	1	2
		( 0 )	( 4 )	( 10 )	( 2 )	( 4 )	( 2 )	( 2 )	( 0 )	( 2 )	( 4 )	( 4 )	( 4 )	( 0 )	( 0 )	( 2 )	( 4 )	( 0 )	( 0 )	( 2 )	( 4 )
urin bladd		<49>				<49>				<50>				<50>				<50>			
	lymphocytic infiltration	4	0	0	0	4	0	0	0	7	1	0	0	4	1	0	0	4	1	0	0
		( 8 )	( 0 )	( 0 )	( 0 )	( 8 )	( 0 )	( 0 )	( 0 )	( 14 )	( 2 )	( 0 )	( 0 )	( 8 )	( 2 )	( 0 )	( 0 )	( 8 )	( 2 )	( 0 )	( 0 )
{Endocrine system}																					
pituitary		<48>				<50>				<50>				<50>				<50>			
	hypoplasia	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		( 2 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 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. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : FEMALE

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

PAGE : 25

Organ	Findings	Group Name No. of Animals on Study Grade				control 49				1500 ppm 50				3000 ppm 50				6000 ppm 50			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																					
pituitary		<48>				<50>				<50>				<50>				<50>			
	angiectasis	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 )
	cyst	6	1	0	0	4	2	0	0	4	1	0	0	2	0	0	0	2	0	0	0
		( 13 )	( 2 )	( 0 )	( 0 )	( 8 )	( 4 )	( 0 )	( 0 )	( 8 )	( 2 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )
	hyperplasia	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	focal hypertrophy	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		( 4 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
thyroid		<49>				<50>				<50>				<50>				<50>			
	atrophy	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 )
	inflammatory infiltration	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
adrenal		<49>				<50>				<50>				<50>				<50>			
	inflammatory infiltration	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )

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

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 26

		Group Name No. of Animals on Study Grade	control 49				1500 ppm 50				3000 ppm 50				6000 ppm 50			
Organ	Findings		1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Endocrine system}																		
adrenal			<49>				<50>				<50>				<50>			
	lymphocytic 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 )
	extramedullary hematopoiesis		0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	1 ( 2 )	0 ( 0 )	0 ( 0 )
	spindle-cell hyperplasia		12 ( 24 )	27 ( 55 )	7 ( 14 )	0 ( 0 )	11 ( 22 )	27 ( 54 )	9 ( 18 )	0 ( 0 )	11 ( 22 )	31 ( 62 )	6 ( 12 )	0 ( 0 )	12 ( 24 )	32 ( 64 )	5 ( 10 )	0 ( 0 )
	focal fatty change:cortex		0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	1 ( 2 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )
{Reproductive system}																		
ovary			<49>				<50>				<50>				<50>			
	thrombus		0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	2 ( 4 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )
	cyst		5 ( 10 )	3 ( 6 )	2 ( 4 )	0 ( 0 )	3 ( 6 )	3 ( 6 )	1 ( 2 )	0 ( 0 )	1 ( 2 )	1 ( 2 )	5 ( 10 )	0 ( 0 )	2 ( 4 )	0 ( 0 )	0 ( 0 )	0 ( 0 )
uterus			<49>				<50>				<50>				<50>			
	cystic endometrial hyperplasia		10 ( 20 )	11 ( 22 )	11 ( 22 )	0 ( 0 )	10 ( 20 )	15 ( 30 )	9 ( 18 )	0 ( 0 )	9 ( 18 )	14 ( 28 )	5 ( 10 )	0 ( 0 )	15 ( 30 )	10 ( 20 )	5 ( 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																		

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : FEMALE

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

PAGE : 27

Organ_____	Findings_____	Group Name No. of Animals on Study Grade				control 49				1500 ppm 50				3000 ppm 50				6000 ppm 50			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)				
<hr/>																					
{Reproductive system}																					
mammary gl		<49>				<50>				<50>				<50>							
	duct ectasia	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 )				
{Nervous system}																					
brain		<49>				<50>				<50>				<50>							
	cyst	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0				
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )				
	mineralization	22	0	0	0	21	0	0	0	15	0	0	0	16	0	0	0				
		( 45 )	( 0 )	( 0 )	( 0 )	( 42 )	( 0 )	( 0 )	( 0 )	( 30 )	( 0 )	( 0 )	( 0 )	( 32 )	( 0 )	( 0 )	( 0 )				
{Special sense organs/appendage}																					
eye		<49>				<50>				<50>				<50>							
	keratitis	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0				
		( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )				
	mineralization:cornea	1	1	0	0	1	0	0	0	4	1	0	0	2	0	0	0				
		( 2 )	( 2 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 8 )	( 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 : Number of animals with lesion  
( c ) c : b / a \* 100  
Significant difference ; \* : P ≤ 0.05 \*\* : P ≤ 0.01 Test of Chi Square



STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 28

Organ	Findings	control				1500 ppm				3000 ppm				6000 ppm			
		No. of Animals on Study				50				50				50			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)

{Special sense organs/appendage}

Harder gl	hyperplasia	<49>				<50>				<50>				<50>			
		1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		( 2 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )

{Musculoskeletal system}

muscle	mineralization	<49>				<50>				<50>				<50>			
		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 2 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )

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

(HPT150)

BAIS4

## APPENDIX L 5

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

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : FEMALE

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

PAGE : 12

Organ	Findings	control No. of Animals on Study Grade				1500 ppm 22				3000 ppm 32				6000 ppm 31			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																	
nasal cavit		<21>				<22>				<32>				<31>			
	exudate	0	0	0	0	1	0	0	0	1	2	0	0	1	1	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 5 )	( 0 )	( 0 )	( 0 )	( 3 )	( 6 )	( 0 )	( 0 )	( 3 )	( 3 )	( 0 )	( 0 )
	deposit of pigment	0	0	0	0	16	0	0	0 **	21	0	0	0 **	28	0	0	0 **
		( 0 )	( 0 )	( 0 )	( 0 )	( 73 )	( 0 )	( 0 )	( 0 )	( 66 )	( 0 )	( 0 )	( 0 )	( 90 )	( 0 )	( 0 )	( 0 )
	inflammation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )
	eosinophilic change:olfactory epithelium	0	0	0	0	6	1	0	0 *	13	0	0	0 **	16	12	1	0 **
		( 0 )	( 0 )	( 0 )	( 0 )	( 27 )	( 5 )	( 0 )	( 0 )	( 41 )	( 0 )	( 0 )	( 0 )	( 52 )	( 39 )	( 3 )	( 0 )
	eosinophilic change:respiratory epithelium	10	1	0	0	5	14	2	0 **	16	14	2	0 **	26	3	0	0 **
		( 48 )	( 5 )	( 0 )	( 0 )	( 23 )	( 64 )	( 9 )	( 0 )	( 50 )	( 44 )	( 6 )	( 0 )	( 84 )	( 10 )	( 0 )	( 0 )
	respiratory metaplasia:olfactory epithelium	1	0	0	0	3	17	0	0 **	0	27	5	0 **	0	5	26	0 **
		( 5 )	( 0 )	( 0 )	( 0 )	( 14 )	( 77 )	( 0 )	( 0 )	( 0 )	( 84 )	( 16 )	( 0 )	( 0 )	( 16 )	( 84 )	( 0 )
	respiratory metaplasia:gland	2	0	0	0	1	13	5	0 **	0	2	29	0 **	0	0	31	0 **
		( 10 )	( 0 )	( 0 )	( 0 )	( 5 )	( 59 )	( 23 )	( 0 )	( 0 )	( 6 )	( 91 )	( 0 )	( 0 )	( 0 )	( 100 )	( 0 )
nasopharynx		<21>				<22>				<32>				<31>			
	eosinophilic change	0	0	1	0	10	5	1	1 **	17	4	2	1 **	9	10	3	0 **
		( 0 )	( 0 )	( 5 )	( 0 )	( 45 )	( 23 )	( 5 )	( 5 )	( 53 )	( 13 )	( 6 )	( 3 )	( 29 )	( 32 )	( 10 )	( 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. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : FEMALE

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

PAGE : 13

		Group Name	control				1500 ppm				3000 ppm				6000 ppm			
		No. of Animals on Study	21				22				32				31			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Organ	Findings		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
lung			<21>				<22>				<32>				<31>			
	edema		1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0
			( 5 )	( 0 )	( 0 )	( 0 )	( 0 )	( 5 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 3 )	( 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 )	( 3 )	( 0 )	( 0 )	( 0 )
	granulomatous inflammation		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )
	bronchiolar-alveolar cell hyperplasia		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 )	( 6 )	( 0 )	( 0 )	( 0 )
{Hematopoietic system}																		
bone marrow			<21>				<22>				<32>				<31>			
	granulation		0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )
	decreased hematopoiesis		0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 5 )	( 5 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	erythropoiesis:increased		1	0	0	0	4	2	0	0	6	2	0	0	8	0	0	0
			( 5 )	( 0 )	( 0 )	( 0 )	( 18 )	( 9 )	( 0 )	( 0 )	( 19 )	( 6 )	( 0 )	( 0 )	( 26 )	( 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. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : FEMALE

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

PAGE : 14

Organ_____	Findings_____	Group Name No. of Animals on Study Grade				control 21				1500 ppm 22				3000 ppm 32				6000 ppm 31			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)				
(Hematopoietic system)																					
bone marrow		<21>				<22>				<32>				<31>							
	erythropoiesis:decreased	1 ( 5)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 5)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 3)	0 ( 0)	0 ( 0)	0 ( 0)				
	granulopoiesis:increased	0 ( 0)	0 ( 0)	1 ( 5)	0 ( 0)	2 ( 9)	0 ( 0)	2 ( 9)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)				
lymph node		<21>				<22>				<32>				<31>							
	deposit of hemosiderin	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 3)	0 ( 0)	0 ( 0)	0 ( 0)	3 ( 10)	0 ( 0)	0 ( 0)	0 ( 0)				
	lymphadenitis	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 5)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 3)	0 ( 0)	0 ( 0)	0 ( 0)				
	follicular hyperplasia	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 3)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)				
thymus		<21>				<22>				<32>				<31>							
	atrophy	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 5)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)				
spleen		<21>				<22>				<32>				<31>							
	atrophy	1 ( 5)	0 ( 0)	0 ( 0)	0 ( 0)	2 ( 9)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	2 ( 6)	0 ( 0)	0 ( 0)	0 ( 0)				
Grade	1 : Slight      2 : Moderate      3 : Marked      4 : Severe																				
< a >	a : Number of animals examined at the site																				
b	b : Number of animals with lesion																				
( c )	c : b / a * 100																				
Significant difference ;    * : P ≤ 0.05    ** : P ≤ 0.01    Test of Chi Square																					

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : FEMALE

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

PAGE : 15

		Group Name	control				1500 ppm				3000 ppm				6000 ppm			
		No. of Animals on Study	21				22				32				31			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Organ	Findings		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Hematopoietic system}																		
spleen			<21>				<22>				<32>				<31>			
	deposit of hemosiderin		0	0	0	0	1	0	0	0	3	0	0	0	0	0	0	0
			( 0)	( 0)	( 0)	( 0)	( 5)	( 0)	( 0)	( 0)	( 9)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
	extramedullary hematopoiesis		2	2	5	0	0	2	7	0	6	5	13	0	4	7	12	0
			( 10)	( 10)	( 24)	( 0)	( 0)	( 9)	( 32)	( 0)	( 19)	( 16)	( 41)	( 0)	( 13)	( 23)	( 39)	( 0)
{Circulatory system}																		
heart			<21>				<22>				<32>				<31>			
	thrombus		0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0
			( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 3)	( 0)	( 0)	( 0)	( 0)	( 6)	( 0)	( 0)
	necrosis:zonal		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)	( 6)	( 0)	( 0)
	mineralization		1	0	0	0	2	2	0	0	7	0	0	0	4	0	0	0
			( 5)	( 0)	( 0)	( 0)	( 9)	( 9)	( 0)	( 0)	( 22)	( 0)	( 0)	( 0)	( 13)	( 0)	( 0)	( 0)
{Digestive system}																		
tooth			<21>				<22>				<32>				<31>			
	dysplasia		9	0	1	1	9	3	1	0	17	1	0	2	9	3	1	1
			( 43)	( 0)	( 5)	( 5)	( 41)	( 14)	( 5)	( 0)	( 53)	( 3)	( 0)	( 6)	( 29)	( 10)	( 3)	( 3)

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. : 0422  
ANIMAL : MOUSE Crj:BDF1  
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				control 21				1500 ppm 22				3000 ppm 32				6000 ppm 31				
		Grade				1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																						
tongue		<21>				<22>				<32>				<31>								
	arteritis	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 )	( 3 )	( 0 )	( 0 )	( 0 )	
salivary gl		<21>				<22>				<32>				<31>								
	lymphocytic infiltration	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	
stomach		<20>				<21>				<32>				<31>								
	erosion:glandular stomach	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		( 0 )	( 0 )	( 0 )	( 0 )	( 5 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	
	hyperplasia:glandular stomach	11	3	0	0	6	2	1	0	16	3	0	0	14	4	1	0	( 45 )	( 13 )	( 3 )	( 0 )	
		( 55 )	( 15 )	( 0 )	( 0 )	( 29 )	( 10 )	( 5 )	( 0 )	( 50 )	( 9 )	( 0 )	( 0 )	( 45 )	( 13 )	( 3 )	( 0 )					
liver		<21>				<22>				<32>				<31>								
	angiectasis	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	
		( 0 )	( 0 )	( 0 )	( 0 )	( 5 )	( 0 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	
	necrosis:central	0	0	0	0	0	0	0	0	0	0	0	0	0	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 )	
	necrosis:focal	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		( 10 )	( 0 )	( 0 )	( 0 )	( 5 )	( 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. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 17

		Group Name	control				1500 ppm				3000 ppm				6000 ppm			
		No. of Animals on Study	21				22				32				31			
Organ_____	Findings_____	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
liver			<21>				<22>				<32>				<31>			
	fatty change		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 5 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	fatty change:central		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	inflammatory infiltration		0	0	0	0	0	1	1	0	0	1	0	0	1	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 5 )	( 5 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )
	acidophilic cell focus		0	0	0	0	0	0	0	0	2	0	0	0	3	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )	( 0 )	( 10 )	( 0 )	( 0 )	( 0 )
	hepatocellular hypertrophy:central		0	0	0	0	0	0	0	0	0	0	0	0	2	7	0	0 *
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 6 )	( 23 )	( 0 )	( 0 )
{Urinary system}																		
kidney			<21>				<22>				<32>				<31>			
	basophilic change		0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )
	deposit of hemosiderin		0	0	0	0	0	1	1	0	2	1	3	0	1	2	3	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 5 )	( 5 )	( 0 )	( 6 )	( 3 )	( 9 )	( 0 )	( 3 )	( 6 )	( 10 )	( 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. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : FEMALE

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

PAGE : 18

		Group Name	control				1500 ppm				3000 ppm				6000 ppm			
		No. of Animals on Study	21				22				32				31			
Organ_____	Findings_____	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
<hr/>																		
(Urinary system)																		
kidney			<21>				<22>				<32>				<31>			
	hyaline cast		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 )
	lymphocytic infiltration		0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 3 )	( 3 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )
	hydronephrosis		0	1	1	0	0	1	1	0	0	0	1	0	1	0	0	1
			( 0 )	( 5 )	( 5 )	( 0 )	( 0 )	( 5 )	( 5 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )	( 3 )	( 0 )	( 0 )	( 3 )
	retention 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 )	( 3 )	( 0 )	( 0 )	( 0 )	
	glomerulosclerosis		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 5 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	dilated pelvis		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	eosinophilic droplet:proximal tubule		0	1	5	1	2	1	1	0	0	2	1	2	0	0	1	2
			( 0 )	( 5 )	( 24 )	( 5 )	( 9 )	( 5 )	( 5 )	( 0 )	( 0 )	( 6 )	( 3 )	( 6 )	( 0 )	( 0 )	( 3 )	( 6 )
	urin bladd		<21>				<21>				<32>				<31>			
	lymphocytic infiltration		0	0	0	0	0	0	0	0	2	1	0	0	1	1	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 6 )	( 3 )	( 0 )	( 0 )	( 3 )	( 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. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : FEMALE

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

PAGE : 19

Organ_____	Findings_____	Group Name	control				1500 ppm				3000 ppm				6000 ppm			
		No. of Animals on Study	21				22				32				31			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																		
pituitary			<21>				<22>				<32>				<31>			
	angiectasis		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			( 0)	( 0)	( 0)	( 0)	( 5)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
	cyst		4	1	0	0	1	1	0	0	3	1	0	0	1	0	0	0
			( 19)	( 5)	( 0)	( 0)	( 5)	( 5)	( 0)	( 0)	( 9)	( 3)	( 0)	( 0)	( 3)	( 0)	( 0)	( 0)
	hyperplasia		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			( 5)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
thyroid			<21>				<22>				<32>				<31>			
	inflammatory infiltration		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			( 0)	( 0)	( 0)	( 0)	( 5)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
adrenal			<21>				<22>				<32>				<31>			
	inflammatory infiltration		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
			( 0)	( 0)	( 0)	( 0)	( 0)	( 5)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
	spindle-cell hyperplasia		8	10	0	0	6	10	3	0	9	17	4	0	9	19	2	0
			( 38)	( 48)	( 0)	( 0)	( 27)	( 45)	( 14)	( 0)	( 28)	( 53)	( 13)	( 0)	( 29)	( 61)	( 6)	( 0)
	focal fatty change:cortex		0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
			( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 3)	( 0)	( 0)	( 0)	( 0)	( 0)

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. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 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				1500 ppm				3000 ppm				6000 ppm			
		Grade				21				22				32				31			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Reproductive system}																					
ovary		<21>				<22>				<32>				<31>							
	thrombus	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 )	( 8 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
		<21>				<22>				<32>				<31>							
	cyst	1	1	0	0	1	0	0	0	0	0	1	0	1	0	1	0	0	0	0	0
		( 5 )	( 5 )	( 0 )	( 0 )	( 5 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )	( 3 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
uterus		<21>				<22>				<32>				<31>							
	cystic endometrial hyperplasia	4	3	2	0	4	5	2	0	4	7	4	0	8	5	3	0	8	5	3	0
		( 19 )	( 14 )	( 10 )	( 0 )	( 18 )	( 23 )	( 9 )	( 0 )	( 13 )	( 22 )	( 13 )	( 0 )	( 26 )	( 16 )	( 10 )	( 0 )	( 26 )	( 16 )	( 10 )	( 0 )
{Nervous system}																					
brain		<21>				<22>				<32>				<31>							
	mineralization	11	0	0	0	8	0	0	0	10	0	0	0	10	0	0	0	10	0	0	0
		( 52 )	( 0 )	( 0 )	( 0 )	( 36 )	( 0 )	( 0 )	( 0 )	( 31 )	( 0 )	( 0 )	( 0 )	( 32 )	( 0 )	( 0 )	( 0 )	( 32 )	( 0 )	( 0 )	( 0 )
{Special sense organs/appendage}																					
eye		<21>				<22>				<32>				<31>							
	mineralization:cornea	0	0	0	0	0	0	0	0	3	1	0	0	2	0	0	0	2	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 9 )	( 3 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )	( 0 )

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

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 21

Organ_____	Findings_____	control				1500 ppm				3000 ppm				6000 ppm			
		No. of Animals on Study				22				32				31			
		Grade															
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)

{Musculoskeletal system}

muscle	mineralization	<21>				<22>				<32>				<31>			
		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 3 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )

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

(HPT150)

BAIS4

## APPENDIX L 6

HISTOPATHOLOGICAL FINDINGS :  
NON-NEOPLASTIC LESIONS : FEMALE  
SACRIFICED ANIMALS

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : FEMALE

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

PAGE : 12

Organ	Findings	Group Name No. of Animals on Study Grade				control 28				1500 ppm 28				3000 ppm 18				6000 ppm 19			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)				
{Respiratory system}																					
nasal cavit	exudate	<28>				<28>				<18>				<19>							
		0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0				
		( 0 )	( 4 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )				
	deposit of pigment	0	0	0	0	27	0	0	0 **	17	0	0	0 **	19	0	0	0 **				
		( 0 )	( 0 )	( 0 )	( 0 )	( 96 )	( 0 )	( 0 )	( 0 )	( 94 )	( 0 )	( 0 )	( 0 )	( 100 )	( 0 )	( 0 )	( 0 )				
	mineralization	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				
		( 7 )	( 0 )	( 0 )	( 0 )	( 7 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )				
	eosinophilic change:olfactory epithelium	6	1	0	0	8	2	0	0	10	1	2	0 *	6	10	0	0 **				
	( 21 )	( 4 )	( 0 )	( 0 )	( 29 )	( 7 )	( 0 )	( 0 )	( 56 )	( 6 )	( 11 )	( 0 )	( 32 )	( 53 )	( 0 )	( 0 )					
	eosinophilic change:respiratory epithelium	18	3	1	0	6	20	1	0 **	9	7	2	0 *	18	1	0	0				
		( 64 )	( 11 )	( 4 )	( 0 )	( 21 )	( 71 )	( 4 )	( 0 )	( 50 )	( 39 )	( 11 )	( 0 )	( 95 )	( 5 )	( 0 )	( 0 )				
	respiratory metaplasia:olfactory epithelium	8	0	0	0	4	23	1	0 **	0	15	3	0 **	0	1	18	0 **				
		( 29 )	( 0 )	( 0 )	( 0 )	( 14 )	( 82 )	( 4 )	( 0 )	( 0 )	( 83 )	( 17 )	( 0 )	( 0 )	( 5 )	( 95 )	( 0 )				
	respiratory metaplasia:gland	4	0	0	0	3	15	10	0 **	0	0	18	0 **	0	0	19	0 **				
		( 14 )	( 0 )	( 0 )	( 0 )	( 11 )	( 54 )	( 36 )	( 0 )	( 0 )	( 0 )	( 100 )	( 0 )	( 0 )	( 0 )	( 100 )	( 0 )				
	nasopharynx	eosinophilic change	<28>				<28>				<18>				<19>						
			0	0	2	0	10	1	6	1 **	6	2	4	0 **	10	4	0	0 **			
		( 0 )	( 0 )	( 7 )	( 0 )	( 36 )	( 4 )	( 21 )	( 4 )	( 33 )	( 11 )	( 22 )	( 0 )	( 53 )	( 21 )	( 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. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 13

Organ	Findings	Group Name No. of Animals on Study Grade	control 28				1500 ppm 28				3000 ppm 18				6000 ppm 19			
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
larynx			<28>				<28>				<18>				<19>			
	eosinophilic change		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
trachea			<28>				<28>				<18>				<19>			
	eosinophilic change		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
lung			<28>				<28>				<18>				<19>			
	hemorrhage		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			( 4 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	eosinophilic change		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	lymphocytic infiltration		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
	bronchiolar-alveolar cell hyperplasia		0	0	0	0	3	0	0	0	1	0	0	0	1	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 11 )	( 0 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )	( 0 )	( 5 )	( 0 )	( 0 )	( 0 )
	accumulation:macrophage		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
Grade 1 : Slight 2 : Moderate 3 : Marked 4 : Severe																		
< a > a : Number of animals examined at the site																		
b b : Number of animals with lesion																		
( c ) c : b / a * 100																		
Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square																		

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 14

		Group Name	control				1500 ppm				3000 ppm				6000 ppm			
		No. of Animals on Study	28				28				18				19			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Organ	Findings		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Hematopoietic system)																		
bone marrow			<28>				<28>				<18>				<19>			
	granulation		1	0	0	0	2	1	0	0	1	0	0	0	0	1	0	0
			( 4 )	( 0 )	( 0 )	( 0 )	( 7 )	( 4 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 5 )	( 0 )
	erythropoiesis:increased		1	0	0	0	1	0	0	0	1	1	0	0	2	0	0	0
			( 4 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )	( 6 )	( 6 )	( 0 )	( 0 )	( 11 )	( 0 )	( 0 )	( 0 )
	granulopoiesis:increased		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
lymph node			<28>				<28>				<18>				<19>			
	deposit of hemosiderin		1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
			( 4 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )	( 0 )	( 5 )	( 0 )	( 0 )	( 0 )
	lymphadenitis		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 5 )	( 0 )	( 0 )	( 0 )
thymus			<28>				<28>				<18>				<19>			
	accumulation:macrophage		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )
spleen			<28>				<28>				<18>				<19>			
	deposit of hemosiderin		0	0	0	0	0	0	0	0	6	1	0	0 **	7	1	0	0 **
			( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 33 )	( 6 )	( 0 )	( 0 )	( 37 )	( 5 )	( 0 )	( 0 )

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



STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 15

		Group Name	control				1500 ppm				3000 ppm				6000 ppm			
		No. of Animals on Study	28				28				18				19			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
(Hematopoietic system)																		
spleen			<28>				<28>				<18>				<19>			
	inflammation		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 6)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
	extramedullary hematopoiesis		2	4	0	0	3	1	1	0	5	5	0	0 *	6	3	1	0
			( 7)	( 14)	( 0)	( 0)	( 11)	( 4)	( 4)	( 0)	( 28)	( 28)	( 0)	( 0)	( 32)	( 16)	( 5)	( 0)
	follicular hyperplasia		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 6)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
(Circulatory system)																		
heart			<28>				<28>				<18>				<19>			
	necrosis:focal		0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
			( 0)	( 0)	( 0)	( 0)	( 0)	( 4)	( 4)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
	mineralization		1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			( 4)	( 0)	( 0)	( 0)	( 4)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
(Digestive system)																		
tooth			<28>				<28>				<18>				<19>			
	dysplasia		13	4	0	1	14	1	0	1	8	0	0	0	10	2	2	0
			( 46)	( 14)	( 0)	( 4)	( 50)	( 4)	( 0)	( 4)	( 44)	( 0)	( 0)	( 0)	( 53)	( 11)	( 11)	( 0)

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

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : FEMALE

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

PAGE : 16

		Group Name No. of Animals on Study Grade				control 28				1500 ppm 28				3000 ppm 18				6000 ppm 19			
Organ	Findings	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)				
{Digestive system}																					
tongue		<28>				<28>				<18>				<19>							
	arteritis	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
		( 7)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)				
salivary gl		<28>				<28>				<18>				<19>							
	lymphocytic infiltration	3	0	0	0	8	0	0	0	2	0	0	0	0	0	0	0				
		( 11)	( 0)	( 0)	( 0)	( 29)	( 0)	( 0)	( 0)	( 11)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)				
stomach		<28>				<28>				<18>				<19>							
	hyperplasia:glandular stomach	9	12	5	0	12	11	3	0	6	11	1	0	10	7	0	0				
		( 32)	( 43)	( 18)	( 0)	( 43)	( 39)	( 11)	( 0)	( 33)	( 61)	( 6)	( 0)	( 53)	( 37)	( 0)	( 0)				
liver		<28>				<28>				<18>				<19>							
	angiectasis	4	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0				
		( 14)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 5)	( 0)	( 0)	( 0)				
	deposit of amyloid	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0				
		( 0)	( 0)	( 0)	( 0)	( 0)	( 4)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)				
	granulation	12	0	0	0	3	0	0	0 *	3	0	0	0	0	0	0	0 **				
		( 43)	( 0)	( 0)	( 0)	( 11)	( 0)	( 0)	( 0)	( 17)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)				
	clear cell focus	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0				
		( 0)	( 0)	( 0)	( 0)	( 7)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)				
Grade	1 : Slight	2 : Moderate		3 : Marked		4 : Severe															
< a >	a : Number of animals examined at the site																				
b	b : Number of animals with lesion																				
( c )	c : b / a * 100																				
Significant difference ; * : P ≤ 0.05 ** : P ≤ 0.01 Test of Chi Square																					

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 17

Organ	Findings	Group Name	control				1500 ppm				3000 ppm				6000 ppm			
		No. of Animals on Study	28				28				18				19			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
liver			<28>				<28>				<18>				<19>			
	acidophilic cell focus	0	0	0	0	2	1	0	0	3	1	0	0 *	5	0	0	0 *	
		( 0 )	( 0 )	( 0 )	( 0 )	( 7 )	( 4 )	( 0 )	( 0 )	( 17 )	( 6 )	( 0 )	( 0 )	( 26 )	( 0 )	( 0 )	( 0 )	
	basophilic cell focus	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	
		( 4 )	( 0 )	( 0 )	( 0 )	( 7 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	
	hepatocellular hypertrophy:central	0	0	0	0	0	0	0	0	2	0	0	0	4	10	0	0 **	
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 11 )	( 0 )	( 0 )	( 0 )	( 21 )	( 53 )	( 0 )	( 0 )	
{Urinary system}																		
kidney			<28>				<28>				<18>				<19>			
	infarct	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 )	( 11 )	( 0 )	( 0 )	
	basophilic change	4	0	0	0	2	0	0	0	3	0	0	0	1	0	0	0	
		( 14 )	( 0 )	( 0 )	( 0 )	( 7 )	( 0 )	( 0 )	( 0 )	( 17 )	( 0 )	( 0 )	( 0 )	( 5 )	( 0 )	( 0 )	( 0 )	
	deposit of amyloid	0	0	0	0	0	0	2	0	0	1	0	0	0	0	0	0	
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 7 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	
	deposit of hemosiderin	0	0	0	0	0	0	1	0	0	0	1	0	0	1	0	0	
		( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 0 )	( 4 )	( 0 )	( 0 )	( 0 )	( 6 )	( 0 )	( 0 )	( 5 )	( 0 )	( 0 )	

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

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : FEMALE

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

PAGE : 18

Organ	Findings	control 28				1500 ppm 28				3000 ppm 18				6000 ppm 19			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																	
kidney		<28>				<28>				<18>				<19>			
	inflammatory infiltration	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	1 ( 4 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )
	lymphocytic infiltration	1 ( 4 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	2 ( 7 )	1 ( 4 )	0 ( 0 )	0 ( 0 )	4 ( 22 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	2 ( 11 )	0 ( 0 )	0 ( 0 )	0 ( 0 )
	inflammatory polyp	0 ( 0 )	1 ( 4 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )
	ossification	1 ( 4 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )
	hydronephrosis	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	1 ( 4 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )
	papillary necrosis	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	1 ( 4 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )
	mineralization:papilla	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	1 ( 4 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )
	eosinophilic droplet:proximal tubule	0 ( 0 )	1 ( 4 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	0 ( 0 )	1 ( 6 )	0 ( 0 )	1 ( 6 )	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. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 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 28				1500 ppm 28				3000 ppm 18				6000 ppm 19			
Organ	Findings		1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Urinary system}																		
urin bladd			<28>				<28>				<18>				<19>			
	lymphocytic infiltration		4 ( 14)	0 ( 0)	0 ( 0)	0 ( 0)	4 ( 14)	0 ( 0)	0 ( 0)	0 ( 0)	5 ( 28)	0 ( 0)	0 ( 0)	0 ( 0)	3 ( 16)	0 ( 0)	0 ( 0)	0 ( 0)
{Endocrine system}																		
pituitary			<27>				<28>				<18>				<19>			
	hypoplasia		1 ( 4)	1 ( 4)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)
	angiectasis		0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 6)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)
	cyst		2 ( 7)	0 ( 0)	0 ( 0)	0 ( 0)	3 ( 11)	1 ( 4)	0 ( 0)	0 ( 0)	1 ( 6)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 5)	0 ( 0)	0 ( 0)	0 ( 0)
	focal hypertrophy		2 ( 7)	1 ( 4)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)
thyroid			<28>				<28>				<18>				<19>			
	atrophy		0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	1 ( 4)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)	0 ( 0)

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. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : FEMALE

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

PAGE : 20

Organ	Findings	Group Name No. of Animals on Study Grade				control 28				1500 ppm 28				3000 ppm 18				6000 ppm 19			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																					
adrenal		<28>				<28>				<18>				<19>							
	inflammatory infiltration	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
		( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 6)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
	lymphocytic infiltration	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	5	0	0	0
		( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 5)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
	extramedullary hematopoiesis	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	5	0	0
		( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 5)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
	spindle-cell hyperplasia	4	17	7	0	5	17	6	0	2	14	2	0	3	13	3	0	16	68	16	0
		( 14)	( 61)	( 25)	( 0)	( 18)	( 61)	( 21)	( 0)	( 11)	( 78)	( 11)	( 0)	( 16)	( 68)	( 16)	( 0)				
{Reproductive system}																					
ovary		<28>				<28>				<18>				<19>							
	cyst	4	2	2	0	2	3	1	0	1	1	4	0	1	0	0	0	5	0	0	0
		( 14)	( 7)	( 7)	( 0)	( 7)	( 11)	( 4)	( 0)	( 6)	( 6)	( 22)	( 0)	( 5)	( 0)	( 0)	( 0)				
uterus		<28>				<28>				<18>				<19>							
	cystic endometrial hyperplasia	6	8	9	0	6	10	7	0	5	7	1	0	7	5	2	0	37	26	11	0
		( 21)	( 29)	( 32)	( 0)	( 21)	( 36)	( 25)	( 0)	( 28)	( 39)	( 6)	( 0)	( 37)	( 26)	( 11)	( 0)				

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

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 21

		Group Name	control				1500 ppm				3000 ppm				6000 ppm			
		No. of Animals on Study	28				28				18				19			
Organ	Findings	Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Reproductive system}																		
mammary gl			<28>				<28>				<18>				<19>			
	duct ectasia		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			( 0)	( 0)	( 0)	( 0)	( 4)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
{Nervous system}																		
brain			<28>				<28>				<18>				<19>			
	cyst		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
			( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 5)	( 0)	( 0)
	mineralization		11	0	0	0	13	0	0	0	5	0	0	0	6	0	0	0
			( 39)	( 0)	( 0)	( 0)	( 46)	( 0)	( 0)	( 0)	( 28)	( 0)	( 0)	( 0)	( 32)	( 0)	( 0)	( 0)
{Special sense organs/appendage}																		
eye			<28>				<28>				<18>				<19>			
	keratitis		0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
			( 0)	( 0)	( 0)	( 0)	( 4)	( 0)	( 0)	( 0)	( 6)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)
	mineralization:cornea		1	1	0	0	1	0	0	0	1	0	0	0	0	0	0	0
			( 4)	( 4)	( 0)	( 0)	( 4)	( 0)	( 0)	( 0)	( 6)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)

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

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 22

Organ	Findings	control				1500 ppm				3000 ppm				6000 ppm			
		28				28				18				19			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)

(Special sense organs/appendage)

Harder gl	hyperplasia	<28>				<28>				<18>				<19>			
		1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		( 4)	( 4)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)	( 0)

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

(HPT150)

BAIS4



## APPENDIX M 1

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

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : MALE

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

PAGE : 1

Time-related Weeks	Items	Group Name	control	750 ppm	1500 ppm	3000 ppm
0 - 52	NO. OF EXAMINED ANIMALS		0	0	1	1
	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		6	2	3	7
	NO. OF ANIMALS WITH TUMORS		3	1	1	7
	NO. OF ANIMALS WITH SINGLE TUMORS		3	1	0	3
	NO. OF ANIMALS WITH MULTIPLE TUMORS		0	0	1	4
	NO. OF BENIGN TUMORS		1	0	1	5
	NO. OF MALIGNANT TUMORS		2	1	1	6
	NO. OF TOTAL TUMORS		3	1	2	11
79 - 104	NO. OF EXAMINED ANIMALS		9	10	17	19
	NO. OF ANIMALS WITH TUMORS		8	10	17	19
	NO. OF ANIMALS WITH SINGLE TUMORS		4	3	7	2
	NO. OF ANIMALS WITH MULTIPLE TUMORS		4	7	10	17
	NO. OF BENIGN TUMORS		5	10	14	21
	NO. OF MALIGNANT TUMORS		8	10	19	25
	NO. OF TOTAL TUMORS		13	20	33	46
105 - 105	NO. OF EXAMINED ANIMALS		35	38	29	23
	NO. OF ANIMALS WITH TUMORS		25	36	28	23
	NO. OF ANIMALS WITH SINGLE TUMORS		11	16	4	5
	NO. OF ANIMALS WITH MULTIPLE TUMORS		14	20	24	18
	NO. OF BENIGN TUMORS		30	38	38	26
	NO. OF MALIGNANT TUMORS		18	27	27	30
	NO. OF TOTAL TUMORS		48	65	65	56

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : MALE

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

PAGE : 2

Time-related Weeks	Items	Group Name	control	750 ppm	1500 ppm	3000 ppm
0 - 105	NO. OF EXAMINED ANIMALS		50	50	50	50
	NO. OF ANIMALS WITH TUMORS		36	47	46	49
	NO. OF ANIMALS WITH SINGLE TUMORS		18	20	11	10
	NO. OF ANIMALS WITH MULTIPLE TUMORS		18	27	35	39
	NO. OF BENIGN TUMORS		36	48	53	52
	NO. OF MALIGNANT TUMORS		28	38	47	61
	NO. OF TOTAL TUMORS		64	86	100	113

(HPT070)

BAIS4

## APPENDIX M 2

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

STUDY NO. : 0422  
ANIMAL : MOUSE Crl:BDF1  
REPORT TYPE : A1  
SEX : FEMALE

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

PAGE : 3

Time-related Weeks	Items	Group Name	control	1500 ppm	3000 ppm	6000 ppm
0 - 52	NO. OF EXAMINED ANIMALS		1	3	0	1
	NO. OF ANIMALS WITH TUMORS		1	1	0	1
	NO. OF ANIMALS WITH SINGLE TUMORS		1	1	0	1
	NO. OF ANIMALS WITH MULTIPLE TUMORS		0	0	0	0
	NO. OF BENIGN TUMORS		0	0	0	0
	NO. OF MALIGNANT TUMORS		1	1	0	1
	NO. OF TOTAL TUMORS		1	1	0	1
53 - 78	NO. OF EXAMINED ANIMALS		4	2	4	7
	NO. OF ANIMALS WITH TUMORS		3	2	4	7
	NO. OF ANIMALS WITH SINGLE TUMORS		3	1	4	2
	NO. OF ANIMALS WITH MULTIPLE TUMORS		0	1	0	5
	NO. OF BENIGN TUMORS		0	1	0	8
	NO. OF MALIGNANT TUMORS		3	2	4	4
	NO. OF TOTAL TUMORS		3	3	4	12
79 - 104	NO. OF EXAMINED ANIMALS		16	17	28	23
	NO. OF ANIMALS WITH TUMORS		16	17	28	23
	NO. OF ANIMALS WITH SINGLE TUMORS		14	12	5	4
	NO. OF ANIMALS WITH MULTIPLE TUMORS		2	5	23	19
	NO. OF BENIGN TUMORS		1	6	31	25
	NO. OF MALIGNANT TUMORS		17	17	35	29
	NO. OF TOTAL TUMORS		18	23	66	54
105 - 105	NO. OF EXAMINED ANIMALS		28	28	18	19
	NO. OF ANIMALS WITH TUMORS		19	27	18	19
	NO. OF ANIMALS WITH SINGLE TUMORS		10	4	2	2
	NO. OF ANIMALS WITH MULTIPLE TUMORS		9	23	16	17
	NO. OF BENIGN TUMORS		15	31	25	21
	NO. OF MALIGNANT TUMORS		18	30	22	27
	NO. OF TOTAL TUMORS		33	61	47	48

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : FEMALE

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

PAGE : 4

Time-related Weeks	Items	Group Name	control	1500 ppm	3000 ppm	6000 ppm
0 - 105	NO. OF EXAMINED ANIMALS		49	50	50	50
	NO. OF ANIMALS WITH TUMORS		39	47	50	50
	NO. OF ANIMALS WITH SINGLE TUMORS		28	18	11	9
	NO. OF ANIMALS WITH MULTIPLE TUMORS		11	29	39	41
	NO. OF BENIGN TUMORS		16	38	56	54
	NO. OF MALIGNANT TUMORS		39	50	61	61
	NO. OF TOTAL TUMORS		55	88	117	115

(HPT070)

BAIS4

## APPENDIX N 1

HISTOPATHOLOGICAL FINDINGS :

NEOPLASTIC LESIONS : MALE

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 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	750 ppm 50	1500 ppm 50	3000 ppm 50
{Integumentary system/appandage}						
skin/app			<50>	<50>	<50>	<50>
	squamous cell papilloma		1 ( 2%)	0 ( 0%)	1 ( 2%)	0 ( 0%)
	fibroma		1 ( 2%)	0 ( 0%)	0 ( 0%)	0 ( 0%)
subcutis			<50>	<50>	<50>	<50>
	fibroma		2 ( 4%)	0 ( 0%)	1 ( 2%)	0 ( 0%)
	lipoma		2 ( 4%)	0 ( 0%)	1 ( 2%)	0 ( 0%)
	hemangioma		0 ( 0%)	1 ( 2%)	0 ( 0%)	1 ( 2%)
	histiocytic sarcoma		0 ( 0%)	1 ( 2%)	0 ( 0%)	0 ( 0%)
	hemangiosarcoma		1 ( 2%)	0 ( 0%)	0 ( 0%)	0 ( 0%)
{Respiratory system}						
lung			<50>	<50>	<50>	<50>
	bronchiolar-alveolar adenoma		2 ( 4%)	3 ( 6%)	7 ( 14%)	1 ( 2%)
	hemangioma		0 ( 0%)	0 ( 0%)	1 ( 2%)	0 ( 0%)
	bronchiolar-alveolar carcinoma		7 ( 14%)	8 ( 16%)	4 ( 8%)	4 ( 8%)
{Hematopoietic system}						
lymph node			<50>	<50>	<50>	<50>
	malignant lymphoma		3 ( 6%)	1 ( 2%)	3 ( 6%)	3 ( 6%)

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



STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
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	750 ppm 50	1500 ppm 50	3000 ppm 50
{Hematopoietic system}						
lymph node			<50>	<50>	<50>	<50>
	mastcytoma:malignant		1 ( 2%)	0 ( 0%)	0 ( 0%)	0 ( 0%)
spleen			<50>	<50>	<50>	<50>
	hemangioma		1 ( 2%)	2 ( 4%)	2 ( 4%)	2 ( 4%)
	malignant lymphoma		1 ( 2%)	2 ( 4%)	1 ( 2%)	0 ( 0%)
	mastcytoma:malignant		0 ( 0%)	0 ( 0%)	0 ( 0%)	1 ( 2%)
{Digestive system}						
tooth			<50>	<50>	<50>	<50>
	sarcoma:NOS		0 ( 0%)	0 ( 0%)	1 ( 2%)	0 ( 0%)
salivary gl			<50>	<50>	<50>	<50>
	histiocytic sarcoma		0 ( 0%)	2 ( 4%)	2 ( 4%)	0 ( 0%)
stomach			<50>	<50>	<50>	<50>
	squamous cell papilloma		0 ( 0%)	0 ( 0%)	0 ( 0%)	1 ( 2%)
	adenocarcinoma		0 ( 0%)	1 ( 2%)	0 ( 0%)	0 ( 0%)
small intes			<50>	<50>	<50>	<50>
	histiocytic sarcoma		0 ( 0%)	1 ( 2%)	0 ( 0%)	0 ( 0%)
large intes			<50>	<50>	<50>	<50>
	histiocytic sarcoma		0 ( 0%)	1 ( 2%)	0 ( 0%)	0 ( 0%)
liver			<50>	<50>	<50>	<50>
	hemangioma		3 ( 6%)	3 ( 6%)	5 ( 10%)	1 ( 2%)
	hepatocellular adenoma		18 ( 36%)	34 ( 68%)	30 ( 60%)	43 ( 86%)
< 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. : 0422  
ANIMAL : MOUSE Crj:BDF1  
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	750 ppm 50	1500 ppm 50	3000 ppm 50
{Digestive system}						
liver			<50>	<50>	<50>	<50>
	histiocytic sarcoma		2 ( 4%)	3 ( 6%)	3 ( 6%)	1 ( 2%)
	hepatocellular carcinoma		7 ( 14%)	7 ( 14%)	11 ( 22%)	15 ( 30%)
	hepatoblastoma		1 ( 2%)	5 ( 10%)	16 ( 32%)	27 ( 54%)
pancreas			<50>	<50>	<50>	<50>
	islet cell adenoma		0 ( 0%)	0 ( 0%)	1 ( 2%)	0 ( 0%)
{Urinary system}						
kidney			<50>	<50>	<50>	<50>
	renal cell carcinoma		0 ( 0%)	1 ( 2%)	0 ( 0%)	0 ( 0%)
urin bladd			<50>	<50>	<50>	<50>
	histiocytic sarcoma		3 ( 6%)	0 ( 0%)	1 ( 2%)	0 ( 0%)
{Endocrine system}						
thyroid			<50>	<50>	<50>	<50>
	C-cell adenoma		0 ( 0%)	0 ( 0%)	1 ( 2%)	0 ( 0%)
{Reproductive system}						
testis			<50>	<50>	<50>	<50>
	histiocytic sarcoma		0 ( 0%)	0 ( 0%)	1 ( 2%)	0 ( 0%)
epididymis			<50>	<50>	<50>	<50>
	histiocytic sarcoma		0 ( 0%)	1 ( 2%)	1 ( 2%)	4 ( 8%)
mammary gl			<50>	<50>	<50>	<50>
	adenocarcinoma		1 ( 2%)	0 ( 0%)	0 ( 0%)	0 ( 0%)
<div> <div>&lt; a &gt;</div> <div>a : Number of animals examined at the site</div> </div> <div> <div>b ( c )</div> <div>b : Number of animals with neoplasm</div> </div> <div> <div>c : b / a * 100</div> </div>						
(HPT085)						

BAIS4

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 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	750 ppm 50	1500 ppm 50	3000 ppm 50
{Reproductive system}						
prep/cli gl	histiocytic sarcoma		<50> 0 ( 0%)	<50> 1 ( 2%)	<50> 0 ( 0%)	<50> 0 ( 0%)
{Nervous system}						
periph nerv	schwannoma'malignant		<50> 0 ( 0%)	<50> 1 ( 2%)	<50> 0 ( 0%)	<50> 0 ( 0%)
	histiocytic sarcoma		0 ( 0%)	0 ( 0%)	0 ( 0%)	1 ( 2%)
{Special sense organs/appendage}						
Harder gl	adenoma		<50> 5 ( 10%)	<50> 2 ( 4%)	<50> 2 ( 4%)	<50> 2 ( 4%)
	adenocarcinoma		0 ( 0%)	0 ( 0%)	1 ( 2%)	0 ( 0%)
{Musculoskeletal system}						
bone	osteoma		<50> 0 ( 0%)	<50> 1 ( 2%)	<50> 0 ( 0%)	<50> 0 ( 0%)
{Body cavities}						
peritoneum	lipoma		<50> 1 ( 2%)	<50> 0 ( 0%)	<50> 1 ( 2%)	<50> 1 ( 2%)
	hemangioma		0 ( 0%)	1 ( 2%)	0 ( 0%)	0 ( 0%)
	hemangiosarcoma		1 ( 2%)	0 ( 0%)	2 ( 4%)	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. : 0422  
ANIMAL : MOUSE Crj:BDF1  
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	750 ppm 50	1500 ppm 50	3000 ppm 50
{Body cavities}						
retroperit			<50>	<50>	<50>	<50>
	histiocytic sarcoma		0 ( 0%)	2 ( 4%)	0 ( 0%)	0 ( 0%)
mesenterium			<50>	<50>	<50>	<50>
	lipoma		0 ( 0%)	1 ( 2%)	0 ( 0%)	0 ( 0%)
<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>						
(HPT085)						BAIS4

## APPENDIX N 2

HISTOPATHOLOGICAL FINDINGS :

NEOPLASTIC LESIONS : FEMALE

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
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 49	1500 ppm 50	3000 ppm 50	6000 ppm 50
{Integumentary system/appandage}						
subcutis			<49>	<50>	<50>	<50>
	hemangioma		0 ( 0%)	0 ( 0%)	1 ( 2%)	0 ( 0%)
	osteosarcoma		1 ( 2%)	0 ( 0%)	0 ( 0%)	0 ( 0%)
	histiocytic sarcoma		1 ( 2%)	0 ( 0%)	0 ( 0%)	0 ( 0%)
	hemangiosarcoma		0 ( 0%)	0 ( 0%)	0 ( 0%)	1 ( 2%)
{Respiratory system}						
lung			<49>	<50>	<50>	<50>
	bronchiolar-alveolar adenoma		0 ( 0%)	4 ( 8%)	1 ( 2%)	1 ( 2%)
	bronchiolar-alveolar carcinoma		2 ( 4%)	2 ( 4%)	3 ( 6%)	2 ( 4%)
{Hematopoietic system}						
bone marrow			<49>	<50>	<50>	<50>
	histiocytic sarcoma		0 ( 0%)	1 ( 2%)	1 ( 2%)	0 ( 0%)
lymph node			<49>	<50>	<50>	<50>
	malignant lymphoma		19 ( 39%)	23 ( 46%)	11 ( 22%)	4 ( 8%)
	mastcytoma:malignant		0 ( 0%)	1 ( 2%)	0 ( 0%)	0 ( 0%)
spleen			<49>	<50>	<50>	<50>
	hemangioma		0 ( 0%)	0 ( 0%)	2 ( 4%)	1 ( 2%)
	malignant lymphoma		0 ( 0%)	4 ( 8%)	3 ( 6%)	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

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 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 49	1500 ppm 50	3000 ppm 50	6000 ppm 50
{Digestive system}						
salivary gl			<49>	<50>	<50>	<50>
	histiocytic sarcoma		0 ( 0%)	1 ( 2%)	0 ( 0%)	0 ( 0%)
stomach			<48>	<49>	<50>	<50>
	squamous cell papilloma		0 ( 0%)	1 ( 2%)	0 ( 0%)	1 ( 2%)
	squamous cell carcinoma		0 ( 0%)	2 ( 4%)	0 ( 0%)	0 ( 0%)
small intes			<49>	<50>	<50>	<50>
	leiomyosarcoma		0 ( 0%)	0 ( 0%)	1 ( 2%)	0 ( 0%)
liver			<49>	<50>	<50>	<50>
	hemangioma		3 ( 6%)	2 ( 4%)	3 ( 6%)	0 ( 0%)
	hepatocellular adenoma		8 ( 16%)	25 ( 50%)	42 ( 84%)	45 ( 90%)
	histiocytic sarcoma		0 ( 0%)	0 ( 0%)	1 ( 2%)	2 ( 4%)
	hepatocellular carcinoma		1 ( 2%)	2 ( 4%)	11 ( 22%)	21 ( 42%)
	hepatoblastoma		0 ( 0%)	2 ( 4%)	7 ( 14%)	7 ( 14%)
{Endocrine system}						
pituitary			<48>	<50>	<50>	<50>
	adenoma		2 ( 4%)	0 ( 0%)	1 ( 2%)	0 ( 0%)
{Reproductive system}						
ovary			<49>	<50>	<50>	<50>
	cystadenoma		2 ( 4%)	4 ( 8%)	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

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
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 49	1500 ppm 50	3000 ppm 50	6000 ppm 50
{Reproductive system}						
ovary			<49>	<50>	<50>	<50>
	hemangioma		0 ( 0%)	0 ( 0%)	0 ( 0%)	1 ( 2%)
	histiocytic sarcoma		0 ( 0%)	0 ( 0%)	1 ( 2%)	0 ( 0%)
uterus			<49>	<50>	<50>	<50>
	hemangioma		0 ( 0%)	0 ( 0%)	1 ( 2%)	1 ( 2%)
	endometrial stromal polyp		0 ( 0%)	0 ( 0%)	1 ( 2%)	0 ( 0%)
	histiocytic sarcoma		13 ( 27%)	9 ( 18%)	14 ( 28%)	6 ( 12%)
vagina			<49>	<49>	<50>	<50>
	squamous cell carcinoma		0 ( 0%)	0 ( 0%)	1 ( 2%)	0 ( 0%)
mammary gl			<49>	<50>	<50>	<50>
	adenocarcinoma		1 ( 2%)	0 ( 0%)	0 ( 0%)	0 ( 0%)
{Special sense organs/appendage}						
Harder gl			<49>	<50>	<50>	<50>
	adenoma		1 ( 2%)	1 ( 2%)	2 ( 4%)	2 ( 4%)
	histiocytic sarcoma		1 ( 2%)	0 ( 0%)	0 ( 0%)	0 ( 0%)
{Musculoskeletal system}						
muscle			<49>	<50>	<50>	<50>
	mastcytoma:benign		0 ( 0%)	0 ( 0%)	1 ( 2%)	0 ( 0%)
bone			<49>	<50>	<50>	<50>
	osteoma		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



STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : FEMALE

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

PAGE : 9

Organ	Findings	Group Name No. of animals on Study	control 49	1500 ppm 50	3000 ppm 50	6000 ppm 50
{Body cavities}						
peritoneum			<49>	<50>	<50>	<50>
	leiomyoma		0 ( 0%)	1 ( 2%)	0 ( 0%)	0 ( 0%)
	hemangioma		0 ( 0%)	0 ( 0%)	1 ( 2%)	0 ( 0%)
	hemangiosarcoma		0 ( 0%)	3 ( 6%)	7 ( 14%)	17 ( 34%)

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

(HPT085)

BAIS4

## APPENDIX O 1

### NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS : MALE

STUDY No. : 0422  
ANIMAL : MOUSE Crj:BDF1  
SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 1

Group Name	control	750 ppm	1500 ppm	3000 ppm
SITE : lung TUMOR : bronchiolar-alveolar adenoma				
Tumor rate				
Overall rates(a)	2/50( 4.0)	3/50( 6.0)	7/50( 14.0)	1/50( 2.0)
Adjusted rates(b)	4.35	7.50	20.69	4.35
Terminal rates(c)	1/35( 2.9)	2/38( 5.3)	6/29( 20.7)	1/23( 4.3)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.4914			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.7343			
Fisher Exact test(e)		P = 0.5000	P = 0.0798	P = 0.5000
SITE : lung TUMOR : bronchiolar-alveolar carcinoma				
Tumor rate				
Overall rates(a)	7/50( 14.0)	8/50( 16.0)	4/50( 8.0)	4/50( 8.0)
Adjusted rates(b)	17.14	18.42	10.53	6.90
Terminal rates(c)	6/35( 17.1)	7/38( 18.4)	2/29( 6.9)	1/23( 4.3)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.1942			
Prevalence method(d)	P = 0.8850			
Combined analysis(d)	P = 0.7450			
Cochran-Armitage test(e)	P = 0.2163			
Fisher Exact test(e)		P = 0.5000	P = 0.2623	P = 0.2623
SITE : lung TUMOR : bronchiolar-alveolar adenoma, bronchiolar-alveolar carcinoma				
Tumor rate				
Overall rates(a)	9/50( 18.0)	11/50( 22.0)	11/50( 22.0)	5/50( 10.0)
Adjusted rates(b)	20.00	25.00	27.59	10.34
Terminal rates(c)	7/35( 20.0)	9/38( 23.7)	8/29( 27.6)	2/23( 8.7)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.1942			
Prevalence method(d)	P = 0.8533			
Combined analysis(d)	P = 0.7383			
Cochran-Armitage test(e)	P = 0.2133			
Fisher Exact test(e)		P = 0.4016	P = 0.4016	P = 0.1940

STUDY No. : 0422  
ANIMAL : MOUSE Crj:BDF1  
SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 2

Group Name	control	750 ppm	1500 ppm	3000 ppm
SITE : lymph node TUMOR : malignant lymphoma				
Tumor rate				
Overall rates(a)	3/50( 6.0)	1/50( 2.0)	3/50( 6.0)	3/50( 6.0)
Adjusted rates(b)	5.71	2.63	10.34	13.04
Terminal rates(c)	2/35( 5.7)	1/38( 2.6)	3/29( 10.3)	3/23( 13.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.9036 ?			
Prevalence method(d)	P = 0.0931			
Combined analysis(d)	P = 0.1765			
Cochran-Armitage test(e)	P = 0.7421			
Fisher Exact test(e)		P = 0.3087	P = 0.6611	P = 0.6611
SITE : liver TUMOR : hemangioma				
Tumor rate				
Overall rates(a)	3/50( 6.0)	3/50( 6.0)	5/50( 10.0)	1/50( 2.0)
Adjusted rates(b)	8.57	6.38	6.06	2.94
Terminal rates(c)	3/35( 8.6)	2/38( 5.3)	1/29( 3.4)	0/23( 0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.2679			
Prevalence method(d)	P = 0.7853			
Combined analysis(d)	P = 0.6475			
Cochran-Armitage test(e)	P = 0.4207			
Fisher Exact test(e)		P = 0.6611	P = 0.3575	P = 0.3087
SITE : liver TUMOR : hepatocellular adenoma				
Tumor rate				
Overall rates(a)	18/50( 36.0)	34/50( 68.0)	30/50( 60.0)	43/50( 86.0)
Adjusted rates(b)	44.74	76.32	79.31	100.00
Terminal rates(c)	15/35( 42.9)	29/38( 76.3)	23/29( 79.3)	23/23(100.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.5415			
Prevalence method(d)	P < 0.0001**			
Combined analysis(d)	P < 0.0001**			
Cochran-Armitage test(e)	P < 0.0001**			
Fisher Exact test(e)		P = 0.0013**	P = 0.0136*	P < 0.0001**

STUDY No. : 0422  
ANIMAL : MOUSE Crj:BDF1  
SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 3

Group Name	control	750 ppm	1500 ppm	3000 ppm
SITE : liver TUMOR : histiocytic sarcoma				
Tumor rate				
Overall rates(a)	2/50( 4.0)	3/50( 6.0)	3/50( 6.0)	1/50( 2.0)
Adjusted rates(b)	0.0	0.0	3.45	3.45
Terminal rates(c)	0/35( 0.0)	0/38( 0.0)	1/29( 3.4)	0/23( 0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.8759			
Prevalence method(d)	P = 0.0921			
Combined analysis(d)	P = 0.6202			
Cochran-Armitage test(e)	P = 0.5259			
Fisher Exact test(e)		P = 0.5000	P = 0.5000	P = 0.5000
SITE : liver TUMOR : hepatocellular carcinoma				
Tumor rate				
Overall rates(a)	7/50( 14.0)	7/50( 14.0)	11/50( 22.0)	15/50( 30.0)
Adjusted rates(b)	18.92	13.33	25.00	52.17
Terminal rates(c)	6/35( 17.1)	5/38( 13.2)	7/29( 24.1)	12/23( 52.2)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.1928			
Prevalence method(d)	P = 0.0007**			
Combined analysis(d)	P = 0.0005**			
Cochran-Armitage test(e)	P = 0.0232*			
Fisher Exact test(e)		P = 0.6129	P = 0.2178	P = 0.0448*
SITE : liver TUMOR : hepatoblastoma				
Tumor rate				
Overall rates(a)	1/50( 2.0)	5/50( 10.0)	16/50( 32.0)	27/50( 54.0)
Adjusted rates(b)	0.0	12.50	27.59	47.83
Terminal rates(c)	0/35( 0.0)	4/38( 10.5)	8/29( 27.6)	11/23( 47.8)
Statistical analysis				
Peto test				
Standard method(d)	P < 0.0001**			
Prevalence method(d)	P < 0.0001**			
Combined analysis(d)	P < 0.0001**?			
Cochran-Armitage test(e)	P < 0.0001**			
Fisher Exact test(e)		P = 0.1022	P < 0.0001**	P < 0.0001**

STUDY No. : 0422  
ANIMAL : MOUSE Crj:BDF1  
SEX : MALE

NEOPLASTIC LESIONS—INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 4

Group Name	control	750 ppm	1500 ppm	3000 ppm
SITE : liver TUMOR : hepatocellular adenoma, hepatocellular carcinoma, hepatoblastoma				
Tumor rate				
Overall rates(a)	19/50( 38.0)	39/50( 78.0)	41/50( 82.0)	45/50( 90.0)
Adjusted rates(b)	45.95	84.21	93.10	100.00
Terminal rates(c)	16/35( 45.7)	32/38( 84.2)	27/29( 93.1)	23/23(100.0)
Statistical analysis				
Peto test				
Standard method(d)	P < 0.0001**			
Prevalence method(d)	P < 0.0001**			
Combined analysis(d)	P < 0.0001**			
Cochran-Armitage test(e)	P < 0.0001**			
Fisher Exact test(e)		P < 0.0001**	P < 0.0001**	P < 0.0001**
SITE : urinary bladder TUMOR : histiocytic sarcoma				
Tumor rate				
Overall rates(a)	3/50( 6.0)	0/50( 0.0)	1/50( 2.0)	0/50( 0.0)
Adjusted rates(b)	8.57	0.0	3.45	0.0
Terminal rates(c)	3/35( 8.6)	0/38( 0.0)	1/29( 3.4)	0/23( 0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.9417			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.0877			
Fisher Exact test(e)		P = 0.1212	P = 0.3087	P = 0.1212
SITE : epididymis TUMOR : histiocytic sarcoma				
Tumor rate				
Overall rates(a)	0/50( 0.0)	1/50( 2.0)	1/50( 2.0)	4/50( 8.0)
Adjusted rates(b)	0.0	2.63	3.45	4.35
Terminal rates(c)	0/35( 0.0)	1/38( 2.6)	1/29( 3.4)	1/23( 4.3)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.0025**?			
Prevalence method(d)	P = 0.1581			
Combined analysis(d)	P = 0.0041**			
Cochran-Armitage test(e)	P = 0.0172*			
Fisher Exact test(e)		P = 0.5000	P = 0.5000	P = 0.0587

STUDY No. : 0422  
ANIMAL : MOUSE Crj:BDF1  
SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 5

Group Name	control	750 ppm	1500 ppm	3000 ppm
SITE : Harderian gland TUMOR : adenoma				
Tumor rate				
Overall rates(a)	5/50( 10.0)	2/50( 4.0)	2/50( 4.0)	2/50( 4.0)
Adjusted rates(b)	11.43	5.13	6.90	4.17
Terminal rates(c)	4/35( 11.4)	1/38( 2.6)	2/29( 6.9)	0/23( 0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.8608			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.2709			
Fisher Exact test(e)		P = 0.2180	P = 0.2180	P = 0.2180
SITE : Harderian gland TUMOR : adenoma,adenocarcinoma				
Tumor rate				
Overall rates(a)	5/50( 10.0)	2/50( 4.0)	3/50( 6.0)	2/50( 4.0)
Adjusted rates(b)	11.43	5.13	8.33	4.17
Terminal rates(c)	4/35( 11.4)	1/38( 2.6)	2/29( 6.9)	0/23( 0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.8438			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.3141			
Fisher Exact test(e)		P = 0.2180	P = 0.3575	P = 0.2180
SITE : peritoneum TUMOR : hemangiosarcoma				
Tumor rate				
Overall rates(a)	1/50( 2.0)	0/50( 0.0)	2/50( 4.0)	5/50( 10.0)
Adjusted rates(b)	0.0	0.0	3.45	11.76
Terminal rates(c)	0/35( 0.0)	0/38( 0.0)	1/29( 3.4)	1/23( 4.3)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.2973			
Prevalence method(d)	P = 0.0009**			
Combined analysis(d)	P = 0.0033**			
Cochran-Armitage test(e)	P = 0.0147*			
Fisher Exact test(e)		P = 0.5000	P = 0.5000	P = 0.1022

STUDY No. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 6

Group Name	control	750 ppm	1500 ppm	3000 ppm
SITE : peritoneum TUMOR : hemangioma, hemangiosarcoma				
Tumor rate				
Overall rates(a)	1/50( 2.0)	1/50( 2.0)	2/50( 4.0)	5/50( 10.0)
Adjusted rates(b)	0.0	2.63	3.45	11.76
Terminal rates(c)	0/35( 0.0)	1/38( 2.6)	1/29( 3.4)	1/23( 4.3)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.2973			
Prevalence method(d)	P = 0.0041**			
Combined analysis(d)	P = 0.0075**			
Cochran-Armitage test(e)	P = 0.0329*			
Fisher Exact test(e)		P = 0.7525	P = 0.5000	P = 0.1022

(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.



STUDY No. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 SEX : MALE

NEOPLASTIC LESIONS—INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 1

Group Name	control	750 ppm	1500 ppm	3000 ppm
SITE : ALL SITE TUMOR : hemangioma				
Tumor rate				
Overall rates(a)	4/50( 8.0)	7/50( 14.0)	6/50( 12.0)	3/50( 6.0)
Adjusted rates(b)	11.43	14.89	9.09	6.45
Terminal rates(c)	4/35( 11.4)	5/38( 13.2)	2/29( 6.9)	1/23( 4.3)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.0937			
Prevalence method(d)	P = 0.7759			
Combined analysis(d)	P = 0.5102			
Cochran-Armitage test(e)	P = 0.5238			
Fisher Exact test(e)		P = 0.2623	P = 0.3703	P = 0.5000
SITE : ALL SITE TUMOR : histiocytic sarcoma				
Tumor rate				
Overall rates(a)	5/50( 10.0)	12/50( 24.0)	8/50( 16.0)	6/50( 12.0)
Adjusted rates(b)	8.57	17.95	17.24	6.90
Terminal rates(c)	3/35( 8.6)	6/38( 15.8)	5/29( 17.2)	1/23( 4.3)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.2184			
Prevalence method(d)	P = 0.5722			
Combined analysis(d)	P = 0.3484			
Cochran-Armitage test(e)	P = 0.7663			
Fisher Exact test(e)		P = 0.0542	P = 0.2768	P = 0.5000
SITE : ALL SITE TUMOR : malignant lymphoma				
Tumor rate				
Overall rates(a)	4/50( 8.0)	3/50( 6.0)	4/50( 8.0)	3/50( 6.0)
Adjusted rates(b)	8.57	7.89	13.79	13.04
Terminal rates(c)	3/35( 8.6)	3/38( 7.9)	4/29( 13.8)	3/23( 13.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.9036 ?			
Prevalence method(d)	P = 0.2319			
Combined analysis(d)	P = 0.3390			
Cochran-Armitage test(e)	P = 0.7787			
Fisher Exact test(e)		P = 0.5000	P = 0.6425	P = 0.5000

STUDY No. : 0422  
ANIMAL : MOUSE Crj:BDF1  
SEX : MALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 2

Group Name	control	750 ppm	1500 ppm	3000 ppm
SITE : ALL SITE				
TUMOR : hemangiosarcoma				
Tumor rate				
Overall rates(a)	2/50( 4.0)	0/50( 0.0)	2/50( 4.0)	5/50( 10.0)
Adjusted rates(b)	0.0	0.0	3.45	11.76
Terminal rates(c)	0/35( 0.0)	0/38( 0.0)	1/29( 3.4)	1/23( 4.3)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.5483			
Prevalence method(d)	P = 0.0009**			
Combined analysis(d)	P = 0.0155*			
Cochran-Armitage test(e)	P = 0.0571			
Fisher Exact test(e)		P = 0.2475	P = 0.6913	P = 0.2180

(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.

## APPENDIX O 2

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

STUDY No. : 0422  
ANIMAL : MOUSE Crj:BDF1  
SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 7

Group Name	control	1500 ppm	3000 ppm	6000 ppm
SITE : lung TUMOR : bronchiolar-alveolar adenoma				
Tumor rate				
Overall rates(a)	0/49( 0.0)	4/50( 8.0)	1/50( 2.0)	1/50( 2.0)
Adjusted rates(b)	0.0	13.79	2.56	5.26
Terminal rates(c)	0/28( 0.0)	3/28( 10.7)	0/18( 0.0)	1/19( 5.3)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.3698			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.8768			
Fisher Exact test(e)		P = 0.0612	P = 0.5051	P = 0.5051
SITE : lung TUMOR : bronchiolar-alveolar carcinoma				
Tumor rate				
Overall rates(a)	2/49( 4.1)	2/50( 4.0)	3/50( 6.0)	2/50( 4.0)
Adjusted rates(b)	7.14	7.14	15.00	8.33
Terminal rates(c)	2/28( 7.1)	2/28( 7.1)	2/18( 11.1)	1/19( 5.3)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.2746			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.9685			
Fisher Exact test(e)		P = 0.6990	P = 0.5097	P = 0.6990
SITE : lung TUMOR : bronchiolar-alveolar adenoma, bronchiolar-alveolar carcinoma				
Tumor rate				
Overall rates(a)	2/49( 4.1)	6/50( 12.0)	4/50( 8.0)	3/50( 6.0)
Adjusted rates(b)	7.14	20.69	15.00	12.50
Terminal rates(c)	2/28( 7.1)	5/28( 17.9)	2/18( 11.1)	2/19( 10.5)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.2503			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.9447			
Fisher Exact test(e)		P = 0.1409	P = 0.3485	P = 0.5097

STUDY No. : 0422  
ANIMAL : MOUSE Crj:BDF1  
SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 8

Group Name	control	1500 ppm	3000 ppm	6000 ppm
SITE : lymph node TUMOR : malignant lymphoma				
Tumor rate				
Overall rates(a)	19/49( 38.8)	23/50( 46.0)	11/50( 22.0)	4/50( 8.0)
Adjusted rates(b)	36.67	50.00	22.22	15.79
Terminal rates(c)	10/28( 35.7)	14/28( 50.0)	4/18( 22.2)	3/19( 15.8)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.9682			
Prevalence method(d)	P = 0.9773			
Combined analysis(d)	P = 0.9970			
Cochran-Armitage test(e)	P < 0.0001**			
Fisher Exact test(e)		P = 0.3004	P = 0.0548	P = 0.0003**
SITE : spleen TUMOR : malignant lymphoma				
Tumor rate				
Overall rates(a)	0/49( 0.0)	4/50( 8.0)	3/50( 6.0)	1/50( 2.0)
Adjusted rates(b)	0.0	10.71	11.11	5.26
Terminal rates(c)	0/28( 0.0)	3/28( 10.7)	2/18( 11.1)	1/19( 5.3)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.5144			
Prevalence method(d)	P = 0.2528			
Combined analysis(d)	P = 0.3068			
Cochran-Armitage test(e)	P = 0.9863			
Fisher Exact test(e)		P = 0.0612	P = 0.1250	P = 0.5051
SITE : stomach TUMOR : squamous cell papilloma, squamous cell carcinoma				
Tumor rate				
Overall rates(a)	0/48( 0.0)	3/49( 6.1)	0/50( 0.0)	1/50( 2.0)
Adjusted rates(b)	0.0	3.57	0.0	2.63
Terminal rates(c)	0/28( 0.0)	1/28( 3.6)	0/18( 0.0)	0/19( 0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.6433			
Prevalence method(d)	P = 0.2264			
Combined analysis(d)	P = 0.3996			
Cochran-Armitage test(e)	P = 0.9765			
Fisher Exact test(e)		P = 0.1250	P = N.C.	P = 0.5102

STUDY No. : 0422  
ANIMAL : MOUSE Crj:BDF1  
SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 9

Group Name	control	1500 ppm	3000 ppm	6000 ppm
SITE : liver TUMOR : hemangioma				
Tumor rate				
Overall rates(a)	3/49( 6.1)	2/50( 4.0)	3/50( 6.0)	0/50( 0.0)
Adjusted rates(b)	10.71	3.57	7.69	0.0
Terminal rates(c)	3/28( 10.7)	1/28( 3.6)	1/18( 5.6)	0/19( 0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.4694			
Prevalence method(d)	P = 0.8802			
Combined analysis(d)	P = 0.8464			
Cochran-Armitage test(e)	P = 0.1382			
Fisher Exact test(e)		P = 0.4903	P = 0.6708	P = 0.1175
SITE : liver TUMOR : hepatocellular adenoma				
Tumor rate				
Overall rates(a)	8/49( 16.3)	25/50( 50.0)	42/50( 84.0)	45/50( 90.0)
Adjusted rates(b)	25.81	75.00	100.00	96.00
Terminal rates(c)	7/28( 25.0)	21/28( 75.0)	18/18(100.0)	18/19( 94.7)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.0214*			
Prevalence method(d)	P < 0.0001**			
Combined analysis(d)	P < 0.0001**			
Cochran-Armitage test(e)	P < 0.0001**			
Fisher Exact test(e)		P = 0.0004**	P < 0.0001**	P < 0.0001**
SITE : liver TUMOR : hepatocellular carcinoma				
Tumor rate				
Overall rates(a)	1/49( 2.0)	2/50( 4.0)	11/50( 22.0)	21/50( 42.0)
Adjusted rates(b)	3.57	7.14	33.33	75.00
Terminal rates(c)	1/28( 3.6)	2/28( 7.1)	6/18( 33.3)	14/19( 73.7)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.0395*			
Prevalence method(d)	P < 0.0001**?			
Combined analysis(d)	P < 0.0001**?			
Cochran-Armitage test(e)	P < 0.0001**			
Fisher Exact test(e)		P = 0.5077	P = 0.0021**	P < 0.0001**

STUDY No. : 0422  
ANIMAL : MOUSE Crj:BDF1  
SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 10

Group Name	control	1500 ppm	3000 ppm	6000 ppm
SITE : liver TUMOR : hepatoblastoma				
Tumor rate				
Overall rates(a)	0/49( 0.0)	2/50( 4.0)	7/50( 14.0)	7/50( 14.0)
Adjusted rates(b)	0.0	3.67	11.11	11.54
Terminal rates(c)	0/28( 0.0)	1/28( 3.6)	2/18( 11.1)	2/19( 10.5)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.0213*			
Prevalence method(d)	P = 0.0068**			
Combined analysis(d)	P = 0.0007**			
Cochran-Armitage test(e)	P = 0.0051**			
Fisher Exact test(e)		P = 0.2525	P = 0.0067**	P = 0.0067**
SITE : liver TUMOR : hepatocellular adenoma, hepatocellular carcinoma, hepatoblastoma				
Tumor rate				
Overall rates(a)	8/49( 16.3)	28/50( 56.0)	43/50( 86.0)	48/50( 96.0)
Adjusted rates(b)	25.81	82.14	100.00	100.00
Terminal rates(c)	7/28( 25.0)	23/28( 82.1)	18/18(100.0)	19/19(100.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.0004**			
Prevalence method(d)	P < 0.0001**			
Combined analysis(d)	P < 0.0001**			
Cochran-Armitage test(e)	P < 0.0001**			
Fisher Exact test(e)		P < 0.0001**	P < 0.0001**	P < 0.0001**
SITE : ovary TUMOR : cystadenoma				
Tumor rate				
Overall rates(a)	2/49( 4.1)	4/50( 8.0)	0/50( 0.0)	1/50( 2.0)
Adjusted rates(b)	7.14	14.29	0.0	5.26
Terminal rates(c)	2/28( 7.1)	4/28( 14.3)	0/18( 0.0)	1/19( 5.3)
Statistical analysis				
Peto test				
Standard method(d)	P = -----			
Prevalence method(d)	P = 0.7416			
Combined analysis(d)	P = -----			
Cochran-Armitage test(e)	P = 0.2615			
Fisher Exact test(e)		P = 0.3485	P = 0.2424	P = 0.4923

STUDY No. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 11

Group Name	control	1500 ppm	3000 ppm	6000 ppm
SITE : uterus TUMOR : histiocytic sarcoma				
Tumor rate				
Overall rates(a)	13/49( 26.5)	9/50( 18.0)	14/50( 28.0)	6/50( 12.0)
Adjusted rates(b)	14.29	14.29	22.22	4.17
Terminal rates(c)	4/28( 14.3)	4/28( 14.3)	4/18( 22.2)	0/19( 0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.5713			
Prevalence method(d)	P = 0.7434			
Combined analysis(d)	P = 0.7013			
Cochran Armitage test(e)	P = 0.1302			
Fisher Exact test(e)		P = 0.2182	P = 0.5246	P = 0.0564
SITE : peritoneum TUMOR : hemangiosarcoma				
Tumor rate				
Overall rates(a)	0/49( 0.0)	3/50( 6.0)	7/50( 14.0)	17/50( 34.0)
Adjusted rates(b)	0.0	9.68	5.56	31.58
Terminal rates(c)	0/28( 0.0)	2/28( 7.1)	1/18( 5.6)	6/19( 31.6)
Statistical analysis				
Peto test				
Standard method(d)	P < 0.0001**			
Prevalence method(d)	P = 0.0010**			
Combined analysis(d)	P < 0.0001**			
Cochran-Armitage test(e)	P < 0.0001**			
Fisher Exact test(e)		P = 0.1250	P = 0.0067**	P < 0.0001**

(HPT360A)

BAIS4



STUDY No. : 0422  
ANIMAL : MOUSE Crj:BDF1  
SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 12

Group Name	control	1500 ppm	3000 ppm	6000 ppm
SITE : peritoneum TUMOR : hemangioma, hemangiosarcoma				
Tumor rate				
Overall rates(a)	0/49( 0.0)	3/50( 6.0)	8/50( 16.0)	17/50( 34.0)
Adjusted rates(b)	0.0	9.68	8.33	31.58
Terminal rates(c)	0/28( 0.0)	2/28( 7.1)	1/18( 5.6)	6/19( 31.6)
Statistical analysis				
Peto test				
Standard method(d)	P < 0.0001**			
Prevalence method(d)	P = 0.0007**			
Combined analysis(d)	P < 0.0001**			
Cochran-Armitage test(e)	P < 0.0001**			
Fisher Exact test(e)		P = 0.1250	P = 0.0031**	P < 0.0001**

(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.

STUDY No. : 0422  
ANIMAL : MOUSE Crj:BDF1  
SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 3

Group Name	control	1500 ppm	3000 ppm	6000 ppm
SITE : ALL SITE TUMOR : hemangioma				
Tumor rate				
Overall rates(a)	3/49( 6.1)	2/50( 4.0)	6/50( 12.0)	3/50( 6.0)
Adjusted rates(b)	10.71	3.57	14.29	5.26
Terminal rates(c)	3/28( 10.7)	1/28( 3.6)	1/18( 5.6)	0/19( 0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.1706			
Prevalence method(d)	P = 0.3761			
Combined analysis(d)	P = 0.2177			
Cochran-Armitage test(e)	P = 0.7962			
Fisher Exact test(e)		P = 0.4903	P = 0.2536	P = 0.6708
SITE : ALL SITE TUMOR : histiocytic sarcoma				
Tumor rate				
Overall rates(a)	15/49( 30.6)	11/50( 22.0)	17/50( 34.0)	8/50( 16.0)
Adjusted rates(b)	17.86	17.86	22.22	4.17
Terminal rates(c)	5/28( 17.9)	5/28( 17.9)	4/18( 22.2)	0/19( 0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.4270			
Prevalence method(d)	P = 0.8294			
Combined analysis(d)	P = 0.6455			
Cochran-Armitage test(e)	P = 0.1629			
Fisher Exact test(e)		P = 0.2282	P = 0.4424	P = 0.0686
SITE : ALL SITE TUMOR : malignant lymphoma				
Tumor rate				
Overall rates(a)	19/49( 38.8)	27/50( 54.0)	14/50( 28.0)	5/50( 10.0)
Adjusted rates(b)	36.67	60.71	33.33	21.05
Terminal rates(c)	10/28( 35.7)	17/28( 60.7)	6/18( 33.3)	4/19( 21.1)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.9708			
Prevalence method(d)	P = 0.9437			
Combined analysis(d)	P = 0.9931			
Cochran-Armitage test(e)	P = 0.0001**			
Fisher Exact test(e)		P = 0.0938	P = 0.1778	P = 0.0008**

STUDY No. : 0422  
ANIMAL : MOUSE Crj:BDF1  
SEX : FEMALE

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS

PAGE : 4

Group Name	control	1500 ppm	3000 ppm	6000 ppm
SITE : ALL SITE TUMOR : hemangiosarcoma				
Tumor rate				
Overall rates(a)	0/49( 0.0)	3/50( 6.0)	7/50( 14.0)	18/50( 36.0)
Adjusted rates(b)	0.0	9.68	5.56	31.58
Terminal rates(c)	0/28( 0.0)	2/28( 7.1)	1/18( 5.6)	6/19( 31.6)
Statistical analysis				
Peto test				
Standard method(d)	P < 0.0001**			
Prevalence method(d)	P = 0.0010**			
Combined analysis(d)	P < 0.0001**			
Cochran-Armitage test(e)	P < 0.0001**			
Fisher Exact test(e)		P = 0.1250	P = 0.0067**	P < 0.0001**

(HPT360A)

BAIS4

- (a): Number of tumor-bearing animals/number of animals examined at the site.  
(b): Kaplan-Meier estimated tumor incidence at the end of the study after adjusting for intercurrent mortality.  
(c): Observed tumor incidence at terminal kill.  
(d): Beneath the control incidence are the P-values associated with the trend test.  
Standard method : Death analysis  
Prevalence method : Incidental tumor test  
Combined analysis : Death analysis + Incidental tumor test  
(e): The Cochran-Armitage and Fisher exact test compare directly the overall incidence rates.  
? : The conditional probabilities of the largest and smallest possible outcomes cannot be estimated or this P-value is beyond the estimated P-value.  
----- : There is no data which should be statistical analysis.  
Significant difference : \* :  $P \leq 0.05$  \*\* :  $P \leq 0.01$   
N.C.:Statistical value cannot be calculated and was not significant.

## APPENDIX P 1

HISTOPATHOLOGICAL FINDINGS: METASTASIS OF TUMOR:

MALE : ALL ANIMALS

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : MALE

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

PAGE : 1

Group Name		control	750 ppm	1500 ppm	3000 ppm
No. of Animals on Study		50	50	50	50
Organ	Findings				
{Integumentary system/appandage}					
skin/app	leukemic cell infiltration	<50> 0	<50> 1	<50> 0	<50> 0
	metastasis:subcutis tumor	0	1	0	0
	metastasis:epididymis tumor	0	0	0	1
subcutis	metastasis:liver tumor	<50> 0	<50> 1	<50> 0	<50> 0
{Respiratory system}					
nasal cavit	leukemic cell infiltration	<50> 0	<50> 1	<50> 0	<50> 0
	metastasis:liver tumor	0	1	1	0
	metastasis:subcutis tumor	0	1	0	0
	metastasis:epididymis tumor	0	0	0	2
nasopharynx	leukemic cell infiltration	<50> 0	<50> 1	<50> 0	<50> 0
	leukemic cell infiltration	<50> 0	<50> 1	<50> 0	<50> 0
lung	leukemic cell infiltration	<50> 2	<50> 1	<50> 2	<50> 0
	metastasis:liver tumor	2	3	5	9
	metastasis:peritoneum tumor	1	0	0	0
	metastasis:mammary gland tumor	1	0	0	0
< a > a : Number of animals examined at the site b b : Number of animals with lesion					

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 2

Group Name		control	750 ppm	1500 ppm	3000 ppm
No. of Animals on Study		50	50	50	50
Organ	Findings				
{Respiratory system}					
lung	metastasis:spleen tumor	<50> 0	<50> 0	<50> 0	<50> 1
	metastasis:retroperitoneum tumor	0	2	0	0
	metastasis:urinary bladder tumor	0	0	1	0
{Hematopoietic system}					
bone marrow	leukemic cell infiltration	<50> 0	<50> 1	<50> 0	<50> 0
	metastasis:liver tumor	1	1	0	0
lymph node	leukemic cell infiltration	<50> 0	<50> 1	<50> 0	<50> 0
	metastasis:liver tumor	0	1	0	1
	metastasis:subcutis tumor	0	1	0	0
	metastasis:retroperitoneum tumor	0	2	0	0
spleen	leukemic cell infiltration	<50> 2	<50> 1	<50> 1	<50> 1
	metastasis:liver tumor	2	2	0	0
	metastasis:retroperitoneum tumor	0	1	0	0
	metastasis:lymph node tumor	1	0	0	0
{Circulatory system}					
heart	leukemic cell infiltration	<50> 0	<50> 1	<50> 0	<50> 0
< a >	a : Number of animals examined at the site				
b	b : Number of animals with lesion				

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : MALE

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

PAGE : 3

Group Name		control	750 ppm	1500 ppm	3000 ppm
No. of Animals on Study		50	50	50	50
Organ	Findings				
{Circulatory system}					
heart		<50>	<50>	<50>	<50>
	metastasis:lung tumor	0	1	0	0
{Digestive system}					
salivary gl		<50>	<50>	<50>	<50>
	leukemic cell infiltration	1	1	0	0
stomach		<50>	<50>	<50>	<50>
	metastasis:liver tumor	0	0	1	0
liver		<50>	<50>	<50>	<50>
	leukemic cell infiltration	1	1	0	0
	metastasis:subcutis tumor	0	1	0	0
	metastasis:spleen tumor	0	0	0	1
	metastasis:retroperitoneum tumor	0	2	0	0
	metastasis:epididymis tumor	0	0	0	2
pancreas		<50>	<50>	<50>	<50>
	leukemic cell infiltration	1	0	0	0
	metastasis:liver tumor	0	1	0	0
	metastasis:mammary gland tumor	1	0	0	0
{Urinary system}					
kidney		<50>	<50>	<50>	<50>
	leukemic cell infiltration	1	1	1	0
< a >		a : Number of animals examined at the site			
b		b : Number of animals with lesion			

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 4

Organ	Findings	Group Name No. of Animals on Study	control 50	750 ppm 50	1500 ppm 50	3000 ppm 50
{Urinary system}						
kidney	metastasis:liver tumor		<50> 0	<50> 1	<50> 0	<50> 0
	metastasis:mammary gland tumor		1	0	0	0
	metastasis:spleen tumor		0	0	0	1
	metastasis:retroperitoneum tumor		0	1	0	0
urin bladd	leukemic cell infiltration		<50> 0	<50> 1	<50> 1	<50> 0
{Endocrine system}						
pituitary	metastasis:peripheral nerve tumor		<50> 0	<49> 1	<49> 0	<50> 1
	leukemic cell infiltration		<50> 0	<50> 1	<50> 0	<50> 0
adrenal	metastasis:lung tumor		<50> 0	<50> 1	<50> 0	<50> 0
{Reproductive system}						
testis	metastasis:epididymis tumor		<50> 0	<50> 0	<50> 0	<50> 1
	leukemic cell infiltration		<50> 0	<50> 1	<50> 0	<50> 0
epididymis	metastasis:liver tumor		0	0	1	0
	leukemic cell infiltration		<50> 0	<50> 1	<50> 0	<50> 0
semin ves	leukemic cell infiltration		<50> 0	<50> 1	<50> 0	<50> 0
< a > a : Number of animals examined at the site b b : Number of animals with lesion						



STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : MALE

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

PAGE : 5

Organ	Findings	Group Name No. of Animals on Study	control 50	750 ppm 50	1500 ppm 50	3000 ppm 50
{Reproductive system}						
prostate			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	1	0	0
	metastasis:peritoneum tumor		0	0	0	1
{Nervous system}						
brain			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	1	0	0
	metastasis:peripheral nerve tumor		0	1	0	0
spinal cord			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	1	0	0
{Special sense organs/appendage}						
eye			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	1	0	0
Harder gl			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	1	0	0
	metastasis:epididymis tumor		0	0	0	1
{Musculoskeletal system}						
muscle			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	1	0	0
{Body cavities}						
mediastinum			<50>	<50>	<50>	<50>
	metastasis:lung tumor		0	1	0	0

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

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : MALE

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

PAGE : 6

		Group Name	control	750 ppm	1500 ppm	3000 ppm
		No. of Animals on Study	50	50	50	50
Organ_____	Findings_____					
{Body cavities}						
mediastinum		<50>	<50>	<50>	<50>	
	metastasis:retroperitoneum tumor	0	1	0	0	
peritoneum		<50>	<50>	<50>	<50>	
	metastasis:liver tumor	0	0	2	1	
< a >	a : Number of animals examined at the site					
b	b : Number of animals with lesion					
(JPT150)						BAIS

## APPENDIX P 2

HISTOPATHOLOGICAL FINDINGS: METASTASIS OF TUMOR:  
MALE : DEAD AND MORIBUND ANIMALS

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : MALE

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

PAGE : 1

Organ	Findings	Group Name No. of Animals on Study	control 15	750 ppm 12	1500 ppm 21	3000 ppm 27
{Integumentary system/appendage}						
skin/app			<15>	<12>	<21>	<27>
	metastasis:subcutis tumor		0	1	0	0
	metastasis:epididymis tumor		0	0	0	1
subcutis			<15>	<12>	<21>	<27>
	metastasis:liver tumor		0	1	0	0
{Respiratory system}						
nasal cavit			<15>	<12>	<21>	<27>
	metastasis:liver tumor		0	1	1	0
	metastasis:subcutis tumor		0	1	0	0
	metastasis:epididymis tumor		0	0	0	2
lung			<15>	<12>	<21>	<27>
	leukemic cell infiltration		1	0	0	0
	metastasis:liver tumor		2	2	3	4
	metastasis:peritoneum tumor		1	0	0	0
	metastasis:mammary gland tumor		1	0	0	0
	metastasis:retroperitoneum tumor		0	1	0	0
{Hematopoietic system}						
bone marrow			<15>	<12>	<21>	<27>
	metastasis:liver tumor		1	1	0	0
lymph node			<15>	<12>	<21>	<27>
	metastasis:liver tumor		0	1	0	1

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

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : MALE

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

PAGE : 2

Organ	Findings	Group Name No. of Animals on Study	control 15	750 ppm 12	1500 ppm 21	3000 ppm 27
(Hematopoietic system)						
lymph node			<15>	<12>	<21>	<27>
	metastasis:subcutis tumor		0	1	0	0
	metastasis:retroperitoneum tumor		0	1	0	0
spleen			<15>	<12>	<21>	<27>
	metastasis:liver tumor		2	2	0	0
	metastasis:lymph node tumor		1	0	0	0
(Circulatory system)						
heart			<15>	<12>	<21>	<27>
	metastasis:lung tumor		0	1	0	0
(Digestive system)						
liver			<15>	<12>	<21>	<27>
	leukemic cell infiltration		1	0	0	0
	metastasis:subcutis tumor		0	1	0	0
	metastasis:retroperitoneum tumor		0	1	0	0
	metastasis:epididymis tumor		0	0	0	2
pancreas			<15>	<12>	<21>	<27>
	leukemic cell infiltration		1	0	0	0
	metastasis:liver tumor		0	1	0	0
	metastasis:mammary gland tumor		1	0	0	0
(Urinary system)						
kidney			<15>	<12>	<21>	<27>
	metastasis:liver tumor		0	1	0	0

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

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : MALE

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

PAGE : 3

Organ	Findings	Group Name No. of Animals on Study	control 15	750 ppm 12	1500 ppm 21	3000 ppm 27
{Urinary system}						
kidney	metastasis:mammary gland tumor		<15> 1	<12> 0	<21> 0	<27> 0
	metastasis:retroperitoneum tumor		0	1	0	0
{Endocrine system}						
pituitary	metastasis:peripheral nerve tumor		<15> 0	<11> 1	<21> 0	<27> 1
	metastasis:lung tumor		<15> 0	<12> 1	<21> 0	<27> 0
{Reproductive system}						
testis	metastasis:epididymis tumor		<15> 0	<12> 0	<21> 0	<27> 1
	metastasis:liver tumor		<15> 0	<12> 0	<21> 1	<27> 0
prostate	metastasis:peritoneum tumor		<15> 0	<12> 0	<21> 0	<27> 1
{Nervous system}						
brain	metastasis:peripheral nerve tumor		<15> 0	<12> 1	<21> 0	<27> 0
{Special sense organs/appendage}						
Harder gl	metastasis:epididymis tumor		<15> 0	<12> 0	<21> 0	<27> 1
< a > b : Number of animals with lesion						

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : MALE

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

PAGE : 4

		Group Name	control	750 ppm	1500 ppm	3000 ppm
		No. of Animals on Study	15	12	21	27
Organ	Findings					
{Body cavities}						
mediastinum			<15>	<12>	<21>	<27>
	metastasis:lung tumor		0	1	0	0
peritoneum			<15>	<12>	<21>	<27>
	metastasis:liver tumor		0	0	1	0
< a >		a : Number of animals examined at the site				
b		b : Number of animals with lesion				

(JPT150)

BAIS4

## APPENDIX P 3

HISTOPATHOLOGICAL FINDINGS: METASTASIS OF TUMOR:  
MALE : SACRIFICED ANIMALS



STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 1

Organ	Findings	Group Name No. of Animals on Study	control 35	750 ppm 38	1500 ppm 29	3000 ppm 23
{Integumentary system/appandage}						
skin/app			<35>	<38>	<29>	<23>
	leukemic cell infiltration		0	1	0	0
{Respiratory system}						
nasal cavit			<35>	<38>	<29>	<23>
	leukemic cell infiltration		0	1	0	0
nasopharynx			<35>	<38>	<29>	<23>
	leukemic cell infiltration		0	1	0	0
larynx			<35>	<38>	<29>	<23>
	leukemic cell infiltration		0	1	0	0
lung			<35>	<38>	<29>	<23>
	leukemic cell infiltration		1	1	2	0
	metastasis:liver tumor		0	1	2	5
	metastasis:spleen tumor		0	0	0	1
	metastasis:retroperitoneum tumor		0	1	0	0
	metastasis:urinary bladder tumor		0	0	1	0
{Hematopoietic system}						
bone marrow			<35>	<38>	<29>	<23>
	leukemic cell infiltration		0	1	0	0
lymph node			<35>	<38>	<29>	<23>
	leukemic cell infiltration		0	1	0	0
	metastasis:retroperitoneum tumor		0	1	0	0
< a >	a : Number of animals examined at the site					
b	b : Number of animals with lesion					

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : MALE

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

PAGE : 2

Organ	Findings	Group Name No. of Animals on Study	control 35	750 ppm 38	1500 ppm 29	3000 ppm 23
{Hematopoietic system}						
spleen			<35>	<38>	<29>	<23>
	leukemic cell infiltration		2	1	1	1
	metastasis:retroperitoneum tumor		0	1	0	0
{Circulatory system}						
heart			<35>	<38>	<29>	<23>
	leukemic cell infiltration		0	1	0	0
{Digestive system}						
salivary gl			<35>	<38>	<29>	<23>
	leukemic cell infiltration		1	1	0	0
stomach			<35>	<38>	<29>	<23>
	metastasis:liver tumor		0	0	1	0
liver			<35>	<38>	<29>	<23>
	leukemic cell infiltration		0	1	0	0
	metastasis:spleen tumor		0	0	0	1
	metastasis:retroperitoneum tumor		0	1	0	0
{Urinary system}						
kidney			<35>	<38>	<29>	<23>
	leukemic cell infiltration		1	1	1	0
	metastasis:spleen tumor		0	0	0	1
urin bladd			<35>	<38>	<29>	<23>
	leukemic cell infiltration		0	1	1	0

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

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : MALE

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

PAGE : 3

Organ	Findings	Group Name No. of Animals on Study	control 35	750 ppm 38	1500 ppm 29	3000 ppm 23
{Endocrine system}						
thyroid	leukemic cell infiltration		<35> 0	<38> 1	<29> 0	<23> 0
{Reproductive system}						
epididymis	leukemic cell infiltration		<35> 0	<38> 1	<29> 0	<23> 0
semin ves	leukemic cell infiltration		<35> 0	<38> 1	<29> 0	<23> 0
prostate	leukemic cell infiltration		<35> 0	<38> 1	<29> 0	<23> 0
{Nervous system}						
brain	leukemic cell infiltration		<35> 0	<38> 1	<29> 0	<23> 0
spinal cord	leukemic cell infiltration		<35> 0	<38> 1	<29> 0	<23> 0
{Special sense organs/appendage}						
eye	leukemic cell infiltration		<35> 0	<38> 1	<29> 0	<23> 0
Harder gl	leukemic cell infiltration		<35> 0	<38> 1	<29> 0	<23> 0
{Musculoskeletal system}						
muscle	leukemic cell infiltration		<35> 0	<38> 1	<29> 0	<23> 0

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

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : MALE

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

PAGE : 4

		Group Name	control	750 ppm	1500 ppm	3000 ppm
Organ	Findings	No. of Animals on Study	35	38	29	23
{Body cavities}						
mediastinum			<35>	<38>	<29>	<23>
	metastasis:retroperitoneum tumor		0	1	0	0
peritoneum			<35>	<38>	<29>	<23>
	metastasis:liver tumor		0	0	1	1
< a > a : Number of animals examined at the site						
b b : Number of animals with lesion						

(JPT150)

BAIS4

## APPENDIX P 4

HISTOPATHOLOGICAL FINDINGS: METASTASIS OF TUMOR:

FEMALE : ALL ANIMALS

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : FEMALE

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

PAGE : 7

Group Name		control	1500 ppm	3000 ppm	6000 ppm
No. of Animals on Study		49	50	50	50
Organ	Findings				
{Integumentary system/appandage}					
skin/app		<49>	<50>	<50>	<50>
	leukemic cell infiltration	1	0	2	1
subcutis		<49>	<50>	<50>	<50>
	metastasis:uterus tumor	0	0	1	0
{Respiratory system}					
nasal cavit		<49>	<50>	<50>	<50>
	metastasis:uterus tumor	1	2	1	0
	metastasis:salivary gland tumor	0	1	0	0
larynx		<49>	<50>	<50>	<50>
	leukemic cell infiltration	1	2	0	0
trachea		<49>	<50>	<50>	<50>
	leukemic cell infiltration	1	0	0	0
lung		<49>	<50>	<50>	<50>
	leukemic cell infiltration	13	12	9	2
	metastasis:liver tumor	0	1	4	3
	metastasis:uterus tumor	5	2	2	2
	metastasis:peritoneum tumor	0	0	1	1
	metastasis:mammary gland tumor	1	0	0	0
{Hematopoietic system}					
bone marrow		<49>	<50>	<50>	<50>
	leukemic cell infiltration	3	6	4	0

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

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : FEMALE

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

PAGE : 8

Organ	Findings	Group Name No. of Animals on Study	control 49	1500 ppm 50	3000 ppm 50	6000 ppm 50
{Hematopoietic system}						
bone marrow			<49>	<50>	<50>	<50>
	metastasis:liver tumor		0	0	0	1
	metastasis:uterus tumor		0	0	1	5
lymph node			<49>	<50>	<50>	<50>
	leukemic cell infiltration		0	3	1	0
	metastasis:liver tumor		0	0	0	1
	metastasis:uterus tumor		1	0	2	0
	metastasis:subcutis tumor		1	0	0	0
spleen			<49>	<50>	<50>	<50>
	leukemic cell infiltration		9	18	5	2
	metastasis:liver tumor		0	0	0	1
	metastasis:uterus tumor		2	1	3	1
	metastasis:stomach tumor		0	1	0	0
{Circulatory system}						
heart			<49>	<50>	<50>	<50>
	leukemic cell infiltration		1	1	0	0
{Digestive system}						
tongue			<49>	<50>	<50>	<50>
	leukemic cell infiltration		1	2	1	1
salivary gl			<49>	<50>	<50>	<50>
	leukemic cell infiltration		9	15	6	3

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

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : FEMALE

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

PAGE : 9

Organ	Findings	Group Name No. of Animals on Study	control 49	1500 ppm 50	3000 ppm 50	6000 ppm 50
{Digestive system}						
stomach			<49>	<50>	<50>	<50>
	leukemic cell infiltration		1	1	1	0
	metastasis:peritoneum tumor		0	0	0	2
small intes			<49>	<50>	<50>	<50>
	metastasis:stomach tumor		0	1	0	0
liver			<49>	<50>	<50>	<50>
	leukemic cell infiltration		10	18	7	2
	metastasis:uterus tumor		10	6	9	5
	metastasis:ovary tumor		0	0	1	0
	metastasis:stomach tumor		0	1	0	0
pancreas			<49>	<50>	<50>	<50>
	leukemic cell infiltration		4	11	6	1
	metastasis:liver tumor		0	0	0	2
	metastasis:uterus tumor		0	4	2	2
{Urinary system}						
kidney			<49>	<50>	<50>	<50>
	leukemic cell infiltration		9	14	5	3
	metastasis:uterus tumor		3	2	2	2
	metastasis:peritoneum tumor		0	0	0	1
	metastasis:stomach tumor		0	1	0	0
< a >	a : Number of animals examined at the site					
b	b : Number of animals with lesion					



STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : FEMALE

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

PAGE : 10

Group Name		control	1500 ppm	3000 ppm	6000 ppm
No. of Animals on Study		49	50	50	50
Organ	Findings				
(Urinary system)					
urin bladd		<49>	<50>	<50>	<50>
	leukemic cell infiltration	6	15	3	3
	metastasis:uterus tumor	0	1	0	0
	metastasis:peritoneum tumor	0	0	1	0
(Endocrine system)					
pituitary		<49>	<50>	<50>	<50>
	leukemic cell infiltration	0	1	0	0
thyroid		<49>	<50>	<50>	<50>
	leukemic cell infiltration	1	1	0	0
adrenal		<49>	<50>	<50>	<50>
	leukemic cell infiltration	4	2	1	0
	metastasis:uterus tumor	1	0	0	0
(Reproductive system)					
ovary		<49>	<50>	<50>	<50>
	leukemic cell infiltration	7	10	3	1
	metastasis:liver tumor	0	0	1	2
	metastasis:uterus tumor	6	5	6	4
	metastasis:mammary gland tumor	1	0	0	0
	metastasis:stomach tumor	0	1	0	0
uterus		<49>	<50>	<50>	<50>
	leukemic cell infiltration	4	5	1	1

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

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 11

Organ	Findings	Group Name No. of Animals on Study	control 49	1500 ppm 50	3000 ppm 50	6000 ppm 50
{Reproductive system}						
uterus			<49>	<50>	<50>	<50>
	metastasis:peritoneum tumor		0	0	1	4
vagina			<49>	<50>	<50>	<50>
	leukemic cell infiltration		2	3	1	0
	metastasis:uterus tumor		3	3	2	1
	metastasis:peritoneum tumor		0	0	2	0
mammary gl			<49>	<50>	<50>	<50>
	leukemic cell infiltration		1	0	2	0
{Nervous system}						
brain			<49>	<50>	<50>	<50>
	leukemic cell infiltration		1	2	0	0
	metastasis:salivary gland tumor		0	1	0	0
spinal cord			<49>	<50>	<50>	<50>
	leukemic cell infiltration		0	1	0	0
periph nerv			<49>	<50>	<50>	<50>
	metastasis:liver tumor		0	0	0	1
{Special sense organs/appendage}						
eye			<49>	<50>	<50>	<50>
	leukemic cell infiltration		0	0	1	0
	metastasis:liver tumor		0	0	0	1
Harder gl			<49>	<50>	<50>	<50>
	leukemic cell infiltration		3	8	2	0

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

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : FEMALE

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

PAGE : 12

		Group Name	control	1500 ppm	3000 ppm	6000 ppm
		No. of Animals on Study	49	50	50	50
Organ	Findings					
{Special sense organs/appendage}						
Harder gl			<49>	<50>	<50>	<50>
	metastasis:liver tumor		0	0	0	1
	metastasis:uterus tumor		0	0	1	0
{Musculoskeletal system}						
muscle			<49>	<50>	<50>	<50>
	leukemic cell infiltration		1	1	1	0
bone			<49>	<50>	<50>	<50>
	metastasis:bone marrow tumor		0	1	0	0
{Body cavities}						
peritoneum			<49>	<50>	<50>	<50>
	leukemic cell infiltration		2	0	2	0
	metastasis:stomach tumor		0	1	0	0
mesenterium			<49>	<50>	<50>	<50>
	leukemic cell infiltration		1	0	0	0
	metastasis:uterus tumor		0	0	1	0
< a >	a : Number of animals examined at the site					
b	b : Number of animals with lesion					

(JPT150)

BAIS4

## APPENDIX P 5

HISTOPATHOLOGICAL FINDINGS: METASTASIS OF TUMOR:  
FEMALE : DEAD AND MORIBUND ANIMALS

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : FEMALE

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

PAGE : 5

Group Name		control	1500 ppm	3000 ppm	6000 ppm
No. of Animals on Study		21	22	32	31
Organ	Findings				
{Integumentary system/appandage}					
skin/app		<21>	<22>	<32>	<31>
	leukemic cell infiltration	1	0	2	1
subcutis		<21>	<22>	<32>	<31>
	metastasis:uterus tumor	0	0	1	0
{Respiratory system}					
nasal cavit		<21>	<22>	<32>	<31>
	metastasis:uterus tumor	0	2	0	0
	metastasis:salivary gland tumor	0	1	0	0
larynx		<21>	<22>	<32>	<31>
	leukemic cell infiltration	1	0	0	0
trachea		<21>	<22>	<32>	<31>
	leukemic cell infiltration	1	0	0	0
lung		<21>	<22>	<32>	<31>
	leukemic cell infiltration	7	6	7	1
	metastasis:liver tumor	0	0	3	0
	metastasis:uterus tumor	5	1	2	2
	metastasis:peritoneum tumor	0	0	1	0
	metastasis:mammary gland tumor	1	0	0	0
{Hematopoietic system}					
bone marrow		<21>	<22>	<32>	<31>
	leukemic cell infiltration	3	5	4	0

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

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 6

Group Name		control	1500 ppm	3000 ppm	6000 ppm
No. of Animals on Study		21	22	32	31
Organ	Findings				
{Hematopoietic system}					
bone marrow		<21>	<22>	<32>	<31>
	metastasis:liver tumor	0	0	0	1
	metastasis:uterus tumor	0	0	1	5
lymph node		<21>	<22>	<32>	<31>
	leukemic cell infiltration	0	1	0	0
	metastasis:liver tumor	0	0	0	1
	metastasis:uterus tumor	1	0	1	0
	metastasis:subcutis tumor	1	0	0	0
spleen		<21>	<22>	<32>	<31>
	leukemic cell infiltration	5	8	4	1
	metastasis:liver tumor	0	0	0	1
	metastasis:uterus tumor	2	1	3	1
	metastasis:stomach tumor	0	1	0	0
{Circulatory system}					
heart		<21>	<22>	<32>	<31>
	leukemic cell infiltration	1	1	0	0
{Digestive system}					
tongue		<21>	<22>	<32>	<31>
	leukemic cell infiltration	1	1	1	1
salivary gl		<21>	<22>	<32>	<31>
	leukemic cell infiltration	4	5	4	1

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

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 7

		Group Name No. of Animals on Study	control 21	1500 ppm 22	3000 ppm 32	6000 ppm 31
Organ	Findings					
{Digestive system}						
stomach			<21>	<22>	<32>	<31>
	leukemic cell infiltration		1	0	0	0
	metastasis:peritoneum tumor		0	0	0	2
small intes			<21>	<22>	<32>	<31>
	metastasis:stomach tumor		0	1	0	0
liver			<21>	<22>	<32>	<31>
	leukemic cell infiltration		6	8	5	1
	metastasis:uterus tumor		8	4	7	5
	metastasis:ovary tumor		0	0	1	0
	metastasis:stomach tumor		0	1	0	0
pancreas			<21>	<22>	<32>	<31>
	leukemic cell infiltration		4	7	3	1
	metastasis:liver tumor		0	0	0	2
	metastasis:uterus tumor		0	3	1	2
{Urinary system}						
kidney			<21>	<22>	<32>	<31>
	leukemic cell infiltration		3	6	2	0
	metastasis:uterus tumor		3	2	1	2
	metastasis:peritoneum tumor		0	0	0	1
	metastasis:stomach tumor		0	1	0	0
< a >	a : Number of animals examined at the site					
b	b : Number of animals with lesion					

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : FEMALE

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

PAGE : 8

Group Name		control	1500 ppm	3000 ppm	6000 ppm
No. of Animals on Study		21	22	32	31
Organ	Findings				
{Urinary system}					
urin bladd		<21>	<22>	<32>	<31>
	leukemic cell infiltration	4	5	1	0
	metastasis:uterus tumor	0	1	0	0
	metastasis:peritoneum tumor	0	0	1	0
{Endocrine system}					
pituitary		<21>	<22>	<32>	<31>
	leukemic cell infiltration	0	1	0	0
thyroid		<21>	<22>	<32>	<31>
	leukemic cell infiltration	1	0	0	0
adrenal		<21>	<22>	<32>	<31>
	leukemic cell infiltration	4	2	1	0
	metastasis:uterus tumor	1	0	0	0
{Reproductive system}					
ovary		<21>	<22>	<32>	<31>
	leukemic cell infiltration	7	7	3	1
	metastasis:liver tumor	0	0	1	2
	metastasis:uterus tumor	6	4	4	4
	metastasis:mammary gland tumor	1	0	0	0
	metastasis:stomach tumor	0	1	0	0
uterus		<21>	<22>	<32>	<31>
	leukemic cell infiltration	4	4	1	1

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



STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : FEMALE

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

PAGE : 9

Group Name		control	1500 ppm	3000 ppm	6000 ppm
No. of Animals on Study		21	22	32	31
Organ	Findings				
{Reproductive system}					
uterus		<21>	<22>	<32>	<31>
	metastasis:peritoneum tumor	0	0	1	3
vagina		<21>	<22>	<32>	<31>
	leukemic cell infiltration	2	2	1	0
	metastasis:uterus tumor	2	2	2	1
	metastasis:peritoneum tumor	0	0	2	0
mammary gl		<21>	<22>	<32>	<31>
	leukemic cell infiltration	1	0	2	0
{Nervous system}					
brain		<21>	<22>	<32>	<31>
	leukemic cell infiltration	1	2	0	0
	metastasis:salivary gland tumor	0	1	0	0
spinal cord		<21>	<22>	<32>	<31>
	leukemic cell infiltration	0	1	0	0
periph nerv		<21>	<22>	<32>	<31>
	metastasis:liver tumor	0	0	0	1
{Special sense organs/appendage}					
eye		<21>	<22>	<32>	<31>
	leukemic cell infiltration	0	0	1	0
	metastasis:liver tumor	0	0	0	1
Harder gl		<21>	<22>	<32>	<31>
	leukemic cell infiltration	1	3	2	0
< a >	a : Number of animals examined at the site				
b	b : Number of animals with lesion				

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 10

Group Name		control	1500 ppm	3000 ppm	6000 ppm
No. of Animals on Study		21	22	32	31
Organ	Findings				
{Special sense organs/appendage}					
Harder gl	metastasis:liver tumor	<21> 0	<22> 0	<32> 0	<31> 1
	metastasis:uterus tumor	0	0	1	0
{Musculoskeletal system}					
muscle	leukemic cell infiltration	<21> 1	<22> 0	<32> 1	<31> 0
{Body cavities}					
peritoneum	leukemic cell infiltration	<21> 2	<22> 0	<32> 2	<31> 0
	metastasis:stomach tumor	0	1	0	0
mesenterium	leukemic cell infiltration	<21> 1	<22> 0	<32> 0	<31> 0
	metastasis:uterus tumor	0	0	1	0
< a > a : Number of animals examined at the site b b : Number of animals with lesion					

(JPT150)

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## APPENDIX P 6

HISTOPATHOLOGICAL FINDINGS: METASTASIS OF TUMOR:  
FEMALE : SACRIFICED ANIMALS

STUDY NO. : 0422  
ANIMAL : MOUSE Crj:BDF1  
REPORT TYPE : A1  
SEX : FEMALE

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

PAGE : 5

Group Name		control	1500 ppm	3000 ppm	6000 ppm
No. of Animals on Study		28	28	18	19
Organ	Findings				
{Respiratory system}					
nasal cavit		<28>	<28>	<18>	<19>
	metastasis:uterus tumor	1	0	1	0
larynx		<28>	<28>	<18>	<19>
	leukemic cell infiltration	0	2	0	0
lung		<28>	<28>	<18>	<19>
	leukemic cell infiltration	6	6	2	1
	metastasis:liver tumor	0	1	1	3
	metastasis:uterus tumor	0	1	0	0
	metastasis:peritoneum tumor	0	0	0	1
{Hematopoietic system}					
bone marrow		<28>	<28>	<18>	<19>
	leukemic cell infiltration	0	1	0	0
lymph node		<28>	<28>	<18>	<19>
	leukemic cell infiltration	0	2	1	0
	metastasis:uterus tumor	0	0	1	0
spleen		<28>	<28>	<18>	<19>
	leukemic cell infiltration	4	10	1	1
{Digestive system}					
tongue		<28>	<28>	<18>	<19>
	leukemic cell infiltration	0	1	0	0
salivary gl		<28>	<28>	<18>	<19>
	leukemic cell infiltration	5	10	2	2

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

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 6

Group Name		control	1500 ppm	3000 ppm	6000 ppm
No. of Animals on Study		28	28	18	19
Organ	Findings				
{Digestive system}					
stomach		<28>	<28>	<18>	<19>
	leukemic cell infiltration	0	1	1	0
liver		<28>	<28>	<18>	<19>
	leukemic cell infiltration	4	10	2	1
	metastasis:uterus tumor	2	2	2	0
pancreas		<28>	<28>	<18>	<19>
	leukemic cell infiltration	0	4	3	0
	metastasis:uterus tumor	0	1	1	0
{Urinary system}					
kidney		<28>	<28>	<18>	<19>
	leukemic cell infiltration	6	8	3	3
	metastasis:uterus tumor	0	0	1	0
urin bladd		<28>	<28>	<18>	<19>
	leukemic cell infiltration	2	10	2	3
{Endocrine system}					
thyroid		<28>	<28>	<18>	<19>
	leukemic cell infiltration	0	1	0	0
{Reproductive system}					
ovary		<28>	<28>	<18>	<19>
	leukemic cell infiltration	0	3	0	0
< a >	a : Number of animals examined at the site				
b	b : Number of animals with lesion				

STUDY NO. : 0422  
 ANIMAL : MOUSE Crj:BDF1  
 REPORT TYPE : A1  
 SEX : FEMALE

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

PAGE : 7

Group Name		control	1500 ppm	3000 ppm	6000 ppm
No. of Animals on Study		28	28	18	19
Organ	Findings				
{Reproductive system}					
ovary		<28>	<28>	<18>	<19>
	metastasis:uterus tumor	0	1	2	0
uterus		<28>	<28>	<18>	<19>
	leukemic cell infiltration	0	1	0	0
	metastasis:peritoneum tumor	0	0	0	1
vagina		<28>	<28>	<18>	<19>
	leukemic cell infiltration	0	1	0	0
	metastasis:uterus tumor	1	1	0	0
{Special sense organs/appendage}					
Harder gl		<28>	<28>	<18>	<19>
	leukemic cell infiltration	2	5	0	0
{Musculoskeletal system}					
muscle		<28>	<28>	<18>	<19>
	leukemic cell infiltration	0	1	0	0
bone		<28>	<28>	<18>	<19>
	metastasis:bone marrow tumor	0	1	0	0
< a >	a : Number of animals examined at the site				
b	b : Number of animals with lesion				

(JPT150)

BAIS4

## APPENDIX Q

METHODS, UNITS AND DECIMAL PLACE FOR  
HEMATOLOGY AND BIOCHEMISTRY IN THE 2-YEAR  
FEED STUDY OF 2,4-DICHLORO-1-NITROBENZENE

METHODS, UNITS AND DECIMAL PLACE FOR HEMATOLOGY AND BIOCHEMISTRY  
IN THE 2-YEAR FEED STUDY OF 2,4-DICHLORO-1-NITROBENZENE

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

1) Automatic blood cell analyzer (ADVIA120 : Bayer Corporation)

2) Automatic blood cell differential analyzer (MICROX HEG-120NA : OMRON Corporation)

3) Automatic analyzer (Hitachi 7070 : Hitachi,Ltd.)