プロピオノニトリルのラットを用いた
吸入によるがん原性試験報告書

試験番号：0535

APPENDICES

APPENDICES

APPENDICES (CONTINUED)

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APPENDIX A 1

IDENTITY OF PROPIONONITRILE

IN THE 2-YEAR INHALATION STUDY

IDENTITY OF PROPIONONITRILE IN THE 2-YEAR INHALATION STUDY

Test Substance : Propiononitrile (Wako Pure Chemical Industries, Ltd.)

A. Lot No. : PKK4727

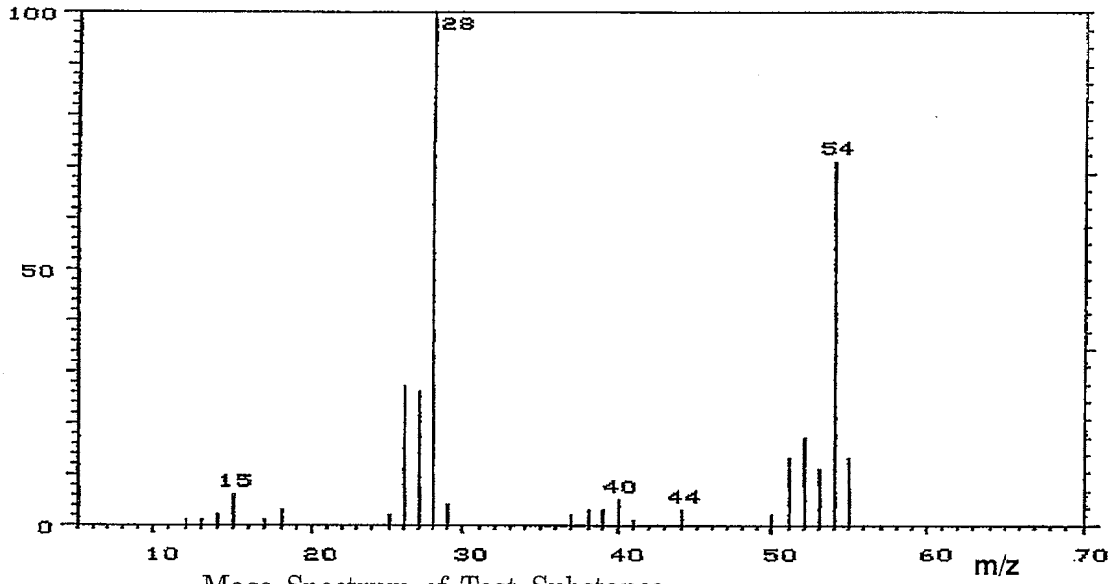
1. Spectral Data

Mass Spectrometry

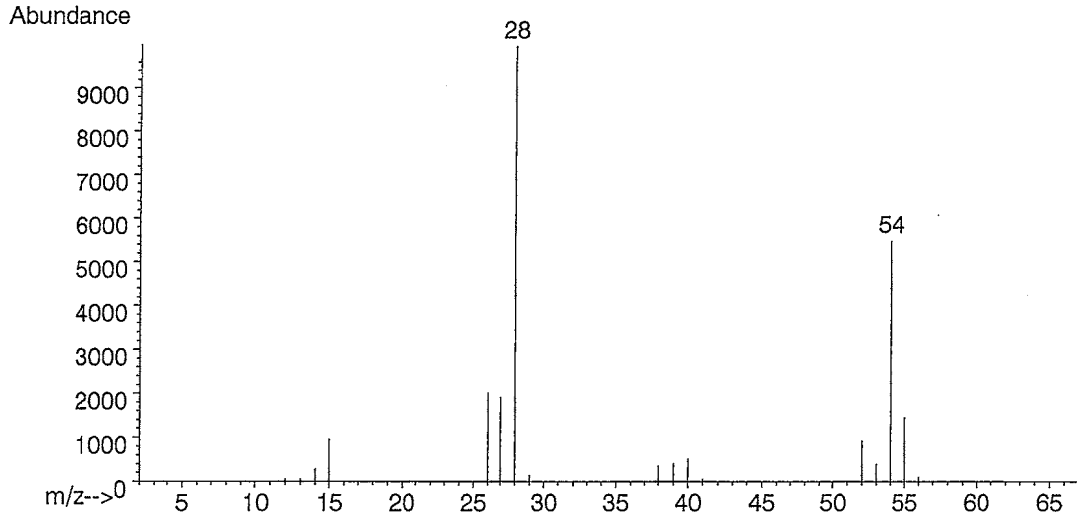
Instrument : Hitachi M-80B Mass Spectrometer

Ionization : EI (Electron Ionization)

Ionization Voltage : 70eV



Mass Spectrum of Test Substance



Mass Spectrum of Literature Data*

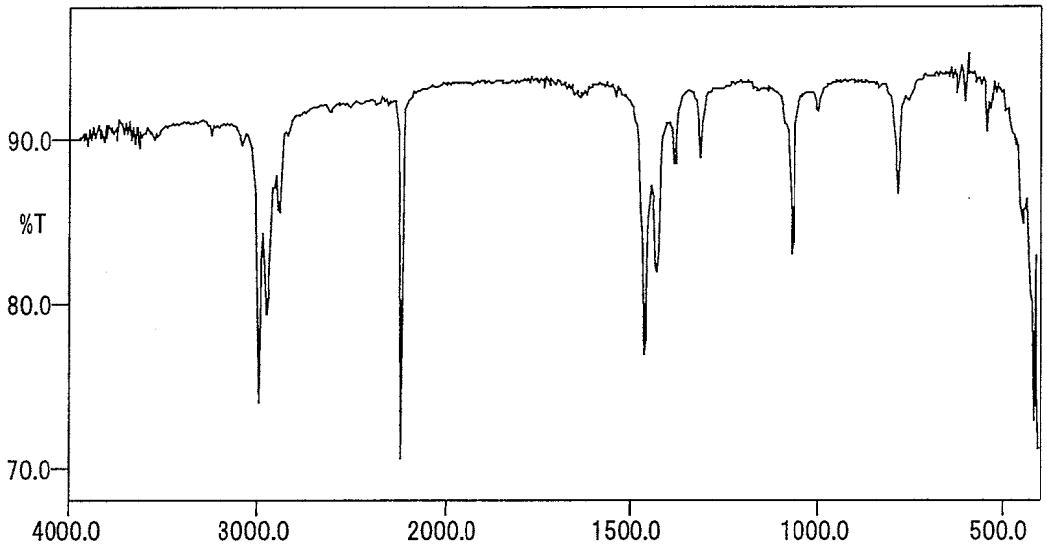
Result: The mass spectrum was consistent with literature spectrum.
(*McLafferty FW, ed. 1994. Wiley Registry of Mass Spectral Data. 6th ed. New York, NY : John Wiley and Sons.)

Infrared Spectrometry

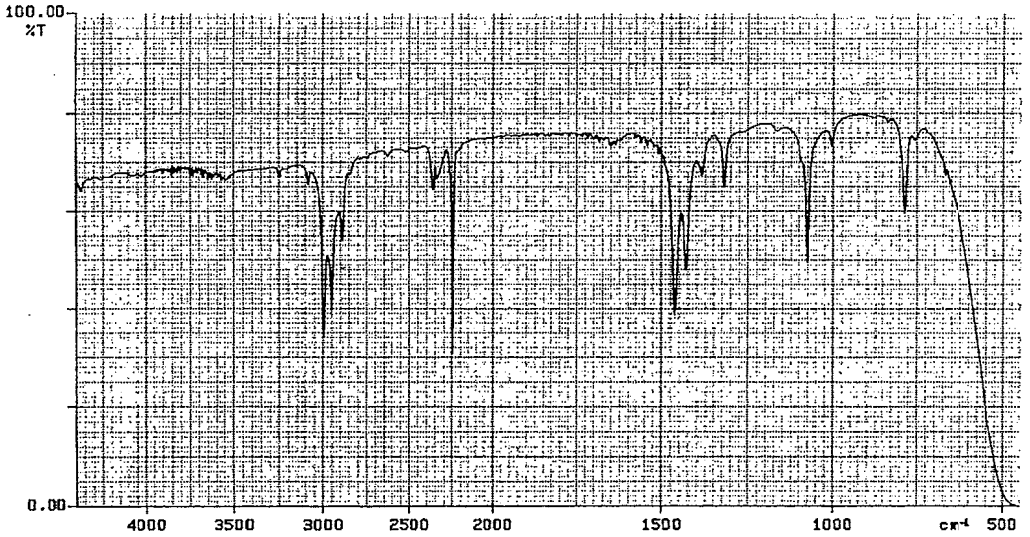
Instrument : Shimadzu FTIR-8200PC Infrared Spectrometer

Cell : KBr Liquid Cell

Resolution : 4 cm^{-1}



Infrared Spectrum of Test Substance Wavenumbers cm^{-1}



Infrared Spectrum of Literature Data* Wavenumbers

Result: The infrared spectrum was consistent with literature spectrum.
(*Performed by Wako Pure Chemical Industries, Ltd.)

2. Conclusion: The test substance was identified as propiononitrile by mass spectrum and infrared spectrum.

B. Lot No. : CEL7045

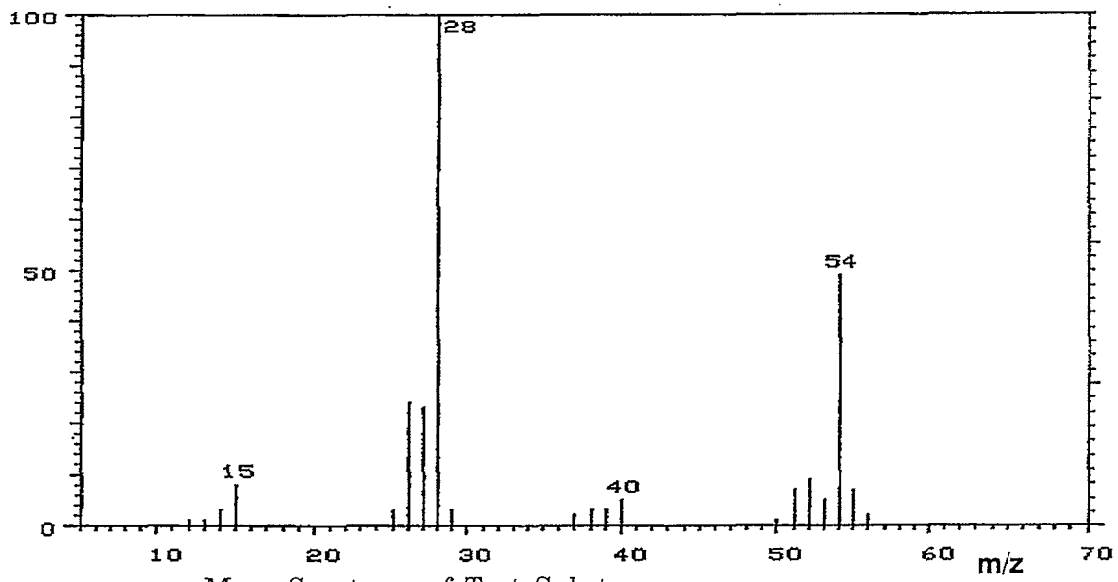
1. Spectral Data

Mass Spectrometry

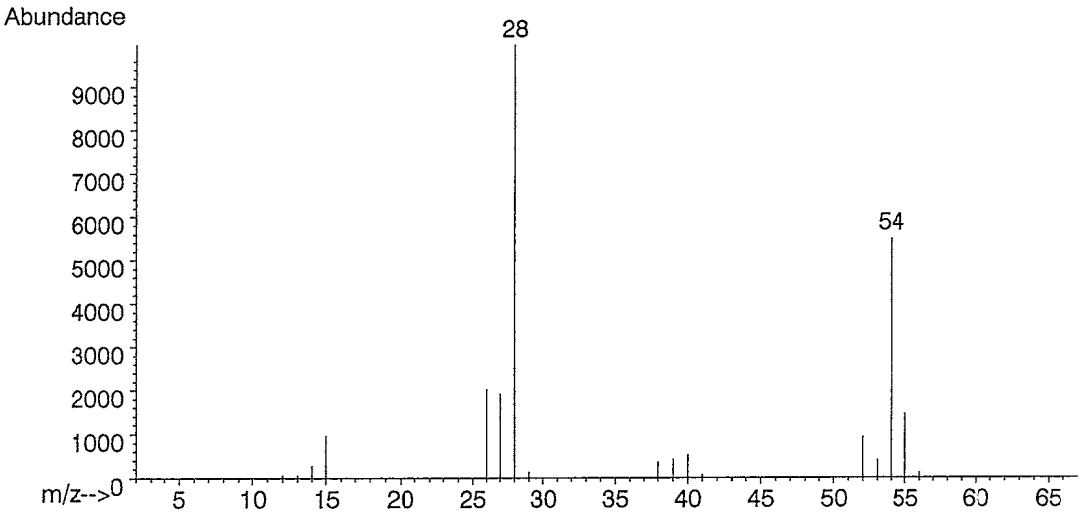
Instrument : Hitachi M-80B Mass Spectrometer

Ionization : EI (Electron Ionization)

Ionization Voltage : 70eV



Mass Spectrum of Test Substance



Mass Spectrum of Literature Data*

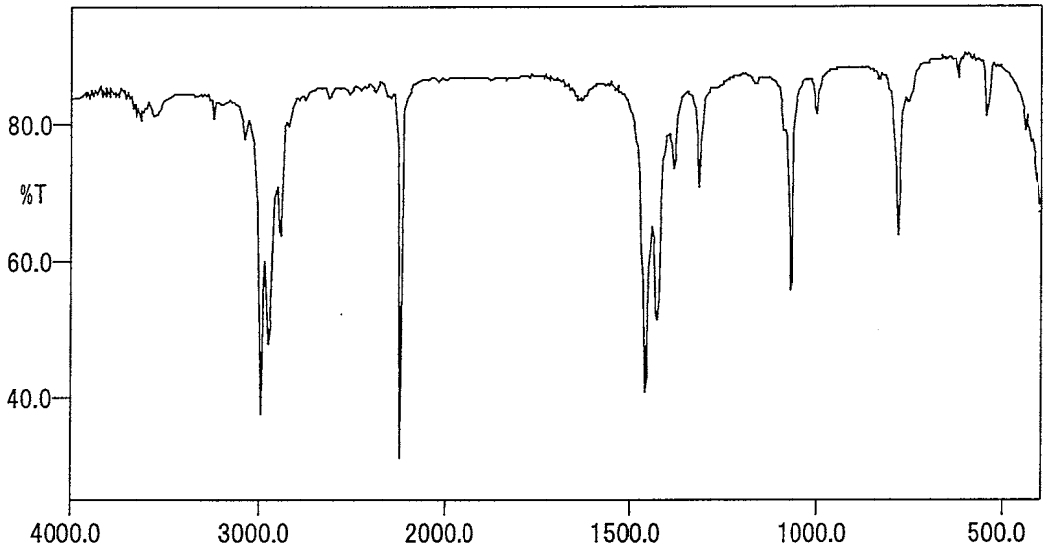
Result: The mass spectrum was consistent with literature spectrum.
(*McLafferty FW, ed. 1994. Wiley Registry of Mass Spectral Data. 6th ed. New York, NY : John Wiley and Sons.)

Infrared Spectrometry

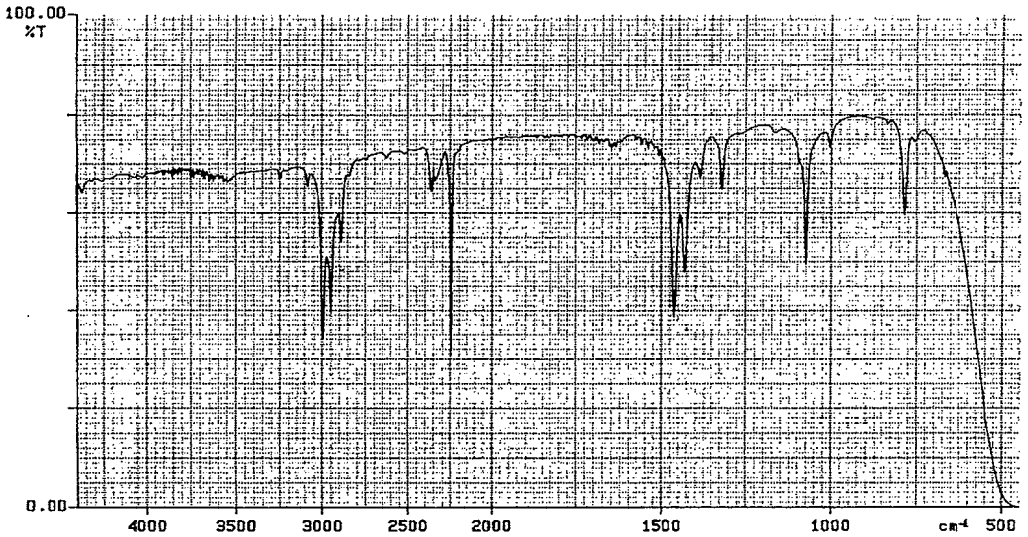
Instrument : Shimadzu FTIR-8200PC Infrared Spectrometer

Cell : KBr Liquid Cell

Resolution : 4 cm^{-1}



Infrared Spectrum of Test Substance Wavenumbers cm^{-1}



Infrared Spectrum of Literature Data* Wavenumbers

Result: The infrared spectrum was consistent with literature spectrum.
(*Performed by Wako Pure Chemical Industries, Ltd.)

2. Conclusion: The test substance was identified as propiononitrile by mass spectrum and infrared spectrum.

C. Lot No. : SDM0881

1. Spectral Data

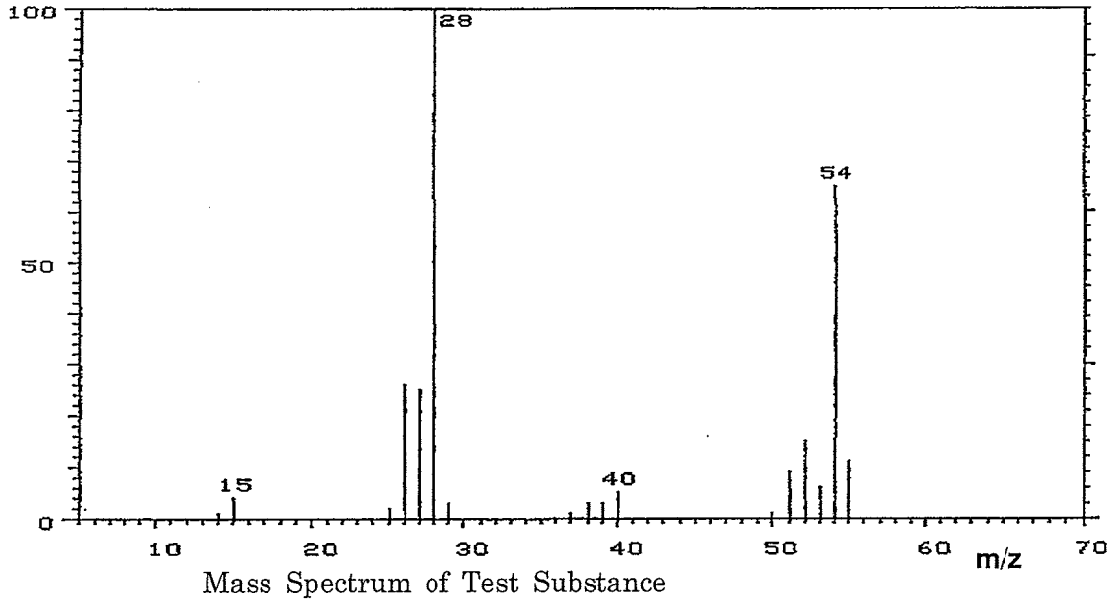
Mass Spectrometry

Instrument : Hitachi M-80B Mass Spectrometer

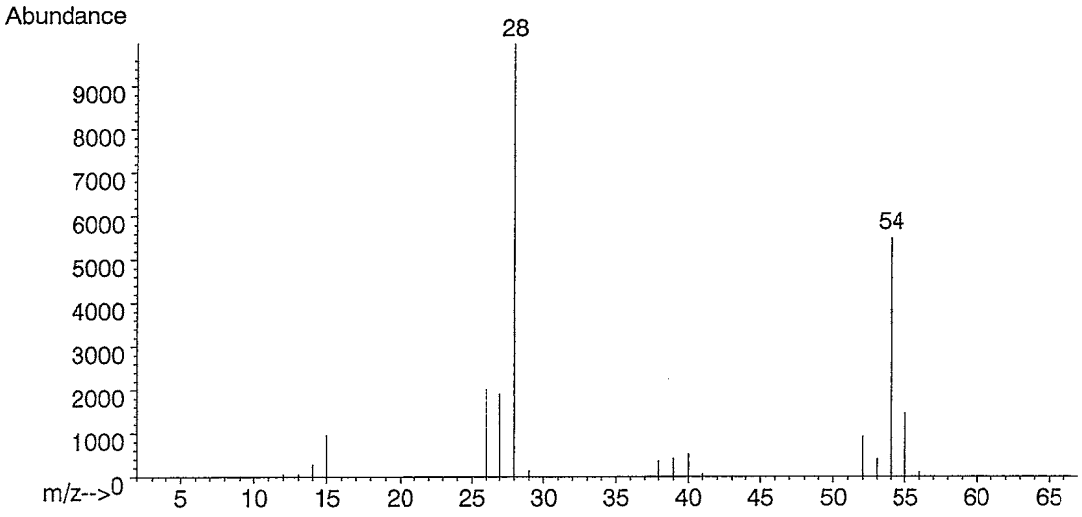
Ionization : EI (Electron Ionization)

Ionization Voltage : 70eV

75 148



Mass Spectrum of Test Substance



Mass Spectrum of Literature Data*

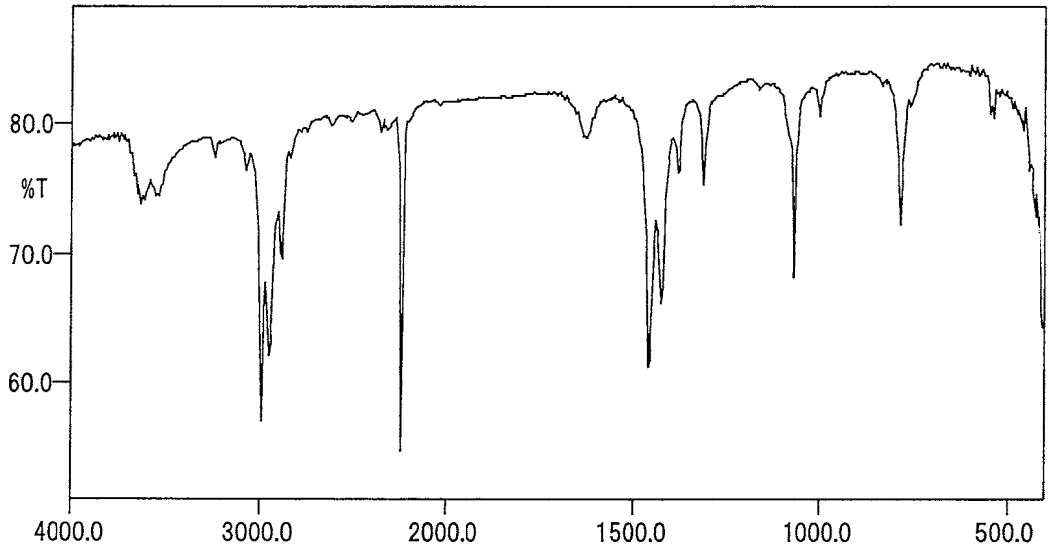
Result: The mass spectrum was consistent with literature spectrum.
(*McLafferty FW, ed. 1994. Wiley Registry of Mass Spectral Data. 6th ed. New York, NY : John Wiley and Sons.)

Infrared Spectrometry

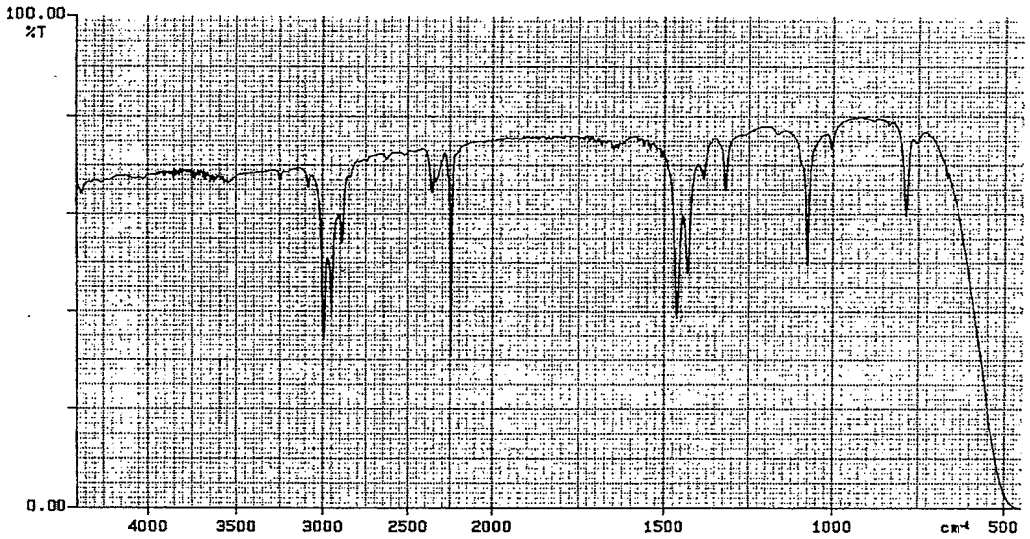
Instrument : Shimadzu FTIR-8200PC Infrared Spectrometer

Cell : KBr Liquid Cell

Resolution : 4 cm^{-1}



Infrared Spectrum of Test Substance Wavenumbers cm^{-1}



Infrared Spectrum of Literature Data* Wavenumbers

Result: The infrared spectrum was consistent with literature spectrum.
(*Performed by Wako Pure Chemical Industries, Ltd.)

2. Conclusion: The test substance was identified as propiononitrile by mass spectrum and infrared spectrum.

APPENDIX A 2

STABILITY OF PROPIONONITRILE

IN THE 2-YEAR INHALATION STUDY

STABILITY OF PROPIONONITRILE IN THE 2-YEAR INHALATION STUDY

Test Substance : Propiononitrile (Wako Pure Chemical Industries, Ltd.)

A. Lot No. : PKK4727

1. Gas Chromatography

Instrument : Hewlett Packard 5890A Gas Chromatograph

Column : Methyl Silicone (0.53 mmϕ × 60 m)

Column Temperature : 80° C

Flow Rate : 10 mL/min

Detector : FID (Flame Ionization Detector)

Injection Volume : 1 μL

Date Analyzed	Peak No.	Retention Time (min)	Area (%)
2003.11.28	1	3.770	100
2004.11.10	1	3.768	100

Result: Gas chromatography indicated one major peak (peak No.1) analyzed on 2003.11.28 and one major peak (peak No.1) analyzed on 2004.11.10. No new trace impurity peak in the test substance analyzed on 2004.11.10 was detected.

2. Conclusion: The test substance was stable for the period that the test substance had been used for the study.

B. Lot No. : CEL7045

1. Gas Chromatography

Instrument : Hewlett Packard 5890A Gas Chromatograph

Column : Methyl Silicone (0.53 mmϕ × 60 m)

Column Temperature : 80° C

Flow Rate : 10 mL/min

Detector : FID (Flame Ionization Detector)

Injection Volume : 1 μL

Date Analyzed	Peak No. (min)	Retention Time (%)	Area
2004.11.05	1	3.768	100
2005.06.24	1	3.783	100

Result: Gas chromatography indicated one major peak (peak No.1) analyzed on 2004.11.5 and one major peak (peak No.1) analyzed on 2005.6.24. No new trace impurity peak in the test substance analyzed on 2005.6.24 was detected.

2. Conclusion: The test substance was stable for the period that the test substance had been used for the study.

C. Lot No. : SDM0881

1. Gas Chromatography

Instrument : Hewlett Packard 5890A Gas Chromatograph

Column : Methyl Silicone (0.53 mmϕ × 60 m)

Column Temperature : 80° C

Flow Rate : 10 mL/min

Detector : FID (Flame Ionization Detector)

Injection Volume : 1 μL

Date Analyzed	Peak No. (min)	Retention Time (%)	Area
2005.06.17	1	3.771	100
2005.12.05	1	3.769	100

Result: Gas chromatography indicated one major peak (peak No.1) analyzed on 2005.6.17 and one major peak (peak No.1) analyzed on 2005.12.5. No new trace impurity peak in the test substance analyzed on 2005.12.5 was detected.

2. Conclusion: The test substance was stable for the period that the test substance had been used for the study.

APPENDIX B

ENVIRONMENTAL CONDITIONS OF INHALATION CHAMBER IN THE 2-YEAR INHALATION STUDY OF PROPIONONITRILE

ENVIRONMENTAL CONDITIONS OF INHALATION CHAMBER IN THE 2-YEAR INHALATION STUDY OF PROPIONONITRILE

Group Name	Temperature (℃) Mean ± S.D.	Humidity (%) Mean ± S.D.	Ventilation Rate (L/min) Mean ± S.D.	Air Change (time/h) Mean
Control	23.1 ± 0.2	57.0 ± 1.0	1520.9 ± 12.2	12.0
25 ppm	23.1 ± 0.1	55.4 ± 1.3	1521.3 ± 12.6	12.0
50 ppm	23.2 ± 0.2	55.3 ± 1.3	1516.2 ± 11.7	12.0
100 ppm	23.1 ± 0.2	57.3 ± 0.9	1515.4 ± 11.7	12.0

APPENDIX C 1

CLINICAL OBSERVATION : MALE

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATAXIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TUMBLE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATAXIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TUMBLE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATAXIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TUMBLE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MORIBUND SACRIFICE	Control	0	0	0	0	1	1	1	1	1	1	1	1	1	1
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATAXIC GAIT	Control	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TUMBLE	Control	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 57-7	58-7	59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MORIBUND SACRIFICE	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATAXIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TUMBLE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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	0	0	0	1	1	1	1	1	1	1	1	2	2	2
	25 ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	1
	50 ppm	1	1	1	1	1	1	1	1	1	2	2	2	2	2
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
MORIBUND SACRIFICE	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	1	1	2	2	2	2	2	2	2	2	2	2	2	3
	100 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATAXIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TUMBLE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	1	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	100 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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

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	2	2	2	2	2	2	2	2	2	2	2	2	3	3
	25 ppm	1	1	1	1	1	1	1	2	2	2	3	4	4	4
	50 ppm	3	3	3	3	3	3	3	3	4	4	4	4	4	4
	100 ppm	1	1	3	3	4	4	4	4	4	4	4	5	6	8
MORIBUND SACRIFICE	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	25 ppm	1	1	1	1	1	1	1	1	1	1	2	2	2	2
	50 ppm	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	100 ppm	1	1	1	1	1	1	1	2	3	3	3	3	3	3
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
ATAXIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	1	1	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TUMBLE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	1	1	1	1	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	1	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	1	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 99-7	100-7	101-7	102-7	103-7	104-7
DEATH	Control	3	4	4	4	4	4
	25 ppm	4	4	4	4	4	4
	50 ppm	4	4	4	4	5	5
	100 ppm	9	9	9	9	9	10
MORIBUND SACRIFICE	Control	1	1	1	1	2	2
	25 ppm	2	2	2	2	2	2
	50 ppm	3	3	3	3	3	3
	100 ppm	4	4	4	4	4	4
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
ATAXIC GAIT	Control	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
TUMBLE	Control	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
ABNORMAL GAIT	Control	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	1	1	1	0	0
	100 ppm	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	1	1	2
	100 ppm	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0

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
TRAUMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	0	0	0	0	0	0	0	0	1	1	1	1	1	1
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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
TRAUMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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
TRAUMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	1	1	1	1	1	1	1	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

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
TRAUMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	1	1	1	1	1	1	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0	0	1	1	1	1	1	1	1
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	1	1	1	1	1	1	1	1	2
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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
TRAUMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	1	1	1	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	50 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	100 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	1	1	1	1	1	1	1	1	1	1	1	2	1	1
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	2	2	2	2	2	2	2	3	3	3	3	3	3	3
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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
TRAUMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	1	1	0	0	0
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	100 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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	1	1	1	1	1	1	1	1	1	1	1	0	0	0
	25 ppm	1	1	1	1	1	1	1	1	1	1	2	2	2	2
	50 ppm	1	1	1	1	1	1	1	1	1	1	1	2	2	2
	100 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	1	1	1	1	1	1	1	1	1	1	1	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	1	1	3	3	3	3	3	3	3	3	3	2	2	2
	25 ppm	0	0	2	3	3	3	2	2	2	2	2	2	2	3
	50 ppm	0	0	0	0	0	0	0	0	0	0	1	1	0	0
	100 ppm	3	3	4	4	6	6	6	6	7	7	7	7	7	8
INTERNAL MASS	Control	0	2	2	1	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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
TRAUMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	1	1	1	1	1	1	1	1	1	1	0
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	0	0	0	0	0	0	0	0	1	1	1	1	0	0
	25 ppm	2	3	3	3	3	3	3	3	3	3	3	3	3	3
	50 ppm	2	2	2	2	3	3	3	3	3	3	3	3	3	3
	100 ppm	1	1	1	1	2	2	2	2	2	2	2	2	2	2
CORNEAL OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	1	1	1	1	1	1	1	1	1	1	0
EXTERNAL MASS	Control	3	3	3	4	6	6	7	6	7	7	7	7	6	6
	25 ppm	3	4	5	6	6	6	7	7	8	8	9	8	8	9
	50 ppm	0	2	2	4	4	4	4	5	5	6	5	5	5	5
	100 ppm	8	8	7	9	9	9	8	9	8	10	10	11	11	10
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	1	1	1	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	1	1	1	2	1	1

Clinical sign	Group Name	Administration Week-day 99-7	100-7	101-7	102-7	103-7	104-7
TRAUMA	Control	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	1	1	0	0
	100 ppm	0	0	0	0	0	0
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	1	1	1	1
	25 ppm	0	0	0	0	0	0
	50 ppm	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0
CATARACT	Control	0	0	1	1	1	1
	25 ppm	3	3	3	3	3	4
	50 ppm	3	3	3	3	3	3
	100 ppm	1	1	1	1	1	1
CORNEAL OPACITY	Control	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
EXTERNAL MASS	Control	6	7	8	9	9	11
	25 ppm	9	8	9	9	9	10
	50 ppm	5	6	7	7	7	7
	100 ppm	9	10	11	11	13	12
INTERNAL MASS	Control	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : MALE

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. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. MANDIBULAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. FORELIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. MANDIBULAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. FORELIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. MANDIBULAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. FORELIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. MANDIBULAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	1	1	1	1	1	1	1	1	1
M. EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. FORELIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. MANDIBULAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. FORELIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	1	1	1	1	1	1	1

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. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. MANDIBULAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	1	1	1	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. FORELIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	1	1	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	1	1	1	1	1	1	1	1	1	1	1	2
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	1	1	2	2	3	3	3	3	3	3	3	3	3	4

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. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	50 ppm	0	0	0	1	1	1	1	1	1	1	1	1	1	1
	100 ppm	0	0	0	1	1	1	1	1	1	1	1	1	1	1
M. PERI-MOUTH	Control	0	0	0	1	2	2	2	1	1	1	1	1	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	100 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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	1	1	1	1	1	1	1	1	1	1	1	1
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	0
M. NECK	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. FORELIMB	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	1	2	2	1	1	0	1	1	1	1	1
M. BREAST	Control	0	0	0	0	0	0	0	0	1	1	1	1	1	1
	25 ppm	0	1	1	1	1	1	2	2	2	2	2	2	2	2
	50 ppm	0	1	1	1	1	1	1	1	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0	0	1	1	1	1	1	1	1
M. ABDOMEN	Control	0	0	0	0	0	0	1	1	1	1	2	2	2	2
	25 ppm	2	2	2	3	3	4	4	4	5	5	5	4	4	4
	50 ppm	0	1	1	1	1	1	1	1	1	1	1	1	1	1
	100 ppm	4	4	3	3	3	3	3	3	3	3	3	3	3	3

Clinical sign	Group Name	Administration Week-day 99-7	100-7	101-7	102-7	103-7	104-7
M. NOSE	Control	0	0	0	0	0	0
	25 ppm	1	1	1	1	1	1
	50 ppm	0	0	0	0	0	0
	100 ppm	1	1	1	1	1	1
M. PERI-MOUTH	Control	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
M. MANDIBULAR	Control	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	1	1	1	1	1	1
M. EAR	Control	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	0
	25 ppm	1	1	1	1	1	1
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
M. NECK	Control	0	0	1	1	1	1
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
M. FORELIMB	Control	1	1	1	1	1	1
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	1	1	1	1	1	1
M. BREAST	Control	1	2	2	3	3	3
	25 ppm	2	2	3	3	3	3
	50 ppm	1	1	2	2	2	2
	100 ppm	1	1	2	2	3	2
M. ABDOMEN	Control	2	2	2	2	2	2
	25 ppm	4	4	4	4	4	3
	50 ppm	1	1	1	1	1	1
	100 ppm	3	3	3	3	4	4

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. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. SCROTUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JAUNDICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ULCER	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. SCROTUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JAUNDICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ULCER	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. SCROTUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JAUNDICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ULCER	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
M. HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. SCROTUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JAUNDICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ULCER	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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. ANTERIOR. DORSUM	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. SCROTUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	1	0	0	0	0	1	1	1	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JAUNDICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ULCER	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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. ANTERIOR. DORSUM	Control	1	1	2	2	2	2	2	2	2	2	2	1	1	1
	25 ppm	0	0	1	1	1	1	1	1	1	1	1	1	1	1
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	1	1	1	1	1	1	1	1	1	1
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	1	1	1	1	1	1	1	1	2	2	2	2	2	2
M. HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	Control	0	0	1	1	1	1	1	1	1	1	1	1	1	1
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. SCROTUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	1	0	0	0	0
JAUNDICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ULCER	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	1	1	1	1	1	1	1	1	0	0	0	0	0	0

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. ANTERIOR. DORSUM	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	25 ppm	1	1	1	1	1	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	1	1	1	1	2	2	2	2	2	2	2
	100 ppm	1	1	1	1	1	2	2	2	1	1	1	1	1	1
M. POSTERIOR DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	2	2	2	2	1	1	0	0	0	1	1	1	1	1
M. HINDLIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. GENITALIA	Control	1	1	1	1	2	2	2	1	1	1	1	1	1	1
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. SCROTUM	Control	0	0	0	0	0	0	0	1	1	1	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	1	1	1	1	1	1	0	0	1	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	1	0	0	0	0	0	0	1	1	0	0
JAUNDICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	1	1	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	1	1	1	1	1	0	0
ULCER	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	1
	100 ppm	1	1	1	1	1	1	4	4	4	2	2	1	1	2
CRUSTA	Control	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 99-7	100-7	101-7	102-7	103-7	104-7
M. ANTERIOR. DORSUM	Control	1	1	1	1	1	2
	25 ppm	1	1	1	1	1	2
	50 ppm	3	3	3	3	3	3
	100 ppm	1	1	1	1	1	1
M. POSTERIOR DORSUM	Control	0	0	1	1	1	0
	25 ppm	1	0	0	0	0	0
	50 ppm	0	1	1	1	1	1
	100 ppm	1	2	2	2	2	2
M. HINDLIMB	Control	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	1
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
M. GENITALIA	Control	1	1	1	1	1	2
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
M. SCROTUM	Control	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
JAUNDICE	Control	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
ULCER	Control	0	1	1	1	1	1
	25 ppm	0	0	0	0	0	0
	50 ppm	1	1	1	1	1	1
	100 ppm	1	1	2	2	2	2
CRUSTA	Control	1	1	1	1	1	0
	25 ppm	0	0	0	0	0	1
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 1-7	2-7	3-7	4-7	5-7	6-7	7-7	8-7	9-7	10-7	11-7	12-7	13-7	14-7
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL TESTIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PROLAPSE OF PENIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TACHYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOOSE STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 15-7	16-7	17-7	18-7	19-7	20-7	21-7	22-7	23-7	24-7	25-7	26-7	27-7	28-7
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL TESTIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PROLAPSE OF PENIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TACHYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOOSE STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 29-7	30-7	31-7	32-7	33-7	34-7	35-7	36-7	37-7	38-7	39-7	40-7	41-7	42-7
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL TESTIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PROLAPSE OF PENIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TACHYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOOSE STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL TESTIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PROLAPSE OF PENIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TACHYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOOSE STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 57-7	58-7	59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL TESTIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PROLAPSE OF PENIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TACHYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOOSE STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 71-7	72-7	73-7	74-7	75-7	76-7	77-7	78-7	79-7	80-7	81-7	82-7	83-7	84-7
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ABNORMAL TESTIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PROLAPSE OF PENIS	Control	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	1	0	0	0	0	0	0	1	1	1	1	1	0
	100 ppm	0	0	0	0	0	0	0	0	0	1	0	0	0	0
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	1	1	1	1	1	0
	100 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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	1	1	1	1	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOOSE STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
ABNORMAL TESTIS	Control	0	0	0	0	2	2	2	2	2	2	2	2	2	2
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PROLAPSE OF PENIS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	1	1	1	1	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	1	1	0	0	1	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	1	1	0	0	0	0	1	0	1
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TACHYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOOSE STOOL	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 99-7	100-7	101-7	102-7	103-7	104-7
HEMORRHAGE	Control	0	0	0	0	0	0
	25 ppm	0	1	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
ABNORMAL TESTIS	Control	2	2	2	2	2	2
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
PROLAPSE OF PENIS	Control	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	1	0	1
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
TACHYPNEA	Control	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
LOOSE STOOL	Control	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
SUBNORMAL TEMP	Control	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0

APPENDIX C 2

CLINICAL OBSERVATION : FEMALE

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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HUNCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATAXIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HUNCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATAXIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HUNCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATAXIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 43-7	44-7	45-7	46-7	47-7	48-7	49-7	50-7	51-7	52-7	53-7	54-7	55-7	56-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	1
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HUNCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATAXIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 57-7	58-7	59-7	60-7	61-7	62-7	63-7	64-7	65-7	66-7	67-7	68-7	69-7	70-7
DEATH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	1	1	1	1	1	1	3	3	3	3	3	3	3	3
	100 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HUNCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATAXIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	1	1	1	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	1	0	0	0	0	0	0	0	0
	100 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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	1	0	0	0	0	0	0	0	0
	100 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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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	0	0	0	0	0	1	1	1	1	1	3	3	3	3
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	3	3	3	3	3	3	3	4	4	4	4	4	5	5
	100 ppm	1	1	2	2	2	2	2	2	3	3	3	3	3	3
MORIBUND SACRIFICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HUNCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ATAXIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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	4	4	4	4	4	4	4	4	4	4	5	5	5	5
	25 ppm	0	0	0	0	0	1	1	1	1	1	1	1	1	1
	50 ppm	5	5	6	6	6	6	6	7	7	7	7	7	7	7
	100 ppm	3	3	3	3	3	3	3	3	3	3	3	4	5	5
MORIBUND SACRIFICE	Control	0	1	1	1	1	2	2	2	2	2	2	3	3	3
	25 ppm	0	0	0	0	0	0	0	2	2	2	2	2	2	2
	50 ppm	1	1	1	1	1	1	2	3	3	3	3	4	4	4
	100 ppm	0	0	0	0	1	1	1	2	2	2	2	2	2	3
LOCOMOTOR MOVEMENT DECR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	1	0	0	0
HUNCHBACK POSITION	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	1	0	0	0	0	0	0	0	0	0	0
ATAXIC GAIT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	1	1	0	0	0
	100 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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WASTING	Control	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	1	1	1	1	0	0	1
	100 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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0
PILOERECTION	Control	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	1	0	0	0	1	1	1	1	1	1	0	0	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1

Clinical sign	Group Name	Administration Week-day 99-7	100-7	101-7	102-7	103-7	104-7
DEATH	Control	5	5	6	6	6	7
	25 ppm	1	2	2	3	3	3
	50 ppm	7	9	9	9	9	10
	100 ppm	6	6	6	6	6	6
MORIBUND SACRIFICE	Control	4	4	4	4	6	6
	25 ppm	2	2	2	2	2	2
	50 ppm	4	4	4	4	4	4
	100 ppm	3	3	4	5	5	5
LOCOMOTOR MOVEMENT DECR	Control	0	0	1	1	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
HUNCHBACK POSITION	Control	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	1	1	1	1
ATAXIC GAIT	Control	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
PARALYTIC GAIT	Control	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
WASTING	Control	0	0	1	1	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	1	0	0	0	0	1
	100 ppm	1	1	2	1	1	2
SOILED	Control	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
PILOERECTION	Control	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	1	0	0	0	0	0
	100 ppm	1	1	1	1	1	1

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

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
TRAUMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	1	1	1	1	1	1	1	1	1	1	1	1
	50 ppm	0	0	0	0	1	1	1	1	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	50 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CONJUNCTIVAL EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CORNEAL EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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
TRAUMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	50 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	25 ppm	1	1	2	2	2	2	2	2	2	2	2	2	2	2
	50 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CONJUNCTIVAL EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CORNEAL EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	1	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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
TRAUMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	50 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	25 ppm	2	2	3	3	3	3	3	3	3	3	3	3	3	3
	50 ppm	1	1	2	2	2	2	2	2	2	2	2	2	2	2
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CONJUNCTIVAL EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	1	1	1	1	1	1	1	1	1	1	1	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CORNEAL EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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
TRAUMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	50 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	1	2	2	2	2	2	2	2	2	2	2	2	2	2
	25 ppm	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	50 ppm	2	2	2	2	2	2	3	3	3	3	3	3	3	3
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CONJUNCTIVAL EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	1	1	1	1	1	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CORNEAL EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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
TRAUMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	1	1	1	0	0	0	0	0	0	0	0
	100 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
	25 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	2	2	2	2	2	2	2	2	2	2	2	3	3	3
	25 ppm	3	3	3	3	3	3	3	3	4	4	4	4	4	4
	50 ppm	2	2	2	2	2	3	3	3	3	3	3	3	3	3
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CONJUNCTIVAL EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CORNEAL EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	1	1	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

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
TRAUMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOILED PERI-GENITALIA	Control	0	0	0	0	0	0	0	0	1	1	0	0	0	1
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXOPHTHALMOS	Control	0	1	1	1	1	1	1	2	2	2	1	1	1	1
	25 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	25 ppm	4	4	4	4	4	4	4	4	4	4	4	4	5	5
	50 ppm	3	3	4	4	5	5	5	5	5	5	5	5	5	5
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CONJUNCTIVAL EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CORNEAL EDEMA	Control	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	1	1	2	1	1	2	2	1	1
	100 ppm	0	0	0	0	0	1	1	2	2	2	2	2	2	2

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
TRAUMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FROG BELLY	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	1	1	1	1	1	2	2	1	1	1	1	0	1	1
	100 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	0	0	0	1
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	1	0	0	0	1	1	0	0	0	0	0	0	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0
EXOPHTHALMOS	Control	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	25 ppm	1	1	1	1	1	1	1	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CATARACT	Control	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	25 ppm	5	5	5	5	5	5	5	4	4	4	4	4	4	4
	50 ppm	5	5	5	6	6	6	6	6	6	6	6	6	6	6
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CONJUNCTIVAL EDEMA	Control	1	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANTERIOR CHAMBER OPACITY	Control	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CORNEAL EDEMA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EXTERNAL MASS	Control	2	3	3	3	3	3	3	3	3	4	3	3	3	3
	25 ppm	0	0	0	1	2	3	3	3	3	4	5	5	5	6
	50 ppm	1	1	1	1	1	1	1	0	0	1	2	2	2	2
	100 ppm	4	4	4	4	4	4	5	5	6	7	8	9	8	7

Clinical sign	Group Name	Administration Week-day 99-7	100-7	101-7	102-7	103-7	104-7
TRAUMA	Control	1	1	1	1	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
FROG BELLY	Control	1	1	2	2	1	0
	25 ppm	0	0	0	0	0	0
	50 ppm	1	0	0	1	1	1
	100 ppm	0	0	0	0	1	1
SOILED PERI-GENITALIA	Control	0	1	1	1	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	1	0	1	0	0	0
	100 ppm	0	1	1	0	0	0
EXOPHTHALMOS	Control	1	1	1	1	1	1
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
CATARACT	Control	3	3	4	4	4	4
	25 ppm	4	4	4	4	4	4
	50 ppm	6	5	5	5	5	5
	100 ppm	0	0	0	0	0	0
CONJUNCTIVAL EDEMA	Control	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
ANTERIOR CHAMBER OPACITY	Control	1	1	1	1	1	1
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
CORNEAL EDEMA	Control	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
EXTERNAL MASS	Control	3	3	4	5	5	5
	25 ppm	6	6	7	6	6	7
	50 ppm	2	2	2	2	3	4
	100 ppm	6	6	6	6	6	7

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
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. FORELIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	1	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. FORELIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. FORELIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. FORELIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. FORELIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	1	1	0	0	0	0	0	0	0	0
	100 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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	1	1	1	1	1	1	1	1	1	1	2	2	2	2
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. EYE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	100 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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. FORELIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. BREAST	Control	0	0	0	0	0	0	0	0	0	0	0	1	1	1
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	1	1	1	1	1	1	1
M. ABDOMEN	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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
INTERNAL MASS	Control	0	0	0	0	0	0	0	0	0	0	0	0	1	3
	25 ppm	0	0	0	1	1	0	0	0	0	0	0	0	0	0
	50 ppm	2	2	1	1	2	3	2	1	1	1	1	1	1	1
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	2
M. NOSE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. EYE	Control	0	1	1	1	1	1	1	1	1	1	1	1	1	1
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	1	1	1	1	1	1	1	1
M. FORELIMB	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	1	1	0
M. BREAST	Control	1	1	1	1	1	1	1	1	1	1	0	0	0	0
	25 ppm	0	0	0	1	1	2	2	2	2	3	3	3	3	3
	50 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	100 ppm	1	1	1	1	1	1	1	1	2	2	3	3	3	3
M. ABDOMEN	Control	0	0	0	0	0	1	1	1	1	2	2	2	2	2
	25 ppm	0	0	0	0	1	1	1	1	1	1	1	1	1	2
	50 ppm	0	0	0	0	0	0	0	0	0	1	1	1	1	1
	100 ppm	1	1	1	1	1	1	1	1	1	1	1	1	1	1
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	1	1	1	1
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 99-7	100-7	101-7	102-7	103-7	104-7
INTERNAL MASS	Control	2	2	2	2	1	0
	25 ppm	0	0	0	0	0	0
	50 ppm	1	1	2	2	2	2
	100 ppm	2	2	2	1	1	1
M. NOSE	Control	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	1	1	1	1	1	1
M. EYE	Control	1	1	1	1	1	1
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
M. PERI-MOUTH	Control	0	0	0	1	1	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
M. PERI EAR	Control	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
M. FORELIMB	Control	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
M. BREAST	Control	0	0	1	1	1	1
	25 ppm	3	2	3	3	3	3
	50 ppm	1	1	1	1	1	1
	100 ppm	3	3	4	4	4	4
M. ABDOMEN	Control	2	2	2	2	2	3
	25 ppm	2	3	3	2	2	3
	50 ppm	1	1	1	1	1	2
	100 ppm	1	1	1	1	1	3
M. ANTERIOR. DORSUM	Control	0	0	0	0	0	0
	25 ppm	1	1	1	1	1	1
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0

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.GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JAUNDICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BRADYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BROWN URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1 104

CLINICAL OBSERVATION (SUMMARY)
ALL ANIMALS

SEX : FEMALE

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. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JAUNDICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BRADYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BROWN URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JAUNDICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BRADYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BROWN URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0
JAUNDICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BRADYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BROWN URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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. GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JAUNDICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	1	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	1	1	1	0	0	0	0	0	0	0	0
	100 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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BRADYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BROWN URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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.GENITALIA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	1	1	1	1	1	2	2	1	1
	100 ppm	0	0	0	0	0	1	1	1	1	1	1	1	1	1
ANEMIA	Control	0	0	0	1	1	0	0	0	0	0	0	0	0	1
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JAUNDICE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HEMORRHAGE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	1	0	0	0	0	0	0	0	1	1	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	1	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	1	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BRADYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BROWN URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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. GENITALIA	Control	1	1	1	1	1	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	1	1	1	1	1	1	1	0	0	0	0	0	0	0
	100 ppm	1	1	1	1	1	1	1	1	1	2	2	2	1	1
ANEMIA	Control	1	1	1	1	1	0	0	0	0	0	0	0	1	1
	25 ppm	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	1	1	1	1	0	0	0	0	0	0	0
	100 ppm	1	1	1	2	1	1	1	1	2	2	2	1	1	1
JAUNDICE	Control	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	1	0	0	0	0	0	0	1
HEMORRHAGE	Control	1	1	1	0	0	1	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IRREGULAR BREATHING	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	1	1	0	0	0	0	0	0	1
	100 ppm	0	0	0	1	0	0	0	0	0	0	0	1	1	0
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	1	0
BRADYPNEA	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	100 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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BROWN URINE	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	1	1	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Clinical sign	Group Name	Administration Week-day 99-7	100-7	101-7	102-7	103-7	104-7
M.GENITALIA	Control	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	1
	100 ppm	1	1	0	0	0	0
ANEMIA	Control	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	1
	100 ppm	1	2	1	0	0	1
JAUNDICE	Control	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	1	1	1
	100 ppm	0	0	0	0	0	0
HEMORRHAGE	Control	0	0	1	0	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	1	0	1	0	0	0
	100 ppm	0	0	0	0	1	1
IRREGULAR BREATHING	Control	0	0	0	1	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	1	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
RESPIRATORY SOUND ABNOR	Control	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
BRADYPNEA	Control	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0
DEEP BREATHING	Control	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	1	1	1
BROWN URINE	Control	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0

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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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
SUBNORMAL TEMP	Control	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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
	25 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	100 ppm	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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
	25 ppm	0	0	0	0	0	0
	50 ppm	0	0	0	0	0	0
	100 ppm	0	0	0	0	0	0

APPENDIX D 1

BODY WEIGHT CHANGES : MALE

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day 0-0	1-7	2-7	3-7	4-7	5-7	6-7
Control	122± 5	151± 6	182± 8	206± 10	225± 10	243± 12	259± 12
25 ppm	122± 5	150± 7	181± 8	205± 9	226± 10	242± 11	256± 11
50 ppm	122± 5	150± 7	181± 9	205± 10	225± 10	243± 11	257± 12
100 ppm	121± 5	146± 9**	170± 9**	190± 11**	209± 12**	227± 13**	238± 14**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day 7-7	8-7	9-7	10-7	11-7	12-7	13-7
Control	271± 13	284± 13	294± 14	302± 15	310± 16	316± 15	321± 16
25 ppm	268± 12	282± 14	292± 14	300± 14	307± 14	313± 15	319± 15
50 ppm	270± 13	282± 14	292± 14	301± 14	309± 14	314± 15	321± 15
100 ppm	250± 16**	261± 16**	270± 16**	277± 17**	286± 17**	291± 17**	297± 17**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day 17-7	21-7	25-7	29-7	33-7	37-7	41-7
Control	341± 16	356± 18	368± 20	381± 21	390± 23	391± 24	385± 23
25 ppm	334± 19	352± 18	364± 19	376± 21	386± 25	388± 23	383± 22
50 ppm	340± 16	353± 16	366± 18	376± 19	386± 21	388± 20	383± 19
100 ppm	315± 17**	329± 17**	342± 16**	351± 18**	359± 22**	362± 21**	358± 22**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day 45-7	49-7	53-7	54-7	58-7	62-7	66-7
Control	395± 25	409± 26	416± 27	416± 27	418± 29	423± 28	425± 28
25 ppm	392± 25	405± 27	410± 25	411± 26	415± 26	418± 26	420± 26
50 ppm	392± 21	405± 21	411± 22	412± 22	416± 22	417± 23	418± 22
100 ppm	367± 21**	379± 23**	385± 24**	386± 24**	389± 24**	393± 23**	394± 24**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day 70-7	74-7	78-7	82-7	86-7	90-7	94-7
Control	428± 29	430± 28	430± 26	428± 26	427± 26	425± 26	421± 25
25 ppm	423± 27	426± 27	425± 27	422± 27	422± 33	420± 47	422± 56
50 ppm	420± 21	422± 19	420± 22	415± 29	418± 19	417± 20	413± 21
100 ppm	398± 26**	401± 25**	402± 24**	399± 27**	399± 27**	395± 31**	390± 31**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day 98-7	102-7	104-7
Control	416± 27	412± 33	408± 32
25 ppm	414± 24	410± 24	406± 25
50 ppm	407± 22	400± 27	395± 28
100 ppm	383± 31**	382± 27**	377± 28**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

APPENDIX D 2

BODY WEIGHT CHANGES : FEMALE

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day 0-0	1-7	2-7	3-7	4-7	5-7	6-7
Control	95± 3	109± 4	123± 5	132± 5	140± 6	148± 7	154± 8
25 ppm	95± 3	109± 5	123± 6	133± 7	142± 7	148± 8	155± 8
50 ppm	95± 3	109± 5	123± 6	132± 7	141± 8	148± 9	154± 9
100 ppm	95± 3	108± 4	120± 5*	129± 6	138± 7	146± 7	150± 8*

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day 7-7	8-7	9-7	10-7	11-7	12-7	13-7
Control	157± 9	162± 9	166± 9	170± 9	174± 9	176± 10	178± 10
25 ppm	159± 9	164± 10	170± 11	173± 11	177± 11	178± 10	182± 10
50 ppm	158± 10	162± 11	166± 11	169± 11	173± 11	176± 12	179± 12
100 ppm	155± 8	160± 9	164± 9	167± 9	171± 10	173± 10	176± 10

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day 17-7	21-7	25-7	29-7	33-7	37-7	41-7
Control	186± 10	190± 11	196± 12	199± 11	200± 11	209± 12	213± 13
25 ppm	190± 12	194± 12	200± 12	203± 13	202± 13	212± 14	216± 14
50 ppm	188± 13	190± 13	195± 14	197± 13	197± 12	207± 13	210± 15
100 ppm	183± 9	188± 10	194± 10	197± 11	195± 10	206± 10	210± 12

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day 45-7	49-7	53-7	54-7	58-7	62-7	66-7
Control	215± 13	218± 13	221± 14	221± 14	224± 15	228± 15	233± 17
25 ppm	219± 14	222± 15	225± 16	226± 16	230± 16	236± 18*	241± 19
50 ppm	212± 15	215± 15	219± 15	219± 14	221± 14	224± 18	228± 17
100 ppm	212± 12	215± 13	217± 13	217± 13	221± 13	225± 14	228± 15

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day 70-7	74-7	78-7	82-7	86-7	90-7	94-7
Control	238± 18	243± 20	246± 21	249± 22	253± 22	257± 23	259± 24
25 ppm	246± 21	250± 22	254± 22	257± 23	260± 24	264± 25	268± 25
50 ppm	233± 19	238± 20	243± 20	245± 21	249± 23	254± 28	254± 30
100 ppm	234± 15	239± 16	244± 17	246± 17	250± 17	253± 18	255± 21

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

BODY WEIGHT CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day 98-7	102-7	104-7
Control	257± 27	258± 28	259± 21
25 ppm	269± 27	272± 27	271± 28
50 ppm	260± 23	261± 26	259± 27
100 ppm	254± 24	257± 27	256± 25

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

APPENDIX E 1

FOOD CONSUMPTION CHANGES : MALE

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day(effective) 1-7(4)	2-7(7)	3-7(7)	4-7(7)	5-7(7)	6-7(7)	7-7(7)
Control	14.4± 0.9	15.7± 1.1	16.8± 1.2	16.9± 1.2	16.9± 1.2	16.6± 1.1	16.7± 1.0
25 ppm	14.3± 0.9	15.7± 1.0	16.9± 1.1	16.7± 1.0	16.9± 0.9	16.4± 0.9	16.5± 1.1
50 ppm	14.1± 1.1	15.4± 1.3	16.6± 1.1	16.7± 1.1	17.0± 1.0	16.6± 1.0	16.3± 1.2
100 ppm	13.2± 1.3**	13.9± 1.0**	14.8± 1.0**	15.5± 0.9**	16.4± 0.9*	15.4± 1.0**	15.0± 1.1**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day(effective) 8-7(7)	9-7(7)	10-7(7)	11-7(7)	12-7(7)	13-7(7)	17-7(7)
Control	17.2± 1.0	16.9± 1.2	16.9± 1.1	16.4± 1.1	16.1± 0.9	15.9± 0.9	16.0± 1.1
25 ppm	17.3± 1.0	16.8± 1.1	16.8± 0.9	16.2± 1.1	15.9± 1.0	15.7± 1.0	15.5± 1.4
50 ppm	16.9± 1.0	16.7± 1.1	16.8± 1.0	16.4± 1.0	16.2± 1.1	16.0± 0.9	15.9± 1.0
100 ppm	15.9± 1.1**	15.5± 1.2**	15.9± 1.0**	15.5± 1.0**	15.3± 1.1**	15.0± 1.0**	15.2± 1.0**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day(effective) 21-7(7)	25-7(7)	29-7(7)	33-7(7)	37-7(7)	41-7(7)	45-7(7)
Control	16.3± 1.1	16.0± 1.1	16.6± 1.2	16.4± 1.2	15.4± 1.0	15.7± 1.1	15.7± 1.5
25 ppm	16.0± 0.9	15.8± 1.1	16.5± 1.2	16.3± 1.2	15.0± 0.9	15.6± 1.1	15.9± 1.2
50 ppm	16.0± 0.8	15.7± 1.0	16.4± 1.1	16.2± 1.0	15.5± 1.0	15.6± 0.9	15.6± 1.0
100 ppm	15.3± 1.0**	15.3± 0.9**	15.8± 1.1**	15.2± 1.2**	15.0± 0.9*	15.3± 1.1	15.0± 1.0**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day(effective) 50-7(7)	53-7(7)	54-7(7)	58-7(7)	62-7(7)	66-7(7)	70-7(7)
Control	16.5± 1.0	16.5± 0.9	16.5± 1.0	16.2± 1.1	17.1± 0.9	16.9± 0.9	17.2± 1.0
25 ppm	16.4± 1.2	16.5± 1.1	16.4± 1.1	16.3± 0.9	16.9± 1.2	16.8± 1.1	17.0± 1.1
50 ppm	16.3± 0.9	16.1± 0.9	16.2± 1.1	16.3± 0.8	16.6± 1.1	16.6± 1.1	17.0± 1.0
100 ppm	15.5± 1.0**	15.8± 0.9**	15.9± 0.9**	15.7± 1.1*	16.3± 1.0**	16.1± 0.9**	16.6± 1.1

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day(effective) 74-7(7)	78-7(7)	82-7(7)	86-7(7)	90-7(7)	94-7(7)	98-7(7)
Control	16.7± 1.1	16.7± 1.4	16.3± 1.0	16.6± 1.1	16.2± 1.2	16.3± 1.2	16.5± 1.3
25 ppm	16.5± 1.1	16.4± 1.1	16.1± 1.0	16.3± 1.9	16.3± 2.1	16.4± 2.8	16.7± 1.3
50 ppm	16.5± 0.9	16.6± 1.1	16.1± 1.9	16.7± 1.0	16.8± 1.2*	16.7± 1.1	16.9± 1.5
100 ppm	16.1± 1.3	16.4± 1.3	15.9± 1.3	16.2± 1.0	15.9± 1.5	15.4± 1.9*	15.5± 2.4

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : MALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day(effective) 102-7(7)	104-7(7)
Control	16.5± 2.1	16.5± 2.2
25 ppm	16.7± 1.2	16.7± 1.3
50 ppm	16.4± 2.0	16.9± 2.1
100 ppm	16.2± 1.7	15.9± 1.2*

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

APPENDIX E 2

FOOD CONSUMPTION CHANGES : FEMALE

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day(effective) 1-7(4)	2-7(7)	3-7(7)	4-7(7)	5-7(7)	6-7(7)	7-7(7)
Control	10.5± 0.6	11.0± 0.8	11.0± 0.7	11.2± 0.8	11.5± 0.9	11.1± 1.0	10.8± 0.9
25 ppm	10.2± 0.7*	11.1± 0.8	11.3± 0.8	11.4± 0.7	11.6± 0.8	11.2± 0.9	11.3± 1.0*
50 ppm	10.1± 0.7**	11.0± 0.9	11.0± 0.8	11.3± 0.9	11.7± 1.0	10.9± 0.7	10.9± 1.0
100 ppm	10.0± 0.7**	10.5± 0.8**	10.9± 0.7	11.1± 0.8	11.8± 0.9	10.6± 0.9*	10.7± 0.9

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day(effective) 8-7(7)	9-7(7)	10-7(7)	11-7(7)	12-7(7)	13-7(7)	17-7(7)
Control	10.9± 1.5	10.9± 0.9	10.7± 0.7	11.0± 0.9	10.4± 0.8	10.7± 0.7	10.9± 0.7
25 ppm	10.9± 1.0	11.5± 1.4*	11.1± 1.2	11.2± 0.8	10.5± 0.8	11.3± 1.1*	11.2± 1.3
50 ppm	10.7± 0.9	10.9± 1.1	10.8± 0.9	10.8± 0.9	10.6± 0.9	11.0± 1.0	11.0± 1.0
100 ppm	10.6± 0.9	10.8± 0.9	10.4± 0.9	11.0± 1.2	10.4± 0.9	10.7± 1.0	10.7± 0.9

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day(effective) 21-7(7)	25-7(7)	29-7(7)	33-7(7)	37-7(7)	41-7(7)	45-7(7)
Control	10.4± 0.8	11.1± 1.1	10.8± 0.7	10.5± 0.9	12.4± 1.7	11.1± 0.9	11.3± 0.9
25 ppm	10.6± 0.9	11.4± 1.2	11.1± 0.9	10.5± 0.9	12.5± 1.5	11.3± 0.9	11.5± 0.9
50 ppm	10.3± 0.8	10.7± 1.3	10.6± 0.9	10.4± 0.8	12.1± 1.5	11.0± 1.1	10.8± 1.1*
100 ppm	10.4± 0.8	10.7± 1.2	11.1± 1.0	10.0± 0.8*	12.4± 1.4	11.5± 1.2	11.1± 0.8

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day(effective) 50-7(7)	53-7(7)	54-7(7)	58-7(7)	62-7(7)	66-7(7)	70-7(7)
Control	10.5± 0.8	11.2± 0.7	10.8± 0.8	11.0± 0.8	11.5± 0.8	11.6± 0.9	11.7± 0.8
25 ppm	10.8± 0.8	11.4± 0.9	11.2± 0.9*	11.3± 0.8	11.8± 1.0	11.8± 1.1	12.0± 1.2
50 ppm	10.1± 0.6*	11.1± 0.9	10.8± 0.7	10.6± 0.7*	11.5± 0.9	11.2± 0.9	11.6± 1.0
100 ppm	10.5± 0.8	10.8± 0.7*	10.7± 0.8	10.8± 0.7	11.4± 0.9	11.5± 0.9	11.8± 0.8

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day(effective) 74-7(7)	78-7(7)	82-7(7)	86-7(7)	90-7(7)	94-7(7)	98-7(7)
Control	11.5± 1.1	11.5± 1.1	11.4± 1.1	11.8± 1.1	12.0± 1.0	11.7± 1.5	11.9± 1.6
25 ppm	11.8± 1.0	12.0± 0.9	11.8± 1.0	12.1± 1.2	12.2± 1.1	12.2± 0.9	12.5± 1.0
50 ppm	11.5± 1.1	11.6± 1.2	11.6± 1.3	12.0± 1.7	12.0± 1.9	11.9± 1.3	12.6± 1.4
100 ppm	11.4± 1.1	11.7± 1.0	11.6± 1.1	11.9± 0.9	11.8± 1.0	11.6± 1.9	12.0± 2.0

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
UNIT : g
REPORT TYPE : A1 104
SEX : FEMALE

FOOD CONSUMPTION CHANGES (SUMMARY)
ALL ANIMALS

Group Name	Administration week-day(effective) 102-7(7)	104-7(7)
Control	11.6± 1.9	12.2± 1.0
25 ppm	12.4± 1.3	12.4± 1.3
50 ppm	12.3± 1.7	12.0± 1.9
100 ppm	12.3± 1.3	11.9± 1.7

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

APPENDIX F 1

HEMATOLOGY : MALE

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
MEASURE. TIME : 1
SEX : MALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
ALL ANIMALS (105W)

Group Name	NO. of Animals	RED BLOOD CELL $10^6/\mu\ell$	HEMOGLOBIN g/dℓ	HEMATOCRIT %	MCV f ℓ	MCH p g	MCHC g/dℓ	PLATELET $10^3/\mu\ell$
Control	43	8.02± 1.48	13.5± 2.8	39.6± 6.9	49.5± 3.1	16.8± 1.5	33.9± 1.9	955± 328
25 ppm	44	8.19± 1.59	13.6± 3.0	39.8± 7.3	48.8± 3.1	16.5± 1.5	33.8± 1.8	997± 365
50 ppm	42	8.49± 1.65	14.3± 2.8	41.3± 7.1	49.4± 6.6	17.0± 2.3	34.3± 1.4	909± 377
100 ppm	36	8.16± 1.48	13.7± 2.9	40.2± 7.3	49.3± 2.9	16.8± 1.5	33.9± 1.8	934± 315

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

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
MEASURE. TIME : 1
SEX : MALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
ALL ANIMALS (105W)

Group Name	NO. of Animals	RETICULOCYTE %	
Control	43	5.0±	4.0
25 ppm	44	4.9±	3.9
50 ppm	42	4.9±	7.1
100 ppm	36	4.5±	3.1

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
MEASURE. TIME : 1
SEX : MALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
ALL ANIMALS (105W)

Group Name	NO. of Animals	WBC $10^3/\mu\ell$	Differential WBC (%) N-BAND	N-SEG	EOSINO	BASO	MONO	LYMPHO	OTHER
Control	43	5.97± 2.03	0± 1	46± 9	2± 1	0± 0	5± 2	45± 10	2± 5
25 ppm	44	6.24± 2.70	1± 1	49± 10	2± 1	0± 0	5± 2	43± 11	1± 3
50 ppm	42	7.90± 10.13	0± 1	48± 10	2± 1	0± 0	5± 2	41± 11	3± 14
100 ppm	36	5.27± 1.78	1± 1	46± 7	2± 1	0± 0	5± 2	45± 8	2± 2

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

(HCL070)

APPENDIX F 2

HEMATOLOGY : FEMALE

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
MEASURE. TIME : 1
SEX : FEMALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
ALL ANIMALS (105W)

Group Name	NO. of Animals	RED BLOOD CELL $10^6/\mu\ell$	HEMOGLOBIN g/dℓ	HEMATOCRIT %	MCV f ℓ	MCH p g	MCHC g/dℓ	PLATELET $10^3/\mu\ell$
Control	37	8.23± 0.88	15.1± 1.7	42.1± 4.0	51.3± 2.1	18.3± 0.5	35.7± 1.1	651± 175
25 ppm	45	8.19± 0.94	14.9± 1.7	41.9± 3.7	51.4± 3.1	18.2± 1.0	35.4± 1.6	675± 185
50 ppm	36	7.90± 1.43	14.5± 2.4	40.7± 5.9	52.7± 7.9	18.5± 1.7	35.4± 1.7	636± 207
100 ppm	39	7.94± 1.16	14.8± 2.1	41.9± 5.0	53.4± 5.0**	18.6± 0.9*	35.0± 2.0**	644± 109

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
MEASURE. TIME : 1
SEX : FEMALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
ALL ANIMALS (105W)

Group Name	NO. of Animals	RETICULOCYTE %	
Control	37	3.1±	4.2
25 ppm	45	3.3±	3.8
50 ppm	36	4.8±	8.0*
100 ppm	39	3.9±	3.5**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
MEASURE. TIME : 1
SEX : FEMALE REPORT TYPE : A1

HEMATOLOGY (SUMMARY)
ALL ANIMALS (105W)

Group Name	NO. of Animals	WBC $10^3/\mu\ell$	Differential WBC (%) N-BAND	N-SEG	EOSINO	BASO	MONO	LYMPHO	OTHER
Control	37	2.99± 1.41	1± 1	38± 10	2± 1	0± 0	5± 2	54± 10	1± 1
25 ppm	45	8.08± 34.45	0± 1	41± 11	2± 1	0± 0	5± 1	49± 11	3± 14
50 ppm	36	5.26± 11.34	1± 1	40± 11	2± 1	0± 0	5± 2	46± 13	6± 19
100 ppm	39	6.08± 12.05	0± 1	39± 12	2± 1	0± 0	4± 2	49± 15	6± 21

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

APPENDIX G 1

BIOCHEMISTRY : MALE

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
MEASURE. TIME : 1
SEX : MALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
ALL ANIMALS (105W)

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	43	6.6± 0.3	3.0± 0.3	0.8± 0.1	0.17± 0.05	162± 21	162± 40	86± 43
25 ppm	44	6.6± 0.3	3.0± 0.3	0.8± 0.1	0.16± 0.03	166± 19	160± 50	81± 57
50 ppm	42	6.7± 0.3	3.0± 0.2	0.8± 0.1	0.30± 0.66	163± 23	169± 53	103± 104
100 ppm	36	6.8± 0.5	3.1± 0.3	0.8± 0.1	0.17± 0.05	163± 27	168± 48	81± 42

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

(HCL074)

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
MEASURE. TIME : 1
SEX : MALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
ALL ANIMALS (105W)

Group Name	NO. of Animals	PHOSPHOLIPID mg/dℓ	AST IU/ℓ	ALT IU/ℓ	LDH IU/ℓ	ALP IU/ℓ	G-GTP IU/ℓ	CK IU/ℓ
Control	43	232± 49	105± 56	44± 20	181± 46	247± 70	9± 5	121± 37
25 ppm	44	230± 59	109± 42	43± 14	205± 57	254± 82	9± 3	136± 42
50 ppm	42	247± 74	117± 108	46± 21	196± 73	251± 110	8± 4	135± 47
100 ppm	36	245± 64	115± 40	52± 29	191± 55	267± 220	11± 7	132± 44

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
MEASURE. TIME : 1
SEX : MALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
ALL ANIMALS (105W)

Group Name	NO. of Animals	UREA NITROGEN mg/dℓ	CREATININE mg/dℓ	SODIUM mEq/ℓ	POTASSIUM mEq/ℓ	CHLORIDE mEq/ℓ	CALCIUM mg/dℓ	INORGANIC PHOSPHORUS mg/dℓ
Control	43	19.2± 3.1	0.6± 0.1	142± 1	3.8± 0.3	105± 2	10.5± 0.2	4.2± 0.5
25 ppm	44	19.8± 3.4	0.6± 0.1	142± 2	3.8± 0.3	105± 1	10.4± 0.3	4.0± 0.5
50 ppm	42	19.1± 3.3	0.6± 0.1	141± 1	3.7± 0.3	105± 2	10.4± 0.4	4.0± 0.7
100 ppm	36	19.8± 3.2	0.6± 0.1	142± 2	3.7± 0.3	105± 2	10.5± 0.4	4.1± 0.5

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

APPENDIX G 2

BIOCHEMISTRY : FEMALE

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
MEASURE. TIME : 1
SEX : FEMALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
ALL ANIMALS (105W)

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	37	6.9± 0.4	3.6± 0.3	1.1± 0.1	0.13± 0.02	154± 15	125± 23	39± 21
25 ppm	45	6.8± 0.4	3.6± 0.3	1.1± 0.1	0.15± 0.11	155± 15	129± 26	46± 22
50 ppm	36	6.8± 0.5	3.6± 0.4	1.1± 0.1	0.23± 0.52	150± 17	129± 26	57± 45
100 ppm	39	6.9± 0.5	3.6± 0.4	1.1± 0.1	0.16± 0.16	154± 17	141± 35	65± 87

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
MEASURE. TIME : 1
SEX : FEMALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
ALL ANIMALS (105W)

Group Name	NO. of Animals	PHOSPHOLIPID mg/dℓ	AST IU/ℓ	ALT IU/ℓ	LDH IU/ℓ	ALP IU/ℓ	G-GTP IU/ℓ	CK IU/ℓ
Control	37	221± 39	130± 75	60± 32	206± 77	132± 35	3± 2	98± 24
25 ppm	45	227± 38	154± 220	63± 67	287± 514	150± 62	3± 2	116± 73
50 ppm	36	231± 46	151± 104	62± 34	233± 112	171± 129	4± 5	118± 64
100 ppm	39	250± 57*	137± 91	60± 33	240± 168	158± 104	3± 1	105± 28

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
MEASURE. TIME : 1
SEX : FEMALE REPORT TYPE : A1

BIOCHEMISTRY (SUMMARY)
ALL ANIMALS (105W)

Group Name	NO. of Animals	UREA NITROGEN mg/dℓ	CREATININE mg/dℓ	SODIUM mEq/ℓ	POTASSIUM mEq/ℓ	CHLORIDE mEq/ℓ	CALCIUM mg/dℓ	INORGANIC PHOSPHORUS mg/dℓ
Control	37	17.5± 1.7	0.5± 0.0	141± 2	3.5± 0.3	103± 2	10.5± 0.4	3.9± 0.6
25 ppm	45	17.8± 1.7	0.5± 0.1	141± 1	3.4± 0.3	103± 2	10.5± 0.4	3.8± 0.8
50 ppm	36	18.0± 2.0	0.5± 0.1	141± 2	3.4± 0.4	102± 2	10.5± 0.3	4.1± 0.7
100 ppm	39	18.5± 3.2	0.5± 0.1	141± 1	3.4± 0.4	103± 2	10.6± 0.4	3.9± 0.9

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

APPENDIX H 1

URINALYSIS : MALE

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
MEASURE. TIME : 1
SEX : MALE REPORT TYPE : A1

URINALYSIS

Group Name	NO. of Animals	pH 5.0	6.0	6.5	7.0	7.5	8.0	8.5	CHI	Protein −	±	+	2+	3+	4+	CHI	Glucose −	±	+	2+	3+	4+	CHI	Ketone body −	±	+	2+	3+	4+	CHI	Bilirubin −	+	2+	3+	CHI
Control	44	0	0	3	3	16	20	2		0	0	0	7	33	4		44	0	0	0	0	0		41	3	0	0	0	0		43	1	0	0	
25 ppm	44	0	0	0	3	23	17	1		0	0	1	4	36	3		44	0	0	0	0	0		42	2	0	0	0	0		43	1	0	0	
50 ppm	42	0	0	2	3	16	20	1		0	0	1	6	28	7		42	0	0	0	0	0		42	0	0	0	0	0		41	1	0	0	
100 ppm	37	0	1	2	2	18	13	1		0	0	2	9	22	4		37	0	0	0	0	0		37	0	0	0	0	0		37	0	0	0	

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of CHI SQUARE

(HCL101)

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
MEASURE. TIME : 1
SEX : MALE REPORT TYPE : A1

URINALYSIS

Group Name	NO. of Animals	Occult blood −	±	+	2+	3+	CHI	Urobilinogen ±	+	2+	3+	4+	CHI
Control	44	41	1	0	0	2		44	0	0	0	0	
25 ppm	44	43	0	0	1	0		44	0	0	0	0	
50 ppm	42	41	1	0	0	0		42	0	0	0	0	
100 ppm	37	36	0	0	1	0		37	0	0	0	0	

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of CHI SQUARE

APPENDIX H 2

URINALYSIS : FEMALE

STUDY NO. : 0535 URINALYSIS
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
MEASURE. TIME : 1
SEX : FEMALE REPORT TYPE : A1

Group Name	NO. of Animals	pH 5.0	6.0	6.5	7.0	7.5	8.0	8.5	CHI	Protein −	±	+	2+	3+	4+	CHI	Glucose −	±	+	2+	3+	4+	CHI	Ketone body −	±	+	2+	3+	4+	CHI	Bilirubin −	+	2+	3+	CHI
Control	40	0	2	2	6	9	13	8		2	10	11	8	7	2		40	0	0	0	0	0		25	15	0	0	0	0		40	0	0	0	
25 ppm	45	0	3	1	3	9	17	12		2	5	14	18	4	2		45	0	0	0	0	0		32	13	0	0	0	0		45	0	0	0	
50 ppm	37	0	2	3	4	4	16	8		2	4	9	14	8	0		37	0	0	0	0	0		26	11	0	0	0	0		36	0	0	1	
100 ppm	39	0	2	1	2	5	18	11		1	3	9	12	11	3		39	0	0	0	0	0		17	22	0	0	0	0		38	1	0	0	

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of CHI SQUARE

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
MEASURE. TIME : 1
SEX : FEMALE REPORT TYPE : A1

URINALYSIS

Group Name	NO. of Animals	Occult blood −	±	+	2+	3+	CHI	Urobilinogen ±	+	2+	3+	4+	CHI
Control	40	39	1	0	0	0		40	0	0	0	0	
25 ppm	45	43	1	1	0	0		45	0	0	0	0	
50 ppm	37	33	0	0	1	3		36	0	0	1	0	
100 ppm	39	37	0	1	0	1		39	0	0	0	0	

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of CHI SQUARE

APPENDIX I 1

GROSS FINDINGS : MALE

ALL ANIMALS

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

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

Organ	Findings	Group Name / NO. of Animals	Control 50 (%)	25 ppm 50 (%)	50 ppm 50 (%)	100 ppm 50 (%)
skin/app	nodule		4 (8)	3 (6)	3 (6)	4 (8)
	scab		1 (2)	1 (2)	0 (0)	0 (0)
subcutis	edema		0 (0)	1 (2)	1 (2)	0 (0)
	jaundice		0 (0)	0 (0)	2 (4)	1 (2)
	mass		8 (16)	9 (18)	5 (10)	10 (20)
lung	white zone		5 (10)	2 (4)	3 (6)	3 (6)
	red zone		0 (0)	2 (4)	3 (6)	0 (0)
	nodule		2 (4)	0 (0)	0 (0)	2 (4)
	voluminus		0 (0)	1 (2)	0 (0)	0 (0)
lymph node	enlarged		0 (0)	0 (0)	2 (4)	1 (2)
thymus	nodule		0 (0)	0 (0)	1 (2)	0 (0)
spleen	enlarged		7 (14)	4 (8)	5 (10)	4 (8)
	white zone		1 (2)	1 (2)	0 (0)	0 (0)
heart	white zone		0 (0)	0 (0)	0 (0)	1 (2)
	nodule		0 (0)	1 (2)	0 (0)	0 (0)
tongue	nodule		0 (0)	1 (2)	0 (0)	0 (0)
salivary gl	nodule		0 (0)	1 (2)	0 (0)	0 (0)
forestomach	nodule		1 (2)	0 (0)	1 (2)	0 (0)
	ulcer		1 (2)	0 (0)	1 (2)	3 (6)
gl stomach	red zone		0 (0)	0 (0)	0 (0)	1 (2)
	nodule		0 (0)	2 (4)	0 (0)	0 (0)
	ulcer		1 (2)	0 (0)	0 (0)	0 (0)

Organ	Findings	Group Name / NO. of Animals	Control 50	(%)	25 ppm 50	(%)	50 ppm 50	(%)	100 ppm 50	(%)
liver	enlarged		0	(0)	4	(8)	0	(0)	0	(0)
	nodule		2	(4)	1	(2)	1	(2)	0	(0)
	rough		1	(2)	1	(2)	2	(4)	0	(0)
	granular		0	(0)	0	(0)	0	(0)	1	(2)
	nodular		0	(0)	1	(2)	0	(0)	0	(0)
	herniation		7	(14)	3	(6)	2	(4)	5	(10)
kidney	white zone		0	(0)	0	(0)	0	(0)	1	(2)
	nodule		1	(2)	0	(0)	0	(0)	0	(0)
	cyst		1	(2)	0	(0)	0	(0)	0	(0)
	granular		1	(2)	3	(6)	5	(10)	3	(6)
urethra	nodule		0	(0)	0	(0)	1	(2)	0	(0)
pituitary	enlarged		0	(0)	0	(0)	1	(2)	3	(6)
	red zone		2	(4)	1	(2)	2	(4)	1	(2)
	nodule		0	(0)	4	(8)	2	(4)	4	(8)
thyroid	enlarged		1	(2)	2	(4)	6	(12)	2	(4)
	nodule		1	(2)	1	(2)	0	(0)	1	(2)
adrenal	enlarged		0	(0)	1	(2)	1	(2)	3	(6)
	nodule		0	(0)	0	(0)	1	(2)	0	(0)
testis	nodule		43	(86)	49	(98)	45	(90)	43	(86)
brain	red zone		0	(0)	0	(0)	1	(2)	0	(0)
	nodule		2	(4)	0	(0)	0	(0)	0	(0)
spinal cord	red zone		0	(0)	0	(0)	1	(2)	0	(0)

Organ	Findings	Group Name / NO. of Animals	Control 50	(%)	25 ppm 50	(%)	50 ppm 50	(%)	100 ppm 50	(%)
periph nerv	nodule		2	(4)	0	(0)	0	(0)	0	(0)
eye	turbid		0	(0)	0	(0)	0	(0)	1	(2)
	white		2	(4)	4	(8)	3	(6)	2	(4)
	red		1	(2)	0	(0)	0	(0)	0	(0)
	exophthalmos		0	(0)	0	(0)	1	(2)	0	(0)
Zymbal gl	nodule		0	(0)	0	(0)	0	(0)	2	(4)
bone	nodule		1	(2)	0	(0)	0	(0)	0	(0)
peritoneum	nodule		1	(2)	2	(4)	1	(2)	2	(4)
retroperit	mass		0	(0)	0	(0)	1	(2)	0	(0)
abdominal c	hemorrhage		1	(2)	0	(0)	0	(0)	0	(0)
	ascites		2	(4)	3	(6)	2	(4)	2	(4)
adipose	nodule		0	(0)	0	(0)	1	(2)	0	(0)
thoracic ca	pleural fluid		1	(2)	2	(4)	2	(4)	2	(4)
other	forelimb:nodule		0	(0)	0	(0)	0	(0)	1	(2)
	upper jaw:nodule		0	(0)	0	(0)	1	(2)	0	(0)
	nose:nodule		0	(0)	1	(2)	0	(0)	1	(2)
whole body	anemic		0	(0)	1	(2)	0	(0)	0	(0)

APPENDIX I 2

GROSS FINDINGS : MALE

DEAD AND MORIBUND ANIMALS

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

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

Organ	Findings	Group Name / NO. of Animals	Control 6 (%)	25 ppm 6 (%)	50 ppm 8 (%)	100 ppm 14 (%)
skin/app	nodule		0 (0)	1 (17)	0 (0)	0 (0)
subcutis	edema		0 (0)	1 (17)	1 (13)	0 (0)
	jaundice		0 (0)	0 (0)	2 (25)	1 (7)
	mass		1 (17)	1 (17)	1 (13)	3 (21)
lung	white zone		0 (0)	0 (0)	0 (0)	1 (7)
	red zone		0 (0)	2 (33)	3 (38)	0 (0)
	nodule		0 (0)	0 (0)	0 (0)	1 (7)
	voluminus		0 (0)	1 (17)	0 (0)	0 (0)
lymph node	enlarged		0 (0)	0 (0)	1 (13)	1 (7)
spleen	enlarged		2 (33)	3 (50)	3 (38)	3 (21)
heart	white zone		0 (0)	0 (0)	0 (0)	1 (7)
tongue	nodule		0 (0)	1 (17)	0 (0)	0 (0)
forestomach	ulcer		1 (17)	0 (0)	1 (13)	3 (21)
gl stomach	red zone		0 (0)	0 (0)	0 (0)	1 (7)
	nodule		0 (0)	1 (17)	0 (0)	0 (0)
	ulcer		1 (17)	0 (0)	0 (0)	0 (0)
liver	enlarged		0 (0)	4 (67)	0 (0)	0 (0)
	rough		0 (0)	1 (17)	0 (0)	0 (0)
	granular		0 (0)	0 (0)	0 (0)	1 (7)
	nodular		0 (0)	1 (17)	0 (0)	0 (0)
	herniation		1 (17)	1 (17)	0 (0)	2 (14)
kidney	granular		0 (0)	0 (0)	1 (13)	0 (0)

Organ	Findings	Group Name / NO. of Animals	Control 6	(%)	25 ppm 6	(%)	50 ppm 8	(%)	100 ppm 14	(%)
pituitary	enlarged		0	(0)	0	(0)	1	(13)	2	(14)
	red zone		0	(0)	0	(0)	1	(13)	0	(0)
thyroid	enlarged		0	(0)	0	(0)	1	(13)	0	(0)
adrenal	enlarged		0	(0)	0	(0)	1	(13)	2	(14)
testis	nodule		2	(33)	5	(83)	3	(38)	7	(50)
brain	red zone		0	(0)	0	(0)	1	(13)	0	(0)
	nodule		2	(33)	0	(0)	0	(0)	0	(0)
spinal cord	red zone		0	(0)	0	(0)	1	(13)	0	(0)
periph nerv	nodule		2	(33)	0	(0)	0	(0)	0	(0)
eye	turbid		0	(0)	0	(0)	0	(0)	1	(7)
	white		1	(17)	0	(0)	0	(0)	1	(7)
	red		1	(17)	0	(0)	0	(0)	0	(0)
	exophthalmos		0	(0)	0	(0)	1	(13)	0	(0)
Zymbal gl	nodule		0	(0)	0	(0)	0	(0)	2	(14)
bone	nodule		1	(17)	0	(0)	0	(0)	0	(0)
peritoneum	nodule		0	(0)	0	(0)	0	(0)	1	(7)
retroperit	mass		0	(0)	0	(0)	1	(13)	0	(0)
abdominal c	hemorrhage		1	(17)	0	(0)	0	(0)	0	(0)
	ascites		1	(17)	1	(17)	1	(13)	1	(7)
adipose	nodule		0	(0)	0	(0)	1	(13)	0	(0)
thoracic ca	pleural fluid		0	(0)	1	(17)	2	(25)	1	(7)
other	forelimb:nodule		0	(0)	0	(0)	0	(0)	1	(7)

Organ	Findings	Group Name / NO. of Animals	Control 6	(%)	25 ppm 6	(%)	50 ppm 8	(%)	100 ppm 14	(%)
whole body	anemic		0	(0)	1	(17)	0	(0)	0	(0)

APPENDIX I 3

GROSS FINDINGS : MALE

SACRIFICED ANIMALS

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

GROSS FINDINGS (SUMMARY)
SACRIFICED ANIMALS (105W)

Organ	Findings	Group Name / NO. of Animals	Control 44	(%)	25 ppm 44	(%)	50 ppm 42	(%)	100 ppm 36	(%)
skin/app	nodule		4	(9)	2	(5)	3	(7)	4	(11)
	scab		1	(2)	1	(2)	0	(0)	0	(0)
subcutis	mass		7	(16)	8	(18)	4	(10)	7	(19)
lung	white zone		5	(11)	2	(5)	3	(7)	2	(6)
	nodule		2	(5)	0	(0)	0	(0)	1	(3)
lymph node	enlarged		0	(0)	0	(0)	1	(2)	0	(0)
thymus	nodule		0	(0)	0	(0)	1	(2)	0	(0)
spleen	enlarged		5	(11)	1	(2)	2	(5)	1	(3)
	white zone		1	(2)	1	(2)	0	(0)	0	(0)
heart	nodule		0	(0)	1	(2)	0	(0)	0	(0)
salivary gl	nodule		0	(0)	1	(2)	0	(0)	0	(0)
forestomach	nodule		1	(2)	0	(0)	1	(2)	0	(0)
gl stomach	nodule		0	(0)	1	(2)	0	(0)	0	(0)
liver	nodule		2	(5)	1	(2)	1	(2)	0	(0)
	rough		1	(2)	0	(0)	2	(5)	0	(0)
	herniation		6	(14)	2	(5)	2	(5)	3	(8)
kidney	white zone		0	(0)	0	(0)	0	(0)	1	(3)
	nodule		1	(2)	0	(0)	0	(0)	0	(0)
	cyst		1	(2)	0	(0)	0	(0)	0	(0)
	granular		1	(2)	3	(7)	4	(10)	3	(8)
urethra	nodule		0	(0)	0	(0)	1	(2)	0	(0)
pituitary	enlarged		0	(0)	0	(0)	0	(0)	1	(3)

Organ	Findings	Group Name / NO. of Animals	Control 44	(%)	25 ppm 44	(%)	50 ppm 42	(%)	100 ppm 36	(%)
pituitary	red zone		2	(5)	1	(2)	1	(2)	1	(3)
	nodule		0	(0)	4	(9)	2	(5)	4	(11)
thyroid	enlarged		1	(2)	2	(5)	5	(12)	2	(6)
	nodule		1	(2)	1	(2)	0	(0)	1	(3)
adrenal	enlarged		0	(0)	1	(2)	0	(0)	1	(3)
	nodule		0	(0)	0	(0)	1	(2)	0	(0)
testis	nodule		41	(93)	44	(100)	42	(100)	36	(100)
eye	white		1	(2)	4	(9)	3	(7)	1	(3)
peritoneum	nodule		1	(2)	2	(5)	1	(2)	1	(3)
abdominal c	ascites		1	(2)	2	(5)	1	(2)	1	(3)
thoracic ca	pleural fluid		1	(2)	1	(2)	0	(0)	1	(3)
other	upper jaw:nodule		0	(0)	0	(0)	1	(2)	0	(0)
	nose:nodule		0	(0)	1	(2)	0	(0)	1	(3)

APPENDIX I 4

GROSS FINDINGS : FEMALE

ALL ANIMALS

Organ	Findings	Group Name / NO. of Animals	Control 50	(%)	25 ppm 50	(%)	50 ppm 50	(%)	100 ppm 50	(%)
subcutis	jaundice		2	(4)	0	(0)	1	(2)	3	(6)
	mass		6	(12)	11	(22)	9	(18)	9	(18)
lung	white zone		1	(2)	1	(2)	1	(2)	1	(2)
	red zone		1	(2)	0	(0)	0	(0)	0	(0)
	nodule		1	(2)	1	(2)	1	(2)	1	(2)
lymph node	enlarged		3	(6)	2	(4)	1	(2)	2	(4)
spleen	enlarged		8	(16)	3	(6)	7	(14)	9	(18)
	nodule		0	(0)	0	(0)	1	(2)	0	(0)
heart	white zone		0	(0)	0	(0)	0	(0)	1	(2)
forestomach	nodule		1	(2)	1	(2)	0	(0)	0	(0)
	ulcer		2	(4)	1	(2)	2	(4)	1	(2)
	erosion		0	(0)	1	(2)	0	(0)	0	(0)
gl stomach	nodule		0	(0)	0	(0)	1	(2)	0	(0)
	ulcer		1	(2)	1	(2)	0	(0)	0	(0)
	erosion		0	(0)	0	(0)	0	(0)	1	(2)
cecum	dilated		0	(0)	0	(0)	1	(2)	0	(0)
liver	enlarged		1	(2)	0	(0)	0	(0)	2	(4)
	white zone		3	(6)	1	(2)	1	(2)	2	(4)
	red zone		1	(2)	1	(2)	0	(0)	0	(0)
	nodule		0	(0)	0	(0)	1	(2)	1	(2)
	rough		2	(4)	2	(4)	4	(8)	6	(12)
	herniation		12	(24)	9	(18)	8	(16)	9	(18)

Organ	Findings	Group Name / NO. of Animals	Control 50	(%)	25 ppm 50	(%)	50 ppm 50	(%)	100 ppm 50	(%)
kidney	white zone		1	(2)	0	(0)	0	(0)	1	(2)
	nodule		0	(0)	0	(0)	1	(2)	1	(2)
	cyst		0	(0)	1	(2)	0	(0)	0	(0)
	granular		0	(0)	0	(0)	1	(2)	0	(0)
	hydronephrosis		0	(0)	0	(0)	2	(4)	0	(0)
urin bladd	red zone		0	(0)	0	(0)	1	(2)	0	(0)
	urine:marked retention		0	(0)	0	(0)	1	(2)	0	(0)
pituitary	enlarged		3	(6)	3	(6)	5	(10)	2	(4)
	red zone		3	(6)	7	(14)	2	(4)	5	(10)
	black zone		1	(2)	0	(0)	0	(0)	0	(0)
	nodule		6	(12)	3	(6)	3	(6)	5	(10)
	cyst		0	(0)	0	(0)	0	(0)	1	(2)
thyroid	enlarged		0	(0)	0	(0)	1	(2)	2	(4)
	nodule		0	(0)	1	(2)	1	(2)	1	(2)
adrenal	enlarged		1	(2)	0	(0)	1	(2)	1	(2)
	nodule		0	(0)	0	(0)	0	(0)	1	(2)
ovary	enlarged		0	(0)	1	(2)	1	(2)	0	(0)
	nodule		0	(0)	0	(0)	0	(0)	1	(2)
	cyst		3	(6)	6	(12)	2	(4)	1	(2)
uterus	black zone		0	(0)	0	(0)	1	(2)	0	(0)
	nodule		8	(16)	2	(4)	9	(18)	9	(18)
	cyst		0	(0)	1	(2)	0	(0)	0	(0)

Organ	Findings	Group Name / NO. of Animals	Control 50 (%)	25 ppm 50 (%)	50 ppm 50 (%)	100 ppm 50 (%)
prep/cli gl	nodule		0 (0)	0 (0)	0 (0)	1 (2)
brain	red zone		0 (0)	0 (0)	1 (2)	0 (0)
	hemorrhage		0 (0)	0 (0)	1 (2)	0 (0)
	deformed		0 (0)	1 (2)	0 (0)	0 (0)
spinal cord	red zone		0 (0)	0 (0)	0 (0)	1 (2)
eye	turbid		1 (2)	0 (0)	0 (0)	0 (0)
	white		4 (8)	5 (10)	7 (14)	0 (0)
Zymbal gl	nodule		0 (0)	0 (0)	0 (0)	2 (4)
bone	nodule		0 (0)	0 (0)	1 (2)	0 (0)
mediastinum	mass		0 (0)	0 (0)	0 (0)	2 (4)
peritoneum	nodule		1 (2)	1 (2)	0 (0)	2 (4)
	adhesion		0 (0)	0 (0)	1 (2)	0 (0)
abdominal c	ascites		2 (4)	0 (0)	0 (0)	1 (2)
thoracic ca	pleural fluid		1 (2)	0 (0)	0 (0)	3 (6)
other	eye lid:nodule		1 (2)	0 (0)	0 (0)	0 (0)
	upper jaw:nodule		1 (2)	0 (0)	0 (0)	0 (0)
whole body	anemic		1 (2)	0 (0)	0 (0)	1 (2)

APPENDIX I 5

GROSS FINDINGS : FEMALE

DEAD AND MORIBUND ANIMALS

Organ	Findings	Group Name / NO. of Animals	Control 13	(%)	25 ppm 5	(%)	50 ppm 14	(%)	100 ppm 11	(%)
subcutis	jaundice		2	(15)	0	(0)	0	(0)	3	(27)
	mass		2	(15)	2	(40)	3	(21)	2	(18)
lung	white zone		0	(0)	0	(0)	1	(7)	0	(0)
	red zone		1	(8)	0	(0)	0	(0)	0	(0)
	nodule		1	(8)	0	(0)	1	(7)	0	(0)
lymph node	enlarged		3	(23)	2	(40)	1	(7)	2	(18)
spleen	enlarged		8	(62)	2	(40)	4	(29)	7	(64)
heart	white zone		0	(0)	0	(0)	0	(0)	1	(9)
forestomach	nodule		1	(8)	0	(0)	0	(0)	0	(0)
	ulcer		2	(15)	1	(20)	1	(7)	1	(9)
	erosion		0	(0)	1	(20)	0	(0)	0	(0)
gl stomach	ulcer		1	(8)	1	(20)	0	(0)	0	(0)
	erosion		0	(0)	0	(0)	0	(0)	1	(9)
liver	enlarged		1	(8)	0	(0)	0	(0)	2	(18)
	white zone		1	(8)	0	(0)	1	(7)	1	(9)
	nodule		0	(0)	0	(0)	1	(7)	0	(0)
	rough		0	(0)	0	(0)	2	(14)	4	(36)
	herniation		6	(46)	1	(20)	4	(29)	1	(9)
kidney	white zone		1	(8)	0	(0)	0	(0)	1	(9)
	nodule		0	(0)	0	(0)	1	(7)	1	(9)
	granular		0	(0)	0	(0)	1	(7)	0	(0)
	hydronephrosis		0	(0)	0	(0)	2	(14)	0	(0)

Organ	Findings	Group Name / NO. of Animals	Control 13	(%)	25 ppm 5	(%)	50 ppm 14	(%)	100 ppm 11	(%)
urin bladd	red zone		0	(0)	0	(0)	1	(7)	0	(0)
	urine:marked retention		0	(0)	0	(0)	1	(7)	0	(0)
pituitary	enlarged		2	(15)	2	(40)	1	(7)	0	(0)
	red zone		0	(0)	1	(20)	1	(7)	2	(18)
	black zone		1	(8)	0	(0)	0	(0)	0	(0)
	nodule		1	(8)	0	(0)	0	(0)	2	(18)
	cyst		0	(0)	0	(0)	0	(0)	1	(9)
adrenal	enlarged		0	(0)	0	(0)	0	(0)	1	(9)
	nodule		0	(0)	0	(0)	0	(0)	1	(9)
ovary	enlarged		0	(0)	0	(0)	1	(7)	0	(0)
	cyst		1	(8)	1	(20)	0	(0)	0	(0)
uterus	nodule		4	(31)	0	(0)	2	(14)	2	(18)
prep/cli gl	nodule		0	(0)	0	(0)	0	(0)	1	(9)
brain	red zone		0	(0)	0	(0)	1	(7)	0	(0)
	hemorrhage		0	(0)	0	(0)	1	(7)	0	(0)
	deformed		0	(0)	1	(20)	0	(0)	0	(0)
spinal cord	red zone		0	(0)	0	(0)	0	(0)	1	(9)
eye	white		0	(0)	1	(20)	2	(14)	0	(0)
Zymbal gl	nodule		0	(0)	0	(0)	0	(0)	2	(18)
bone	nodule		0	(0)	0	(0)	1	(7)	0	(0)
mediastinum	mass		0	(0)	0	(0)	0	(0)	2	(18)
peritoneum	nodule		1	(8)	0	(0)	0	(0)	1	(9)

Organ	Findings	Group Name / NO. of Animals	Control 13	(%)	25 ppm 5	(%)	50 ppm 14	(%)	100 ppm 11	(%)
abdominal c	ascites		2	(15)	0	(0)	0	(0)	1	(9)
thoracic ca	pleural fluid		1	(8)	0	(0)	0	(0)	2	(18)
whole body	anemic		1	(8)	0	(0)	0	(0)	1	(9)

APPENDIX I 6

GROSS FINDINGS : FEMALE

SACRIFICED ANIMALS

APPENDIX I 6

GROSS FINDINGS : FEMALE

SACRIFICED ANIMALS

Organ	Findings	Group Name / NO. of Animals	Control 37	(%)	25 ppm 45	(%)	50 ppm 36	(%)	100 ppm 39	(%)
subcutis	jaundice		0	(0)	0	(0)	1	(3)	0	(0)
	mass		4	(11)	9	(20)	6	(17)	7	(18)
lung	white zone		1	(3)	1	(2)	0	(0)	1	(3)
	nodule		0	(0)	1	(2)	0	(0)	1	(3)
spleen	enlarged		0	(0)	1	(2)	3	(8)	2	(5)
	nodule		0	(0)	0	(0)	1	(3)	0	(0)
forestomach	nodule		0	(0)	1	(2)	0	(0)	0	(0)
	ulcer		0	(0)	0	(0)	1	(3)	0	(0)
gl stomach	nodule		0	(0)	0	(0)	1	(3)	0	(0)
cecum	dilated		0	(0)	0	(0)	1	(3)	0	(0)
liver	white zone		2	(5)	1	(2)	0	(0)	1	(3)
	red zone		1	(3)	1	(2)	0	(0)	0	(0)
	nodule		0	(0)	0	(0)	0	(0)	1	(3)
	rough		2	(5)	2	(4)	2	(6)	2	(5)
	herniation		6	(16)	8	(18)	4	(11)	8	(21)
kidney	cyst		0	(0)	1	(2)	0	(0)	0	(0)
pituitary	enlarged		1	(3)	1	(2)	4	(11)	2	(5)
	red zone		3	(8)	6	(13)	1	(3)	3	(8)
	nodule		5	(14)	3	(7)	3	(8)	3	(8)
thyroid	enlarged		0	(0)	0	(0)	1	(3)	2	(5)
	nodule		0	(0)	1	(2)	1	(3)	1	(3)
adrenal	enlarged		1	(3)	0	(0)	1	(3)	0	(0)

Organ	Findings	Group Name / NO. of Animals	Control 37	(%)	25 ppm 45	(%)	50 ppm 36	(%)	100 ppm 39	(%)
ovary	enlarged		0	(0)	1	(2)	0	(0)	0	(0)
	nodule		0	(0)	0	(0)	0	(0)	1	(3)
	cyst		2	(5)	5	(11)	2	(6)	1	(3)
uterus	black zone		0	(0)	0	(0)	1	(3)	0	(0)
	nodule		4	(11)	2	(4)	7	(19)	7	(18)
	cyst		0	(0)	1	(2)	0	(0)	0	(0)
eye	turbid		1	(3)	0	(0)	0	(0)	0	(0)
	white		4	(11)	4	(9)	5	(14)	0	(0)
peritoneum	nodule		0	(0)	1	(2)	0	(0)	1	(3)
	adhesion		0	(0)	0	(0)	1	(3)	0	(0)
thoracic ca	pleural fluid		0	(0)	0	(0)	0	(0)	1	(3)
other	eye lid:nodule		1	(3)	0	(0)	0	(0)	0	(0)
	upper jaw:nodule		1	(3)	0	(0)	0	(0)	0	(0)

APPENDIX J 1

ORGAN WEIGHT, ABSOLUTE : MALE

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE
UNIT: g

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

Group Name	NO. of Animals	Body Weight	ADRENALS	TESTES	HEART	LUNGS	KIDNEYS
Control	44	382± 31	0.077± 0.011	3.467± 1.347	1.227± 0.125	1.434± 0.346	2.710± 0.320
25 ppm	44	380± 24	0.108± 0.203	3.718± 1.344	1.242± 0.117	1.339± 0.100	2.649± 0.214
50 ppm	42	367± 28*	0.081± 0.036	3.647± 1.509	1.211± 0.114	1.341± 0.152	2.704± 0.355
100 ppm	36	352± 29**	0.079± 0.029	4.003± 1.392	1.170± 0.113	1.332± 0.158	2.592± 0.199

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE
UNIT: g

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

Group Name	NO. of Animals	SPLEEN		LIVER		BRAIN	
Control	44	1.253±	0.743	10.727±	1.801	2.074±	0.046
25 ppm	44	1.091±	0.478	10.903±	1.375	2.069±	0.043
50 ppm	42	1.256±	1.349	10.879±	1.498	2.057±	0.044
100 ppm	36	1.053±	0.358	10.537±	1.089	2.057±	0.046

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

APPENDIX J 2

ORGAN WEIGHT, ABSOLUTE : FEMALE

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE
UNIT: g

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

Group Name	NO. of Animals	Body Weight	ADRENALS	OVARIES	HEART	LUNGS	KIDNEYS
Control	37	240± 21	0.092± 0.086	0.152± 0.123	0.822± 0.063	0.922± 0.085	1.659± 0.098
25 ppm	45	252± 27	0.081± 0.008	0.240± 0.696	0.881± 0.073**	0.964± 0.130	1.741± 0.175
50 ppm	36	241± 27	0.082± 0.019	0.149± 0.125	0.878± 0.079**	0.989± 0.168	1.715± 0.139
100 ppm	39	238± 24	0.081± 0.010	0.129± 0.059	0.854± 0.076	0.994± 0.232	1.722± 0.148

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE
UNIT: g

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

Group Name	NO. of Animals	SPLEEN		LIVER		BRAIN	
Control	37	0.553±	0.250	6.101±	0.822	1.862±	0.034
25 ppm	45	0.681±	0.851	6.477±	0.992	1.873±	0.040
50 ppm	36	1.017±	1.818*	6.543±	0.876*	1.859±	0.042
100 ppm	39	0.995±	1.866*	6.711±	1.338*	1.866±	0.049

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

APPENDIX K 1

ORGAN WEIGHT, RELATIVE : MALE

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE
UNIT: %

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

Group Name	NO. of Animals	Body Weight (g)	ADRENALS	TESTES	HEART	LUNGS	KIDNEYS
Control	44	382± 31	0.020± 0.003	0.910± 0.343	0.323± 0.043	0.379± 0.112	0.714± 0.112
25 ppm	44	380± 24	0.030± 0.064	0.983± 0.366	0.328± 0.034	0.354± 0.032	0.700± 0.062
50 ppm	42	367± 28*	0.023± 0.014	0.997± 0.419	0.332± 0.039	0.368± 0.054	0.740± 0.103
100 ppm	36	352± 29**	0.023± 0.008	1.134± 0.376	0.335± 0.044	0.381± 0.059	0.741± 0.079*

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE
UNIT: %

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

Group Name	NO. of Animals	SPLEEN	LIVER	BRAIN
Control	44	0.331± 0.207	2.801± 0.319	0.546± 0.042
25 ppm	44	0.288± 0.123	2.871± 0.296	0.547± 0.036
50 ppm	42	0.345± 0.384	2.972± 0.413	0.564± 0.047
100 ppm	36	0.301± 0.108	3.002± 0.298*	0.588± 0.051**

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

APPENDIX K 2

ORGAN WEIGHT, RELATIVE : FEMALE

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE
UNIT: %

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

Group Name	NO. of Animals	Body Weight (g)	ADRENALS	OVARIES	HEART	LUNGS	KIDNEYS
Control	37	240± 21	0.038± 0.032	0.063± 0.048	0.343± 0.030	0.387± 0.050	0.693± 0.054
25 ppm	45	252± 27	0.032± 0.004	0.098± 0.290	0.351± 0.034	0.386± 0.076	0.693± 0.059
50 ppm	36	241± 27	0.034± 0.007	0.062± 0.049	0.368± 0.054*	0.418± 0.118	0.719± 0.091
100 ppm	39	238± 24	0.035± 0.007	0.054± 0.024	0.361± 0.045	0.422± 0.116	0.729± 0.096

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE
UNIT: %

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

Group Name	NO. of Animals	SPLEEN	LIVER	BRAIN
Control	37	0.232± 0.108	2.542± 0.295	0.780± 0.067
25 ppm	45	0.275± 0.363	2.569± 0.305	0.750± 0.075
50 ppm	36	0.473± 1.037	2.737± 0.452**	0.781± 0.088
100 ppm	39	0.432± 0.874	2.824± 0.505**	0.791± 0.082

Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Dunnett

APPENDIX L 1

HISTOPATHOLOGICAL FINDINGS :

NON-NEOPLASTIC LESIONS : MALE

ALL ANIMALS

Organ	Findings	Group Name	Control				25 ppm				50 ppm				100 ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Integumentary system/appandage}																		
skin/app			<50>				<50>				<50>				<50>			
	inflammation		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)	(0)	(0)	(0)
	squamous cell hyperplasia		0	0	0	0	1	1	0	0	0	1	0	0	0	1	0	0
			(0)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)
	epidermal cyst		1	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(4)	(0)	(0)
{Respiratory system}																		
nasal cavit			<50>				<50>				<50>				<50>			
	thrombus		1	0	0	0	1	0	0	0	0	0	0	0	3	0	0	0
			(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
	goblet cell hyperplasia		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	eosinophilic change:olfactory epithelium		18	17	0	0	13	21	3	0	15	20	3	0	20	20	0	0
			(36)	(34)	(0)	(0)	(26)	(42)	(6)	(0)	(30)	(40)	(6)	(0)	(40)	(40)	(0)	(0)
	eosinophilic change:respiratory epithelium		4	0	0	0	6	0	0	0	4	0	0	0	3	0	0	0
			(8)	(0)	(0)	(0)	(12)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(6)	(0)	(0)	(0)

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

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 50 1 (%)	Control 50 2 (%)	Control 50 3 (%)	Control 50 4 (%)	25 ppm 50 1 (%)	25 ppm 50 2 (%)	25 ppm 50 3 (%)	25 ppm 50 4 (%)	50 ppm 50 1 (%)	50 ppm 50 2 (%)	50 ppm 50 3 (%)	50 ppm 50 4 (%)	100 ppm 50 1 (%)	100 ppm 50 2 (%)	100 ppm 50 3 (%)	100 ppm 50 4 (%)
{Respiratory system}																		
nasal cavit			<50>				<50>				<50>				<50>			
	inflammation:foreign body		7 (14)	4 (8)	0 (0)	0 (0)	7 (14)	0 (0)	0 (0)	0 (0)	10 (20)	2 (4)	0 (0)	0 (0)	4 (8)	1 (2)	0 (0)	0 (0)
	inflammation:respiratory epithelium		0 (0)	1 (2)	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)
	respiratory metaplasia:olfactory epithelium		0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
	respiratory metaplasia:gland		7 (14)	0 (0)	0 (0)	0 (0)	5 (10)	0 (0)	0 (0)	0 (0)	5 (10)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
	squamous cell metaplasia:respiratory epithelium		0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
nasopharynx			<50>				<50>				<50>				<50>			
	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)	1 (2)	0 (0)	0 (0)
lung			<50>				<50>				<50>				<50>			
	congestion		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)

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

Organ	Findings	Group Name	Control				25 ppm				50 ppm				100 ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
lung			<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)
	inflammatory infiltration		0	0	0	0	1	0	0	0	1	0	0	0	2	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(4)	(0)	(0)	(0)
	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)
	accumulation of foamy cells		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	bronchiolar-alveolar cell hyperplasia		3	2	0	0	2	1	0	0	0	0	0	0	4	0	0	0
			(6)	(4)	(0)	(0)	(4)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)
{Hematopoietic system}																		
bone marrow			<50>				<50>				<50>				<50>			
	granulation		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)
	increased hematopoiesis		3	0	0	0	3	0	0	0	2	0	0	0	2	0	0	0
			(6)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(4)	(0)	(0)	(0)

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

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 50				25 ppm 50				50 ppm 50				100 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>			
	granulopoiesis:increased		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
spleen			<50>				<50>				<50>				<50>			
	congestion		8	0	0	0	9	0	0	0	7	0	0	0	5	0	0	0
			(16)	(0)	(0)	(0)	(18)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(10)	(0)	(0)	(0)
	deposit of hemosiderin		19	2	0	0	21	1	0	0	20	3	0	0	20	5	0	0
			(38)	(4)	(0)	(0)	(42)	(2)	(0)	(0)	(40)	(6)	(0)	(0)	(40)	(10)	(0)	(0)
	granulation		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)
	fibrosis:focal		1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	increased extramedullary hematopoiesis		5	2	1	0	5	4	0	0	2	3	0	0	4	5	1	0
			(10)	(4)	(2)	(0)	(10)	(8)	(0)	(0)	(4)	(6)	(0)	(0)	(8)	(10)	(2)	(0)
{Circulatory system}																		
heart			<50>				<50>				<50>				<50>			
	thrombus		0	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0
			(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(2)	(0)	(0)

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

Organ	Findings	Group Name	Control				25 ppm				50 ppm				100 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 (%)
{Circulatory system}																		
heart			<50>				<50>				<50>				<50>			
	myocardial fibrosis		22 (44)	1 (2)	0 (0)	0 (0)	21 (42)	0 (0)	0 (0)	0 (0)	23 (46)	1 (2)	0 (0)	0 (0)	26 (52)	1 (2)	0 (0)	0 (0)
	subendocardial fibrosis		1 (2)	0 (0)	0 (0)	0 (0)	1 (2)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
{Digestive system}																		
tooth			<50>				<50>				<50>				<50>			
	epidermal cyst		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
tongue			<50>				<50>				<50>				<50>			
	inflammation		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
	squamous cell hyperplasia		0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	arteritis		0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

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

Organ	Findings	Group Name	Control				25 ppm				50 ppm				100 ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
stomach			<50>				<50>				<50>				<50>			
	ulcer:forestomach		0	1	0	0	2	0	0	0	1	0	0	0	3	0	0	0
			(0)	(2)	(0)	(0)	(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
	hyperplasia:forestomach		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)
	erosion:glandular stomach		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)
	ulcer:glandular stomach		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)
	hyperplasia:glandular stomach		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
liver			<50>				<50>				<50>				<50>			
	herniation		7	0	0	0	3	0	0	0	3	0	0	0	5	0	0	0
			(14)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(10)	(0)	(0)	(0)
	necrosis:central		0	0	0	0	1	1	0	0	0	0	0	0	1	1	0	0
			(0)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(2)	(0)	(0)
	necrosis:focal		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

Organ	Findings	Group Name / Grade	Control 1 (%)	Control 2 (%)	Control 3 (%)	Control 4 (%)	25 ppm 1 (%)	25 ppm 2 (%)	25 ppm 3 (%)	25 ppm 4 (%)	50 ppm 1 (%)	50 ppm 2 (%)	50 ppm 3 (%)	50 ppm 4 (%)	100 ppm 1 (%)	100 ppm 2 (%)	100 ppm 3 (%)	100 ppm 4 (%)
		No. of Animals on Study	50				50				50				50			
{Digestive system}																		
liver			<50>				<50>				<50>				<50>			
	degeneration: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)
	granulation		1 (2)	1 (2)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)	4 (8)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	inflammatory cell nest		0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	clear cell focus		4 (8)	3 (6)	0 (0)	0 (0)	5 (10)	1 (2)	0 (0)	0 (0)	3 (6)	1 (2)	0 (0)	0 (0)	2 (4)	3 (6)	0 (0)	0 (0)
	acidophilic cell focus		1 (2)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	basophilic cell focus		1 (2)	1 (2)	0 (0)	0 (0)	1 (2)	1 (2)	0 (0)	0 (0)	4 (8)	2 (4)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)
	mixed cell focus		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	spongiosis hepatis		3 (6)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)

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

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 50 1 (%)	Control 50 2 (%)	Control 50 3 (%)	Control 50 4 (%)	25 ppm 50 1 (%)	25 ppm 50 2 (%)	25 ppm 50 3 (%)	25 ppm 50 4 (%)	50 ppm 50 1 (%)	50 ppm 50 2 (%)	50 ppm 50 3 (%)	50 ppm 50 4 (%)	100 ppm 50 1 (%)	100 ppm 50 2 (%)	100 ppm 50 3 (%)	100 ppm 50 4 (%)
{Digestive system}																		
liver			<50>				<50>				<50>				<50>			
	bile duct hyperplasia		2 (4)	48 (96)	0 (0)	0 (0)	1 (2)	48 (96)	0 (0)	0 (0)	3 (6)	46 (92)	0 (0)	0 (0)	5 (10)	43 (86)	0 (0)	0 (0)
pancreas			<50>				<50>				<50>				<50>			
	atrophy		17 (34)	6 (12)	0 (0)	0 (0)	18 (36)	6 (12)	0 (0)	0 (0)	17 (34)	5 (10)	0 (0)	0 (0)	11 (22)	5 (10)	0 (0)	0 (0)
	arteritis		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)
	islet cell hyperplasia		0 (0)	3 (6)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)
{Urinary system}																		
kidney			<50>				<50>				<50>				<50>			
	fatty change		1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	cyst		0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

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

Organ	Findings	Group Name	Control				25 ppm				50 ppm				100 ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																		
kidney			<50>				<50>				<50>				<50>			
	scar		1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)
	chronic nephropathy		15	29	0	0	21	25	1	0	10	30	4	0	21	23	2	0
			(30)	(58)	(0)	(0)	(42)	(50)	(2)	(0)	(20)	(60)	(8)	(0)	(42)	(46)	(4)	(0)
	tubular necrosis		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)
	papillary necrosis		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)
	mineralization:papilla		1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	mineralization:pelvis		0	0	0	0	0	0	0	0	1	0	0	0	1	2	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(4)	(0)	(0)
	transitional cell hyperplasia		0	0	0	0	0	0	0	0	1	0	0	0	3	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
	atypical tubule hyperplasia		1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

Organ	Findings	Group Name	Control				25 ppm				50 ppm				100 ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																		
urin bladd			<50>				<50>				<49>				<49>			
	papillary hyperplasia:transitional epithelium		0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0
			(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)
{Endocrine system}																		
pituitary			<50>				<50>				<50>				<50>			
	angiectasis		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	cyst		1	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	hyperplasia		4	3	0	0	4	2	0	0	6	3	0	0	3	4	0	0
			(8)	(6)	(0)	(0)	(8)	(4)	(0)	(0)	(12)	(6)	(0)	(0)	(6)	(8)	(0)	(0)
	Rathke pouch		2	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
			(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
thyroid			<50>				<50>				<50>				<50>			
	C-cell hyperplasia		9	4	0	0	12	4	0	0	12	6	0	0	9	5	0	0
			(18)	(8)	(0)	(0)	(24)	(8)	(0)	(0)	(24)	(12)	(0)	(0)	(18)	(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

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 50 1 (%)	Control 50 2 (%)	Control 50 3 (%)	Control 50 4 (%)	25 ppm 50 1 (%)	25 ppm 50 2 (%)	25 ppm 50 3 (%)	25 ppm 50 4 (%)	50 ppm 50 1 (%)	50 ppm 50 2 (%)	50 ppm 50 3 (%)	50 ppm 50 4 (%)	100 ppm 50 1 (%)	100 ppm 50 2 (%)	100 ppm 50 3 (%)	100 ppm 50 4 (%)
{Endocrine system}																		
adrenal			<50>				<50>				<50>				<50>			
	hyperplasia:cortical cell		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)
	hyperplasia:medulla		3 (6)	4 (8)	0 (0)	0 (0)	7 (14)	0 (0)	0 (0)	0 (0)	4 (8)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)
	focal fatty change:cortex		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
{Reproductive system}																		
testis			<50>				<50>				<50>				<50>			
	mineralization		2 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
	arteritis		2 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	interstitial cell hyperplasia		6 (12)	0 (0)	0 (0)	0 (0)	7 (14)	0 (0)	0 (0)	0 (0)	9 (18)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)
prostate			<50>				<50>				<49>				<49>			
	inflammation		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

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

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 50 1 (%)	2 (%)	3 (%)	4 (%)	25 ppm 50 1 (%)	2 (%)	3 (%)	4 (%)	50 ppm 50 1 (%)	2 (%)	3 (%)	4 (%)	100 ppm 50 1 (%)	2 (%)	3 (%)	4 (%)
{Reproductive system}																		
prostate			<50>				<50>				<49>				<49>			
	hyperplasia		8 (16)	1 (2)	0 (0)	0 (0)	7 (14)	2 (4)	0 (0)	0 (0)	9 (18)	1 (2)	0 (0)	0 (0)	7 (14)	0 (0)	0 (0)	0 (0)
mammary gl			<50>				<50>				<50>				<50>			
	galactocele		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
{Special sense organs/appendage}																		
eye			<50>				<50>				<50>				<50>			
	hemorrhage		1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	cataract		2 (4)	0 (0)	0 (0)	0 (0)	4 (8)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)
	retinal atrophy		18 (36)	1 (2)	0 (0)	0 (0)	16 (32)	4 (8)	0 (0)	0 (0)	13 (26)	5 (10)	0 (0)	0 (0)	12 (24)	1 (2)	0 (0)	0 (0)
	keratitis		1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)

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

Organ	Findings	Group Name	Control				25 ppm				50 ppm				100 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
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Special sense organs/appendage}																		
eye			<50>				<50>				<50>				<50>			
	squamous cell metaplasia:cornea		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)
{Musculoskeletal system}																		
muscle			<50>				<50>				<50>				<50>			
	mineralization		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

APPENDIX L 2

HISTOPATHOLOGICAL FINDINGS :

NON-NEOPLASTIC LESIONS : MALE

DEAD AND MORIBUND ANIMALS

Organ	Findings	Group Name	Control				25 ppm				50 ppm				100 ppm			
		No. of Animals on Study	6				6				8				14			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
nasal cavit			< 6>				< 6>				< 8>				<14>			
	thrombus		0	0	0	0	1	0	0	0	0	0	0	0	3	0	0	0
			(0)	(0)	(0)	(0)	(17)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(21)	(0)	(0)	(0)
	eosinophilic change:olfactory epithelium		1	2	0	0	0	2	0	0	0	1	0	0	3	4	0	0
			(17)	(33)	(0)	(0)	(0)	(33)	(0)	(0)	(0)	(13)	(0)	(0)	(21)	(29)	(0)	(0)
	eosinophilic change:respiratory epithelium		0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(17)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(7)	(0)	(0)	(0)
	inflammation:foreign body		0	1	0	0	1	0	0	0	1	0	0	0	1	1	0	0
			(0)	(17)	(0)	(0)	(17)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(7)	(7)	(0)	(0)
	respiratory metaplasia:olfactory epithelium		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
nasopharynx			< 6>				< 6>				< 8>				<14>			
	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)	(7)	(0)	(0)
lung			< 6>				< 6>				< 8>				<14>			
	congestion		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(17)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

Organ	Findings	Group Name	Control				25 ppm				50 ppm				100 ppm			
		No. of Animals on Study	6				6				8				14			
		Grade	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Respiratory system}																		
lung			< 6>				< 6>				< 8>				<14>			
	inflammation		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (13)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	inflammatory infiltration		0 (0)	0 (0)	0 (0)	0 (0)	1 (17)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (7)	0 (0)	0 (0)	0 (0)
	bronchiolar-alveolar cell hyperplasia		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (7)	0 (0)	0 (0)	0 (0)
{Hematopoietic system}																		
bone marrow			< 6>				< 6>				< 8>				<14>			
	increased hematopoiesis		1 (17)	0 (0)	0 (0)	0 (0)	2 (33)	0 (0)	0 (0)	0 (0)	1 (13)	0 (0)	0 (0)	0 (0)	1 (7)	0 (0)	0 (0)	0 (0)
	granulopoiesis:increased		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 (7)	0 (0)	0 (0)	0 (0)
spleen			< 6>				< 6>				< 8>				<14>			
	deposit of hemosiderin		1 (17)	2 (33)	0 (0)	0 (0)	0 (0)	1 (17)	0 (0)	0 (0)	0 (0)	3 (38)	0 (0)	0 (0)	2 (14)	4 (29)	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

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 6				25 ppm 6				50 ppm 8				100 ppm 14			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Hematopoietic system}																		
spleen			< 6>				< 6>				< 8>				<14>			
	increased extramedullary hematopoiesis		1	0	0	0	1	0	0	0	0	1	0	0	2	4	0	0
			(17)	(0)	(0)	(0)	(17)	(0)	(0)	(0)	(0)	(13)	(0)	(0)	(14)	(29)	(0)	(0)
{Circulatory system}																		
heart			< 6>				< 6>				< 8>				<14>			
	thrombus		0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(0)	(7)	(0)	(0)
	myocardial fibrosis		3	0	0	0	2	0	0	0	4	0	0	0	8	0	0	0
			(50)	(0)	(0)	(0)	(33)	(0)	(0)	(0)	(50)	(0)	(0)	(0)	(57)	(0)	(0)	(0)
{Digestive system}																		
tongue			< 6>				< 6>				< 8>				<14>			
	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)	(7)	(0)	(0)	(0)
	squamous cell hyperplasia		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(17)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

Organ	Findings	Group Name	Control				25 ppm				50 ppm				100 ppm			
		No. of Animals on Study	6				6				8				14			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
stomach			< 6>				< 6>				< 8>				<14>			
	ulcer:forestomach		0	1	0	0	2	0	0	0	1	0	0	0	3	0	0	0
			(0)	(17)	(0)	(0)	(33)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(21)	(0)	(0)	(0)
	hyperplasia:forestomach		0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(17)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	erosion:glandular stomach		0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(14)	(0)	(0)	(0)
	ulcer:glandular stomach		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(17)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
liver			< 6>				< 6>				< 8>				<14>			
	herniation		1	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0
			(17)	(0)	(0)	(0)	(17)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(14)	(0)	(0)	(0)
	necrosis:central		0	0	0	0	1	1	0	0	0	0	0	0	1	1	0	0
			(0)	(0)	(0)	(0)	(17)	(17)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(7)	(0)	(0)
	degeneration:central		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)
	bile duct hyperplasia		2	4	0	0	1	4	0	0	2	5	0	0	3	9	0	0
			(33)	(67)	(0)	(0)	(17)	(67)	(0)	(0)	(25)	(63)	(0)	(0)	(21)	(64)	(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

Organ	Findings	Group Name	Control				25 ppm				50 ppm				100 ppm			
		No. of Animals on Study	6				6				8				14			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
pancreas			< 6>				< 6>				< 8>				<14>			
	atrophy		0	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0
			(0)	(17)	(0)	(0)	(17)	(17)	(0)	(0)	(13)	(13)	(0)	(0)	(7)	(7)	(0)	(0)
	islet cell hyperplasia		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Urinary system}																		
kidney			< 6>				< 6>				< 8>				<14>			
	scar		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(17)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	chronic nephropathy		2	0	0	0	5	0	0	0	2	0	1	0	8	2	0	0
			(33)	(0)	(0)	(0)	(83)	(0)	(0)	(0)	(25)	(0)	(13)	(0)	(57)	(14)	(0)	(0)
	tubular necrosis		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(17)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	mineralization:pelvis		0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(7)	(0)	(0)
	transitional 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)	(14)	(0)	(0)	(0)

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

Organ	Findings	Group Name	Control				25 ppm				50 ppm				100 ppm			
		No. of Animals on Study	6				6				8				14			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																		
urin bladd			< 6>				< 6>				< 7>				<14>			
	papillary hyperplasia:transitional epithelium		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)
{Endocrine system}																		
pituitary			< 6>				< 6>				< 8>				<14>			
	hyperplasia		0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(17)	(0)	(0)	(13)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
thyroid			< 6>				< 6>				< 8>				<14>			
	C-cell hyperplasia		0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(7)	(0)	(0)
adrenal			< 6>				< 6>				< 8>				<14>			
	hyperplasia:medulla		0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(33)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Reproductive system}																		
testis			< 6>				< 6>				< 8>				<14>			
	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)	(7)	(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

Organ	Findings	Group Name	Control				25 ppm				50 ppm				100 ppm			
		No. of Animals on Study	6				6				8				14			
		Grade	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Reproductive system}																		
testis																		
	interstitial cell hyperplasia		<6>				<6>				<8>				<14>			
			0	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(33)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)
{Special sense organs/appendage}																		
eye																		
	hemorrhage		<6>				<6>				<8>				<14>			
			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(17)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	cataract		1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(17)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)
	retinal atrophy		0	1	0	0	1	0	0	0	0	1	0	0	1	0	0	0
			(0)	(17)	(0)	(0)	(17)	(0)	(0)	(0)	(0)	(13)	(0)	(0)	(7)	(0)	(0)	(0)
	keratitis		1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
			(17)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)
	squamous cell metaplasia:cornea		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)
{Musculoskeletal system}																		
muscle																		
	mineralization		<6>				<6>				<8>				<14>			
			0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(13)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

APPENDIX L 3

HISTOPATHOLOGICAL FINDINGS :

NON-NEOPLASTIC LESIONS : MALE

SACRIFICED ANIMALS

Organ	Findings	Group Name	Control				25 ppm				50 ppm				100 ppm			
		No. of Animals on Study	44				44				42				36			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Integumentary system/appandage}																		
skin/app			<44>				<44>				<42>				<36>			
	inflammation		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)	(0)	(0)	(0)
	squamous cell hyperplasia		0	0	0	0	1	1	0	0	0	1	0	0	0	1	0	0
			(0)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(3)	(0)	(0)
	epidermal cyst		1	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(6)	(0)	(0)
{Respiratory system}																		
nasal cavit			<44>				<44>				<42>				<36>			
	thrombus		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	goblet cell hyperplasia		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	eosinophilic change:olfactory epithelium		17	15	0	0	13	19	3	0	15	19	3	0	17	16	0	0
			(39)	(34)	(0)	(0)	(30)	(43)	(7)	(0)	(36)	(45)	(7)	(0)	(47)	(44)	(0)	(0)
	eosinophilic change:respiratory epithelium		4	0	0	0	5	0	0	0	3	0	0	0	2	0	0	0
			(9)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(6)	(0)	(0)	(0)

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

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 44				25 ppm 44				50 ppm 42				100 ppm 36			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Respiratory system}																		
nasal cavit			<44>				<44>				<42>				<36>			
	inflammation:foreign body		7 (16)	3 (7)	0 (0)	0 (0)	6 (14)	0 (0)	0 (0)	0 (0)	9 (21)	2 (5)	0 (0)	0 (0)	3 (8)	0 (0)	0 (0)	0 (0)
	inflammation:respiratory epithelium		0 (0)	1 (2)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)
	respiratory metaplasia:olfactory epithelium		0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	2 (5)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)
	respiratory metaplasia:gland		7 (16)	0 (0)	0 (0)	0 (0)	5 (11)	0 (0)	0 (0)	0 (0)	5 (12)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)
	squamous cell metaplasia:respiratory epithelium		0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
lung			<44>				<44>				<42>				<36>			
	inflammatory infiltration		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)
	granulomatous inflammation		0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	accumulation of foamy cells		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)

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

Organ	Findings	Group Name	Control				25 ppm				50 ppm				100 ppm			
		No. of Animals on Study	44				44				42				36			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
lung			<44>				<44>				<42>				<36>			
	bronchiolar-alveolar cell hyperplasia		3	2	0	0	2	1	0	0	0	0	0	0	3	0	0	0
			(7)	(5)	(0)	(0)	(5)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(8)	(0)	(0)	(0)
{Hematopoietic system}																		
bone marrow			<44>				<44>				<42>				<36>			
	granulation		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)
	increased hematopoiesis		2	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
			(5)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
spleen			<44>				<44>				<42>				<36>			
	congestion		8	0	0	0	9	0	0	0	7	0	0	0	5	0	0	0
			(18)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(17)	(0)	(0)	(0)	(14)	(0)	(0)	(0)
	deposit of hemosiderin		18	0	0	0	21	0	0	0	20	0	0	0	18	1	0	0
			(41)	(0)	(0)	(0)	(48)	(0)	(0)	(0)	(48)	(0)	(0)	(0)	(50)	(3)	(0)	(0)
	granulation		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)	(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

Organ	Findings	Group Name	Control				25 ppm				50 ppm				100 ppm			
		No. of Animals on Study	44				44				42				36			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Hematopoietic system}																		
spleen			<44>				<44>				<42>				<36>			
	fibrosis:focal		1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	increased extramedullary hematopoiesis		4	2	1	0	4	4	0	0	2	2	0	0	2	1	1	0
			(9)	(5)	(2)	(0)	(9)	(9)	(0)	(0)	(5)	(5)	(0)	(0)	(6)	(3)	(3)	(0)
{Circulatory system}																		
heart			<44>				<44>				<42>				<36>			
	thrombus		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	myocardial fibrosis		19	1	0	0	19	0	0	0	19	1	0	0	18	1	0	0
			(43)	(2)	(0)	(0)	(43)	(0)	(0)	(0)	(45)	(2)	(0)	(0)	(50)	(3)	(0)	(0)
	subendocardial fibrosis		1	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0
			(2)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
{Digestive system}																		
tooth			<44>				<44>				<42>				<36>			
	epidermal cyst		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

Organ	Findings	Group Name	Control				25 ppm				50 ppm				100 ppm			
		No. of Animals on Study	44				44				42				36			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
tongue			<44>				<44>				<42>				<36>			
	arteritis		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)
stomach			<44>				<44>				<42>				<36>			
	hyperplasia:glandular stomach		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
liver			<44>				<44>				<42>				<36>			
	herniation		6	0	0	0	2	0	0	0	3	0	0	0	3	0	0	0
			(14)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(8)	(0)	(0)	(0)
	necrosis:focal		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	granulation		1	1	0	0	3	0	0	0	4	0	0	0	0	0	0	0
			(2)	(2)	(0)	(0)	(7)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	inflammatory cell nest		0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	clear cell focus		4	3	0	0	5	1	0	0	3	1	0	0	2	3	0	0
			(9)	(7)	(0)	(0)	(11)	(2)	(0)	(0)	(7)	(2)	(0)	(0)	(6)	(8)	(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

Organ	Findings	Group Name	Control				25 ppm				50 ppm				100 ppm			
		No. of Animals on Study	44				44				42				36			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
liver			<44>				<44>				<42>				<36>			
	acidophilic cell focus		1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	basophilic cell focus		1	1	0	0	1	1	0	0	4	2	0	0	0	1	0	0
			(2)	(2)	(0)	(0)	(2)	(2)	(0)	(0)	(10)	(5)	(0)	(0)	(0)	(3)	(0)	(0)
	mixed cell focus		0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(0)	(0)	(0)	(0)
	spongiosis hepatis		3	0	0	0	3	0	0	0	3	0	0	0	0	1	0	0
			(7)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(0)	(3)	(0)	(0)
	bile duct hyperplasia		0	44	0	0	0	44	0	0	1	41	0	0	2	34	0	0
			(0)	(100)	(0)	(0)	(0)	(100)	(0)	(0)	(2)	(98)	(0)	(0)	(6)	(94)	(0)	(0)
pancreas			<44>				<44>				<42>				<36>			
	atrophy		17	5	0	0	17	5	0	0	16	4	0	0	10	4	0	0
			(39)	(11)	(0)	(0)	(39)	(11)	(0)	(0)	(38)	(10)	(0)	(0)	(28)	(11)	(0)	(0)
	arteritis		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)
	islet cell hyperplasia		0	3	0	0	0	1	0	0	0	0	0	0	0	1	0	0
			(0)	(7)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)

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

Organ	Findings	Group Name	Control				25 ppm				50 ppm				100 ppm			
		No. of Animals on Study	44				44				42				36			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																		
kidney			<44>				<44>				<42>				<36>			
	fatty change		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	cyst		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	scar		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)	(0)
	chronic nephropathy		13	29	0	0	16	25	1	0	8	30	3	0	13	21	2	0
			(30)	(66)	(0)	(0)	(36)	(57)	(2)	(0)	(19)	(71)	(7)	(0)	(36)	(58)	(6)	(0)
	papillary necrosis		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)
	mineralization:papilla		1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	mineralization:pelvis		0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(3)	(0)	(0)
	transitional cell hyperplasia		0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(3)	(0)	(0)	(0)

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

Organ	Findings	Group Name	Control				25 ppm				50 ppm				100 ppm			
		No. of Animals on Study	44				44				42				36			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																		
kidney			<44>				<44>				<42>				<36>			
	atypical tubule hyperplasia		1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
urin bladd			<44>				<44>				<42>				<35>			
	papillary hyperplasia:transitional epithelium		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)
{Endocrine system}																		
pituitary			<44>				<44>				<42>				<36>			
	angiectasis		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
	cyst		1	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
	hyperplasia		4	3	0	0	4	1	0	0	5	3	0	0	3	4	0	0
			(9)	(7)	(0)	(0)	(9)	(2)	(0)	(0)	(12)	(7)	(0)	(0)	(8)	(11)	(0)	(0)
	Rathke pouch		2	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
			(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(3)	(0)	(0)	(0)

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

Organ	Findings	Group Name	Control				25 ppm				50 ppm				100 ppm			
		No. of Animals on Study	44				44				42				36			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																		
thyroid			<44>				<44>				<42>				<36>			
	C-cell hyperplasia		9	4	0	0	12	4	0	0	12	6	0	0	8	4	0	0
			(20)	(9)	(0)	(0)	(27)	(9)	(0)	(0)	(29)	(14)	(0)	(0)	(22)	(11)	(0)	(0)
adrenal			<44>				<44>				<42>				<36>			
	hyperplasia:cortical cell		0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(3)	(0)	(0)
	hyperplasia:medulla		3	4	0	0	5	0	0	0	4	0	0	0	2	0	0	0
			(7)	(9)	(0)	(0)	(11)	(0)	(0)	(0)	(10)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
	focal fatty change: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)	(3)	(0)	(0)	(0)
{Reproductive system}																		
testis			<44>				<44>				<42>				<36>			
	mineralization		2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
			(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	arteritis		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)	(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

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 1 (%)	Control 2 (%)	Control 3 (%)	Control 4 (%)	25 ppm 1 (%)	25 ppm 2 (%)	25 ppm 3 (%)	25 ppm 4 (%)	50 ppm 1 (%)	50 ppm 2 (%)	50 ppm 3 (%)	50 ppm 4 (%)	100 ppm 1 (%)	100 ppm 2 (%)	100 ppm 3 (%)	100 ppm 4 (%)
			44				44				42				36			
{Reproductive system}																		
testis			<44>				<44>				<42>				<36>			
	interstitial cell hyperplasia		6	0	0	0	5	0	0	0	9	0	0	0	2	0	0	0
			(14)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(21)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
prostate			<44>				<44>				<42>				<35>			
	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)
	hyperplasia		8	1	0	0	7	2	0	0	9	1	0	0	7	0	0	0
			(18)	(2)	(0)	(0)	(16)	(5)	(0)	(0)	(21)	(2)	(0)	(0)	(20)	(0)	(0)	(0)
mammary gl			<44>				<44>				<42>				<36>			
	galactocele		0	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			<44>				<44>				<42>				<36>			
	cataract		1	0	0	0	4	0	0	0	3	0	0	0	1	0	0	0
			(2)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
	retinal atrophy		18	0	0	0	15	4	0	0	13	4	0	0	11	1	0	0
			(41)	(0)	(0)	(0)	(34)	(9)	(0)	(0)	(31)	(10)	(0)	(0)	(31)	(3)	(0)	(0)

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

APPENDIX L 4

HISTOPATHOLOGICAL FINDINGS :

NON-NEOPLASTIC LESIONS : FEMALE

ALL ANIMALS

Organ	Findings	Group Name	Control				25 ppm				50 ppm				100 ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Integumentary system/appandage}																		
subcutis			<50>				<50>				<50>				<50>			
	adhesion		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)
	inflammation		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)
{Respiratory system}																		
nasal cavit			<50>				<50>				<50>				<50>			
	thrombus		1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	goblet cell hyperplasia		1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	eosinophilic change:olfactory epithelium		6	32	11	0	2	38	8	0	6	29	9	0	4	35	7	0
			(12)	(64)	(22)	(0)	(4)	(76)	(16)	(0)	(12)	(58)	(18)	(0)	(8)	(70)	(14)	(0)
	eosinophilic change:respiratory epithelium		11	0	0	0	14	0	0	0	13	0	0	0	8	0	0	0
			(22)	(0)	(0)	(0)	(28)	(0)	(0)	(0)	(26)	(0)	(0)	(0)	(16)	(0)	(0)	(0)
	inflammation:foreign body		2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)

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

Organ	Findings	Group Name / Grade	Control 1 (%)	Control 2 (%)	Control 3 (%)	Control 4 (%)	25 ppm 1 (%)	25 ppm 2 (%)	25 ppm 3 (%)	25 ppm 4 (%)	50 ppm 1 (%)	50 ppm 2 (%)	50 ppm 3 (%)	50 ppm 4 (%)	100 ppm 1 (%)	100 ppm 2 (%)	100 ppm 3 (%)	100 ppm 4 (%)
		No. of Animals on Study	50				50				50				50			
{Respiratory system}																		
nasal cavit			<50>				<50>				<50>				<50>			
	inflammation:respiratory epithelium		0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)
	respiratory metaplasia:gland		3 (6)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)	5 (10)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)
larynx			<50>				<50>				<50>				<50>			
	inflammation		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
lung			<50>				<50>				<50>				<50>			
	inflammatory infiltration		1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)
	inflammation:foreign body		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)
{Hematopoietic system}																		
bone marrow			<50>				<50>				<50>				<50>			
	granulation		4 (8)	1 (2)	0 (0)	0 (0)	4 (8)	0 (0)	0 (0)	0 (0)	6 (12)	1 (2)	0 (0)	0 (0)	2 (4)	1 (2)	0 (0)	0 (0)

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

Organ	Findings	Group Name	Control				25 ppm				50 ppm				100 ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Hematopoietic system}																		
bone marrow			<50>				<50>				<50>				<50>			
	increased hematopoiesis		3 (6)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)	6 (12)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)
	granulopoiesis:increased		1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
spleen			<50>				<50>				<50>				<50>			
	congestion		2 (4)	0 (0)	0 (0)	0 (0)	4 (8)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)	3 (6)	0 (0)	0 (0)	0 (0)
	deposit of hemosiderin		11 (22)	26 (52)	0 (0)	0 (0)	17 (34)	24 (48)	0 (0)	0 (0)	15 (30)	17 (34)	0 (0)	0 (0)	8 (16)	24 (48)	0 (0)	0 (0)
	increased extramedullary hematopoiesis		7 (14)	2 (4)	3 (6)	0 (0)	5 (10)	1 (2)	0 (0)	0 (0)	5 (10)	5 (10)	1 (2)	0 (0)	8 (16)	3 (6)	1 (2)	0 (0)
{Circulatory system}																		
heart			<50>				<50>				<50>				<50>			
	thrombus		1 (2)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	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 b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name	Control				25 ppm				50 ppm				100 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
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Circulatory system}																		
heart			<50>				<50>				<50>				<50>			
	inflammatory cell nest		0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	myocardial fibrosis		12	0	0	0	8	0	0	0	7	0	0	0	8	0	0	0
			(24)	(0)	(0)	(0)	(16)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(16)	(0)	(0)	(0)
	subendocardial fibrosis		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)
{Digestive system}																		
stomach			<50>				<50>				<50>				<50>			
	erosion:forestomach		0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(4)	(0)	(0)	(0)
	ulcer:forestomach		2	2	0	0	0	1	0	0	1	2	0	0	1	3	0	0
			(4)	(4)	(0)	(0)	(0)	(2)	(0)	(0)	(2)	(4)	(0)	(0)	(2)	(6)	(0)	(0)
	hyperplasia:forestomach		2	1	0	0	1	2	0	0	1	0	0	0	0	1	0	0
			(4)	(2)	(0)	(0)	(2)	(4)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(2)	(0)	(0)
	erosion:glandular stomach		1	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0
			(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(6)	(0)	(0)	(0)

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

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 50				25 ppm 50				50 ppm 50				100 ppm 50			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Digestive system}																		
stomach			<50>				<50>				<50>				<50>			
	ulcer:glandular stomach		0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	hyperplasia:glandular stomach		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)	0 (0)	0 (0)
large intes			<50>				<50>				<50>				<50>			
	inflammation		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
liver			<50>				<50>				<50>				<50>			
	herniation		11 (22)	0 (0)	0 (0)	0 (0)	9 (18)	0 (0)	0 (0)	0 (0)	7 (14)	0 (0)	0 (0)	0 (0)	9 (18)	0 (0)	0 (0)	0 (0)
	necrosis:central		1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	1 (2)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
	necrosis:focal		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)	1 (2)	0 (0)	0 (0)
	fatty change		2 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

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

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 50 1 (%)	Control 50 2 (%)	Control 50 3 (%)	Control 50 4 (%)	25 ppm 50 1 (%)	25 ppm 50 2 (%)	25 ppm 50 3 (%)	25 ppm 50 4 (%)	50 ppm 50 1 (%)	50 ppm 50 2 (%)	50 ppm 50 3 (%)	50 ppm 50 4 (%)	100 ppm 50 1 (%)	100 ppm 50 2 (%)	100 ppm 50 3 (%)	100 ppm 50 4 (%)
{Digestive system}																		
liver		<50>					<50>				<50>				<50>			
	degeneration: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)	1 (2)	0 (0)	0 (0)	0 (0)
	granulation		8 (16)	3 (6)	0 (0)	0 (0)	8 (16)	5 (10)	0 (0)	0 (0)	6 (12)	3 (6)	0 (0)	0 (0)	8 (16)	4 (8)	0 (0)	0 (0)
	fibrosis		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)
	clear cell focus		2 (4)	0 (0)	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)
	acidophilic cell focus		0 (0)	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)
	basophilic cell focus		23 (46)	3 (6)	0 (0)	0 (0)	20 (40)	1 (2)	0 (0)	0 (0)	18 (36)	1 (2)	0 (0)	0 (0)	21 (42)	1 (2)	0 (0)	0 (0)
	bile duct hyperplasia		8 (16)	1 (2)	0 (0)	0 (0)	4 (8)	7 (14)	0 (0)	0 (0)	7 (14)	4 (8)	0 (0)	0 (0)	3 (6)	3 (6)	0 (0)	0 (0)
pancreas		<50>					<50>				<50>				<50>			
	atrophy		1 (2)	4 (8)	0 (0)	0 (0)	4 (8)	0 (0)	0 (0)	0 (0)	3 (6)	1 (2)	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 b : Number of animals with lesion
(c) c : b / a * 100
Significant difference ; * : P ≦ 0.05 ** : P ≦ 0.01 Test of Chi Square

Organ	Findings	Group Name	Control				25 ppm				50 ppm				100 ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
pancreas			<50>				<50>				<50>				<50>			
	islet 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)
{Urinary system}																		
kidney			<50>				<50>				<50>				<50>			
	cyst		0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	deposit of hemosiderin		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	inflammatory cell nest		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	chronic nephropathy		12	2	0	0	17	2	0	0	18	1	0	0	18	3	0	0
			(24)	(4)	(0)	(0)	(34)	(4)	(0)	(0)	(36)	(2)	(0)	(0)	(36)	(6)	(0)	(0)
	tubular necrosis		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)
	mineralization:papilla		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)

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

Organ	Findings	Group Name	Control				25 ppm				50 ppm				100 ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Urinary system}																		
kidney			<50>				<50>				<50>				<50>			
	mineralization:pelvis		2 (4)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)
	desquamation:pelvis		0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
	transitional cell hyperplasia		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)
	atypical tubule hyperplasia		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)
	dilated pelvis		2 (4)	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)	0 (0)
urin bladd			<50>				<50>				<50>				<50>			
	nodular hyperplasia:transitional epithelium		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
{Endocrine system}																		
pituitary			<50>				<50>				<50>				<50>			
	angiectasis		3 (6)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)

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

Organ	Findings	Group Name	Control				25 ppm				50 ppm				100 ppm			
		No. of Animals on Study	50				50				50				50			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																		
pituitary			<50>				<50>				<50>				<50>			
	cyst		4	0	0	0	3	0	0	0	1	0	0	0	3	0	0	0
			(8)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(6)	(0)	(0)	(0)
	hyperplasia		7	4	0	0	6	2	0	0	5	4	0	0	9	5	0	0
			(14)	(8)	(0)	(0)	(12)	(4)	(0)	(0)	(10)	(8)	(0)	(0)	(18)	(10)	(0)	(0)
	Rathke pouch		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)
thyroid			<50>				<50>				<50>				<50>			
	C-cell hyperplasia		7	5	0	0	5	5	0	0	6	3	0	0	5	3	0	0
			(14)	(10)	(0)	(0)	(10)	(10)	(0)	(0)	(12)	(6)	(0)	(0)	(10)	(6)	(0)	(0)
adrenal			<50>				<50>				<50>				<50>			
	hyperplasia:cortical cell		0	0	0	0	1	0	0	0	2	0	0	0	0	1	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(2)	(0)	(0)
	hyperplasia:medulla		0	0	0	0	0	1	0	0	0	0	0	0	1	2	0	0
			(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(4)	(0)	(0)
	focal fatty change:cortex		4	0	0	0	1	1	0	0	4	1	0	0	4	0	0	0
			(8)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(8)	(2)	(0)	(0)	(8)	(0)	(0)	(0)

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

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 50				25 ppm 50				50 ppm 50				100 ppm 50			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Reproductive system}																		
ovary			<50>				<50>				<50>				<50>			
	cyst		2 (4)	0 (0)	0 (0)	0 (0)	6 (12)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
uterus			<50>				<50>				<50>				<50>			
	fibrosis		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)
	hyperplasia:epithelium		0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)
	hyperplasia:gland		0 (0)	0 (0)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)	1 (2)	1 (2)	0 (0)	0 (0)	1 (2)	0 (0)	0 (0)	0 (0)
	cystic endometrial hyperplasia		1 (2)	0 (0)	0 (0)	0 (0)	4 (8)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	4 (8)	0 (0)	0 (0)	0 (0)
mammary gl			<50>				<50>				<50>				<50>			
	galactocele		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)
{Special sense organs/appendage}																		
eye			<50>				<50>				<50>				<50>			
	cataract		5 (10)	0 (0)	0 (0)	0 (0)	4 (8)	0 (0)	0 (0)	0 (0)	7 (14)	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

Organ	Findings	Group Name	Control				25 ppm				50 ppm				100 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
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Special sense organs/appendage}																		
eye			<50>				<50>				<50>				<50>			
	retinal atrophy		14	5	0	0	15	3	0	0	8	5	0	0	11	0	0	0 *
			(28)	(10)	(0)	(0)	(30)	(6)	(0)	(0)	(16)	(10)	(0)	(0)	(22)	(0)	(0)	(0)
nasolacr d			<50>				<50>				<50>				<50>			
	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)
{Musculoskeletal system}																		
muscle			<50>				<50>				<50>				<50>			
	mineralization		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)
bone			<50>				<50>				<50>				<50>			
	osteosclerosis		4	0	0	0	4	3	0	0	4	1	0	0	5	1	0	0
			(8)	(0)	(0)	(0)	(8)	(6)	(0)	(0)	(8)	(2)	(0)	(0)	(10)	(2)	(0)	(0)
{Body cavities}																		
mediastinum			<50>				<50>				<50>				<50>			
	inflammatory infiltration		0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(2)	(0)	(0)

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

Organ	Findings	Group Name	Control				25 ppm				50 ppm				100 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
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Body cavities}																		
peritoneum			<50>				<50>				<50>				<50>			
	adhesion		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

APPENDIX L 5

HISTOPATHOLOGICAL FINDINGS :

NON-NEOPLASTIC LESIONS : FEMALE

DEAD AND MORIBUND ANIMALS

Organ	Findings	Group Name	Control				25 ppm				50 ppm				100 ppm			
		No. of Animals on Study	13				5				14				11			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Integumentary system/appandage}																		
subcutis			<13>				< 5>				<14>				<11>			
	adhesion		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	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)	(9)	(0)	(0)
{Respiratory system}																		
nasal cavit			<13>				< 5>				<14>				<11>			
	thrombus		1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(9)	(0)	(0)	(0)
	eosinophilic change:olfactory epithelium		4	8	1	0	0	4	0	0	2	5	1	0	1	5	1	0
			(31)	(62)	(8)	(0)	(0)	(80)	(0)	(0)	(14)	(36)	(7)	(0)	(9)	(45)	(9)	(0)
	eosinophilic change:respiratory epithelium		1	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0
			(8)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	inflammation:respiratory epithelium		0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0
			(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(9)	(0)	(0)
	respiratory metaplasia:gland		0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

Organ	Findings	Group Name	Control				25 ppm				50 ppm				100 ppm			
		No. of Animals on Study	13				5				14				11			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
larynx			<13>				< 5>				<14>				<11>			
	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)	(9)	(0)	(0)	(0)
lung			<13>				< 5>				<14>				<11>			
	inflammatory infiltration		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(9)	(0)	(0)
	inflammation:foreign body		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Hematopoietic system}																		
bone marrow			<13>				< 5>				<14>				<11>			
	increased hematopoiesis		3	0	0	0	0	0	0	0	5	0	0	0	2	0	0	0
			(23)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(36)	(0)	(0)	(0)	(18)	(0)	(0)	(0)
	granulopoiesis:increased		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
spleen			<13>				< 5>				<14>				<11>			
	deposit of hemosiderin		1	3	0	0	0	3	0	0	4	2	0	0	0	3	0	0
			(8)	(23)	(0)	(0)	(0)	(60)	(0)	(0)	(29)	(14)	(0)	(0)	(0)	(27)	(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

Organ	Findings	Group Name	Control				25 ppm				50 ppm				100 ppm			
		No. of Animals on Study	13				5				14				11			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Hematopoietic system}																		
spleen			<13>				< 5>				<14>				<11>			
	increased extramedullary hematopoiesis		4	1	3	0	0	0	0	0	0	4	1	0 *	0	2	1	0
			(31)	(8)	(23)	(0)	(0)	(0)	(0)	(0)	(0)	(29)	(7)	(0)	(0)	(18)	(9)	(0)
{Circulatory system}																		
heart			<13>				< 5>				<14>				<11>			
	thrombus		1	1	0	0	0	0	0	0	0	0	0	0	1	2	0	0
			(8)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(9)	(18)	(0)	(0)
	inflammatory cell nest		0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(9)	(0)	(0)	(0)
	myocardial fibrosis		3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(23)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(9)	(0)	(0)	(0)
{Digestive system}																		
stomach			<13>				< 5>				<14>				<11>			
	erosion:forestomach		0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(18)	(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

Organ	Findings	Group Name	Control				25 ppm				50 ppm				100 ppm			
		No. of Animals on Study	13				5				14				11			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
stomach			<13>				< 5>				<14>				<11>			
	ulcer:forestomach		2	2	0	0	0	1	0	0	1	1	0	0	1	3	0	0
			(15)	(15)	(0)	(0)	(0)	(20)	(0)	(0)	(7)	(7)	(0)	(0)	(9)	(27)	(0)	(0)
	hyperplasia:forestomach		2	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0
			(15)	(8)	(0)	(0)	(20)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(9)	(0)	(0)
	erosion:glandular stomach		1	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0
			(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(27)	(0)	(0)	(0)
	ulcer:glandular stomach		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia:glandular stomach		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
liver			<13>				< 5>				<14>				<11>			
	herniation		5	0	0	0	1	0	0	0	4	0	0	0	1	0	0	0
			(38)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(29)	(0)	(0)	(0)	(9)	(0)	(0)	(0)
	necrosis:central		1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	0
			(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(7)	(0)	(0)	(9)	(0)	(0)	(0)
	necrosis:focal		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(9)	(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

Organ	Findings	Group Name	Control				25 ppm				50 ppm				100 ppm			
		No. of Animals on Study	13				5				14				11			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
liver			<13>				< 5>				<14>				<11>			
	fatty change		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	degeneration:central		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)	(9)	(0)	(0)	(0)
	basophilic cell focus		2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(15)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	bile duct hyperplasia		2	0	0	0	1	1	0	0	1	1	0	0	1	2	0	0
			(15)	(0)	(0)	(0)	(20)	(20)	(0)	(0)	(7)	(7)	(0)	(0)	(9)	(18)	(0)	(0)
pancreas			<13>				< 5>				<14>				<11>			
	atrophy		0	1	0	0	1	0	0	0	0	0	0	0	2	0	0	0
			(0)	(8)	(0)	(0)	(20)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(18)	(0)	(0)	(0)
{Urinary system}																		
kidney			<13>				< 5>				<14>				<11>			
	deposit of hemosiderin		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

Organ	Findings	Group Name	Control				25 ppm				50 ppm				100 ppm			
		No. of Animals on Study	13				5				14				11			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																		
kidney			<13>				< 5>				<14>				<11>			
	inflammatory cell nest		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	chronic nephropathy		0	1	0	0	1	0	0	0	1	1	0	0	0	0	0	0
			(0)	(8)	(0)	(0)	(20)	(0)	(0)	(0)	(7)	(7)	(0)	(0)	(0)	(0)	(0)	(0)
	tubular necrosis		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)	(9)	(0)	(0)	(0)
	mineralization:pelvis		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)	(9)	(0)	(0)	(0)
	transitional cell hyperplasia		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	dilated pelvis		2	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0
			(15)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(0)	(0)	(0)
urin bladd			<13>				< 5>				<14>				<11>			
	nodular hyperplasia:transitional epithelium		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Endocrine system}																		
pituitary			<13>				< 5>				<14>				<11>			
	angiectasis		2	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
			(15)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(18)	(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

Organ	Findings	Group Name	Control				25 ppm				50 ppm				100 ppm			
		No. of Animals on Study	13				5				14				11			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																		
pituitary			<13>				< 5>				<14>				<11>			
	cyst		1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0
			(8)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(9)	(0)	(0)	(0)
	hyperplasia		0	1	0	0	0	0	0	0	1	0	0	0	1	1	0	0
			(0)	(8)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(9)	(9)	(0)	(0)
	Rathke pouch		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
thyroid			<13>				< 5>				<14>				<11>			
	C-cell hyperplasia		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)
adrenal			<13>				< 5>				<14>				<11>			
	hyperplasia:cortical 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)	(9)	(0)	(0)
	focal fatty change:cortex		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Reproductive system}																		
ovary			<13>				< 5>				<14>				<11>			
	cyst		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

Organ	Findings	Group Name	Control				25 ppm				50 ppm				100 ppm			
		No. of Animals on Study	13				5				14				11			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Reproductive system}																		
uterus			<13>				< 5>				<14>				<11>			
	cystic endometrial 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)	(18)	(0)	(0)	(0)
{Special sense organs/appendage}																		
eye			<13>				< 5>				<14>				<11>			
	cataract		0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(14)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	retinal atrophy		0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(20)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(0)	(0)	(0)
nasolacr d			<13>				< 5>				<14>				<11>			
	inflammation		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
{Musculoskeletal system}																		
muscle			<13>				< 5>				<14>				<11>			
	mineralization		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)	(18)	(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

Organ	Findings	Group Name	Control				25 ppm				50 ppm				100 ppm			
		No. of Animals on Study	13				5				14				11			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Musculoskeletal system}																		
bone			<13>				< 5>				<14>				<11>			
	osteosclerosis		1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
			(8)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(9)	(0)	(0)	(0)
{Body cavities}																		
mediastinum			<13>				< 5>				<14>				<11>			
	inflammatory infiltration		0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(9)	(9)	(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

APPENDIX L 6

HISTOPATHOLOGICAL FINDINGS :

NON-NEOPLASTIC LESIONS : FEMALE

SACRIFICED ANIMALS

Organ	Findings	Group Name	Control				25 ppm				50 ppm				100 ppm			
		No. of Animals on Study	37				45				36				39			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Respiratory system}																		
nasal cavit			<37>				<45>				<36>				<39>			
	goblet cell hyperplasia		1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
			(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
	eosinophilic change:olfactory epithelium		2	24	10	0	2	34	8	0	4	24	8	0	3	30	6	0
			(5)	(65)	(27)	(0)	(4)	(76)	(18)	(0)	(11)	(67)	(22)	(0)	(8)	(77)	(15)	(0)
	eosinophilic change:respiratory epithelium		10	0	0	0	13	0	0	0	11	0	0	0	8	0	0	0
			(27)	(0)	(0)	(0)	(29)	(0)	(0)	(0)	(31)	(0)	(0)	(0)	(21)	(0)	(0)	(0)
	inflammation:foreign body		2	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)	(3)	(0)	(0)	(0)
	respiratory metaplasia:gland		3	0	0	0	2	0	0	0	4	0	0	0	3	0	0	0
			(8)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(8)	(0)	(0)	(0)
lung			<37>				<45>				<36>				<39>			
	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)
{Hematopoietic system}																		
bone marrow			<37>				<45>				<36>				<39>			
	granulation		4	1	0	0	4	0	0	0	6	1	0	0	2	1	0	0
			(11)	(3)	(0)	(0)	(9)	(0)	(0)	(0)	(17)	(3)	(0)	(0)	(5)	(3)	(0)	(0)

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

Organ	Findings	Group Name / No. of Animals on Study / Grade	Control 37				25 ppm 45				50 ppm 36				100 ppm 39			
			1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)	1 (%)	2 (%)	3 (%)	4 (%)
{Hematopoietic system}																		
bone marrow			<37>				<45>				<36>				<39>			
	increased hematopoiesis		0 (0)	0 (0)	0 (0)	0 (0)	2 (4)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)	1 (3)	0 (0)	0 (0)	0 (0)
spleen			<37>				<45>				<36>				<39>			
	congestion		2 (5)	0 (0)	0 (0)	0 (0)	4 (9)	0 (0)	0 (0)	0 (0)	3 (8)	0 (0)	0 (0)	0 (0)	3 (8)	0 (0)	0 (0)	0 (0)
	deposit of hemosiderin		10 (27)	23 (62)	0 (0)	0 (0)	17 (38)	21 (47)	0 (0)	0 (0)	11 (31)	15 (42)	0 (0)	0 (0)	8 (21)	21 (54)	0 (0)	0 (0)
	increased extramedullary hematopoiesis		3 (8)	1 (3)	0 (0)	0 (0)	5 (11)	1 (2)	0 (0)	0 (0)	5 (14)	1 (3)	0 (0)	0 (0)	8 (21)	1 (3)	0 (0)	0 (0)
{Circulatory system}																		
heart			<37>				<45>				<36>				<39>			
	myocardial fibrosis		9 (24)	0 (0)	0 (0)	0 (0)	8 (18)	0 (0)	0 (0)	0 (0)	7 (19)	0 (0)	0 (0)	0 (0)	7 (18)	0 (0)	0 (0)	0 (0)
	subendocardial fibrosis		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)

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

Organ	Findings	Group Name	Control				25 ppm				50 ppm				100 ppm			
		No. of Animals on Study	37				45				36				39			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
stomach			<37>				<45>				<36>				<39>			
	ulcer:forestomach		0	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)
	hyperplasia:forestomach		0	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(4)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia:glandular stomach		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
large intes			<37>				<45>				<36>				<39>			
	inflammation		0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)
liver			<37>				<45>				<36>				<39>			
	herniation		6	0	0	0	8	0	0	0	3	0	0	0	8	0	0	0
			(16)	(0)	(0)	(0)	(18)	(0)	(0)	(0)	(8)	(0)	(0)	(0)	(21)	(0)	(0)	(0)
	necrosis:focal		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	fatty change		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

Organ	Findings	Group Name	Control				25 ppm				50 ppm				100 ppm			
		No. of Animals on Study	37				45				36				39			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Digestive system}																		
liver			<37>				<45>				<36>				<39>			
	granulation		8	3	0	0	8	5	0	0	6	3	0	0	8	4	0	0
			(22)	(8)	(0)	(0)	(18)	(11)	(0)	(0)	(17)	(8)	(0)	(0)	(21)	(10)	(0)	(0)
	fibrosis		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	clear cell focus		2	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0
			(5)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)
	acidophilic cell focus		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)
	basophilic cell focus		21	3	0	0	19	1	0	0	18	1	0	0	21	1	0	0
			(57)	(8)	(0)	(0)	(42)	(2)	(0)	(0)	(50)	(3)	(0)	(0)	(54)	(3)	(0)	(0)
	bile duct hyperplasia		6	1	0	0	3	6	0	0	6	3	0	0	2	1	0	0
			(16)	(3)	(0)	(0)	(7)	(13)	(0)	(0)	(17)	(8)	(0)	(0)	(5)	(3)	(0)	(0)
pancreas			<37>				<45>				<36>				<39>			
	atrophy		1	3	0	0	3	0	0	0	3	1	0	0	3	0	0	0
			(3)	(8)	(0)	(0)	(7)	(0)	(0)	(0)	(8)	(3)	(0)	(0)	(8)	(0)	(0)	(0)
	islet 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)

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

Organ	Findings	Group Name	Control				25 ppm				50 ppm				100 ppm			
		No. of Animals on Study	37				45				36				39			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Urinary system}																		
kidney			<37>				<45>				<36>				<39>			
	cyst		0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
	chronic nephropathy		12	1	0	0	16	2	0	0	17	0	0	0	18	3	0	0
			(32)	(3)	(0)	(0)	(36)	(4)	(0)	(0)	(47)	(0)	(0)	(0)	(46)	(8)	(0)	(0)
	mineralization:papilla		0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	mineralization:pelvis		2	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
			(5)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(3)	(0)	(0)	(0)
	desquamation:pelvis		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)
	atypical tubule 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)	(5)	(0)	(0)	(0)
{Endocrine system}																		
pituitary			<37>				<45>				<36>				<39>			
	angiectasis		1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
			(3)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

Organ	Findings	Group Name	Control				25 ppm				50 ppm				100 ppm			
		No. of Animals on Study	37				45				36				39			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Endocrine system}																		
pituitary			<37>				<45>				<36>				<39>			
	cyst		3	0	0	0	2	0	0	0	0	0	0	0	2	0	0	0
			(8)	(0)	(0)	(0)	(4)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)
	hyperplasia		7	3	0	0	6	2	0	0	4	4	0	0	8	4	0	0
			(19)	(8)	(0)	(0)	(13)	(4)	(0)	(0)	(11)	(11)	(0)	(0)	(21)	(10)	(0)	(0)
thyroid			<37>				<45>				<36>				<39>			
	C-cell hyperplasia		7	5	0	0	5	5	0	0	6	2	0	0	5	3	0	0
			(19)	(14)	(0)	(0)	(11)	(11)	(0)	(0)	(17)	(6)	(0)	(0)	(13)	(8)	(0)	(0)
adrenal			<37>				<45>				<36>				<39>			
	hyperplasia:cortical cell		0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia:medulla		0	0	0	0	0	1	0	0	0	0	0	0	1	2	0	0
			(0)	(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(5)	(0)	(0)
	focal fatty change:cortex		3	0	0	0	1	1	0	0	4	1	0	0	4	0	0	0
			(8)	(0)	(0)	(0)	(2)	(2)	(0)	(0)	(11)	(3)	(0)	(0)	(10)	(0)	(0)	(0)
{Reproductive system}																		
ovary			<37>				<45>				<36>				<39>			
	cyst		2	0	0	0	5	0	0	0	2	0	0	0	1	0	0	0
			(5)	(0)	(0)	(0)	(11)	(0)	(0)	(0)	(6)	(0)	(0)	(0)	(3)	(0)	(0)	(0)

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

Organ	Findings	Group Name	Control				25 ppm				50 ppm				100 ppm			
		No. of Animals on Study	37				45				36				39			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Reproductive system}																		
uterus			<37>				<45>				<36>				<39>			
	fibrosis		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
	hyperplasia:epithelium		0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(5)	(0)	(0)	(0)
	hyperplasia:gland		0	0	0	0	1	0	0	0	1	1	0	0	1	0	0	0
			(0)	(0)	(0)	(0)	(2)	(0)	(0)	(0)	(3)	(3)	(0)	(0)	(3)	(0)	(0)	(0)
	cystic endometrial hyperplasia		1	0	0	0	4	0	0	0	0	0	0	0	2	0	0	0
			(3)	(0)	(0)	(0)	(9)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(5)	(0)	(0)	(0)
mammary gl			<37>				<45>				<36>				<39>			
	galactocele		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)
{Special sense organs/appendage}																		
eye			<37>				<45>				<36>				<39>			
	cataract		5	0	0	0	3	0	0	0	5	0	0	0	0	0	0	0
			(14)	(0)	(0)	(0)	(7)	(0)	(0)	(0)	(14)	(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

Organ	Findings	Group Name	Control				25 ppm				50 ppm				100 ppm			
		No. of Animals on Study	37				45				36				39			
		Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
			(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
{Special sense organs/appendage}																		
eye			<37>				<45>				<36>				<39>			
	retinal atrophy		14	5	0	0	15	2	0	0	8	4	0	0	11	0	0	0 *
			(38)	(14)	(0)	(0)	(33)	(4)	(0)	(0)	(22)	(11)	(0)	(0)	(28)	(0)	(0)	(0)
{Musculoskeletal system}																		
bone			<37>				<45>				<36>				<39>			
	osteosclerosis		3	0	0	0	4	3	0	0	3	1	0	0	4	1	0	0
			(8)	(0)	(0)	(0)	(9)	(7)	(0)	(0)	(8)	(3)	(0)	(0)	(10)	(3)	(0)	(0)
{Body cavities}																		
peritoneum			<37>				<45>				<36>				<39>			
	adhesion		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
			(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(3)	(0)	(0)	(0)	(0)	(0)	(0)	(0)

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

APPENDIX M 1

NUMBER OF ANIMALS WITH TUMORS

AND NUMBER OF TUMORS-TIME RELATED : MALE

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

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

Time-related Weeks	Items	Group Name	Control	25 ppm	50 ppm	100 ppm
0 - 52	NO. OF EXAMINED ANIMALS		1	0	1	0
	NO. OF ANIMALS WITH TUMORS		1	0	1	0
	NO. OF ANIMALS WITH SINGLE TUMORS		1	0	1	0
	NO. OF ANIMALS WITH MULTIPLE TUMORS		0	0	0	0
	NO. OF BENIGN TUMORS		0	0	0	0
	NO. OF MALIGNANT TUMORS		1	0	1	0
	NO. OF TOTAL TUMORS		1	0	1	0
53 - 78	NO. OF EXAMINED ANIMALS		1	1	2	0
	NO. OF ANIMALS WITH TUMORS		1	1	2	0
	NO. OF ANIMALS WITH SINGLE TUMORS		1	1	1	0
	NO. OF ANIMALS WITH MULTIPLE TUMORS		0	0	1	0
	NO. OF BENIGN TUMORS		0	0	1	0
	NO. OF MALIGNANT TUMORS		1	1	2	0
	NO. OF TOTAL TUMORS		1	1	3	0
79 - 104	NO. OF EXAMINED ANIMALS		4	5	5	14
	NO. OF ANIMALS WITH TUMORS		4	5	5	14
	NO. OF ANIMALS WITH SINGLE TUMORS		1	0	1	2
	NO. OF ANIMALS WITH MULTIPLE TUMORS		3	5	4	12
	NO. OF BENIGN TUMORS		4	6	7	18
	NO. OF MALIGNANT TUMORS		3	4	3	9
	NO. OF TOTAL TUMORS		7	10	10	27
105 - 105	NO. OF EXAMINED ANIMALS		44	44	42	36
	NO. OF ANIMALS WITH TUMORS		44	44	41	36
	NO. OF ANIMALS WITH SINGLE TUMORS		16	21	17	15
	NO. OF ANIMALS WITH MULTIPLE TUMORS		28	23	24	21
	NO. OF BENIGN TUMORS		77	73	67	63
	NO. OF MALIGNANT TUMORS		9	7	8	4
	NO. OF TOTAL TUMORS		86	80	75	67

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1
SEX : MALE

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

Time-related Weeks	Items	Group Name	Control	25 ppm	50 ppm	100 ppm
0 - 105	NO. OF EXAMINED ANIMALS		50	50	50	50
	NO. OF ANIMALS WITH TUMORS		50	50	49	50
	NO. OF ANIMALS WITH SINGLE TUMORS		19	22	20	17
	NO. OF ANIMALS WITH MULTIPLE TUMORS		31	28	29	33
	NO. OF BENIGN TUMORS		81	79	75	81
	NO. OF MALIGNANT TUMORS		14	12	14	13
	NO. OF TOTAL TUMORS		95	91	89	94

APPENDIX M 2

NUMBER OF ANIMALS WITH TUMORS

AND NUMBER OF TUMORS-TIME RELATED : FEMALE

STUDY NO. : 0535
ANIMAL : RAT F344/DuCrlCrlj[F344/DuCrj]
REPORT TYPE : A1
SEX : FEMALE

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

Time-related Weeks	Items	Group Name	Control	25 ppm	50 ppm	100 ppm
0 - 52	NO. OF EXAMINED ANIMALS		0	0	0	0
	NO. OF ANIMALS WITH TUMORS		0	0	0	0
	NO. OF ANIMALS WITH SINGLE TUMORS		0	0	0	0
	NO. OF ANIMALS WITH MULTIPLE TUMORS		0	0	0	0
	NO. OF BENIGN TUMORS		0	0	0	0
	NO. OF MALIGNANT TUMORS		0	0	0	0
	NO. OF TOTAL TUMORS		0	0	0	0
53 - 78	NO. OF EXAMINED ANIMALS		1	0	4	2
	NO. OF ANIMALS WITH TUMORS		1	0	3	2
	NO. OF ANIMALS WITH SINGLE TUMORS		1	0	3	2
	NO. OF ANIMALS WITH MULTIPLE TUMORS		0	0	0	0
	NO. OF BENIGN TUMORS		0	0	0	1
	NO. OF MALIGNANT TUMORS		1	0	3	1
	NO. OF TOTAL TUMORS		1	0	3	2
79 - 104	NO. OF EXAMINED ANIMALS		12	5	10	9
	NO. OF ANIMALS WITH TUMORS		12	5	9	9
	NO. OF ANIMALS WITH SINGLE TUMORS		6	3	8	5
	NO. OF ANIMALS WITH MULTIPLE TUMORS		6	2	1	4
	NO. OF BENIGN TUMORS		9	4	2	8
	NO. OF MALIGNANT TUMORS		10	3	8	6
	NO. OF TOTAL TUMORS		19	7	10	14
105 - 105	NO. OF EXAMINED ANIMALS		37	45	36	39
	NO. OF ANIMALS WITH TUMORS		22	25	26	26
	NO. OF ANIMALS WITH SINGLE TUMORS		17	12	15	12
	NO. OF ANIMALS WITH MULTIPLE TUMORS		5	13	11	14
	NO. OF BENIGN TUMORS		27	34	32	37
	NO. OF MALIGNANT TUMORS		5	5	9	7
	NO. OF TOTAL TUMORS		32	39	41	44

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

Time-related Weeks	Items	Group Name	Control	25 ppm	50 ppm	100 ppm
0 - 105	NO. OF EXAMINED ANIMALS		50	50	50	50
	NO. OF ANIMALS WITH TUMORS		35	30	38	37
	NO. OF ANIMALS WITH SINGLE TUMORS		24	15	26	19
	NO. OF ANIMALS WITH MULTIPLE TUMORS		11	15	12	18
	NO. OF BENIGN TUMORS		36	38	34	46
	NO. OF MALIGNANT TUMORS		16	8	20	14
	NO. OF TOTAL TUMORS		52	46	54	60

APPENDIX N 1

HISTOPATHOLOGICAL FINDINGS :

NEOPLASTIC LESIONS : MALE

Organ	Findings	Group Name / No. of animals on Study	Control 50	25 ppm 50	50 ppm 50	100 ppm 50
{Integumentary system/appandage}						
skin/app			<50>	<50>	<50>	<50>
	trichoepithelioma		1 (2%)	1 (2%)	0 (0%)	0 (0%)
	keratoacanthoma		1 (2%)	0 (0%)	0 (0%)	2 (4%)
	trichoepithelioma:malignant		1 (2%)	1 (2%)	1 (2%)	2 (4%)
subcutis			<50>	<50>	<50>	<50>
	fibroma		1 (2%)	8 (16%)	2 (4%)	3 (6%)
	leiomyoma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
	fibrosarcoma		1 (2%)	0 (0%)	1 (2%)	2 (4%)
{Respiratory system}						
lung			<50>	<50>	<50>	<50>
	bronchiolar-alveolar adenoma		6 (12%)	3 (6%)	2 (4%)	4 (8%)
	bronchiolar-alveolar carcinoma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
{Hematopoietic system}						
bone marrow			<50>	<50>	<50>	<50>
	xanthoma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
thymus			<50>	<50>	<50>	<50>
	thymoma:benign		0 (0%)	0 (0%)	1 (2%)	0 (0%)
spleen			<50>	<50>	<50>	<50>
	mononuclear cell leukemia		5 (10%)	5 (10%)	6 (12%)	4 (8%)

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

Organ	Findings	Group Name / No. of animals on Study	Control 50	25 ppm 50	50 ppm 50	100 ppm 50
{Digestive system}						
oral cavity			<50>	<50>	<50>	<50>
	squamous cell papilloma		0 (0%)	0 (0%)	2 (4%)	0 (0%)
salivary gl			<50>	<50>	<50>	<50>
	adenoma		0 (0%)	1 (2%)	0 (0%)	0 (0%)
stomach			<50>	<50>	<50>	<50>
	squamous cell papilloma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
	squamous cell carcinoma		0 (0%)	0 (0%)	1 (2%)	0 (0%)
	osteosarcoma		0 (0%)	1 (2%)	0 (0%)	0 (0%)
liver			<50>	<50>	<50>	<50>
	hepatocellular adenoma		0 (0%)	0 (0%)	1 (2%)	1 (2%)
	hepatocellular carcinoma		1 (2%)	1 (2%)	0 (0%)	0 (0%)
pancreas			<50>	<50>	<50>	<50>
	islet cell adenoma		3 (6%)	3 (6%)	2 (4%)	0 (0%)
{Urinary system}						
kidney			<50>	<50>	<50>	<50>
	renal cell adenoma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
	hemangiosarcoma		0 (0%)	0 (0%)	1 (2%)	0 (0%)
{Endocrine system}						
pituitary			<50>	<50>	<50>	<50>
	adenoma		6 (12%)	4 (8%)	7 (14%)	8 (16%)

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

Organ	Findings	Group Name / No. of animals on Study	Control 50	25 ppm 50	50 ppm 50	100 ppm 50
{Endocrine system}						
thyroid			<50>	<50>	<50>	<50>
	C-cell adenoma		3 (6%)	6 (12%)	8 (16%)	6 (12%)
	follicular adenoma		0 (0%)	0 (0%)	1 (2%)	0 (0%)
	C-cell carcinoma		1 (2%)	1 (2%)	1 (2%)	0 (0%)
adrenal			<50>	<50>	<50>	<50>
	pheochromocytoma		2 (4%)	2 (4%)	3 (6%)	3 (6%)
	cortical adenoma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
	pheochromocytoma:malignant		0 (0%)	1 (2%)	1 (2%)	1 (2%)
{Reproductive system}						
testis			<50>	<50>	<50>	<50>
	interstitial cell tumor		47 (94%)	49 (98%)	44 (88%)	48 (96%)
mammary gl			<50>	<50>	<50>	<50>
	adenoma		0 (0%)	1 (2%)	0 (0%)	0 (0%)
	fibroadenoma		3 (6%)	0 (0%)	0 (0%)	2 (4%)
prep/cli gl			<50>	<50>	<50>	<50>
	adenoma		3 (6%)	1 (2%)	1 (2%)	2 (4%)
{Nervous system}						
brain			<50>	<50>	<50>	<50>
	malignant reticulosis		0 (0%)	0 (0%)	1 (2%)	0 (0%)

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

Organ	Findings	Group Name / No. of animals on Study	Control 50	25 ppm 50	50 ppm 50	100 ppm 50
{Nervous system}						
brain			<50>	<50>	<50>	<50>
	glioma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
periph nerv			<50>	<50>	<50>	<50>
	schwannoma:malignant		1 (2%)	0 (0%)	0 (0%)	0 (0%)
{Special sense organs/appendage}						
Zymbal gl			<50>	<50>	<50>	<50>
	squamous cell carcinoma		0 (0%)	0 (0%)	0 (0%)	2 (4%)
{Musculoskeletal system}						
bone			<50>	<50>	<50>	<50>
	osteoma		2 (4%)	0 (0%)	0 (0%)	0 (0%)
	osteosarcoma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
vertebra			<50>	<50>	<50>	<50>
	chordoma		0 (0%)	0 (0%)	1 (2%)	0 (0%)
{Body cavities}						
peritoneum			<50>	<50>	<50>	<50>
	mesothelioma		1 (2%)	2 (4%)	1 (2%)	2 (4%)

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

APPENDIX N 2

HISTOPATHOLOGICAL FINDINGS :

NEOPLASTIC LESIONS : FEMALE

Organ	Findings	Group Name / No. of animals on Study	Control 50	25 ppm 50	50 ppm 50	100 ppm 50
{Integumentary system/appandage}						
subcutis			<50>	<50>	<50>	<50>
	fibroma		1 (2%)	1 (2%)	0 (0%)	2 (4%)
{Respiratory system}						
lung			<50>	<50>	<50>	<50>
	bronchiolar-alveolar adenoma		0 (0%)	2 (4%)	0 (0%)	1 (2%)
	bronchiolar-alveolar carcinoma		0 (0%)	1 (2%)	0 (0%)	1 (2%)
{Hematopoietic system}						
spleen			<50>	<50>	<50>	<50>
	mononuclear cell leukemia		8 (16%)	4 (8%)	9 (18%)	9 (18%)
{Digestive system}						
oral cavity			<50>	<50>	<50>	<50>
	squamous cell papilloma		1 (2%)	0 (0%)	0 (0%)	0 (0%)
liver			<50>	<50>	<50>	<50>
	hepatocellular adenoma		2 (4%)	1 (2%)	0 (0%)	1 (2%)
pancreas			<50>	<50>	<50>	<50>
	islet cell adenoma		2 (4%)	1 (2%)	0 (0%)	1 (2%)
{Urinary system}						
kidney			<50>	<50>	<50>	<50>
	mesenchymoma:malignant		0 (0%)	0 (0%)	0 (0%)	1 (2%)
urin bladd			<50>	<50>	<50>	<50>
	transitional cell papilloma		0 (0%)	0 (0%)	1 (2%)	0 (0%)

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

Organ	Findings	Group Name / No. of animals on Study	Control 50	25 ppm 50	50 ppm 50	100 ppm 50
{Endocrine system}						
pituitary			<50>	<50>	<50>	<50>
	adenoma		11 (22%)	12 (24%)	10 (20%)	8 (16%)
	adenocarcinoma		2 (4%)	0 (0%)	1 (2%)	1 (2%)
thyroid			<50>	<50>	<50>	<50>
	C-cell adenoma		2 (4%)	2 (4%)	1 (2%)	4 (8%)
	follicular adenoma		0 (0%)	0 (0%)	0 (0%)	1 (2%)
	C-cell carcinoma		0 (0%)	0 (0%)	2 (4%)	0 (0%)
adrenal			<50>	<50>	<50>	<50>
	pheochromocytoma		0 (0%)	1 (2%)	2 (4%)	2 (4%)
	cortical adenoma		1 (2%)	0 (0%)	0 (0%)	1 (2%)
	pheochromocytoma:malignant		1 (2%)	0 (0%)	0 (0%)	0 (0%)
{Reproductive system}						
ovary			<50>	<50>	<50>	<50>
	hemangioma		0 (0%)	0 (0%)	1 (2%)	0 (0%)
	sertoli cell tumor		0 (0%)	0 (0%)	0 (0%)	1 (2%)
	adenocarcinoma		0 (0%)	1 (2%)	0 (0%)	0 (0%)
uterus			<50>	<50>	<50>	<50>
	endometrial stromal polyp		11 (22%)	10 (20%)	12 (24%)	14 (28%)

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

Organ	Findings	Group Name / No. of animals on Study	Control 50	25 ppm 50	50 ppm 50	100 ppm 50
{Reproductive system}						
uterus			<50>	<50>	<50>	<50>
	adenocarcinoma		1 (2%)	0 (0%)	2 (4%)	0 (0%)
	endometrial stromal sarcoma		4 (8%)	0 (0%)	2 (4%)	2 (4%)
mammary gl			<50>	<50>	<50>	<50>
	fibroadenoma		4 (8%)	8 (16%)	6 (12%)	6 (12%)
	adenocarcinoma		0 (0%)	1 (2%)	2 (4%)	0 (0%)
prep/cli gl			<50>	<50>	<50>	<50>
	adenoma		1 (2%)	0 (0%)	1 (2%)	2 (4%)
{Nervous system}						
brain			<50>	<50>	<50>	<50>
	glioma		0 (0%)	1 (2%)	1 (2%)	0 (0%)
{Special sense organs/appendage}						
Zymbal gl			<50>	<50>	<50>	<50>
	Zmbal gland tumor:benign		0 (0%)	0 (0%)	0 (0%)	1 (2%)
{Musculoskeletal system}						
bone			<50>	<50>	<50>	<50>
	osteosarcoma		0 (0%)	0 (0%)	1 (2%)	0 (0%)
{Body cavities}						
peritoneum			<50>	<50>	<50>	<50>
	hemangioma		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

APPENDIX O 1

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS : MALE

Group Name	Control	25 ppm	50 ppm	100 ppm
	SITE : subcutis			
	TUMOR : fibroma			
Tumor rate				
Overall rates(a)	1/50(2.0)	8/50(16.0)	2/50(4.0)	3/50(6.0)
Adjusted rates(b)	2.27	15.91	4.65	5.56
Terminal rates(c)	1/44(2.3)	7/44(15.9)	1/42(2.4)	2/36(5.6)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.2228			
Prevalence method(d)	P = 0.5369			
Combined analysis(d)	P = 0.4100			
Cochran-Armitage test(e)	P = 0.9254			
Fisher Exact test(e)		P = 0.0154*	P = 0.5000	P = 0.3087
	SITE : subcutis			
	TUMOR : fibroma,fibrosarcoma			
Tumor rate				
Overall rates(a)	2/50(4.0)	8/50(16.0)	3/50(6.0)	5/50(10.0)
Adjusted rates(b)	2.27	15.91	6.98	8.33
Terminal rates(c)	1/44(2.3)	7/44(15.9)	2/42(4.8)	3/36(8.3)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.2293			
Prevalence method(d)	P = 0.3321			
Combined analysis(d)	P = 0.2295			
Cochran-Armitage test(e)	P = 0.6762			
Fisher Exact test(e)		P = 0.0458*	P = 0.5000	P = 0.2180
	SITE : lung			
	TUMOR : bronchiolar-alveolar adenoma			
Tumor rate				
Overall rates(a)	6/50(12.0)	3/50(6.0)	2/50(4.0)	4/50(8.0)
Adjusted rates(b)	13.64	6.82	4.76	8.89
Terminal rates(c)	6/44(13.6)	3/44(6.8)	2/42(4.8)	3/36(8.3)
Statistical analysis				
Peto test				
Standard method(d)	P = ------			
Prevalence method(d)	P = 0.6691			
Combined analysis(d)	P = ------			
Cochran-Armitage test(e)	P = 0.5552			
Fisher Exact test(e)		P = 0.2435	P = 0.1343	P = 0.3703

Group Name	Control	25 ppm	50 ppm	100 ppm
SITE : lung				
TUMOR : bronchiolar-alveolar adenoma, bronchiolar-alveolar carcinoma				
Tumor rate				
Overall rates(a)	7/50(14.0)	3/50(6.0)	2/50(4.0)	4/50(8.0)
Adjusted rates(b)	15.91	6.82	4.76	8.89
Terminal rates(c)	7/44(15.9)	3/44(6.8)	2/42(4.8)	3/36(8.3)
Statistical analysis				
Peto test				
Standard method(d)	P = ------			
Prevalence method(d)	P = 0.7652			
Combined analysis(d)	P = ------			
Cochran-Armitage test(e)	P = 0.3782			
Fisher Exact test(e)		P = 0.1589	P = 0.0798	P = 0.2623
SITE : spleen				
TUMOR : mononuclear cell leukemia				
Tumor rate				
Overall rates(a)	5/50(10.0)	5/50(10.0)	6/50(12.0)	4/50(8.0)
Adjusted rates(b)	6.82	4.55	7.14	2.78
Terminal rates(c)	3/44(6.8)	2/44(4.5)	3/42(7.1)	1/36(2.8)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.3216			
Prevalence method(d)	P = 0.7340			
Combined analysis(d)	P = 0.5261			
Cochran-Armitage test(e)	P = 0.7499			
Fisher Exact test(e)		P = 0.6297	P = 0.5000	P = 0.5000
SITE : pancreas				
TUMOR : islet cell adenoma				
Tumor rate				
Overall rates(a)	3/50(6.0)	3/50(6.0)	2/50(4.0)	0/50(0.0)
Adjusted rates(b)	6.82	6.82	4.76	0.0
Terminal rates(c)	3/44(6.8)	3/44(6.8)	2/42(4.8)	0/36(0.0)
Statistical analysis				
Peto test				
Standard method(d)	P = ------			
Prevalence method(d)	P = 0.9434			
Combined analysis(d)	P = ------			
Cochran-Armitage test(e)	P = 0.0877			
Fisher Exact test(e)		P = 0.6611	P = 0.5000	P = 0.1212

Group Name	Control	25 ppm	50 ppm	100 ppm
	SITE : pituitary gland TUMOR : adenoma			
Tumor rate				
Overall rates(a)	6/50(12.0)	4/50(8.0)	7/50(14.0)	8/50(16.0)
Adjusted rates(b)	13.64	9.09	13.04	16.67
Terminal rates(c)	6/44(13.6)	4/44(9.1)	5/42(11.9)	6/36(16.7)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.0381*			
Prevalence method(d)	P = 0.3060			
Combined analysis(d)	P = 0.1240			
Cochran-Armitage test(e)	P = 0.3663			
Fisher Exact test(e)		P = 0.3703	P = 0.5000	P = 0.3871
	SITE : thyroid TUMOR : C-cell adenoma			
Tumor rate				
Overall rates(a)	3/50(6.0)	6/50(12.0)	8/50(16.0)	6/50(12.0)
Adjusted rates(b)	6.82	13.64	19.05	16.67
Terminal rates(c)	3/44(6.8)	6/44(13.6)	8/42(19.0)	6/36(16.7)
Statistical analysis				
Peto test				
Standard method(d)	P = ———			
Prevalence method(d)	P = 0.0999			
Combined analysis(d)	P = ———			
Cochran-Armitage test(e)	P = 0.3889			
Fisher Exact test(e)		P = 0.2435	P = 0.0999	P = 0.2435
	SITE : thyroid TUMOR : C-cell adenoma,C-cell carcinoma			
Tumor rate				
Overall rates(a)	4/50(8.0)	7/50(14.0)	9/50(18.0)	6/50(12.0)
Adjusted rates(b)	9.09	15.91	19.05	16.67
Terminal rates(c)	4/44(9.1)	7/44(15.9)	8/42(19.0)	6/36(16.7)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.4016			
Prevalence method(d)	P = 0.1821			
Combined analysis(d)	P = 0.1784			
Cochran-Armitage test(e)	P = 0.6188			
Fisher Exact test(e)		P = 0.2623	P = 0.1168	P = 0.3703

Group Name	Control	25 ppm	50 ppm	100 ppm
	SITE : adrenal gland TUMOR : pheochromocytoma			
Tumor rate				
Overall rates(a)	2/50(4.0)	2/50(4.0)	3/50(6.0)	3/50(6.0)
Adjusted rates(b)	4.55	4.55	6.67	6.38
Terminal rates(c)	2/44(4.5)	2/44(4.5)	2/42(4.8)	2/36(5.6)
Statistical analysis				
Peto test				
Standard method(d)	P = ------			
Prevalence method(d)	P = 0.2914			
Combined analysis(d)	P = ------			
Cochran-Armitage test(e)	P = 0.5834			
Fisher Exact test(e)		P = 0.6913	P = 0.5000	P = 0.5000
	SITE : adrenal gland TUMOR : pheochromocytoma, pheochromocytoma:malignant			
Tumor rate				
Overall rates(a)	2/50(4.0)	3/50(6.0)	4/50(8.0)	4/50(8.0)
Adjusted rates(b)	4.55	6.82	8.89	6.38
Terminal rates(c)	2/44(4.5)	3/44(6.8)	3/42(7.1)	2/36(5.6)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.1118			
Prevalence method(d)	P = 0.3306			
Combined analysis(d)	P = 0.2008			
Cochran-Armitage test(e)	P = 0.4098			
Fisher Exact test(e)		P = 0.5000	P = 0.3389	P = 0.3389
	SITE : testis TUMOR : interstitial cell tumor			
Tumor rate				
Overall rates(a)	47/50(94.0)	49/50(98.0)	44/50(88.0)	48/50(96.0)
Adjusted rates(b)	100.00	100.00	97.73	100.00
Terminal rates(c)	44/44(100.0)	44/44(100.0)	41/42(97.6)	36/36(100.0)
Statistical analysis				
Peto test				
Standard method(d)	P = ------			
Prevalence method(d)	P = 0.3712			
Combined analysis(d)	P = ------			
Cochran-Armitage test(e)	P = 1.0000			
Fisher Exact test(e)		P = 0.3087	P = 0.2435	P = 0.5000

Group Name	Control	25 ppm	50 ppm	100 ppm
	SITE : mammary gland TUMOR : fibroadenoma			
Tumor rate				
Overall rates(a)	3/50(6.0)	0/50(0.0)	0/50(0.0)	2/50(4.0)
Adjusted rates(b)	6.82	0.0	0.0	2.78
Terminal rates(c)	3/44(6.8)	0/44(0.0)	0/42(0.0)	1/36(2.8)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.1093			
Prevalence method(d)	P = 0.8044			
Combined analysis(d)	P = 0.5183			
Cochran-Armitage test(e)	P = 0.8183			
Fisher Exact test(e)		P = 0.1212	P = 0.1212	P = 0.5000
	SITE : mammary gland TUMOR : adenoma, fibroadenoma			
Tumor rate				
Overall rates(a)	3/50(6.0)	1/50(2.0)	0/50(0.0)	2/50(4.0)
Adjusted rates(b)	6.82	2.27	0.0	2.78
Terminal rates(c)	3/44(6.8)	1/44(2.3)	0/42(0.0)	1/36(2.8)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.1093			
Prevalence method(d)	P = 0.8376			
Combined analysis(d)	P = 0.5881			
Cochran-Armitage test(e)	P = 0.6742			
Fisher Exact test(e)		P = 0.3087	P = 0.1212	P = 0.5000

Group Name	Control	25 ppm	50 ppm	100 ppm
SITE : preputial/clitoral gland				
TUMOR : adenoma				
Tumor rate				
Overall rates(a)	3/50(6.0)	1/50(2.0)	1/50(2.0)	2/50(4.0)
Adjusted rates(b)	6.82	2.27	2.38	5.56
Terminal rates(c)	3/44(6.8)	1/44(2.3)	1/42(2.4)	2/36(5.6)
Statistical analysis				
Peto test				
Standard method(d)	P = ------			
Prevalence method(d)	P = 0.5349			
Combined analysis(d)	P = ------			
Cochran-Armitage test(e)	P = 0.7450			
Fisher Exact test(e)		P = 0.3087	P = 0.3087	P = 0.5000

(HPT360A)

BAIS4

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

APPENDIX O 2

NEOPLASTIC LESIONS-INCIDENCE AND STATISTICAL ANALYSIS : FEMALE

Group Name	Control	25 ppm	50 ppm	100 ppm
	SITE : lung			
	TUMOR : bronchiolar-alveolar adenoma, bronchiolar-alveolar carcinoma			
Tumor rate				
Overall rates(a)	0/50(0.0)	3/50(6.0)	0/50(0.0)	2/50(4.0)
Adjusted rates(b)	0.0	6.67	0.0	5.13
Terminal rates(c)	0/37(0.0)	3/45(6.7)	0/36(0.0)	2/39(5.1)
Statistical analysis				
Peto test				
Standard method(d)	P = ------			
Prevalence method(d)	P = 0.2396			
Combined analysis(d)	P = ------			
Cochran-Armitage test(e)	P = 0.4908			
Fisher Exact test(e)		P = 0.1212	P = N.C.	P = 0.2475
	SITE : spleen			
	TUMOR : mononuclear cell leukemia			
Tumor rate				
Overall rates(a)	8/50(16.0)	4/50(8.0)	9/50(18.0)	9/50(18.0)
Adjusted rates(b)	8.11	4.44	13.89	7.69
Terminal rates(c)	3/37(8.1)	2/45(4.4)	5/36(13.9)	3/39(7.7)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.2311			
Prevalence method(d)	P = 0.3862			
Combined analysis(d)	P = 0.2293			
Cochran-Armitage test(e)	P = 0.4615			
Fisher Exact test(e)		P = 0.1783	P = 0.5000	P = 0.5000
	SITE : pituitary gland			
	TUMOR : adenoma			
Tumor rate				
Overall rates(a)	11/50(22.0)	12/50(24.0)	10/50(20.0)	8/50(16.0)
Adjusted rates(b)	24.32	23.40	27.78	17.95
Terminal rates(c)	9/37(24.3)	10/45(22.2)	10/36(27.8)	7/39(17.9)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.8736			
Prevalence method(d)	P = 0.7252			
Combined analysis(d)	P = 0.8079			
Cochran-Armitage test(e)	P = 0.3587			
Fisher Exact test(e)		P = 0.5000	P = 0.5000	P = 0.3055

Group Name	Control	25 ppm	50 ppm	100 ppm
	SITE : pituitary gland			
	TUMOR : adenoma, adenocarcinoma			
Tumor rate				
Overall rates(a)	13/50(26.0)	12/50(24.0)	11/50(22.0)	9/50(18.0)
Adjusted rates(b)	27.03	23.40	27.78	20.51
Terminal rates(c)	10/37(27.0)	10/45(22.2)	10/36(27.8)	8/39(20.5)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.9090			
Prevalence method(d)	P = 0.7086			
Combined analysis(d)	P = 0.8315			
Cochran-Armitage test(e)	P = 0.3164			
Fisher Exact test(e)		P = 0.5000	P = 0.4076	P = 0.2348
	SITE : thyroid			
	TUMOR : C-cell adenoma			
Tumor rate				
Overall rates(a)	2/50(4.0)	2/50(4.0)	1/50(2.0)	4/50(8.0)
Adjusted rates(b)	4.88	4.44	2.78	10.26
Terminal rates(c)	1/37(2.7)	2/45(4.4)	1/36(2.8)	4/39(10.3)
Statistical analysis				
Peto test				
Standard method(d)	P = ------			
Prevalence method(d)	P = 0.1524			
Combined analysis(d)	P = ------			
Cochran-Armitage test(e)	P = 0.3270			
Fisher Exact test(e)		P = 0.6913	P = 0.5000	P = 0.3389
	SITE : thyroid			
	TUMOR : C-cell adenoma, C-cell carcinoma			
Tumor rate				
Overall rates(a)	2/50(4.0)	2/50(4.0)	3/50(6.0)	4/50(8.0)
Adjusted rates(b)	4.88	4.44	8.33	10.26
Terminal rates(c)	1/37(2.7)	2/45(4.4)	3/36(8.3)	4/39(10.3)
Statistical analysis				
Peto test				
Standard method(d)	P = ------			
Prevalence method(d)	P = 0.1464			
Combined analysis(d)	P = ------			
Cochran-Armitage test(e)	P = 0.3192			
Fisher Exact test(e)		P = 0.6913	P = 0.5000	P = 0.3389

Group Name	Control	25 ppm	50 ppm	100 ppm
	SITE : uterus			
	TUMOR : endometrial stromal polyp			
Tumor rate				
Overall rates(a)	11/50(22.0)	10/50(20.0)	12/50(24.0)	14/50(28.0)
Adjusted rates(b)	23.68	22.22	30.77	30.77
Terminal rates(c)	8/37(21.6)	10/45(22.2)	11/36(30.6)	12/39(30.8)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.9335 ?			
Prevalence method(d)	P = 0.1322			
Combined analysis(d)	P = 0.1818			
Cochran-Armitage test(e)	P = 0.3822			
Fisher Exact test(e)		P = 0.5000	P = 0.5000	P = 0.3224
	SITE : uterus			
	TUMOR : endometrial stromal sarcoma			
Tumor rate				
Overall rates(a)	4/50(8.0)	0/50(0.0)	2/50(4.0)	2/50(4.0)
Adjusted rates(b)	0.0	0.0	2.78	5.13
Terminal rates(c)	0/37(0.0)	0/45(0.0)	1/36(2.8)	2/39(5.1)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.9876			
Prevalence method(d)	P = 0.0367*			
Combined analysis(d)	P = 0.6632			
Cochran-Armitage test(e)	P = 0.6256			
Fisher Exact test(e)		P = 0.0587	P = 0.3389	P = 0.3389
	SITE : mammary gland			
	TUMOR : fibroadenoma			
Tumor rate				
Overall rates(a)	4/50(8.0)	8/50(16.0)	6/50(12.0)	6/50(12.0)
Adjusted rates(b)	9.09	15.22	16.67	15.38
Terminal rates(c)	3/37(8.1)	6/45(13.3)	6/36(16.7)	6/39(15.4)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.5714			
Prevalence method(d)	P = 0.3345			
Combined analysis(d)	P = 0.3764			
Cochran-Armitage test(e)	P = 0.7686			
Fisher Exact test(e)		P = 0.1783	P = 0.3703	P = 0.3703

Group Name	Control	25 ppm	50 ppm	100 ppm
	SITE : mammary gland			
	TUMOR : fibroadenoma, adenocarcinoma			
Tumor rate				
Overall rates(a)	4/50(8.0)	9/50(18.0)	8/50(16.0)	6/50(12.0)
Adjusted rates(b)	9.09	17.39	16.67	15.38
Terminal rates(c)	3/37(8.1)	7/45(15.6)	6/36(16.7)	6/39(15.4)
Statistical analysis				
Peto test				
Standard method(d)	P = 0.5056			
Prevalence method(d)	P = 0.3769			
Combined analysis(d)	P = 0.3941			
Cochran-Armitage test(e)	P = 0.8066			
Fisher Exact test(e)		P = 0.1168	P = 0.1783	P = 0.3703

(HPT360A)

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

APPENDIX P 1

HISTOPATHOLOGICAL FINDINGS :

METASTASIS OF TUMOR :

MALE

Organ	Findings	Group Name / No. of Animals on Study	Control 50	25 ppm 50	50 ppm 50	100 ppm 50
{Respiratory system}						
nasal cavit			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	0	1	0
lung			<50>	<50>	<50>	<50>
	leukemic cell infiltration		3	2	4	3
	metastasis:subcutis tumor		0	0	0	1
	metastasis:skin/appendage tumor		1	0	0	0
{Hematopoietic system}						
bone marrow			<50>	<50>	<50>	<50>
	leukemic cell infiltration		1	1	1	1
lymph node			<50>	<50>	<50>	<50>
	leukemic cell infiltration		1	1	2	1
{Circulatory system}						
heart			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	0	0	1
	metastasis:skin/appendage tumor		1	0	0	0
{Digestive system}						
liver			<50>	<50>	<50>	<50>
	leukemic cell infiltration		2	2	6	2
pancreas			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	1	0	0

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

Organ	Findings	Group Name / No. of Animals on Study	Control	25 ppm	50 ppm	100 ppm
			50	50	50	50
{Urinary system}						
kidney			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	0	0	1
urin bladd			<50>	<50>	<49>	<49>
	leukemic cell infiltration		0	1	0	0
{Endocrine system}						
adrenal			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	0	1	0
{Nervous system}						
brain			<50>	<50>	<50>	<50>
	leukemic cell infiltration		1	0	1	0
	metastasis:bone tumor		1	0	0	0
	metastasis:peripheral nerve tumor		1	0	0	0
spinal cord			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	1	1	0
periph nerv			<50>	<50>	<50>	<50>
	metastasis:bone tumor		1	0	0	0
{Body cavities}						
adipose			<50>	<50>	<50>	<50>
	metastasis:kidney tumor		0	0	1	0

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

APPENDIX P 2

HISTOPATHOLOGICAL FINDINGS :

METASTASIS OF TUMOR :

FEMALE

Organ	Findings	Group Name / No. of Animals on Study	Control 50	25 ppm 50	50 ppm 50	100 ppm 50
{Integumentary system/appandage}						
subcutis			<50>	<50>	<50>	<50>
	metastasis:uterus tumor		1	0	1	0
{Respiratory system}						
lung			<50>	<50>	<50>	<50>
	leukemic cell infiltration		5	2	5	5
	metastasis:uterus tumor		1	0	2	0
	metastasis:bone tumor		0	0	1	0
{Hematopoietic system}						
bone marrow			<50>	<50>	<50>	<50>
	leukemic cell infiltration		4	2	1	2
lymph node			<50>	<50>	<50>	<50>
	leukemic cell infiltration		3	2	0	2
	metastasis:uterus tumor		0	0	1	0
	metastasis:thyroid tumor		0	0	1	0
{Digestive system}						
stomach			<50>	<50>	<50>	<50>
	leukemic cell infiltration		1	0	0	0
large intes			<50>	<50>	<50>	<50>
	metastasis:uterus tumor		1	0	1	0
liver			<50>	<50>	<50>	<50>
	leukemic cell infiltration		7	2	6	9

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

Organ	Findings	Group Name / No. of Animals on Study	Control 50	25 ppm 50	50 ppm 50	100 ppm 50
{Digestive system}						
liver			<50>	<50>	<50>	<50>
	metastasis:uterus tumor		1	0	2	0
	metastasis:ovary tumor		0	1	0	0
pancreas			<50>	<50>	<50>	<50>
	leukemic cell infiltration		3	0	1	0
	metastasis:uterus tumor		1	0	1	0
{Urinary system}						
kidney			<50>	<50>	<50>	<50>
	leukemic cell infiltration		2	1	0	1
	metastasis:uterus tumor		0	0	1	0
urin bladd			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	0	1	0
	metastasis:uterus tumor		1	0	1	0
{Endocrine system}						
pituitary			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	1	0	1
adrenal			<50>	<50>	<50>	<50>
	leukemic cell infiltration		0	1	1	0
{Reproductive system}						
ovary			<50>	<50>	<50>	<50>
	metastasis:uterus tumor		1	0	0	0

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

Organ	Findings	Group Name / No. of Animals on Study	Control 50	25 ppm 50	50 ppm 50	100 ppm 50
{Reproductive system}						
uterus			<50>	<50>	<50>	<50>
	leukemic cell infiltration		1	0	1	1
{Nervous system}						
brain			<50>	<50>	<50>	<50>
	leukemic cell infiltration		1	0	2	1
	metastasis:pituitary tumor		2	0	1	1
spinal cord			<50>	<50>	<50>	<50>
	leukemic cell infiltration		1	0	1	1
{Body cavities}						
peritoneum			<50>	<50>	<50>	<50>
	metastasis:uterus tumor		1	0	0	1
	metastasis:ovary tumor		0	1	0	0

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

APPENDIX Q

METHODS, UNITS AND DECIMAL PLACE FOR HEMATOLOGY AND BIOCHEMISTRY IN THE 2-YEAR INHALATION STUDY OF PROPIONONITRILE

METHODS, UNITS AND DECIMAL PLACE FOR HEMATOLOGY AND BIOCHEMISTRY IN THE 2-YEAR INHALATION STUDY OF PROPIONONITRILE

Item	Method	Unit	Decimal place
Hematology			
Red blood cell (RBC)	Light scattering method [1]	$\times 10^6/\mu L$	2
Hemoglobin(Hgb)	Cyanmethemoglobin method [1]	g/dL	1
Hematocrit(Hct)	Calculated as RBC×MCV/10 [1]	%	1
Mean corpuscular volume(MCV)	Light scattering method [1]	fL	1
Mean corpuscular hemoglobin(MCH)	Calculated as Hgb/RBC×10 [1]	pg	1
Mean corpuscular hemoglobin concentration (MCHC)	Calculated as Hgb/Hct×100 [1]	g/dL	1
Platelet	Light scattering method [1]	$\times 10^3/\mu L$	0
Reticulocyte	Light scattering method [1]	%	1
White blood cell(WBC)	Light scattering method [1]	$\times 10^3/\mu L$	2
Differential WBC	Pattern recognition method [2] (Wright staining)	%	0
Biochemistry			
Total protein(TP)	Biuret method [3]	g/dL	1
Albumin (Alb)	BCG method [3]	g/dL	1
A/G ratio	Calculated as Alb/(TP−Alb) [3]	−	1
T-bilirubin	Alkaline azobilirubin method [3]	mg/dL	2
Glucose	GlcK・G-6-PDH method [3]	mg/dL	0
T-cholesterol	CE・COD・POD method [3]	mg/dL	0
Triglyceride	LPL・GK・GPO・POD method [3]	mg/dL	0
Phospholipid	PLD・ChOD・POD method [3]	mg/dL	0
Aspartate aminotransferase (AST)	JSCC method [3]	IU/L	0
Alanine aminotransferase (ALT)	JSCC method [3]	IU/L	0
Lactate dehydrogenase (LDH)	SFBC method [3]	IU/L	0
Alkaline phosphatase (ALP)	GSCC method [3]	IU/L	0
γ -Glutamyl transpeptidase (γ -GTP)	JSCC method [3]	IU/L	0
Creatine kinase (CK)	JSCC method [3]	IU/L	0
Urea nitrogen	Urease・GLDH method [3]	mg/dL	1
Creatinine	Jaffé method [3]	mg/dL	1
Sodium	Ion selective electrode method [3]	mEq/L	0
Potassium	Ion selective electrode method [3]	mEq/L	1
Chloride	Ion selective electrode method [3]	mEq/L	0
Calcium	OCPC method [3]	mg/dL	1
Inorganic phosphorus	PNP・XOD・POD method [3]	mg/dL	1

1) Automatic blood cell analyzer (ADVIA120 : Bayer Corporation)
2) Automatic blood cell differential analyzer (MICROX HEG-120NA : OMRON Corporation)
3) Automatic analyzer (Hitachi 7080 : Hitachi,Ltd.)