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May 22, 2003

Document Processing Center EPA East – Room 6428 Attn: Section 8(e) Office of Pollution Prevention and Toxics US EPA 1200 Pennsylvania Avenue NW Washington DC 20460-0001 Contain CBI



RE:

TSCA 8(E) SUBSTANTIAL RISK NOTICE ON: 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N-(2-hydroxyethyl)-N-methyl, (CAS 34454-97-2)

Dear Sirs:

3M has received data for a subchronic oral toxicity study in rats conducted with a chemical intermediate 1-butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-N-(2-hydroxyethyl)-N-methyl, (CAS 34454-97-2) (fluorochemical alcohol) indicating developmental effects.

The study was conducted by Argus Research; a copy of the final report is enclosed. Male rats were administered the fluorochemical alcohol at doses of 0, 10, 50 or 250 mg/kg/day beginning fourteen days before cohabitation and continuing until after cohabitation, for a minimum of 28 days of dosage. Female rats were administered the substance at the same dosage levels beginning fourteen days before cohabitation and continuing until day 5 of lactation.

In the 250 mg/kg/day dosage group, several significant effects were observed. The number of liveborn pups was significantly decreased and the number of stillborn pups was significantly increased. The number of pups found dead or presumed cannibalized on days 1 and 2 to day 5 postpartum was significantly increased. The viability index and number of pups surviving per litter on postpartum day 5 were significantly reduced. These effects at the highest dosage level (250 mg/kg/day) were not observed in the lower dosage groups.

Additionally, some rats in the 50 and 250 mg/kg/day dosage groups were observed to have significantly increased liver weights and microscopic changes in the liver, thymus and/or stomach.

3M uses the fluorochemical alcohol as a chemical intermediate to manufacture polymeric materials. In the manufacturing setting and as administered during toxicity testing, it contains approximately 93-94% of CAS 34454-97-2 and 4-5% functionally

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related branched isomers and monohydrides. The fluorochemical alcohol is present in final products at trace amounts.

Please contact James Zappia (651-733-5180) if you have any questions or if we can provide additional information.

Once a docket number has been assigned for this submittal, please send the docket number postal card to Cheri Kedrowski, 3M Center Bldg. 220-2E-02, St. Paul, MN 55144.

Sincerely,

Larry R. Zobel, MD MPH

Staff Vice President and Medical Director

Enclosure

# FINAL REPORT

#### PROTOCOL 418-027

ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST

SPONSOR'S STUDY NUMBER: T-7599

FINAL REPORT DATE: 25 MARCH 2003

# PROTOCOL 418-027 -

# ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST

SPONSOR'S STUDY NUMBER: T-7599

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TITLE: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST

ARGUS RESEARCH PROTOCOL NUMBER: 418-027

SPONSOR'S STUDY NUMBER: T-7599

# 1. SUMMARY AND CONCLUSION

#### 1.1. Methods<sup>a</sup>

Sixty male and sixty female Crl:CD®(SD)IGS VAF/Plus® rats were assigned to four dosage groups (Groups I through IV), 15 rats per sex per group. The test substance was T 7599.7 and the vehicle was aqueous 0.5% or 1.0% carboxymethylcellulose (CMC). The 0.5% CMC was used for the first four days of the study and the 1.0% CMC was used for the remainder of the study. The test substance or vehicle was administered to the male rats beginning 14 days before cohabitation and continuing until sacrifice, after completion of the cohabitation period, after a minimum of 28 days of dosage and to the female rats beginning 14 days before cohabitation and continuing until day 5 of lactation (DL 5). Dosages were 0 (Vehicle), 10, 50 and 250 mg/kg/day. The dosage volume was adjusted daily.

Within each dosage group, consecutive order was be used to assign the first five male and the first five female rats to a functional observational battery (FOB) and motor activity assessment. The next five rats per sex in each group were assigned to hematology and clinical biochemistry evaluations. The last five rats per sex in each group were assigned to metabolite analysis. Histological evaluations were performed on the last ten rats per sex in each group. Rats were observed for viability at least twice each day of the study. Observations for clinical signs of effects of the test substance, abortions, premature deliveries and deaths were made daily before dosage. Postdosage observations were recorded approximately  $60 \pm 10$  minutes after dosage administration and on the day of sacrifice. Once before the first dosage and at least once weekly thereafter, detailed clinical observations were conducted for all male and female rats. Body weights for male and female rats were recorded daily during the dosage period and at sacrifice. Feed consumption values for male rats were recorded weekly during the dosage period. Feed consumption values for female rats were recorded weekly to cohabitation and on gestation days (DGs) 0, 7, 10, 12, 15, 18, 20 and 25 (if necessary) and on lactation days (DLs) 1 and 5.

a. Detailed descriptions of all procedures used in the conduct of this study are provided in the appropriate sections of this report and in APPENDIX D (PROTOCOL AND AMENDMENTS).

Estrous cycling was evaluated by examination of vaginal cytology beginning with the day after the first administration and then until spermatozoa were observed in a smear of the vaginal contents and/or a copulatory plug was observed *in situ* during the cohabitation period. Female rats were evaluated for adverse clinical signs observed during parturition, duration of gestation, litter sizes and pup viability at birth. Maternal behavior was evaluated on DLs 1 and 5.

Motor activity was evaluated on five male and five female rats per group once during the course of the study, before scheduled sacrifice. Day 1 of lactation was defined as the day of birth and was also the first day on which all pups in a litter were individually weighed. Each litter was evaluated for viability at least twice daily. The pups in each litter were counted twice daily. Clinical observations were recorded once daily. Pup body weights were recorded on DLs 1 and 5. After 36 days of dosage, all male rats were sacrificed and on DL 6, all surviving female rats were sacrificed. A gross necropsy was performed. The testes and epididymides of all male rats were weighed, and the testes, epididymides, seminal vesicles with coagulating gland and prostate were retained. The ovaries and the uterus with cervix of each female rat were weighed, and ovaries, uterus, vagina and a mammary gland were retained.

The following organs were individually weighed: liver, kidneys, adrenals, thymus, testes, epididymides, spleen, brain, heart, ovaries and uterus. The following tissues or representative samples were retained: brain, small and large intestines, lungs, lymph nodes, peripheral nerve, stomach, kidneys, spleen, thymus, trachea, urinary bladder, testes, epididymides, seminal vesicles, prostate, spinal cord, liver, adrenals, heart, thyroid/parathyroid, uterus, bone marrow, ovaries, uterus, vagina, mammary gland (female rats only) and gross lesions. Histological examination was conducted for the assigned ten rats per sex from the control and high dosage groups. Histological evaluations were performed on the livers of ten male and ten female rats, the thymuses of ten female rats and the stomachs of ten male rats in the 10 and 50 mg/kg/day dosage groups.

At scheduled sacrifice, blood was collected from the five male and five female rats per group assigned to hematology and clinical chemistry sample collection. One aliquot was analyzed for hematologic parameters. Two blood smear slides were prepared for each sample for measurements of differential leukocyte count. Plasma from another aliquot was measured for prothrombin time and activated partial thromboplastin time. Serum from a third aliquot was analyzed for clinical chemistry parameters. Blood samples were collected from the five rats per sex per group assigned to metabolite analysis. The liver was excised and the organ weight recorded.

On DL 5, pups were sacrificed and examined for gross lesions. Pups found dead on DLs 2 to 4 were examined for gross lesions and for possible cause of death.

#### 1.2. Results - Males

All male rats survived to scheduled sacrifice. Significant increases in excess salivation, perioral substance and urine-stained abdominal fur occurred in the 250 mg/kg/day dosage group. All other clinical observations and all necropsy observations were considered unrelated to the test substance.

Body weight gains were significantly reduced in the 250 mg/kg/day dosage group on DSs 1 to 8, 1 to 15 and 1 to 36. Body weight gains were also significantly decreased in the 50 mg/kg/day dosage group on DSs 1 to 36. Body weights were significantly reduced on DS 29 and 36 in the 250 mg/kg/day dosage group. Absolute feed consumption values were significantly reduced in the 50 and 250 mg/kg/day dosage groups on DSs 1 to 8 and significantly reduced in the 250 mg/kg/day dosage groups on DSs 1 to 15 and 1 to 36. Relative feed consumption values were significantly reduced on DSs 1 to 8 in the 50 and 250 mg/kg/day dosage groups.

Terminal body weights of the male rats were significantly reduced in the 250 mg/kg/day dosage group. Absolute weights of the left and right kidneys were significantly increased in the 50 and 250 mg/kg/day dosage groups and the absolute weight of the liver was significantly increased in the 250 mg/kg/day dosage group. The ratios of the weights of these organs to terminal body weights were significantly increased in the 50 and 250 mg/kg/day dosage groups. Relative to the brain weight, only the liver weight in the 250 mg/kg/day dosage group was significantly increased. Treatment-related microscopic changes were observed in the liver of male rats in the 50 and 250 mg/kg/day dosage groups and in the stomach of male rats in the 250 mg/kg/day dosage group. Dosages of the test substance as high as 250 mg/kg/day did not affect any hematology or clinical chemistry values evaluated. All mating and fertility parameters were unaffected by dosages of the test substance as high as 250 mg/kg/day.

There were no statistically significant or biologically important differences among the four dosage groups in the measures of the functional observational battery (FOB). Body weights recorded during the functional operational battery for the treated groups were not significantly different than the control group for the male rats. There were no statistically significant or biologically important differences among the four dosage groups in the measures of motor activity on DS 86.

#### 1.3. Results - Females

All female rats survived to scheduled sacrifice. All clinical and necropsy observations were considered unrelated to the test substance. Body weight gains were significantly reduced during the precohabitation period in the 250 mg/kg/day dosage group on DSs 1 to 8 and 1 to 15. Body weights and body weight gains were not significantly affected by dosages of the test substance during gestation or lactation.

Terminal body weights of the female rats were reduced in the 250 mg/kg/day dosage group. Absolute liver weight was significantly increased in the 250 mg/kg/day dosage group. The ratios of the weight of this organ and the weight of the right kidney to

terminal body weights were significantly increased in the 250 mg/kg/day dosage group. Only the ratio of the liver weight to brain weight in the 250 mg/kg/day dosage group was significantly increased. Treatment-related microscopic changes were observed in the liver and thymus of female rats in the 250 mg/kg/day dosage group.

Dosages as high as 250 mg/kg/day did not affect any hematology or clinical chemistry values evaluated. Absolute and relative feed consumption values were not significantly affected by dosages of the test substance during the precohabitation, gestation or lactation periods. All estrous, mating and fertility parameters were unaffected by dosages of the test substance as high as 250 mg/kg/day. There were no statistically significant or biologically important differences among the four dosage groups in the measures of the FOB. Body weights recorded during the functional operational battery for the treated groups were not significantly different than the control group for the female rats. There were no statistically significant or biologically important differences among the four dosage groups in the measures of motor activity on DS 86.

The number of liveborn pups was significantly reduced and number of stillborn pups was significantly increased in the 250 mg/kg/day dosage group. The number of pups found dead or presumed cannibalized on day 1 and days 2 to 5 postpartum was significantly increased in the 250 mg/kg/day dosage groups. The viability index and number of pups surviving per litter on postpartum day 5 were significantly reduced in the 250 mg/kg/day dosage group. Pup body weights per litter were also reduced in the 250 mg/kg/day dosage group on postpartum days 1 and 5.

Values for the numbers of dams delivering litters, duration of gestation, averages for implantation sites per delivered litter, gestation index, numbers of dams with stillborn pups, dams with all pups dying, stillborn pups, surviving pups per litter on postpartum day 1 and pup sex ratios were comparable among the four dosage groups. No clinical or necropsy observations in the F1 generation pups were attributable to dosages of the test substance as high as 250 mg/kg/day.

#### 1.4. Conclusion

On the basis of these data, the paternal no-observable-adverse-effect-level (NOAEL) for T 7599.7 is 10 mg/kg/day (the 50 mg/kg/day dosage caused reduced weight gain during precohabitation, reduced absolute and relative feed consumption values, increased absolute and relative liver and kidney weight, and liver histopathology). The maternal NOAEL is 50 mg/kg/day (the 250 mg/kg/day dosage caused reduced weight gain during precohabitation, reduced terminal body weights, increased absolute and relative liver weight, and histopathology of the liver and thymus). The reproductive NOAEL is greater than 250 mg/kg/day (all estrous, mating and fertility parameters were unaffected by dosages of the test substance as high as 250 mg/kg/day). The NOAEL for viability and growth in the offspring is 50 mg/kg/day (dosages of 250 mg/kg/day caused postnatal mortality and decreased pup body weights).

Alan M. Hoberman, Ph.D., DABT

Date

Date

Director of Research

Raymond G. York Ph.D., DABT

Associate Director of Research

Study Director

# 2. DESCRIPTION OF TEST PROCEDURES

# 2.1. Conduct of Study

#### **2.1.1. Sponsor**

3M Corporate Toxicology, 3M Center, Building 220-2E-02, St. Paul, Minnesota 55144-1000

# 2.1.2. Testing Facility

Argus Research, 905 Sheehy Drive, Building A, Horsham, Pennsylvania 19044-1297

# 2.1.3. Study Number

418-027

# 2.1.4. Sponsor's Study Number

T-7599

# 2.1.5. Purpose of the Study

The purpose of this study was to provide information on the possible health hazards that may result from repeated exposure of Crl:CD®(SD)IGS BR VAF/Plus® male and female rats to a test substance beginning before cohabitation, through mating and continuing for at least 28 days (male rats) or through parturition until day 5 of lactation (female rats). This repeated dose study incorporated a reproduction/developmental toxicity screening test to provide initial information on possible effects on male and female reproductive performance (e.g., gonadal function, mating behavior, conception, development of the conceptus and parturition). The study also placed emphasis on neurological effects as a specific endpoint and was designed to identify the neurotoxic potential of a test substance, which may warrant further in-depth investigation.

#### 2.1.6. Study Design

The requirements of the Organisation for Economic Co-operation and Development (OECD)<sup>(1)</sup> were used as the basis for study design.

#### 2.1.7. Regulatory Compliance

This study was conducted in compliance with Good Laboratory Practice (GLP) regulations of the Organisation for Economic Co-operation and Development (OECD)<sup>(2)</sup>, U.S. Food and Drug Administration (FDA)<sup>(3)</sup> and the Japanese Ministry of Health and Welfare (MHW)<sup>(4)</sup>. There were no deviations from the GLP regulations that affected the quality or integrity of the study. Quality Assurance Unit findings derived from the inspections during the conduct of this study are documented and have been provided to the Study Director and the Testing Facility Management.

# 2.1.8. Ownership of the Study

The Sponsor owns the study. All raw data, analyses, reports and preserved tissues are the property of the Sponsor.

# 2.1.9. Study Monitor

Paul H. Lieder, Ph.D., DABT

# 2.1.10. Study Director

Raymond G. York, Ph.D., DABT, Associate Director of Research Address as cited above for Testing Facility

#### 2.1.11. Technical Performance

John F. Barnett, B.S. (Director of Laboratory Operations) Christine A. O'Brien (Research Associate) Lorna A. Sinotte, B.S. (Laboratory Technician) Stephanie M. Dorizio, B.A. (Necropsy Laboratory Technician) Christopher K. Ruppert, B.S. (Formulation Laboratory Technician)

# 2.1.12. Report Preparation

Raymond G. York, Ph.D., DABT Jo Ann Frazee, M.S. (Study Coordinator) JoAnne M. Conklin, B.S. (Data Management Specialist) Jennifer M. Hughes (Report Administrator)

#### 2.1.13. Report Review

Mildred S. Christian, Ph.D., Fellow, ATS (Executive Director of Research) Alan M. Hoberman, Ph.D., DABT (Director of Research)

#### 2.1.14. Date Protocol Signed

15 February 2002

# 2.1.15. Dates of Technical Performance

#### 2.1.15.1. Male Rats

Rat Arrival
Dosage Period (14 days before cohabitation and through a 14-day cohabitation period until sacrifice after at least 28 days of dosage)
FOB and Motor Activity Evaluation
Scheduled Sacrifice

12 FEB 02

18 FEB 02 - 25 MAR 02 19 MAR 02 - 20 MAR 02 26 MAR 02

#### **2.1.15.2.** Female Rats

Rat Arrival 12 FEB 02 Dosage Period (14 days before cohabitation through DL<sup>a</sup> 5) 18 FEB 02 - 12 APR 02 Dosage Period Estrous Cycle Evaluation 19 FEB 02 - 04 MAR 02 Cohabitation Period Male 1 04 MAR 02 PM - 11 MAR 02 AM Male 2 11 MAR 02 PM - 18 MAR 02 AM  $DG^{b}0$ 05 MAR 02 - 17 MAR 02 Delivery Period<sup>c</sup> (DL 1) 27 MAR 02 - 08 APR 02 DG 25 Sacrifice (Rats that did not deliver a litter) 30 MAR 02 - 12 APR 02 FOB Evaluation and Motor Activity Evaluation 31 MAR 02 - 12 APR 02 Pup Sacrifice (DL 5) 31 MAR 02 - 12 APR 02 Scheduled Sacrifice (DL 6) 01 APR 02 - 13 APR 02

#### 2.1.16. Records Maintained

The original report, raw data and reserve samples of each lot of bulk test substance and bulk vehicle components are retained in the archives of Argus Research. Any preserved tissues are retained in the archives of the Testing Facility for one year after the mailing of the draft final report, after which time the Sponsor will decide their final disposition. All unused prepared formulations were discarded at the Testing Facility. Unused bulk test substance will be returned to the Sponsor.

#### 2.2. Test Substance Information

#### 2.2.1. Description

T 7599.7 - amber waxy solid

a. DL is an abbreviation for day of lactation.

b. DG is an abbreviation used for day of (presumed) gestation.

c. The day of birth is designated lactation day 0 (postpartum day 0) in the Health Effects Test Guidelines - Reproduction and Fertility Effects (Office of Prevention, Pesticides and Toxic Substances 870.3800, August, 1998) and in the OECD Guideline for the Testing of Chemicals - Combined Repeated Dose Toxicity Study with the Reproduction/Developmental Toxicity Screening Test (Section 4, No. 422, 22 March 1966). This same day is designated day 1 postpartum (day 1 of lactation) in the Standard Operating Procedures of the Testing Facility. Throughout this study, the day of birth was designated day 1 postpartum (day 1 of lactation) and all subsequent ages of the F1 generation rats and days of the lactation period were determined and cited accordingly.

#### 2.2.2. Lot Number

6

# 2.2.3. Date Received and Storage Conditions

The test substance was received on 18 February 2002 and stored at room temperature, protected from light.

# 2.2.4. Special Handling Instructions

Standard safety precautions (use of protective clothing, gloves, dust-mist/HEPA-filtered mask, safety goggles or safety glasses and a face-shield) were worn during formulation preparation and dosage. A half-face respirator was worn when the bulk test substance was not being used in a chemical fume hood.

#### 2.2.5. Analysis of Purity

Information to document or certify the identity, composition, method of synthesis, strength and purity of the test substance was provided by the Sponsor to the Testing Facility. A Certificate of Analysis is available in APPENDIX F.

#### 2.3. Vehicle Information

# 2.3.1. Description

Aqueous 0.5% or 1.0% carboxymethylcellulose (CMC) (medium viscosity) prepared carboxymethylcellulose, an off-white powder, and reverse osmosis membrane processed water.

The 0.5% CMC was used for the first four days of the study. Beginning 22 February 2002, the 1.0% CMC was used for the remainder of the study.

#### 2.3.2. Lot Number

120K0252

# 2.3.3. Date Received and Storage Conditions

The carboxymethylcellulose was received on 11 September 2001 from Sigma Chemical Co., St. Louis, Missouri, and stored at room temperature. R.O. deionized water is available from a continuous source at the Testing Facility and is maintained at room temperature.

# 2.3.4. Special Handling Instructions

Standard safety precautions (use of protective clothing, gloves, dust-mist/HEPA-filtered mask, safety goggles or safety glasses and a face-shield) were taken when handling the vehicle components and prepared vehicle.

# 2.3.5. Analysis of Purity

Neither the Sponsor nor the Study Director was aware of any potential contaminants likely to have been present in the vehicle that would have interfered with the results of this study. The expiration date of the carboxymethylcellulose is September 2005.

# 2.4. Test Substance Preparation and Storage Conditions

Formulations were prepared weekly at the Testing Facility. Prepared test substance and vehicle formulations were stored refrigerated, protected from light.

#### **2.4.1.** Sample Information

		Date	Storage/Shipping		Date
Sample Type	Size	Retained	Retained Conditions Shi		Shipped
Bulk Test Substance	5 g	26 FEB 02 <sup>a</sup>	Room temperature,	SRI <sup>c</sup>	26 FEB 02
	1 g	12 APR 02 <sup>b</sup>	protected from light		15 APR 02
Concentration <sup>d</sup>	2 mL	03 APR 02 <sup>e</sup>	Refrigerated,	SRI <sup>c</sup>	03 APR 02
(all levels)	2 mL	04 APR 02 <sup>f</sup>	protected from light		04 APR 02
Homogeneity <sup>g</sup>	2 mL	18 FEB 02	Refrigerated,	SRI <sup>c</sup>	18 FEB 02
(all levels)	2 mL	28 FEB 02	protected from light		28 FEB 02
Stability <sup>h</sup>	2 mL	18 FEB 02 <sup>i</sup>	Refrigerated,	SRI <sup>c</sup>	18 FEB 02
	2 mL	28 FEB 02 <sup>j</sup>	protected from light		28 FEB 02
Bulk Test Substance	1 g	22 APR 02	Room temperature,	Testing Facility	23 APR 02
Reserve			protected from light	Archives	
Vehicle Components			Room temperature	Testing Facility	
Reserve			_	Archives	
Carboxymethylcellulose	1 g	22 APR 02			23 APR 02
R.O. Deionized Water	1 g	22 APR 02			23 APR 02

- a. A sample of the bulk test substance was retained for use in the preparation of analytical standards and for possible spectrophotometric analysis.
- b. A sample of the bulk test article was retained on the last day of dosage administration and shipped for analysis.
- c. Southern Research Institute, Birmingham, Alabama.
- d. Quadruplicate samples were taken from each concentration on the last day of preparation. Two samples from each quadruplicate set were shipped for analysis. The remaining samples were retained at the Testing Facility as backup samples.
- e. Sample for 1 mg/mL.
- f. Samples for 0, 5 and 25 mg/mL
- g. Quadruplicate samples were taken from the top, middle and bottom of each concentration on the first day of preparation. Two samples of each quadruplicate set were shipped for analysis. The remaining samples were retained at the Testing Facility as backup samples.
- h. Two sets of duplicate samples from each concentration were taken on the first day of preparation. One sample of each duplicate set was shipped for analysis. These samples were analyzed as soon after preparation as possible and ten days after the first analysis. The remaining samples were retained at the Testing Facility as backup samples.
- i. Prepared using 0.5% carboxymethylcellulose.
- j. Prepared using 1.0% carboxymethylcellulose.

# 2.4.2. Analytical Results

Results of the analytical analyses are available in APPENDIX G.

# 2.5. Test System

#### **2.5.1.** Species

Rat

#### 2.5.2. Strain

Crl:CD®(SD)IGS BR VAF/Plus®

# 2.5.3. Supplier (Source)

Charles River Laboratories, Inc., Raleigh, North Carolina

#### 2.5.4. Sex

Male and Female

# 2.5.5. Rationale for Test System

The Crl:CD®(SD)IGS BR VAF/Plus® rat was selected as the Test System because: 1) it is one mammalian species accepted for use in toxicity studies and it has been widely used throughout industry; 2) this strain of rat has been demonstrated to be sensitive to reproductive and developmental toxins; and 3) historical data and experience exist at the Testing Facility<sup>(5-7)</sup>.

# 2.5.6. Test System Data

#### **2.5.6.1.** Male Rats

Number of Rats	70
Approximate Date of Birth	04 DEC 01
Approximate Age at Arrival	71 days
Weight (g) the Day after Arrival	282 - 333
Weight (g) at Study Assignment	303 - 354

#### **2.5.6.2. Female Rats**

Number of Rats	70
Approximate Date of Birth	10 DEC 01
Approximate Age at Arrival	65 days
Weight (g) the Day after Arrival	185 - 226
Weight (g) at Study Assignment	210 - 230

#### 2.5.7. Method of Randomization

Upon arrival, the male and female rats were assigned to individual housing on the basis of computer-generated random units. After an acclimation period of at least five days, male and female rats were selected for study on the basis of physical appearance and body weights recorded during acclimation. The rats were assigned to four dosage groups (Groups I through IV), 15 rats per sex per group, using a computer-generated (weight-ordered) randomization procedure.

Within each dosage group, consecutive order was used to assign the first five male and the first five female rats to a functional observational battery (FOB) and motor activity assessment. The next five rats per sex in each group were assigned to hematology and clinical biochemistry evaluations. The last five rats per sex in each group were assigned

to metabolite analysis. Histological evaluations were performed on the last ten rats per sex in each group.

# 2.5.8. System of Identification

Male and female rats assigned temporary numbers at receipt and given unique permanent identification numbers when assigned to the study. Rats were permanently identified using Monel® self piercing ear tags (Gey Band and Tag Co., Inc., No. MSPT 20101). Cage tags were marked with the study number, permanent rat number, sex, test substance identification, generation and dosage level.

Pups were not individually identified during lactation; all parameters were evaluated in terms of the litter.

# 2.6. Husbandry

# 2.6.1. Research Facility Registration

USDA Registration No. 14-R-0144 under the Animal Welfare Act, 7 U.S.C. 2131 et seq.

# 2.6.2. Study Room

The study room was maintained under conditions of positive airflow relative to a hallway and independently supplied with a minimum of ten changes per hour of 100% fresh air that had been passed through 99.97% HEPA filters. Room temperature and humidity were monitored constantly throughout the study. Room temperature was targeted at 66°F to 77°F (19°C to 25°C); relative humidity was targeted at 30% to 70%<sup>a</sup>.

#### **2.6.3. Housing**

Fo generation rats were individually housed in stainless steel wire-bottomed cages except during cohabitation period and postpartum periods. During cohabitation, each pair of male and female rats was housed in the male rat's cage. Beginning no later than DG 20, Fo generation female rats were individually housed in nesting boxes. Each dam and delivered litter was housed in a common nesting box during the postpartum period. All cage sizes and housing conditions were in compliance with the *Guide for the Care and Use of Laboratory Animals*<sup>(8)</sup>.

#### 2.6.4. Lighting

An automatically-controlled fluorescent light cycle was maintained at 12-hours light: 12-hours dark, with each dark period beginning at 1900 hours EST.

a. See APPENDIX H (TEMPERATURE AND RELATIVE HUMIDITY REPORT).

#### 2.6.5. Sanitization

Cage pan liners were changed at least three times weekly. Cages were changed approximately every other week. Bedding was changed as often as necessary to keep the rats dry and clean.

#### 2.6.6. Feed

Rats were given *ad libitum* access to Certified Rodent Diet®#5002 (PMI Nutrition International, Inc., St. Louis, Missouri) in individual feeders. Rats were fasted overnight before sacrifice.

#### 2.6.7. Feed Analysis

Analyses were routinely performed by the feed supplier. No contaminants at levels exceeding the maximum concentration for certified feed or deviations from expected nutritional requirements were detected by these analyses. Copies of the results of the feed analyses are available in the raw data.

Neither the Sponsor nor the Study Director was aware of any potential contaminants likely to have been present in the feed that would have interfered with the results of this study.

#### 2.6.8. Water

Local water that had been processed by passage through a reverse osmosis membrane (R.O. water) was available to the rats *ad libitum* from an automatic watering access system and/or individual water bottles attached to the cages. Chlorine was added to the processed water as a bacteriostat.

#### 2.6.9. Water Analysis

The processed water is analyzed twice annually for possible chemical contamination (Lancaster Laboratories, Lancaster, Pennsylvania) and monthly for possible bacterial contamination (Analytical Laboratories, Inc., Chalfont, Pennsylvania). Copies of the results of the water analyses are available in the raw data.

Neither the Sponsor nor the Study Director was aware of any potential contaminants likely to have been present in the water that would have interfered with the results of this study.

#### 2.6.10. Bedding Material

Bed-o'cobs® bedding (The Andersons Industrial Products Group, Maumee, Ohio) was used as the nesting material.

# 2.6.11. Bedding Analysis

Analyses for possible contamination are conducted semi-annually. Copies of the results of the bedding analyses are available in the raw data.

Neither the Sponsor nor the Study Director was aware of any potential contaminants likely to have been present in the bedding that would have interfered with the results of this study.

#### 2.7. Methods

# 2.7.1. Dosage Administration

Dosage	Dosage <sup>a</sup>	Concentration	Dosage Volume	Number of Rats per	Assigned Numbers	
Group	(mg/kg/day)	(mg/mL)	(mL/kg)	Sex	Male Rats	Female Rats
I	0 (Vehicle)	0	10	15	17601, 17602, 17603, 17604, 17607, 17608, 17618, 17630, 17631, 17639, 17648, 17652, 17656, 17658, 17660	17662, 17672, 17673, 17674, 17680, 17681, 17690, 17694, 17695, 17703, 17713, 17715, 17716, 17717, 17719
П	10	1	10	15	17615, 17616, 17624, 17626, 17632, 17634, 17635, 17638, 17642, 17643, 17645, 17649, 17651, 17653, 17655	17663, 17665, 17666, 17668, 17671, 17675, 17679, 17684, 17688, 17698, 17702, 17704, 17707, 17708, 17710
Ш	50	5	10	15	17605, 17610, 17611, 17613, 17619, 17620, 17623, 17627, 17628, 17633, 17640, 17646, 17650, 17657, 17659	17661, 17667, 17669, 17670, 17676, 17687, 17693, 17697, 17700, 17701, 17705, 17706, 17709, 17718, 17720
IV	250	25	10	15	17606, 17609, 17612, 17614, 17617, 17621, 17622, 17625, 17629, 17636, 17637, 17641, 17644, 17647, 17654	17664, 17677, 17678, 17682, 17683, 17685, 17686, 17689, 17691, 17692, 17696, 17699, 17711, 17712, 17714

a. The test substance was considered 100% pure for the pupose of dosage calculatons.

# 2.7.2. Rationale for Dosage Selection

Dosages were selected by the Sponsor based on previous studies conducted with the test substance, taking into account possible differences in sensitivity between pregnant and nonpregnant rats. The highest dosage was expected to cause toxic effects but not mortality or obvious suffering. The descending sequence of the lower dosage levels were selected for the purpose of demonstrating any dosage-related response, with no adverse effects expected at the lowest level.

#### 2.7.3. Route and Rationale for Route of Administration

The oral (gavage) route was selected for use because: 1) in comparison with the dietary route, the exact dosage can be accurately administered; and 2) it is one possible route of human exposure.

# 2.7.4. Method and Frequency of Administration

#### 2.7.4.1. Fo Generation Rats

Male rats were administered the test substance and/or the vehicle once daily beginning 14 days before cohabitation (maximum 14 days) and continuing until sacrifice, after completion of the cohabitation period, after a minimum of 28 days of dosage. Female rats were administered the test substance and/or the vehicle once daily beginning 14 days before cohabitation (maximum 14 days) and continuing until DL 5. The dosage volume was adjusted daily on the basis of the individual body weights recorded before intubation<sup>a</sup>. The rats were intubated once daily at approximately the same time each day.

#### 2.7.4.2. F1 Generation Pups

F1 generation pups were not directly administered the test substance and/or vehicle, but may have been possibly exposed to test substance and/or vehicle during maternal gestation (*in utero* exposure) or via maternal milk during the lactation period.

# 2.7.5. Method of Study Performance

#### 2.7.5.1. Fo Generation Rats

Within each dosage group, consecutive order was used to assign rats to cohabitation, one male rat per female rat. The cohabitation period consisted of a maximum of 14 days. Female rats with spermatozoa observed in a smear of the vaginal contents and/or a copulatory plug *in situ* were considered to be DG 0 and assigned to individual housing. Female rats that were not mated with a male rat within the first seven days of cohabitation were assigned an alternate male rat that had mated (same dosage group) and remained in cohabitation for a maximum of seven additional days.

Rats were observed for viability at least twice each day of the study. Rats were examined for clinical observations and general appearance weekly during the acclimation period. Observations for clinical signs of effects of the test substance, abortions, premature deliveries and deaths were made daily before dosage. On the first day of dosage, postdosage observations were recorded at approximately hourly intervals for the first four hours after administration. The observation at four hours after administration was at the end of the normal working day. Postdosage observations for subsequent days of dosage were recorded approximately  $60 \pm 10$  minutes after dosage administration and on the day of sacrifice<sup>b</sup>.

Once before the first dosage and at least once weekly thereafter, detailed clinical observations were conducted for all male and female rats. These observations were made

a. See APPENDIX E (DEVIATIONS FROM THE PROTOCOL AND THE STANDARD OPERATING PROCEDURES OF THE TESTING FACILITY), item 1.

b. See APPENDIX E, items 2 and 3.

outside the cage in a standard arena at the same time each day of conduct. Effort was made to ensure that variations in the test conditions were minimal and that observations were conducted by observers unaware of treatment groups. Signs noted included, but were not limited to: changes in skin, fur, eyes, mucous membranes, occurrence of secretions and excretions and autonomic activity (e.g., lacrimation, piloerection, pupil size, unusual respiratory pattern). Changes in gait, posture and response to handling as well as the presence of clonic or tonic movements, stereotypic behavior (e.g., excessive grooming, repetitive circling), difficult or prolonged parturition or bizarre behavior (e.g., self-mutilation, walking backwards) were also recorded.

Body weights for male and female rats were recorded weekly during the acclimation period, daily during the dosage period and at sacrifice. Feed consumption values for male rats were recorded weekly during the dosage period. Feed left was recorded on the day before sacrifice. Feed consumption values for female rats were recorded weekly to cohabitation and on DGs 0, 7, 10, 12, 15, 18, 20 and 25 (if necessary) and on DLs 1 and 5. Feed left was recorded on the day before sacrifice. During cohabitation, when two rats occupied the same cage with one feed jar, replenishment of feed jars was documented but individual values were not recorded or tabulated. Male and female rats were fasted overnight before sacrifice.

Estrous cycling was evaluated by examination of vaginal cytology beginning with the day after the first administration and then until spermatozoa were observed in a smear of the vaginal contents and/or a copulatory plug was observed *in situ* during the cohabitation period.

Female rats were evaluated for adverse clinical signs observed during parturition, duration of gestation (DG 0 to the day the first pup was observed), litter sizes (all pups delivered) and pup viability at birth. Maternal behavior was evaluated on DLs 1 and 5. Variations from expected maternal behavior were recorded, if and when present, on all other days of the postpartum period.

On one occasion during the course of the study, shortly before scheduled sacrifice, a functional observational battery (FOB)<sup>(9-12)</sup> was conducted on five male and five female rats per group. For male rats, this assessment was conducted approximately one week before scheduled sacrifice. Female rats were tested during the lactation period, the day before scheduled sacrifice. To avoid hyperthermia of pups, dams were separated from their litters for no longer than 30 to 40 minutes.

The FOB evaluation was conducted by an observer unaware of the group assignment of the rat. The following parameters were assessed:

1. Lacrimation, salivation, palpebral closure, prominence of the eye, pupillary reaction to light, piloerection, respiration, and urination and defecation (autonomic functions).

- 2. Sensorimotor responses to visual, auditory, tactile and painful stimuli (reactivity and sensitivity).
- 3. Reactions to handling and behavior in the open field (excitability).
- 4. Gait pattern in the open field, severity of gait abnormalities, air righting reaction, visual placing response and landing foot splay (gait and sensorimotor coordination).
- 5. Forelimb and hindlimb grip strength.
- 6. Abnormal clinical signs including but not limited to convulsions, tremors and other unusual behavior, hypotonia or hypertonia, emaciation, dehydration, unkempt appearance and deposits around the eyes, nose or mouth.

The ability of this battery to detect the effects of positive control substances has been established (Testing Facility Positive Control Data) and is available in APPENDIX I.

Motor activity was evaluated on five male and five female rats per group once during the course of the study. For male rats, this assessment was conducted approximately one week before scheduled sacrifice. Female rats were tested during the lactation period, the day before scheduled sacrifice.

The movements of each rat were monitored by a passive infrared sensor mounted outside a stainless steel, wire-bottomed cage (40.6 x 25.4 x 17.8 cm). Each test session was 1.5 hours in duration with the number of movements and time spent in movement tabulated at each five-minute interval. The apparatus monitored a rack of up to 32 cages and sensors during each session, with each rat tested in the same location on the rack across test sessions. Groups were counterbalanced across testing sessions and cages. Data demonstrating that the test system is capable of detecting increases in activity produced by positive control substances (Testing Facility Positive Control Data) is available in APPENDIX I.

# 2.7.5.2. F1 Generation Pups

Day 1 of lactation (postpartum) was defined as the day of birth and was also the first day on which all pups in a litter were individually weighed (pup body weights were recorded after all pups in a litter were delivered and groomed by the dam).

Each litter was evaluated for viability at least twice daily. The pups in each litter were counted once daily. Clinical observations were recorded once daily. Pup body weights were recorded on DLs 1 and 5 (terminal weight).

# 2.7.6. Gross Necropsy

#### 2.7.6.1. Fo Generation Rats

After 36 days of dosage, all male rats were sacrificed on the day following the last dosage, day 37 of study (DS 37) and on DL 6, all surviving female rats were sacrificed. Rats were sacrificed by carbon dioxide asphyxiation, and a gross necropsy of the thoracic, abdominal and pelvic viscera was performed. Gross necropsy of all male and female rats included an initial physical examination of external surfaces and all orifices, as well as the cranial, thoracic and abdominal cavities and their contents. Special attention was paid to the organs of the reproductive system. The number of implantation sites and corpora lutea were recorded. Tissue trimming and histopathology was performed under the supervision of or by a Board-Certified Veterinary Pathologist. Gross lesions were retained in neutral buffered 10% formalin and examined histologically. Representative photographs of gross lesions are available in the raw data.

The testes and epididymides of all male rats were weighed, and the testes, epididymides, seminal vesicles with coagulating gland and prostate were retained in neutral buffered 10% formalin. The testes were fixed in Bouin's solution for 48 to 96 hours before being retained in neutral buffered 10% formalin. The ovaries and the uterus with cervix of each female rat were weighed, and ovaries, uterus, vagina and a mammary gland were retained in neutral buffered 10% formalin. Uteri of apparently nonpregnant rats were examined after being pressed between glass plates to confirm the absence of implantation sites, and retained in neutral buffered 10% formalin.

Ten rats per sex per group not assigned to functional observational battery and motor activity tests were assigned to histological evaluations. The following organs were excised, trimmed and individually weighed as soon as possible after excision to avoid drying: liver, kidneys, adrenals, thymus, testes, epididymides, spleen, brain, heart, ovaries and uterus (with cervix)<sup>a</sup>. The following tissues or representative samples were retained in neutral buffered 10% formalin: brain (representative regions including cerebrum, cerebellum, pons), small and large intestines (including Peyer's patches), lungs (perfused with neutral buffered 10% formalin), lymph nodes (submandibular and mediastinal), peripheral nerve (sciatic), stomach, kidneys, spleen, thymus, trachea, urinary bladder, testes (fixed in Bouin's solution for 48 to 96 hours before being retained in neutral buffered 10% formalin), epididymides, seminal vesicles (with coagulating gland), prostate, spinal cord (cervical, thoracic and lumbar), liver, adrenals, heart, thyroid/parathyroid, uterus, bone marrow, ovaries, uterus, vagina, mammary gland (female rats only) and gross lesions. Histological examination of retained tissues, including reproductive organs, was conducted for the assigned ten rats per sex from the control and high dosage groups. Histological evaluations were performed on the livers of ten male and ten female rats, the thymuses of ten female rats and the stomachs of ten male rats in the 10 and 50 mg/kg/day dosage groups. Tissues to be examined

a. See APPENDIX E, item 4.

histologically were shipped to Research Pathology Services, Inc., New Britain, Pennsylvania for evaluation. Results of the histological evaluation are available in APPENDIX J.

At scheduled sacrifice, the five male and five female rats per group assigned to hematology and clinical chemistry sample collection were exsanguinated from the inferior vena cava following sacrifice. Rats were fasted overnight before sacrifice. Approximately 5 mL of blood was collected. The tubes containing the samples were labeled with the protocol number, Sponsor study number, animal number, group number, dosage level, day of study, collection interval, date of collection, species, generation and storage conditions.

Approximately 1 mL of blood was collected into EDTA-coated tubes and maintained on wet ice or refrigerated until shipment for analysis of the following hematologic parameters: erythrocyte count (RBC), hematocrit (HCT), hemoglobin (HGB), mean corpuscular hemoglobin (MCH), mean corpuscular hemoglobin concentration (MCHC), mean corpuscular volume (MCV), total leukocyte count (WBC), differential leukocyte count, platelet count (PLAT), mean platelet volume (MPV) and cell morphology. Two blood smear slides were prepared at the Testing Facility for each sample for measurements of differential leukocyte count.

Approximately 1.8 mL of blood was added to a tube containing 0.2 mL of sodium citrate (0.129 M). The contents were mixed and maintained on wet ice until the tubes were centrifuged (within 30 minutes of the collection time). The resulting plasma was transferred to a transport tube and immediately frozen<sup>a</sup>. Plasma samples were maintained on dry ice or in a freezer ( $\leq$  -70°C) until shipped for measurement of prothrombin time (PT) and activated partial thromboplastin time (APTT).

Approximately 2 mL of blood was collected into serum separator tubes and centrifuged. The resulting sera samples were immediately frozen on dry ice and maintained frozen ( $\leq$ -70°C) until shipment for analysis of the following parameters: total protein (TP), triglycerides (TRI), albumin (A), globulin (G), albumin/globulin Ratio (A/G), glucose (GLU), cholesterol (CHOL), total bilirubin (TBILI), urea nitrogen (BUN), creatinine (CREAT), alanine aminotransferase (ALT), aspartate aminotransferase (AST), alkaline phosphatase (ALK), calcium (CA), phosphorus (PHOS), sodium (NA), potassium (K) and chloride (CL)<sup>a</sup>.

Samples for hematology and clinical chemistry analyses were shipped to Redfield Laboratories, A Division of CRL-DDS, Redfield, Arkansas. Results of these analyses are available in APPENDIX K.

Blood samples (approximately 3 mL) were collected from the five rats per sex per group assigned to metabolite analysis. Blood was collected from the vena cava. Each sample was divided into two aliquots. One aliquot of 2 mL was transferred into an EDTA-coated (purple top) tube and refrigerated. The second aliquot (approximately 1 mL) was

a. See APPENDIX E, item 5.

transferred into a serum tube, allowed to clot and spun in a centrifuge. The resulting serum was transferred into polypropylene tubes labeled with the protocol number, Sponsor study number, animal number, group number, dosage level, day of study, collection interval, date of collection, species, generation and storage conditions. All samples were immediately frozen on dry ice and maintained frozen ( $\leq$ -70°C) until shipment for analysis.

The liver was excised and the organ weight recorded. One lobe (right lateral) was placed in a conical tube and flash frozen in an ice/alcohol bath. Liver samples were maintained frozen ( $\leq$ -70°C) until shipment for analysis.

Liver and serum samples were shipped on dry ice and whole blood will be shipped on ice packs. Samples to be analyzed were shipped to Southern Research Institute, Birmingham, Alabama, for analysis. Results of these analyses are available in APPENDIX K.

Female rats that did not deliver a litter were sacrificed on DG 25. Gross necropsy, examination and tissue retention were conducted as described above for rats at scheduled sacrifice.

Dams with no surviving pups were sacrificed after the last pup was found dead, missing or presumed cannibalized. Gross necropsy, examination and tissue retention was conducted as described above for rats at scheduled sacrifice. Gross lesions were preserved in neutral buffered 10% formalin for possible future evaluation. Representative photographs of gross lesions are available in the raw data.

#### 2.7.6.2. F1 Generation Pups

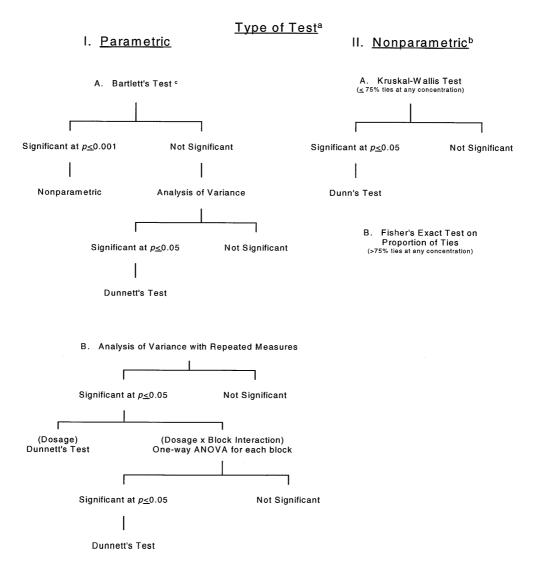
On DL 5, pups were sacrificed by carbon dioxide asphyxiation and examined for gross lesions. Necropsy included a single cross-section of the head at the level of the frontal-parietal suture and examination of the cross-sectioned brain for apparent hydrocephaly. Gross lesions were preserved in neutral buffered 10% formalin for possible future evaluation. Representative photographs of gross lesions are available in the raw data.

Pups that died before initial examination of the litter for pup viability were evaluated for vital status at birth. The lungs were removed and immersed in water. Pups with lungs that sank were identified as stillborn; pups with lungs that floated were identified as liveborn, and to have died shortly after birth. Pups found dead on DLs 2 to 4 were examined for gross lesions and for the cause of death.

# 2.7.7. Data Collection and Statistical Analyses

Data generated during the course of this study were recorded either by hand or using the Argus Automated Data Collection and Management System, the Vivarium Temperature and Relative Humidity Monitoring System, the Coulbourn Instruments Passive Infrared Motor Activity System, the Coulbourn Instruments Auditory Startle System, the Coulbourn Instruments Spatial Delayed Alternation System, and/or the passive avoidance software. All data were tabulated, summarized and/or statistically analyzed using the Argus Automated Data Collection and Management System, the Vivarium Temperature and Relative Humidity Monitoring System, Microsoft Excel [part of Microsoft Office 97 (version SR-2)] and/or The SAS System (version 6.12).

Averages and percentages were calculated. Litter values were used where appropriate. The following schematic represents the statistical analyses of the data:



III. <u>Test for Proportion Data</u> Variance Test for Homogeneity of the Binomial Distribution

a. Statistically significant probabilities are reported as either  $p \le 0.05$  or  $p \le 0.001$ .

b. Proportion data are not included in this category.

c. Test for homogeneity of variance.

Adult data was evaluated with the individual rat as the unit measured. Litter values were used in evaluation of pup data, as appropriate.

Variables with interval or ratio scales of measurement, such as body weights, feed consumption values, latency and errors per trial scores in behavioral tests and percent mortality per litter were analyzed as described under the Parametric heading of the schematic. Bartlett's Test of Homogeneity of Variances (13) was used to estimate the probability that the dosage groups have different variances. A non-significant result (p>0.001) indicated that an assumption of homogeneity of variance was not inappropriate, and the data was compared using the Analysis of Variance<sup>(14)</sup>. If that test was significant ( $p \le 0.05$ ), the groups given the test substance were compared with the control group using Dunnett's Test 15. If Bartlett's Test was significant ( $p \le 0.001$ ), the Analysis of Variance Test was not appropriate, and the data was analyzed as described under the Nonparametric heading of the schematic. When 75% or fewer of the scores in all the groups were tied, the Kruskal-Wallis Test<sup>(16)</sup> was used to analyze the data, and in the event of a significant result ( $p \le 0.05$ ), Dunn's Test<sup>(17)</sup> was used to compare the groups given the test substance with the control group. When more than 75% of the scores in any dosage group were tied, Fisher's Exact Test<sup>(18)</sup> was used to compare the proportion of ties in the groups.

Data from the motor activity test, with measurements recorded at intervals (Blocks) throughout each test session, were analyzed using an Analysis of Variance with Repeated Measures<sup>(19)</sup>, as described under that heading in the schematic. A significant result ( $p \le 0.05$ ) in that test could have appeared as effect of Dosage (differences among dosage groups in the totals of all measurements in a session) or as an interaction between Dosage and Block (differences in the patterns of dosage group values across the measurement periods). If the Dosage effect was significant, the totals for the control group and the groups given the test substance were compared using Dunnett's Test<sup>(15)</sup>. If the Dosage x Block interaction was significant, an Analysis of Variance<sup>(14)</sup> was used to evaluate the data at each measurement period, and a significant result ( $p \le 0.05$ ) was followed by a comparison of the dosage groups using Dunnett's test<sup>(15)</sup>.

Variables that had graded or count scores, such as litter size, the number of trials to a criterion in a behavioral test or the day a developmental landmark appeared, were analyzed using the procedures described under the <u>Nonparametric</u> heading of the schematic.

Clinical observation incidence data were analyzed using the Variance Test for Homogeneity of the Binomial Distribution<sup>(20)</sup>.

#### 3. RESULTS - MALE RATS

# 3.1. Mortality, Clinical and Necropsy Observations (Summaries - Tables B1 and B2; Individual Data - Tables B15 and B16)

# 3.1.1. Mortality

All male rats survived to scheduled sacrifice.

#### 3.1.2. Clinical Observations

Significant increases ( $p \le 0.01$ ) in the incidences of excess salivation, perioral substance and urine-stained abdominal fur occurred in the 250 mg/kg/day dosage group.

All other clinical observations were considered unrelated to the test substance because:
1) the incidences were not dosage-dependent; and/or 2) the observation occurred in only one or two male rats in any dosage group. These observations included chromorhinorrea, soft or liquid feces, missing/broken incisors, chromodacryorrhea, scabs on right forelimb, red substance on the penis and ulceration on right forelimb.

# 3.1.3. Necropsy Observations

All necropsy observations were considered unrelated to the test substance because: 1) the incidences were not dosage-dependent; and/or 2) the observation occurred in only one male rat (17636) in the 250 mg/kg/day dosage group. These observations included a tan, firm, lobular mass (2.8 cm x 0.9 cm x 0.7 cm) on the right hemisphere of the prostate and a red ventral side of the same prostate gland. A cut surface of the mass revealed a tan smooth surface. Histomorphologic diagnosis was suppurative prostatitis.

#### 3.1.4. Histopathology

Treatment-related microscopic changes were observed in the liver of male rats in the 50 and 250 mg/kg/day dosage groups and in the stomach of male rats in the 250 mg/kg/day dosage group.

The treatment-related microscopic changes in the liver consisted of minimal or mild enlargement (hypertrophy) of centrilobular hepatocytes in most of the male rats in the 250 mg/kg/day dosage group and 4 out of 10 in the 50 mg/kg/day dosage group. The enlargement was due to an increased amount of finely granular, dense eosinophilic cytoplasm. Also, in three of the affected rats in the 250 mg/kg/day dosage group, necrosis of individual enlarged hepatocytes was seen in the centrilobular areas.

Microscopic examination of the stomach revealed focal erosions in the pyloric glandular mucosa of two rats in the 250 mg/kg/day dosage group.

No treatment-related microscopic changes were observed in any of the male rats given 10 mg/kg/day of the test substance.

# 3.2. Terminal Body Weights and Organ Weights and Ratios (%) of Organ Weight to Terminal Body Weight and Brain Weight (Summaries - Tables B3 through B5; Individual Data - Tables B17 and B18)

Terminal body weights of the male rats were significantly reduced ( $p \le 0.01$ ) in the 250 mg/kg/day dosage group, as compared with control group values.

Absolute weights of the left and right kidneys were significantly increased ( $p \le 0.05$  or  $p \le 0.01$ ) in the 50 and 250 mg/kg/day dosage groups and the absolute weight of the liver was significantly increased ( $p \le 0.01$ ) in the 250 mg/kg/day dosage group, as compared with the control group value. The ratios of the weights of these organs to terminal body weights were significantly increased ( $p \le 0.05$  or  $p \le 0.01$ ) in the 50 and 250 mg/kg/day dosage groups. Relative to the brain weight, only the liver weight in the 250 mg/kg/day dosage group was significantly increased ( $p \le 0.01$ ).

# 3.3. Hematology and Clinical Chemistry (Summaries - Tables B6 through B7)

Dosages of the test substance as high as 250 mg/kg/day did not affect any hematology or clinical chemistry values evaluated. Average values for red blood cells (RBC), white blood cells (WBC), hemoglobin concentration (HGB), hematocrit (HCT), mean corpuscular volume (MCV), mean corpuscular hemoglobin (MCH), mean corpuscular hemoglobin concentration (MCHC), platelets, volume, prothrombin and activated partial thromboplastin time (PT and APTT), mean platelet volume (MPV), nucleated red blood cell count (NRBC), lymphocytes, segmented neutrophils, bands, monocytes, eosinophils, basophils and abnormal lymphocytes in male rats were comparable among the four dosage groups and did not differ significantly.

Average values for total protein (TP), albumin (A), glucose (GLU), cholesterol (CHOL), total bilirubin (TBILI), blood urea nitrogen (BUN), creatinine (CREAT), alanine aminotransferase (ALT), aspartate aminotransferase (AST), alkaline phosphatase (ALK), calcium (CA), phosphorus (PHOS), triglycerides (TRIG), sodium (NA), potassium (K), chloride (CL), globulin (G) and albumin/globulin ratio (A/G) in male rats were comparable among the four dosage groups and did not differ significantly.

# 3.4. Body Weights and Body Weight Changes (Figure 1; Summaries - Tables B8 and B9; Individual Data - Table B19)

Body weight gains were significantly reduced ( $p \le 0.01$ ) in the 250 mg/kg/day dosage group on study days (DSs) 1 to 8, 1 to 15 and 1 to 36. Body weight gains were also significantly decreased ( $p \le 0.05$ ) in the 50 mg/kg/day dosage group on DSs 1 to 36.

Body weights were significantly reduced ( $p \le 0.01$ ) on DS 29 and 36 in the 250 mg/kg/day dosage group. Body weights and body weight gains of the male rats were unaffected by dosages of the test substance as high as 10 mg/kg/day.

## 3.5. Absolute (g/day) and Relative (g/kg/day) Feed Consumption Values (Summaries - Tables B10 and B11; Individual Data - Table B20)

Absolute (g/day) feed consumption values were significantly reduced ( $p \le 0.05$  or  $p \le 0.01$ ) in the 50 and 250 mg/kg/day dosage groups on DSs 1 to 8 and significantly reduced ( $p \le 0.01$ ) in the 250 mg/kg/day dosage groups on DSs 1 to 15 and 1 to 36. Absolute feed consumption values during the recovery period were comparable between the 0 (Vehicle) and 10 mg/kg/day dosage groups.

Relative (g/kg/day) feed consumption values were significantly reduced ( $p \le 0.05$  or  $p \le 0.01$ ) on DSs 1 to 8 in the 50 and 250 mg/kg/day dosage groups. Relative feed consumption values of the male rats were unaffected by dosages of the test substance as high as 10 mg/kg/day.

## 3.6. Mating and Fertility (Summary - Table B12; Individual Data - Table B21)

All mating and fertility parameters (numbers of days in cohabitation, rats that mated, fertility index, rats with confirmed mating dates during the first and second week of cohabitation, rats pregnant per rats in cohabitation and the number of pregnant rats per number of rats in cohabitation) were unaffected by dosages of the test substance as high as 250 mg/kg/day.

## 3.7. Functional Observational Battery (Summary - Table B13; Individual Data - Table B22)

There were no statistically significant or biologically important differences among the four dosage groups in the measures of the functional observational battery (FOB). There were no alterations in home cage behavior, autonomic functions (lacrimation, salivation, palpebral closure, prominence of the eye, pupillary reaction to light, piloerection, respiration, defectaion and urination), sensorimotor functions [responses to visual, auditory, tactile and painful stimuli (reactivity and sensitivity)], excitability (reactions to handling and behavior in the open field), gait and sensorimotor coordination (gait pattern in the open field, severity of gait abnormalities, air righting reaction and landing foot splay) and forelimb and hindlimb grip strength and abnormal clinical observations including but not limited to: convulsions, tremors, unusual behavior, hypotonia or hypertonia, emaciation, dehydration, unkempt appearance and deposits around the eyes, nose or mouth.

Body weights recorded during the functional operational battery for the treated groups were not significantly different than the control group for the male rats.

## 3.8. Motor Activity (Figure 3 and 4; Summary - Table B14; Individual Data - Table B23)

There were no statistically significant or biologically important differences among the four dosage groups in the measures of motor activity on DS 8.

#### 4. **RESULTS - Female Rats**

## 4.1. Mortality, Clinical and Necropsy Observations (Summaries - Tables C1 and C2; Individual Data - Tables C27 and C28)

#### 4.1.1. Mortality

All female rats survived to scheduled sacrifice.

#### 4.1.2. Clinical Observations

All clinical observations were considered unrelated to the test substance because: 1) the incidences were not dosage-dependent; and/or 2) the observation occurred in only one or two female rats in any dosage group. These observations included perioral substance, excess salivation, bent tail, chromodacryorrhea, corneal opacity of right eye, localized alopecia on the limbs, underside or head, urine-stained abdominal fur, red perivaginal substance, soft or liquid feces, missing/broken incisors and dehydration.

#### 4.1.3. Necropsy Observations

All necropsy observations were considered unrelated to the test substance because: 1) the incidences were not dosage-dependent; and/or 2) the observation occurred in only one female rat in the 50 mg/kg/day dosage group and one female rat in the 250 mg/kg/day dosage group. These observations included an absent right kidney in one 50 mg/kg/day dosage group female rat (17706) and a small thymus in one 250 mg/kg/day dosage group female rat (17696). The small thymus was not available for histomorphologic diagnosis.

#### 4.1.4. Histopathology

Treatment-related microscopic changes were observed in the liver and thymus of female rats in the 250 mg/kg/day dosage group.

The treatment-related microscopic changes in the liver consisted of minimal or mild enlargement (hypertrophy) of centrilobular hepatocytes in most of the female rats in the 250 mg/kg/day dosage group. The enlargement was due to an increased amount of finely granular, dense eosinophilic cytoplasm.

Microscopic examination of the thymus revealed an increased incidence and severity of atrophy of the thymic lobules in female rats in the 250 mg/kg/day dosage group.

No treatment-related microscopic changes were observed in any of the female rats given 10 mg/kg/day of the test substance.

# 4.2. Terminal Body Weights and Organ Weights and Ratios (%) of Organ Weight to Terminal Body Weight and Brain Weight (Summaries - Tables C3 through C5; Individual Data - Tables C29 and C30)

Terminal body weights of the female rats were reduced (-4.8%), albeit not significantly, in the 250 mg/kg/day dosage group, as compared with control group values.

Absolute weights of the liver was significantly increased ( $p \le 0.01$ ) in the 250 mg/kg/day dosage group, as compared with the control group value. The ratios of the weight of this organ and the weight of the right kidney to terminal body weights were significantly increased ( $p \le 0.01$ ) in the 250 mg/kg/day dosage group. Only the ratio of the liver weight to brain weight in the 250 mg/kg/day dosage group was significantly increased ( $p \le 0.01$ ) was considered treatment-related; the significantly increased ( $p \le 0.05$ ) ratio of the liver weight to brain weight in the 10 mg/kg/day dosage group was not considered treatment-related because it was not dosage dependent.

#### 4.3. Hematology and Clinical Chemistry (Summaries - Tables C6 and C7)

Dosages as high as 250 mg/kg/day did not affect any hematology or clinical chemistry values evaluated. Average values for red blood cells (RBC), white blood cells (WBC), hemoglobin concentration (HGB), hematocrit (HCT), mean corpuscular volume (MCV), mean corpuscular hemoglobin (MCH), mean corpuscular hemoglobin concentration (MCHC), platelets, prothrombin and activated partial thromboplastin time (PT and APTT), mean platelet volume (MPV), nucleated red blood cell count (NRBC), lymphocytes, segmented neutrophils, bands, monocytes, eosinophils, basophils, abnormal lymphocytes in female rats were comparable among the four dosage groups and did not differ significantly.

Average values for total protein (TP), albumin (A), glucose (GLU), cholesterol (CHOL), total bilirubin (TBILI), blood urea nitrogen (BUN), creatinine (CREAT), alanine aminotransferase (ALT), aspartate aminotransferase (AST), alkaline phosphatase (ALK), calcium (CA), phosphorus (PHOS), triglycerides (TRIG), sodium (NA), potassium (K), chloride (CL), globulin (G) and albumin/globulin ratio (A/G) in female rats were comparable among the four dosage groups and did not differ significantly.

## 4.4. Body Weights and Body Weight Changes (Figure 1; Summaries - Tables C8 through C13; Individual Data - Tables C31 through C33)

#### 4.4.1. Precohabitation

Body weight gains were significantly reduced ( $p \le 0.05$ ) during the precohabitation period in the 250 mg/kg/day dosage group on DSs 1 to 8 and 1 to 15. Body weights were not significantly affected by dosages of the test substance on any weight day during precohabitation.

#### 4.4.2. Gestation

Body weights and body weight gains were not significantly affected by dosages of the test substance during gestation.

Body weights gains were significantly reduced ( $p \le 0.05$  or  $p \le 0.01$ ) during gestation on days of gestation (DGs) 0 to 3 and 12 to 15 in the 50 mg/kg/day dosage group and on DGSs 12 to 15 in the 10 mg/kg/day dosage group. These significant reductions in body weight gain were not considered treatment-related because they were not dosage-dependent.

#### 4.4.3. Lactation

Body weight gains were not significantly affected by dosages of the test substance during lactation. Body weights were significantly reduced ( $p \le 0.05$ ) during lactation on day of lactation (DL) 1 in the 250 mg/kg/day dosage group but was not considered treatment-related because it did not persist.

4.5. Absolute (g/day) and Relative (g/kg/day) Feed Consumption Values (Summaries - Tables C14 through C19; Individual Data - Tables C34 through C36)

#### 4.5.1. Precohabitation

Absolute (g/day) and relative (g/kg/day) feed consumption values were not significantly affected by dosages of the test substance during the precohabitation period.

#### 4.5.2. Gestation

Absolute (g/day) feed consumption values were not significantly affected by dosages of the test substance during the gestation period.

Relative (g/kg/day) feed consumption values were significantly increased ( $p \le 0.01$ ) during gestation on DGs 15 to 18 in the 250 mg/kg/day dosage group but was not considered treatment-related because it did not persist.

#### 4.5.3. Lactation

Absolute and relative feed consumption values were not significantly affected by dosages of the test substance during lactation.

# 4.6. Estrous Cycling, Mating and Fertility (Summary - Table C20; Individual Data - Table C37)

The average numbers of estrous stages per 14 days were comparable among the four dosage groups and did not significantly differ. The number of rats with six or more consecutive days of diestrus or estrus did not differ significantly.

All mating and fertility parameters (numbers of days in cohabitation, rats that mated, Fertility Index, rats with confirmed mating dates during the first and second week of cohabitation, rats pregnant per rats in cohabitation and the number of pregnant rats per number of rats in cohabitation) were unaffected by dosages of the test substance as high as 250 mg/kg/day.

## **4.7.** Functional Observational Battery (Summary - Table C21; Individual Data - Table C38)

There were no statistically significant or biologically important differences among the four dosage groups in the measures of the functional observational battery (FOB). There were no alterations in home cage behavior, autonomic functions (lacrimation, salivation, palpebral closure, prominence of the eye, pupillary reaction to light, piloerection, respiration, defecation and urination), sensorimotor functions [responses to visual, auditory, tactile and painful stimuli (reactivity and sensitivity)], excitability (reactions to handling and behavior in the open field), gait and sensorimotor coordination (gait pattern in the open field, severity of gait abnormalities, air righting reaction and landing foot splay) and forelimb and hindlimb grip strength and abnormal clinical observations including but not limited to: convulsions, tremors, unusual behavior, hypotonia or hypertonia, emaciation, dehydration, unkempt appearance and deposits around the eyes, nose or mouth.

Body weights recorded during the functional operational battery for the treated groups were not significantly different than the control group for the female rats.

## 4.8. Motor Activity (Figures 5 and 6; Summary - Table C22; Individual Data - Table C39)

There were no statistically significant or biologically important differences among the four dosage groups in the measures of motor activity on DS 86.

# 4.9. Natural Delivery and Litter Observations (Summary - Tables C23 and C24; Individual Data - Tables C40 through C43)

Pregnancy occurred in all 15 (100%) rats assigned to the 0 (Vehicle) and 50 mg/kg/day dosage groups, 14 (93.3%) of the rats assigned to the 10 mg/kg/day dosage group and 13 (86.7%) of the rats assigned to the 250 mg/kg/day dosage group. All pregnant dams delivered a litter of one or more liveborn pups. The number of liveborn pups was significantly reduced ( $p \le 0.01$ ) in the 250 mg/kg/day dosage group. The number of stillborn pups was significantly increased ( $p \le 0.01$ ) in the 250 mg/kg/day dosage group. The number of pups found dead or presumed cannibalized on day 1 and days 2 to 5 postpartum was significantly increased ( $p \le 0.01$ ) in the 250 mg/kg/day dosage groups. The viability index (81.5%) was significantly reduced ( $p \le 0.01$ ) in the 250 mg/kg/day dosage group, compared to the control group value (99.1%). The number of pups surviving per litter on postpartum day 5 was significantly reduced ( $p \le 0.05$ ) in the 250 mg/kg/day dosage group. Pup body weights per litter were also reduced, albeit not significantly, in the 250 mg/kg/day dosage group on postpartum days 1 and 5. These

findings at 250 mg/kg/day were considered related to the test substance because they were dosage dependent.

Values for the numbers of dams delivering litters, the duration of gestation, averages for implantation sites per delivered litter, the gestation index (number of dams with one or more liveborn pups/number of pregnant rats), the numbers of dams with stillborn pups, dams with all pups dying, stillborn pups, surviving pups per litter on postpartum day 1 and pup sex ratios were comparable among the four dosage groups and did not significantly differ.

## 4.10. Pup Clinical and Necropsy Observations (Summary - Tables C25 and C26; Individual Data - Tables C44 and C45)

No clinical or necropsy observations in the F1 generation pups were attributable to dosages of the test substance as high as 250 mg/kg/day because: 1) the incidences were not dosage-dependent; and 2) the observation occurred in only one to three litters. These clinical observations included: not nursing, not nesting, pale and bruise on head, back, mouth, lower midline, chest and/or neck. Necropsy observations on postpartum day 5 was limited to slight dilation of the renal pelvis of one pup from a 10 mg/kg/day dosage group litter.

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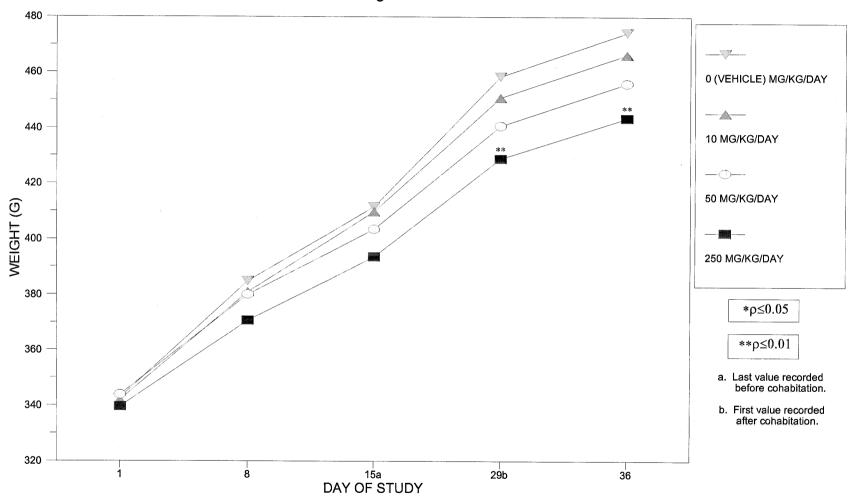
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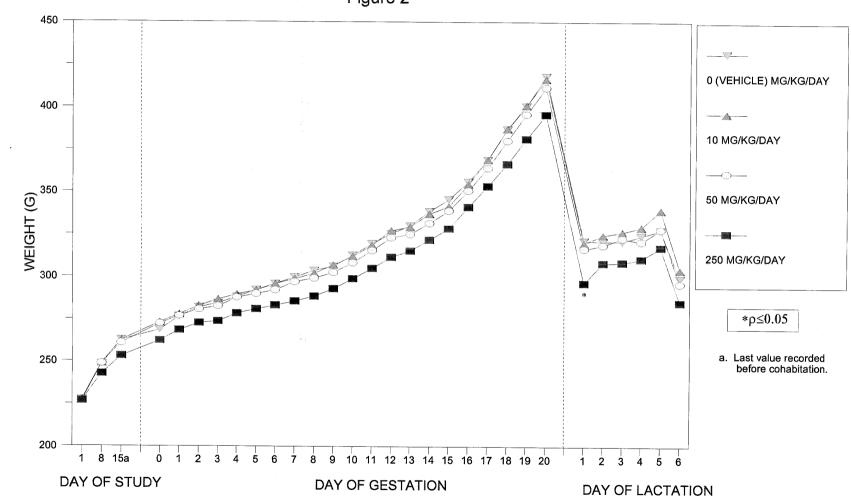
# APPENDIX A REPORT FIGURES

# BODY WEIGHTS - MALE RATS Figure 1



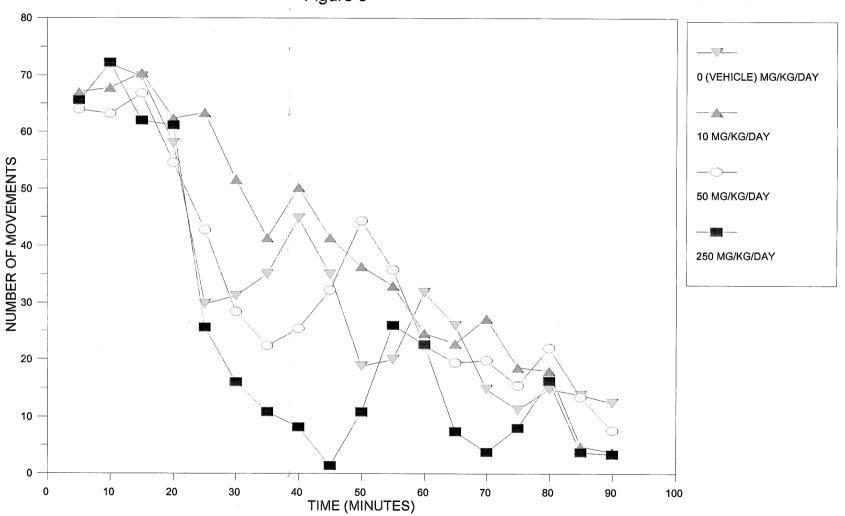
### **BODY WEIGHTS - FEMALE RATS**

Figure 2



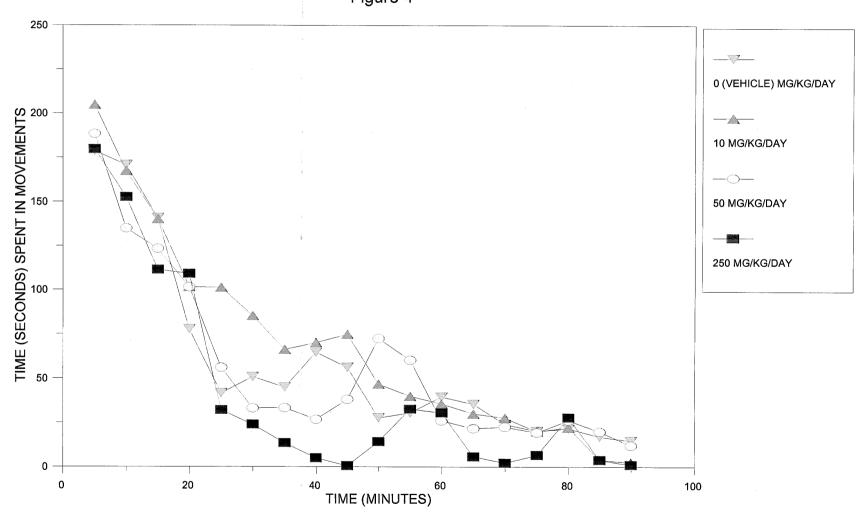
### MOTOR ACTIVITY - NUMBER OF MOVEMENTS - MALE RATS



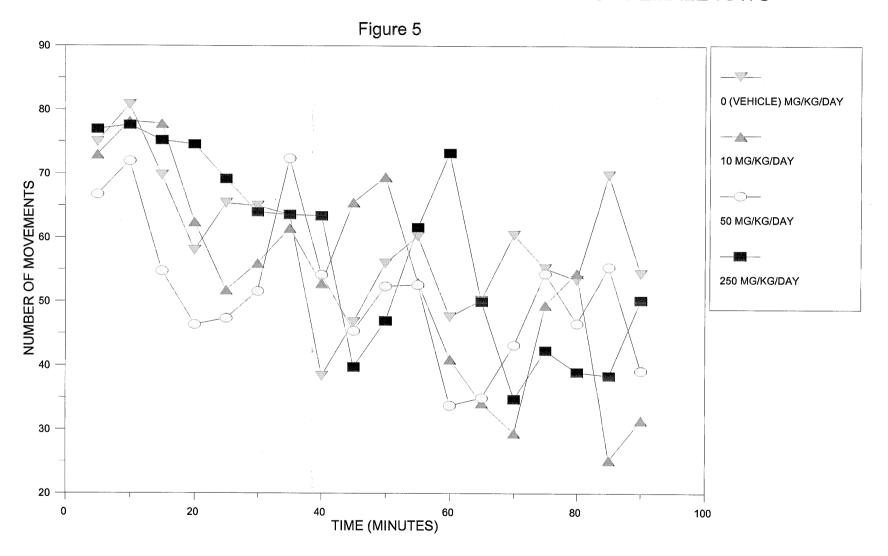


## MOTOR ACTIVITY - TIME SPENT IN MOVEMENT - MALE RATS



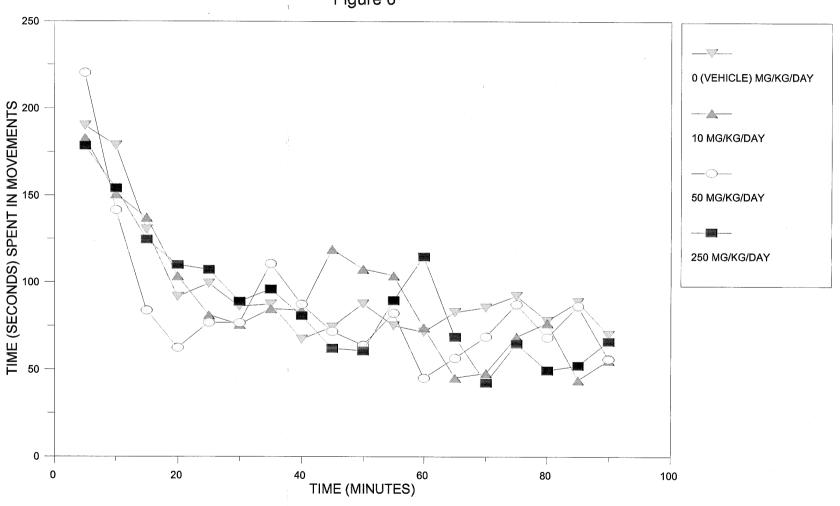


### MOTOR ACTIVITY - NUMBER OF MOVEMENTS - FEMALE RATS



### MOTOR ACTIVITY - TIME SPENT IN MOVEMENT - FEMALE RATS





# APPENDIX B REPORT TABLES - Fo GENERATION MALE RATS

118-027:PAGE B-1

TABLE B1 (PAGE 1): CLINICAL OBSERVATIONS - SUMMARY - FO GENERATION MALE RATS

DOSAGE GROUP DOSAGE (MG/KG/DAY)	I 0 (VEHICLE)	II 10	TII 50	IV 250
MAXIMUM POSSIBLE INCIDENCE	555/ 15	555/ 15	555/ 15	555/ 15
MORTALITY	0	0	0	0
EXCESS SALIVATION	0/ 0	0/ 0	0/ 0	24/ 10**
RED, SLIGHT PERIORAL SUBSTANCE	0/ 0	0/ 0	0/ 0	15/ 10**
URINE-STAINED ABDOMINAL FUR	0/ 0	0/ 0	1/ 1	14/ 4**
CHROMORHINORRHEA	4/ 3	6/ 4	2/ 1	6/ 3
LOCALIZED ALOPECIA: LIMBS	0/ 0	0/ 0	6/ 1	16/ 2
CHROMODACRYORRHEA	0/ 0	0/ 0	1/ 1	5/ 2
SOFT OR LIQUID FECES	3/ 2	3/ 2	0/ 0	2/ 2
RIGHT FORELIMB: SCAB(S)	0/ 0	0/ 0	0/ 0	14/ 1
INCISORS: MISSING/BROKEN	0/ 0	0/ 0	1/ 1	9/ 1
PENIS: RED SUBSTANCE	0/ 0	1/ 1	1/ 1	1/ 1
RIGHT FORELIMB: ULCERATION	0/ 0	0/ 0	0/ 0	1/ 1

STATISTICAL ANALYSES OF CLINICAL OBSERVATION DATA WERE RESTRICTED TO THE NUMBER OF RATS WITH OBSERVATIONS. MAXIMUM POSSIBLE INCIDENCE = (DAYS  $\times$  RATS)/NUMBER OF RATS EXAMINED PER GROUP. N/N = TOTAL NUMBER OF OBSERVATIONS/NUMBER OF RATS WITH OBSERVATION.

<sup>\*\*</sup> Significantly different from the vehicle control group value ( $p \le 0.01$ ).

TABLE B2 (PAGE 1): NECROPSY OBSERVATIONS - SUMMARY - FO GENERATION MALE RATS

DOSAGE GROUP DOSAGE (MG/KG/DAY)		I (VEHICLE)	II 10	III 50	IV 250	
RATS EXAMINED a	N	15	15	15	15	
MORTALITY	N	0	0	0	0	
APPEARED NORMAL	N	15	15	15	14	
PROSTATE: RIGHT HEMISPHERE, TAN, FIRM,						
LOBULAR MASS	N	0	0	0	1	
VENTRAL RIGHT SIDE, RED	N	0	0	0	1	

a. Refer to the individual clinical observations table (Table B15) for external observations confirmed at necropsy.

TABLE B3 (PAGE 1): TERMINAL BODY WEIGHTS AND ORGAN WEIGHTS - SUMMARY - FO GENERATION MALE RATS

				<u> </u>	487 (44)
DOSAGE GROUP DOSAGE (MG/KG/DAY)		I O (VEHICLE)	II 10	III 50	IV 250
RATS TESTED	N	15	15	15	15
TERMINAL BODY WEIGHT	MEAN±S.D.	447.1 ± 34.7	439.0 ± 21.3	428.6 ± 32.2	412.3 ± 16.0**
EPIDIDYMIS LEFT	MEAN±S.D.	0.74 ± 0.06	0.72 ± 0.09	0.72 ± 0.08	0.71 ± 0.06
TESTIS LEFT	MEAN±S.D.	1.76 ± 0.14	1.64 ± 0.29	1.73 ± 0.15	1.74 ± 0.13
EPIDIDYMIS RIGHT	MEAN±S.D.	0.76 ± 0.06	0.74 ± 0.10	0.73 ± 0.09	0.70 ± 0.06
TESTIS RIGHT	MEAN±S.D.	1.74 ± 0.14	$1.72 \pm 0.12$	1.74 ± 0.15	1.75 ± 0.14
BRAIN	MEAN±S.D.	2.31 ± 0.10 [ 10]a	2.25 ± 0.12 [ 10]a	2.36 ± 0.09	2.32 ± 0.16
LIVER	MEAN±S.D.	13.61 ± 1.26	$13.79 \pm 1.74$	[ 10]a 14.06 ± 1.51	[ 10]a 18.31 ± 2.27**
KIDNEY LEFT	MEAN±S.D.	1.94 ± 0.16 [ 10]a	1.96 ± 0.16 [ 10]a	2.12 ± 0.18* [ 10]a	2.16 ± 0.13**
KIDNEY RIGHT	MEAN±S.D.	2.00 ± 0.09 [ 10]a	2.02 ± 0.21 [ 10]a	2.16 ± 0.18* [ 10]a	[ 10]a 2.18 ± 0.13*
ADRENAL LEFT	MEAN±S.D.	$0.030 \pm 0.003$ [ 9]a,b	0.030 ± 0.005 [ 10]a	0.029 ± 0.006 [ 10]a	[ 10]a 0.030 ± 0.007 [ 10]a
ADRENAL RIGHT	$\mathtt{MEAN}_{\pm}\mathtt{S.D.}$	0.028 ± 0.004 [ 10]a	0.032 ± 0.005 [ 10]a	0.029 ± 0.002 [ 10]a	$0.028 \pm 0.004$
SPLEEN	MEAN±S.D.	0.89 ± 0.09 [ 10]a	0.79 ± 0.12 [ 10]a	$0.85 \pm 0.12$	[ 10]a 0.83 ± 0.10
THYMUS	MEAN±S.D.	0.54 ± 0.14 [ 10]a	0.43 ± 0.13 [ 10]a	[ 10]a 0.43 ± 0.14	[ 10]a 0.40 ± 0.12
HEART	MEAN±S.D.	1.51 ± 0.13 [ 10]a	1.49 ± 0.20 [ 10]a	[ 10]a 1.46 ± 0.16 [ 10]a	[ 10]a 1.45 ± 0.17 [ 10]a

ALL WEIGHTS WERE RECORDED IN GRAMS (G).

<sup>[ ] =</sup> NUMBER OF VALUES AVERAGED.

a. Results did not warrant examination of the five additional rats.

b. Excludes a value for rat 17660, which had an organ damaged (weight affected).

<sup>\*</sup> Significantly different from the vehicle control group value (p<0.05).

<sup>\*\*</sup> Significantly different from the vehicle control group value (p<0.01).

RATIOS (%) = (ORGAN WEIGHT/TERMINAL BODY WEIGHT) X 100.

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE B4 (PAGE 1): RATIOS (%) OF ORGAN WEIGHT TO TERMINAL BODY WEIGHT - SUMMARY - FO GENERATION MALE RATS

DOSAGE GROUP		I	II	III	TV
DOSAGE (MG/KG/DAY)		0 (VEHICLE)	10	50	250
RATS TESTED	N	15	15	15	15
EPIDIDYMIS LEFT	MEAN+S.D.	0.165 + 0.016	0.165 ± 0.019	0 167 . 0 000	0.450
	MIDAMID.D.	0.103 ± 0.016	0.165 ± 0.019	$0.167 \pm 0.023$	$0.173 \pm 0.018$
TESTIS LEFT	MEAN±S.D.	0.395 ± 0.050	0.373 ± 0.066	$0.406 \pm 0.048$	$0.422 \pm 0.038$
				<del>-</del>	
EPIDIDYMIS RIGHT	MEAN±S.D.	$0.169 \pm 0.019$	$0.167 \pm 0.025$	$0.171 \pm 0.026$	$0.171 \pm 0.017$
TESTIS RIGHT	MEAN+S.D.	0.392 + 0.046	0.393 ± 0.027	0.409 + 0.047	0.405 . 0.041
	······································	0.392 ± 0.040	0.393 ± 0.027	0.409 ± 0.047	$0.425 \pm 0.041$
BRAIN	MEAN±S.D.	$0.521 \pm 0.039$	$0.512 \pm 0.032$	0.547 + 0.033	0.555 ± 0.050
		[ 10]a	[ 10]a	[ 10]a	[ 10]a
LIVER	MEAN±S.D.	$3.043 \pm 0.144$	$3.133 \pm 0.278$	$3.275 \pm 0.166**$	4.434 ± 0.450**
KIDNEY LEFT	MEAN+S.D.	0.436 ± 0.046	0.448 + 0.043	0.493 + 0.056*	0.517 + 0.033**
		[ 10]a	[ 10]a	[ 10]a	0.51/ ± 0.033** [ 10]a
KIDNEY RIGHT	MEAN±S.D.	0.451 ± 0.037	0.462 ± 0.051	0.501 + 0.056*	0.521 + 0.031**
		[ 10]a	[ 10]a	[ 10]a	[ 10]a
ADRENAL LEFT b	MEAN±S.D.	$6.562 \pm 0.570$	6.737 ± 1.213	6.690 + 1.451	7.069 ± 1.568
		[ 9]a,c	[ 10]a	[ 10]a	[ 10]a
ADRENAL RIGHT b	MEAN±S.D.	$6.325 \pm 0.938$	$7.215 \pm 1.194$	6.826 ± 0.724	6.598 ± 1.005
		[ 10]a	[ 10]a	[ 10]a	[ 10]a
SPLEEN	$\texttt{MEAN} \pm \texttt{S.D.}$	$0.200 \pm 0.027$	$0.178 \pm 0.026$	$0.197 \pm 0.033$	$0.197 \pm 0.021$
		[ 10]a	[ 10]a	[ 10]a	[ 10]a
THYMUS	MEAN±S.D.	$0.122 \pm 0.032$	$0.099 \pm 0.030$	$0.099 \pm 0.033$	$0.096 \pm 0.029$
		[ 10]a	[ 10]a	[ 10]a	[ 10]a
HEART	$\mathtt{MEAN}_{\pm}\mathtt{S.D.}$	$0.341 \pm 0.027$	$0.341 \pm 0.038$	$0.338 \pm 0.039$	$0.348 \pm 0.042$
		[ 10]a	[ 10]a	[ 10]a	[ 10]a

ALL WEIGHTS WERE RECORDED IN GRAMS (G).

[ ] = NUMBER OF VALUES AVERAGED.

a. Results did not warrant examination of the five additional rats.

b. Value was multiplied by 1000.

c. Excludes a value for rat 17660, which had an organ damaged (weight affected).

<sup>\*</sup> Significantly different from the vehicle control group value (p<0.05).

<sup>\*\*</sup> Significantly different from the vehicle control group value  $(p \le 0.01)$ .

TABLE B5 (PAGE 1): RATIOS (%) OF ORGAN WEIGHT TO BRAIN WEIGHT - SUMMARY - FO GENERATION MALE RATS

DOSAGE GROUP DOSAGE (MG/KG/DAY)		I 0 (VEHICLE)	II 10	III 50	IV 250
RATS TESTED	N	10a	10a	10a	10a
BRAIN WEIGHT	MEAN±S.D.	2.31 ± 0.10	2.25 ± 0.12	2.36 ± 0.09	2.32 ± 0.16
EPIDIDYMIS LEFT	MEAN±S.D.	31.28 ± 2.24	32.08 ± 3.44	29.98 ± 3.37	29.86 ± 2.87
TESTIS LEFT	MEAN±S.D.	75.14 ± 6.24	75.90 ± 4.98	73.00 ± 8.32	73.95 ± 10.60
EPIDIDYMIS RIGHT	MEAN±S.D.	31.97 ± 2.81	32.63 ± 3.73	30.38 ± 3.16	29.72 ± 3.60
TESTIS RIGHT	MEAN±S.D.	74.42 ± 5.96	76.90 ± 3.34	72.98 ± 6.85	73.87 ± 9.89
LIVER	MEAN±S.D.	594.63 ± 42.79	620.48 ± 81.18	603.91 ± 53.24	807.37 ±123.75**
KIDNEY LEFT	MEAN±S.D.	83.88 ± 7.32	87.59 ± 7.45	90.39 ± 9.47	93.84 ± 9.85
KIDNEY RIGHT	MEAN±S.D.	86.77 ± 5.89	90.12 ± 9.43	91.76 ± 8.79	94.73 ± 10.17
ADRENAL LEFT	MEAN±S.D.	1.18 ± 0.30	1.32 ± 0.27	1.22 ± 0.25	1.29 ± 0.38
ADRENAL RIGHT	MEAN±S.D.	[ 9]b 1.22 ± 0.16	1.42 ± 0.29	1.25 ± 0.11	1.19 ± 0.18
SPLEEN	MEAN±S.D.	38.72 ± 5.38	35.15 ± 4.75	36.13 ± 5.76	35.99 ± 6.32
THYMUS	MEAN±S.D.	23.66 ± 7.02	19.20 ± 5.21	18.19 ± 5.94	17.22 ± 4.88
HEART	MEAN±S.D.	65.48 ± 7.01	66.42 ± 7.27	61.92 ± 6.70	63.19 ± 9.74

ALL WEIGHTS WERE RECORDED IN GRAMS (G).

RATIOS (%) = (ORGAN WEIGHT/BRAIN WEIGHT) X 100.

a. Results did not warrant examination of the five additional rats.
b. Excludes a value for rat 17660, which had an organ damaged (weight affected).
\*\* Significantly different from the vehicle control group value (p<0.01).

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TABLE B6 (PAGE 1): HEMATOLOGY - SUMMARY - FO GENERATION MALE RATS (See last page of this table for abbreviations)

DOSAGE GROUP DOSAGE (MG/KG/DAY)		I 0 (VEHICLE)	II 10	III 50	IV
				50	250
RATS TESTED	N	5	5	5	5
WBC (THSN/CU MM)	MEAN±s.D.	14.7 ± 3.61	18.9 ± 2.96	15.3 ± 3.36	19.3 ± 7.90
RBC (MILL/CU MM)	MEAN±S.D.	7.55 ± 0.493	7.56 ± 0.448	7.27 ± 0.291	7.17 ± 0.270
HGB (GRAMS/DL)	MEAN±S.D.	15.8 ± 0.26	15.6 ± 0.71	15.2 ± 0.40	15.1 ± 0.65
HCT (%)	MEAN±S.D.	43.7 ± 1.82	42.5 ± 2.12	41.4 ± 1.30	40.5 ± 1.88
MCV (CU MICRONS)	MEAN±S.D.	57.9 ± 2.09	56.3 ± 0.84	56.9 ± 1.94	56.5 ± 1.44
MCH (PICO GRAMS)	MEAN±S.D.	21.0 ± 1.15	20.7 ± 0.42	20.9 ± 0.70	21.1 ± 0.88
MCHC (%)	MEAN±S.D	36.3 ± 0.97	36.8 ± 0.35	36.6 ± 1.17	37.4 ± 1.25
PLT (THSN/CU MM)	MEAN±S.D.	1197 ± 122.5	1172 ± 54.0	1218 ± 190.7	1283 ± 138.9
PT (SECONDS)	MEAN±S.D.	14.4 ± 0.66	13.7 ± 0.39	14.7 ± 0.70	14.6 ± 0.96
APTT (SECONDS)	MEAN±S.D.	25.4 ± 1.89	25.9 ± 2.33	26.2 ± 2.18	26.7 ± 2.51

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TABLE B6 (PAGE 2): HEMATOLOGY - SUMMARY - FO GENERATION MALE RATS (See the page of this table for abbreviations)

DOSAGE GROUP		I	II	III	IV
DOSAGE (MG/KG/DAY)		0 (VEHICLE)	10	50	250
RATS TESTED	N	5	5	5	5
MPV (CU MICRONS)	MEAN±S.D.	9.2 ± 0.32	9.7 ± 0.79	9.5 ± 1.03	9.1 ± 0.67
NRBC COUNT	MEAN±S.D.	0 ± 0.0	0 ± 0.0	0 ± 0.0	0 ± 0.0
Lymphocyte (THSN/CU MM)	MEAN±S.D.	12.6 ± 3.67	15.8 ± 3.21	13.3 ± 3.24	14.1 ± 4.01
Segmented (THSN/CU MM)	MEAN±S.D.	1.9 ± 0.26	2.8 ± 0.87	1.8 ± 0.41	5.0 ± 7.38
Bands (THSN/CU MM)	MEAN±S.D.	0.0 ± 0.00	0.0 ± 0.00	0.0 ± 0.00	0.0 ± 0.00
Monocytes (THSN/CU MM)	MEAN±S.D.	0.1 ± 0.07	0.2 ± 0.20	0.1 ± 0.09	0.1 ± 0.13
Eosinophil (THSN/CU MM)	MEAN±S.D.	0.1 ± 0.05	0.2 ± 0.11	0.2 ± 0.15	0.1 ± 0.14
Basophils (THSN/CU MM)	MEAN±S.D.	$0.0 \pm 0.00$	0.0 ± 0.00	0.0 ± 0.00	0.0 ± 0.00
Abnormal L (THSN/CU MM)	MEAN±S.D.	$0.0 \pm 0.00$	$0.0 \pm 0.00$	0.0 ± 0.00	0.0 ± 0.00
Other (THSN/CU MM)	MEAN±S.D.	0.0 ± 0.00	0.0 ± 0.00	0.0 ± 0.00	0.0 ± 0.00

TABLE B6 (PAGE 3): HEMATOLOGY - SUMMARY - FO GENERATION MALE RATS

 KEY TO HEMATOLOGY TABLE	
 ABBREVIATION	TERMINOLOGY
 WBC	White Blood Cells (Leukocytes)
RBC	Red Blood Cells (Erythrocytes)
HGB	Hemoglobin
HCT	Hematocrit (Packed Cell Volume)
MCV	Mean Corpuscular Volume
MCH	Mean Corpuscular Hemoglobin
MCHC	Mean Corpuscular Hemoglobin Concentration
PLAT	Platelets
MPV	Mean Platelet Volume
PT	Prothrombin Time
APTT	Activated Partial Thromboplastin
NRBC	Nucleated Red Blood Cell Count
Segmented	Segmented Neutrophils
Abnormal L	Abnormal Lymphocytes
Other	Other Cells

TABLE B7 (PAGE 1): CLINICAL CHEMISTRY - SUMMARY - FO GENERATION MALE RATS (See last page of this table for abbreviations)

DOSAGE GROUP DOSAGE (MG/KG/DAY)		I 0 (VEHICLE)	II 10	III 50	IV 250	
RATS TESTED	N	5	5	5	5	
TP (G/DL)	MEAN±S.D.	6.3 ± 0.29	6.3 ± 0.34	6.2 ± 0.29	6.3 ± 0.16	
A (G/DL)	MEAN±S.D.	4.0 ± 0.16	4.1 ± 0.15	4.1 ± 0.21	4.2 ± 0.43	
GLU (MG/DL)	MEAN±S.D.	159 ± 11.0	184 ± 23.9	156 ± 12.7	108 ± 11.5	
CHOL (MG/DL)	MEAN±S.D.	56 ± 11.9	52 ± 5.3	49 ± 5.5	29 ± 8.2	
TBILI (MG/DL)	MEAN±S.D.	0.1 ± 0.00	0.1 ± 0.00	0.1 ± 0.00	0.1 ± 0.00	
BUN (MG/DL)	MEAN±S.D.	12 ± 1.6	14 ± 2.3	13 ± 1.3	17 ± 5.9	
CREAT (MG/DL)	MEAN±S.D.	0.3 ± 0.05	0.3 ± 0.04	0.3 ± 0.04	0.4 ± 0.09	
ALT (U/L)	MEAN±S.D.	38 ± 2.3	43 ± 1.6	47 ± 4.2	48 ± 6.5	
AST (U/L)	MEAN±S.D.	88 ± 3.4	86 ± 10.2	96 ± 5.7	102 ± 8.3	

TABLE B7 (PAGE 2): CLINICAL CHEMISTRY - SUMMARY - FO GENERATION MALE RATS (See last page of this table for abbreviations)

DOSAGE GROUP DOSAGE (MG/KG/DAY)		I O (VEHICLE)	II 10	III 50	IV 250	
RATS TESTED	N	5	5	5	5	
ALK (U/L)	MEAN±S.D.	107 ± 27.4	108 ± 28.6	116 ± 23.4	123 ± 20.0	
CA (MG/DL)	MEAN±S.D.	11.1 ± 0.37	11.4 ± 0.38	11.4 ± 0.29	11.3 ± 0.14	
PHOS (MG/DL)	MEAN±S.D.	8.5 ± 0.87	9.7 ± 2.45	9.4 ± 0.90	10.0 ± 1.51	
TRI (MG/DL)	MEAN±S.D.	72 ± 22.2	59 ± 13.1	66 ± 23.2	31 ± 9.5	
NA (MMOL/L)	MEAN±S.D.	148 ± 1.5	147 ± 2.9	148 ± 0.8	148 ± 2.8	
K (MMOL/L)	MEAN±S.D.	5.7 ± 0.51	6.2 ± 1.01	6.5 ± 0.49	6.5 ± 0.80	
CL (MMOL/L)	MEAN±S.D.	96 ± 1.8	98 ± 2.9	100 ± 2.2	99 ± 2.9	
G (G/DL)	MEAN±S.D.	2.2 ± 0.18	2.3 ± 0.26	2.1 ± 0.20	2.1 ± 0.41	
A/G	MEAN±S.D.	1.8 ± 0.15	1.8 ± 0.21	2.0 ± 0.22	2.0 ± 0.49	

TABLE B7 (PAGE 3): CLINICAL CHEMISTRY - SUMMARY - FO GENERATION MALE RATS

KEY TO CLINICAL CHEMISTRY TABLE	
ABBREVATION	TERMINOLOGY
TP	Total Protein
А	Albumin
GLU	Glucose
CHOL	Cholesterol
TBILI	Total Bilirubin
BUN	Blood Urea Nitrogen
CREAT	Creatinine
ALT	Alanine Aminotransferase
AST	Aspartate Aminotransferase
ALK	Alkaline Phosphatase
CA	Calcium
PHOS	Phosphorus (inorganic)
TRI	Triglycerides
AN	Sodium
К	Potassium
CL	Chloride
G	Globulin
A/G	Albumin/Globulin Ratio

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TABLE B8 (PAGE 1): BODY WEIGHTS - SUMMARY - FO GENERATION MALE RATS

DOSAGE GROUP DOSAGE (MG/KG/DAY)		I 0 (VEHICLE)	II 10	III 50	IV 250
RATS TESTED	N	15	15	15	15
BODY WEIGHT (G)					
DAY 1	MEAN±S.D.	342.7 ± 9.4	341.9 ± 9.4	343.8 ± 13.1	339.5 ± 9.4
DAY 8	MEAN±S.D.	384.8 ± 16.3	380.9 ± 13.0	380.0 ± 20.1	370.6 ± 11.4
DAY 15a	MEAN±S.D.	411.6 ± 24.8	409.8 ± 16.5	403.4 ± 24.4	393.5 ± 13.9
DAY 29b	MEAN±S.D.	458.3 ± 32.5	450.8 ± 20.8	440.7 ± 31.7	428.8 ± 13.9**
DAY 36	MEAN±S.D.	474.2 ± 36.0	466.3 ± 22.5	455.9 ± 32.2	443.5 ± 14.9**

DAY = DAY OF STUDY

a. Last value recorded before cohabitation.

b. First value recorded after cohabitation.

<sup>\*\*</sup> Significantly different from the vehicle control group value (p<0.01).

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TABLE B9 (PAGE 1): BODY WEIGHT CHANGES - SUMMARY - FO GENERATION MALE RATS

DOSAGE GROUP DOSAGE (MG/KG/DAY)		I 0 (VEHICLE)	II 10	III 50	IV 250
RATS TESTED	N	15	15	15	15
BODY WEIGHT CHANGE (G)					
DAYS 1 - 8	MEAN±S.D.	+42.1 ± 9.1	+39.0 ± 7.5	+36.2 ± 9.8	+31.1 ± 5.2**
DAYS 8 - 15a	MEAN±S.D.	+26.8 ± 10.1	+28.9 ± 7.6	+23.4 ± 6.8	+22.9 ± 6.8
DAYS 1 - 15a	MEAN±S.D.	+68.9 ± 17.8	+67.9 ± 12.8	+59.6 ± 12.5	+53.9 ± 9.9**
DAYS 29b- 36	MEAN±S.D.	+15.9 ± 6.0	+15.5 ± 5.4	+15.2 ± 7.1	+14.7 ± 3.7
DAYS 1 - 36	MEAN±S.D.	+131.5± 29.6	+124.4± 21.8	+112.1± 21.2*	+103.9± 13.8**

#### DAYS = DAYS OF STUDY

a. Last value recorded before cohabitation.

b. First value recorded after cohabitation.

<sup>\*</sup> Significantly different from the vehicle control group value ( $p \le 0.05$ ).
\*\* Significantly different from the vehicle control group value ( $p \le 0.01$ ).

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE B10 (PAGE 1): ABSOLUTE FEED CONSUMPTION VALUES (G/DAY) - SUMMARY - FO GENERATION MALE RATS

DOSAGE GROUP DOSAGE (MG/KG/DAY)		I 0 (VEHICLE)	II 10	III 50	IV 250
RATS TESTED	N	15	15	15	. 15
FEED CONSUMPTION (G)					
DAYS 1 - 8	MEAN±S.D.	27.4 ± 2.0	26.2 ± 1.6	25.9 ± 2.4*	24.7 ± 1.4**
DAYS 8 - 15a	MEAN±S.D.	26.3 ± 2.8	25.8 ± 1.6	25.5 ± 2.6	24.9 ± 1.9
DAYS 1 - 15a	MEAN±S.D.	26.9 ± 2.4	[ 14]b 26.1 ± 1.4 [ 14]b	25.7 ± 2.3	24.8 ± 1.4**
DAYS 29c- 36	MEAN±S.D.	28.3 ± 2.8	27.2 ± 1.9	26.8 ± 2.8	26.0 ± 1.6
DAYS 1 - 36	MEAN±S.D.	27.3 ± 2.4	26.4 ± 1.5	26.1 ± 2.3	25.2 ± 1.3**

DAYS = DAYS OF STUDY

<sup>[ ] =</sup> NUMBER OF VALUES AVERAGED

a. Last value recorded before cohabitation.

b. Excludes values that were associated with spillage.

c. First value recorded after cohabitation.

<sup>\*</sup> Significantly different from the vehicle control group value ( $p \le 0.05$ ).

<sup>\*\*</sup> Significantly different from the vehicle control group value (p<0.01).

TABLE B11 (PAGE 1): RELATIVE FEED CONSUMPTION VALUES (G/KG/DAY) - SUMMARY - FO GENERATION MALE RATS

DOSAGE GROUP DOSAGE (MG/KG/DAY)		I 0 (VEHICLE)	II 10	III 50	IV 250
RATS TESTED	N	15	15	15	15
FEED CONSUMPTION (G)					
DAYS 1 - 8	MEAN±S.D.	75.1 ± 3.8	72.4 ± 3.2	71.4 ± 4.9*	70.0 ± 3.1**
DAYS 8 - 15a	MEAN±S.D.	66.0 ± 4.5	65.1 ± 3.4 [ 14]b	65.2 ± 4.4	65.2 ± 3.7
DAYS 1 - 15a	MEAN±S.D.	70.4 ± 3.9	68.6 ± 2.7 [ 14]b	68.2 ± 3.6	67.5 ± 2.7
DAYS 29c- 36	MEAN±S.D.	60.6 ± 3.2	59.5 ± 2.8	59.9 ± 4.3	59.8 ± 2.6
DAYS 1 - 36	MEAN±S.D.	65.3 ± 2.7	63.9 ± 2.2	64.0 ± 3.3	63.5 ± 2.1

DAYS = DAYS OF STUDY

<sup>[ ] =</sup> NUMBER OF VALUES AVERAGED

a. Last value recorded before cohabitation.

b. Excludes values that were associated with spillage.

c. First value recorded after cohabitation.

<sup>\*</sup> Significantly different from the vehicle control group value (p<0.05).

<sup>\*\*</sup> Significantly different from the vehicle control group value (p<0.01).

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TABLE B12 (PAGE 1): MATING AND FERTILITY - SUMMARY - FO GENERATION MALE RATS

DOSAGE GROUP		I	II	III	IV
DOSAGE (MG/KG/DAY)	:	0 (VEHICLE)	10	50	250
RATS IN COHABITATION	N	15	15	15	15
DAYS IN COHABITATION a	MEAN±S.D.	2.9 ± 1.6	2.7 ± 1.0	$3.5 \pm 1.7$	2.8 ± 2.1
RATS THAT MATED b	N (%)	14( 93.3)	15 (100.0)	13 ( 86.7)	13( 86.7)
FERTILITY INDEX c,d	N/N	14/14	14/15	13/13	12/13
	(왕)	(100.0)	(93.3)	(100.0)	( 92.3)
RATS WITH CONFIRMED					
MATING DATES	N	14	15	13	13
MATED WITH FEMALE e					
DAYS 1- 7	N(%)	14(100.0)	15(100.0)	13(100.0)	13 (100.0)
DAYS 8-14	N(%)	0( 0.0)	0( 0.0)	0( 0.0)	0( 0.0)
RATS PREGNANT/RATS IN					
COHABITATION d	N/N	14/15	14/15	13/15	12/15
	(%)	(93.3)	( 93.3)	(86.7)	(80.0)

a. Restricted to rats with a confirmed mating date and rats that did not mate.

b. Includes only one mating for each male rat.

c. Number of pregnancies/number of rats that mated.

d. Includes only one pregnancy for each rat that impregnated more than one female rat.

e. Restricted to rats with a confirmed mating date.

TABLE B13 (PAGE 1): FUNCTIONAL OBSERVATIONAL BATTERY - SUMMARY - MALE RATS

DOSAGE GROUP		I	II	III	IV	
DOSAGE (MG/KG/DAY)		0 (VEHICLE)	10	50	250	
RATS	N	5	5	5	5	
HOME CAGE BEHAVIOR						
1: Sleeping	N	. 0	0	0	0	
2: Awake, Immobile	N	5	5	5	5	
3: Normal movement	N	0	0	0	0	
4: Unusual posture	N	0	0	0	0	
5: Unusual behavior	N	0	0	0	0	
ALTERATIONS (HOME CAGE)						
1: None	N	5	5	5	5	
2: Stereotyped behavior	N	0	0	0	0	
3: Bizarre behavior	N	0	0	0	0	
4: Limb twitches/tremor	N	0	0	0	0	
5: Whole body tremor/spasm	N	0	0	0	0	
6: Unusual posture	N	0	0	0	0	
7: Tonic-clonic seizure	N	0	0	0	0	
REACTION TO REMOVAL						
(1) Sits quietly	N	5	5	5	5	
(2) Vocalization	N	0	0	0	0	
(3) Runs or freezes	N	0	0	0	0	
(4) Tail or throat rattles	N	0	0	0	0	
	MEAN SCORE	1.0	1.0	1.0	1.0	
REACTION TO HANDLING						
(1) No resistance	N	5	5	5	5	
(2) Vocalization	N	0	0	0	0	
(3) Tense	N	0	0	0	0	
(4) Squirming	N	0	0	0	0	
	MEAN SCORE	1.0	1.0	1.0	1.0	

n: = Category number for descriptive test item.

<sup>(</sup>n) = Score assigned to graded test items; mean score was calculated by multiplying each score by the number of rats with that score and then dividing the sum of the products by the total number of rats

TABLE B13 (PAGE 2): FUNCTIONAL OBSERVATIONAL BATTERY - SUMMARY - MALE RATS

DOSAGE GROUP		I	II	III	IV	
DOSAGE (MG/KG/DAY)		0 (VEHICLE)	10	50	250	
RATS	N	5	5	5	5	~~~~~~~~~~
REARS IN OPEN FIELD	MEAN±S.D.	7.2 ± 2.9	7.2 ± 3.1	7.2 ± 4.2	10.6 ± 6.9	
DEFECATION IN OPEN FIELD						
1: None	N	2	1	5	3	
2: Feces normal	N	2	4	0	1	
3: Soft or liquid feces	N	1	0	0	1	
URINATION IN OPEN FIELD						
(1) None	N	1	0	3	3	
(2) Normal urination	N	4	5	2	2	
(3) Excess urination	N	0	0	0	0	
	MEAN SCORE	1.8	2.0	1.4	1.4	
LEVEL OF AROUSAL						
(1) Stuporous	N	0	0	0	0	
(2) Sluggish	N	0	0	0	0	
(3) Apparently normal	N	5	5	5	5	
(4) Sudden darting	N	0	0	0	0	
(5) Freezing, vocalization	N	0	0	0	0	
	MEAN SCORE	1.0	3.0	3.0	3.0	
ALTERATIONS (OPEN FIELD)						
1: None	N	5	5	5	5	
2: Stereotyped behavior	N	0	0	0	0	
3: Bizarre behavior	N	0	0	0	0	
4: Limb twitches/tremor	N	0	0	0	0	
5: Whole body tremor/spasm	N	0	0	0	0	
6: Unusual posture	N	0	0	0	0	
7: Tonic-clonic seizure	N	0	0	0	0	

n: = Category number for descriptive test item.

<sup>(</sup>n) = Score assigned to graded test items; mean score was calculated by multiplying each score by the number of rats with that score and then dividing the sum of the products by the total number of rats

a. Excludes a value that was incorrectly recorded.

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TABLE B13 (PAGE 3): FUNCTIONAL OBSERVATIONAL BATTERY - SUMMARY - MALE RATS

DOSAGE GROUP		I	II	III	IV	 
DOSAGE (MG/KG/DAY)		0 (VEHICLE)	10	50	250	
RATS	N	5	5	5	5	 
GAIT PATTERN						
1: Apparently normal	N	5	5	5	5	
2: Ataxic	N	0	0	0	0	
3: Limbs splay or drag	N	0	0	0	0	
4: Spastic, tip-toe	N	0	0	0	0	
5: Duck-walk	N	0	0 .	0	0	
6: Scissors gait	N	0	0	0	0	
GAIT ABNORMALITY, SEVERITY	?					
(1) Normal gait	N	5	5	5	5	
(2) Slight	N	0	0	0	0	
(3) Moderate	N	0	0	0	0	
(4) Extreme	N	0	0	0	0	
	MEAN SCORE	1.0	1.0	1.0	1.0	
PALPEBRAL CLOSURE						
(1) Wide open	N	5	5	5	5	
(2) Slightly drooping	N	0	0	0	0	
(3) Half-closed	N	0	0	0	0	
(4) Completely shut	N	0	0	0	0	
	MEAN SCORE	1.0	1.0	1.0	1.0	
PROMINENCE OF THE EYE						
1: Normal	N	5	5	5	5	
2: Exophthalmos	N	0	0	0	0	
3: Enophthalmos	N	0	0	0	0	

n: = Category number for descriptive test item.

<sup>(</sup>n) = Score assigned to graded test items; mean score was calculated by multiplying each score by the number of rats with that score and then dividing the sum of the products by the total number of rats

TABLE B13 (PAGE 4): FUNCTIONAL OBSERVATIONAL BATTERY - SUMMARY - MALE RATS

DOS	AGE GROUP		<u> </u>	II	III	IV	
	AGE (MG/KG/DAY)		0 (VEHICLE)	10	50	250	
RATS		N	5	5	5	5	***********************
LACI	RIMATION						
	No excess	N	5	5	5	5	
(2)	Excess at eyelid margin	N	0	0	0	0	
(3)		N	0	0	0	0	
(4)		N	0	0	0	0	
		MEAN SCORE	1.0	1.0	1.0	1.0	
SAL	IVATION						
(1)	No excess	N	5	5	5	5	
(2)	Margin of mouth wet	N	0	0	0	0	
(3)	1/4 to 1/2 submandibular	N	0	0	0	0	
(4)	Entire submandibular	N	0	0	0	0	
	1	MEAN SCORE	1.0	1.0	1.0	1.0	
PIL	DERECTION	N	0	0	0	0	
ABN	ORMAL RESPIRATION	N	0	0	0	0	
APP	EARANCE						
(1)	Clean and groomed	N	5	5	5	5	
(2)	Unkempt	N	0	0	0	0	
(3)	Urine and/or fecal stain	N	0	0	0	0	
	P	MEAN SCORE	1.0	1.0	1.0	1.0	
VIS	UAL REACTION						
(1)	None	N	0	0	0	0	
(2)	Orienting	N	5	5	5	5	
(3)	Startle	N	0	0	0	0	
(4)	More energetic reaction	N	0	0	0	0	
(5)	Attacks	N	0	0	0	0	
	4	MEAN SCORE	2.0	2.0	2.0	2.0	

n: = Category number for descriptive test item.

<sup>(</sup>n) = Score assigned to graded test items; mean score was calculated by multiplying each score by the number of rats with that score and then dividing the sum of the products by the total number of rats

TABLE B13 (PAGE 5): FUNCTIONAL OBSERVATIONAL BATTERY - SUMMARY - MALE RATS

OOSAGE GROUP		I	II	III	IV	
OOSAGE (MG/KG/DAY)		0 (VEHICLE)	10	50	250	
RATS	N	5	5	5	5	
FACTILE REACTION						
(1) None	N	0	0	0	0	
(2) Orienting	N	5	5	5	5	
(3) Startle	N	0	0	0	0	
(4) More energetic reaction	. N	0	0	0	0	
(5) Attacks	N	0	0	0	0	
	MEAN SCORE	2.0	2.0	2.0	2.0	
UDITORY REACTION						
(1) None	N	0	0	0	0	
2) Orienting	N	0	0	0	0	
(3) Startle	N	5	5	5	5	
(4) More energetic reaction	N	0	0	0	0	
(5) Intense vocalization	N	0	0	0	0	
	MEAN SCORE	3.0	3.0	3.0	3.0	
FAIL-PINCH REACTION						
(1) None	N	0	0	0	0	
2) Orienting	N	5	5	5	5	
(3) Startle	N	0	0	0	0	
(4) More energetic reaction	N	0	0	0	0	
(5) Attacks	N	0	0	0	0	
	MEAN SCORE	2.0	2.0	2.0	2.0	
VISUAL PLACING RESPONSE						
(1) Early extension	N	5	5	5	5	
(2) Extension after contact	N	0	0	0	0	
(3) No extension	N	0	0	0	0	
	MEAN SCORE	1.0	1.0	1.0	1.0	

n: = Category number for descriptive test item.

<sup>(</sup>n) = Score assigned to graded test items; mean score was calculated by multiplying each score by the number of rats with that score and then dividing the sum of the products by the total number of rats

TABLE B13 (PAGE 6): FUNCTIONAL OBSERVATIONAL BATTERY - SUMMARY - MALE RATS

DOSAGE GROUP		I	II	III	IV	
DOSAGE (MG/KG/DAY)		0 (VEHICLE)	10	50	250	
RATS	N	5	5	5	5	
AIR RIGHTING RESPONSE						
(1) All feet land on ground	N	5	5	5	5	
(2) Lands on side	N	0	0	0	0	
(3) Lands on back	N	0	0	0	0	
	MEAN SCORE	1.0	1.0	1.0	1.0	
PUPIL RESPONSE TO LIGHT	N	5	; <b>5</b>	5	5	
FORELIMB GRIP TEST						
Maximum (G)	MEAN±S.D.	375.0 ± 120.9	423.0 ± 55.0	404.0 ± 110.4	293.0 ± 114.2	
Average (G)	MEAN±S.D.	337.6 ± 112.8	393.4 ± 50.4	329.0 ± 98.1	276.4 ± 105.8	
HINDLIMB GRIP TEST						
Maximum (G)	MEAN±S.D.	387.0 ± 123.0	341.0 ± 66.8	420.0 ± 99.7	354.0 + 104.0	
Average (G)	MEAN±S.D.	355.0 ± 105.3	309.0 ± 55.1	382.8 ± 96.0	315.0 ± 97.8	
LANDING FOOT SPLAY						
Average (CM)	MEAN±S.D.	8.6 ± 1.5	9.6 ± 2.2	8.0 ± 1.3	7.9 ± 1.3	
BODY WEIGHT (G)	N	464.6 + 37.3	457.5 ± 19.9	438.6 ± 28.4	422.4 ± 12.3	

n: = Category number for descriptive test item.

<sup>(</sup>n) = Score assigned to graded test items; mean score was calculated by multiplying each score by the number of rats with that score and then dividing the sum of the products by the total number of rats

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE B14 (PAGE 1): MOTOR ACTIVITY - SUMMARY - FO GENERATION MALE RATS

	GE GROUP GE (MG/KG/DAY)		0 (VEHICLE)	11 10	III 50	IV 250		
DAY 86								
NUMBER	OF RATE	5 N	5	5	5	5		
NUMBER	OF MOV	EMENTS						
BLOCK	1	MEAN ± S.D.	65.4 ± 9.9	67.0 ± 10.0	64.0 ± 4.1	65.6 ± !	5.3	
BLOCK	2	$MEAN \pm S.D.$	$72.0 \pm 7.6$	67.8 ± 9.0	63.2 ± 15.3	$72.2 \pm 12$	2.2	
BLOCK	3	$MEAN \pm S.D.$	69.8 ± 4.1	$70.4 \pm 15.1$	66.8 ± 11.6	62.0 ±	9.0	
		MEAN $\pm$ S.D.	58.0 ± 18.9	62.4 ± 14.6	54.6 ± 14.5	61.2 ± 10	0.8	
BLOCK		$MEAN \pm S.D.$	29.8 ± 29.2	63.4 ± 19.9	42.8 ± 30.9	25.6 ± 29	9.2	
BLOCK	6	MEAN $\pm$ S.D.	$31.2 \pm 28.8$	51.6 ± 30.9	28.4 ± 24.5	16.0 ± 22	2.4	
BLOCK		$MEAN \pm S.D.$	35.0 ± 35.3	41.4 ± 28.8	22.4 ± 29.7	10.8 ± 23		
BLOCK		MEAN $\pm$ S.D.	$44.8 \pm 27.6$	50.2 ± 31.9	25.4 ± 22.4	8.2 ± 13	3.1	
BLOCK		$MEAN \pm S.D.$	35.0 ± 34.2	41.4 ± 23.7	32.2 ± 31.3		1.7	
BLOCK		MEAN $\pm$ S.D.	18.8 ± 23.7	$36.4 \pm 30.2$	$44.4 \pm 27.2$	10.8 ± 20		
BLOCK		MEAN $\pm$ S.D.	$20.0 \pm 27.0$	33.0 ± 22.8	35.8 ± 31.7	26.0 ± 24		
BLOCK		MEAN $\pm$ S.D.	31.8 ± 38.6	24.6 ± 19.5	$22.4 \pm 22.3$	22.6 ± 27		
BLOCK		MEAN $\pm$ S.D.	$26.0 \pm 31.5$	22.8 ± 29.9	$19.4 \pm 27.6$		7.7	
BLOCK		MEAN $\pm$ S.D.	14.8 ± 25.5	$27.2 \pm 26.2$	$19.8 \pm 24.1$	3.8 ± (		
BLOCK		MEAN ± S.D.	11.2 ± 21.8	18.6 ± 24.3	$15.4 \pm 23.9$	8.0 ± 12		
BLOCK		$MEAN \pm S.D.$	$14.8 \pm 22.6$	18.0 ± 21.1	$22.0 \pm 21.0$	16.2 ± 24		
BLOCK		MEAN $\pm$ S.D.	13.8 ± 25.9	$4.8 \pm 5.3$	$13.4 \pm 23.0$	3.8 ± (		
BLOCK	18	$MEAN \pm S.D.$	$12.4 \pm 23.9$	3.8 ± 5.0	$7.6 \pm 14.8$		4.7	
TOTAL		MEAN $\pm$ S.D.	604.6 ± 292.0	704.8 ± 280.9	$600.0 \pm 120.2$	425.0 ± 93	1.8	

TOTAL = SUM OF BLOCKS; EACH BLOCK CONSISTS OF A 5 MINUTE PERIOD.

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE B14 (PAGE 2): MOTOR ACTIVITY - SUMMARY - Fo GENERATION MALE RATS

OSAGE GROUP OSAGE (MG/KG/DAY)		I 0 (VEHICLE)	II III 10 50		IV 250	
DAY 86						
NUMBER OF RATS	N	5	5	5	5	
TIME (SECONDS)	SPENT IN MOVEME	ENT				
BLOCK 1	MEAN ± S.D.	178.6 ± 20.7	204.8 ± 16.2	188.4 ± 19.3	179.6 ± 22.4	
BLOCK 2	$MEAN \pm S.D.$	170.8 ± 18.0	167.4 ± 10.1	135.0 ± 31.2	152.6 ± 29.4	
BLOCK 3	MEAN $\pm$ S.D.	140.8 ± 42.6	140.2 ± 23.4	123.4 ± 20.5	111.6 ± 23.8	
BLOCK 4	$MEAN \pm S.D.$	77.8 ± 18.5	101.8 ± 22.4	101.6 ± 30.8	109.2 ± 52.2	
BLOCK 5	$MEAN \pm S.D.$	$41.8 \pm 54.5$	101.4 ± 39.2	56.2 ± 43.7	32.2 ± 38.2	
BLOCK 6	$MEAN \pm S.D.$	51.0 ± 62.5	85.4 ± 50.9	33.2 ± 28.1	24.0 ± 45.5	
BLOCK 7	MEAN $\pm$ S.D.	$45.2 \pm 49.3$	66.4 ± 61.9	$33.4 \pm 50.3$	13.6 ± 30.4	
BLOCK 8	$MEAN \pm S.D.$	64.8 ± 43.6	$70.4 \pm 48.2$	26.8 ± 31.0	5.0 ± 9.1	
BLOCK 9	$MEAN \pm S.D.$	56.4 ± 59.5	$75.0 \pm 46.2$	38.2 ± 39.3	0.6 ± 0.9	
BLOCK 10	$MEAN \pm S.D.$	$27.8 \pm 47.1$	47.0 ± 39.9	$72.6 \pm 55.4$	14.2 ± 28.0	
BLOCK 11	$MEAN \pm S.D.$	$30.6 \pm 42.4$	40.0 ± 36.4	60.4 ± 64.3	32.8 ± 34.1	
BLOCK 12	$MEAN \pm S.D.$	39.6 ± 52.6	35.8 ± 35.6	26.2 ± 27.9	30.6 ± 43.0	
BLOCK 13	$MEAN \pm S.D.$	$35.6 \pm 47.6$	30.0 ± 39.9	21.8 ± 31.0	5.8 ± 8.0	
BLOCK 14	$MEAN \pm S.D.$	$24.2 \pm 49.7$	$27.8 \pm 28.4$	22.6 ± 30.9	2.2 ± 4.9	
BLOCK 15	$MEAN \pm S.D.$	$20.4 \pm 45.6$	20.2 ± 29.9	19.4 ± 34.8	$6.6 \pm 11.3$	
BLOCK 16	$MEAN \pm S.D.$	$21.8 \pm 43.8$	22.2 ± 30.4	26.4 ± 28.4	28.0 ± 40.6	
BLOCK 17	$MEAN \pm S.D.$	$17.2 \pm 37.4$	4.0 ± 6.2	20.0 ± 36.4	4.0 ± 8.9	
BLOCK 18	$MEAN \pm S.D.$	$14.8 \pm 32.0$	$2.6 \pm 4.3$	12.2 ± 26.2	1.2 ± 2.7	
TOTAL	$MEAN \pm S.D.$	1059.2 ± 547.0	1242.4 ± 381.5	1017.8 ± 181.4	753.8 ± 146.0	

TOTAL = SUM OF BLOCKS; EACH BLOCK CONSISTS OF A 5 MINUTE PERIOD.

TABLE B15 (PAGE 1): CLINICAL OBSERVATIONS - INDIVIDUAL DATA - Fo GENERATION MALE RATS

DOSAGE	GROUP I	VEHICLE	0 (VEHICLE) MG/KG/DAY
RAT #		DESCRIPTION	
17601		NO ADVERSE FINDINGS	
17602		NO ADVERSE FINDINGS	
17603	DS( 35 )	CHROMORHINORRHEA	
17604		NO ADVERSE FINDINGS	
17607		NO ADVERSE FINDINGS	
17608		NO ADVERSE FINDINGS	
17618		NO ADVERSE FINDINGS	
17630		NO ADVERSE FINDINGS	
17631	DS( 11 )	SOFT OR LIQUID FECES	
17639	DS( 14- 15)	SOFT OR LIQUID FECES	
	DS( 34 )	CHROMORHINORRHEA	
17648		NO ADVERSE FINDINGS	
17652		NO ADVERSE FINDINGS	
17656		NO ADVERSE FINDINGS	
17658		NO ADVERSE FINDINGS	
17660	DS( 34- 35)	CHROMORHINORRHEA	

TABLE B15 (PAGE 2): CLINICAL OBSERVATIONS - INDIVIDUAL DATA - FO GENERATION MALE RATS

I	DOSAGE G	ROUP I	II		LOW DOSAGE	10 MG/KG/DAY	
	 RAT #				DESCRIPTION		
1	 17615	DS (	34	)	PENIS: RED SUBSTANCE		
1	17616	DS(3	34- 3	5)	CHROMORHINORRHEA		•
1	17624				NO ADVERSE FINDINGS		
1	17626				NO ADVERSE FINDINGS		
1	17632				NO ADVERSE FINDINGS		
1	17634	DS (	14	)	CHROMORHINORRHEA		
		DS (	35	)	CHROMORHINORRHEA		
1	17635				NO ADVERSE FINDINGS		
1	17638				NO ADVERSE FINDINGS		
1	17642				NO ADVERSE FINDINGS		
1	17643	DS (	14	)	CHROMORHINORRHEA		
1	17645	DS (	10	)	SOFT OR LIQUID FECES		
		DS (	14	)	SOFT OR LIQUID FECES		
1	17649				NO ADVERSE FINDINGS		
1	17651	DS (	15	)	SOFT OR LIQUID FECES		
1	17653	DS (	14	)	CHROMORHINORRHEA		
1	17655				NO ADVERSE FINDINGS		

TABLE B15 (PAGE 3): CLINICAL OBSERVATIONS - INDIVIDUAL DATA - FO GENERATION MALE RATS

D	DOSAGE GROUP III				MIDDLE DOSAGE 50 MG/KG/DAY
R	RAT #				DESCRIPTION
1	17605				NO ADVERSE FINDINGS
1	17610	DS (	14	)	CHROMORHINORRHEA
		DS (	16	)	URINE-STAINED ABDOMINAL FUR
		DS (	27	)	CHROMORHINORRHEA
1	17611				NO ADVERSE FINDINGS
1	17613				NO ADVERSE FINDINGS
1	17619				NO ADVERSE FINDINGS
1	17620				NO ADVERSE FINDINGS
1	17623				NO ADVERSE FINDINGS
1	17627	DS (	23	)	CHROMODACRYORRHEA
		DS (	23	)	INCISORS: MISSING/BROKEN
1	17628	DS (	10	)	PENIS: RED SUBSTANCE
1	17633				NO ADVERSE FINDINGS
1	17640				NO ADVERSE FINDINGS
1	17646	DS(3	2- 3	7)	LOCALIZED ALOPECIA: LIMBS a
1	17650	-			NO ADVERSE FINDINGS
1	17657				NO ADVERSE FINDINGS
	17659				NO ADVERSE FINDINGS

DS = DAY OF STUDY

a. Observation confirmed at necropsy.

TABLE B15 (PAGE 4): CLINICAL OBSERVATIONS - INDIVIDUAL DATA - FO GENERATION MALE RATS

DOSAGE	GROUP IV	HIGH DOSAGE	250 MG/KG/DAY
RAT #		DESCRIPTION	
17606	DS( 10 )	EXCESS SALIVATION	
	DS( 12- 13)	EXCESS SALIVATION	
	DS( 17 )	RED, SLIGHT PERIORAL SUBSTANCE	
	DS( 23 )	EXCESS SALIVATION	
	DS( 30- 31)	EXCESS SALIVATION	
	DS( 33 )	EXCESS SALIVATION	,
17609	DS( 12 )	CHROMORHINORRHEA	
	DS( 12- 13)	CHROMODACRYORRHEA	
	DS( 14 )	CHROMORHINORRHEA	
	DS( 14- 22)	INCISORS: MISSING/BROKEN	
	DS( 16- 17)	CHROMODACRYORRHEA	
	DS( 32 )	EXCESS SALIVATION	
17612	DS( 30 )	RED, SLIGHT PERIORAL SUBSTANCE	
	DS( 35 )	PENIS: RED SUBSTANCE	
17614	DS( 14- 15)	CHROMORHINORRHEA	
	DS( 29 )	RED, SLIGHT PERIORAL SUBSTANCE	
17617	DS( 1 )	EXCESS SALIVATION	
	DS( 14 )	RED, SLIGHT PERIORAL SUBSTANCE	
	DS( 14 )	URINE-STAINED ABDOMINAL FUR	
	DS( 16 )	RED, SLIGHT PERIORAL SUBSTANCE	
	DS( 29 )	EXCESS SALIVATION	
	DS( 32 )	EXCESS SALIVATION	
	DS( 37 )	URINE-STAINED ABDOMINAL FUR	

TABLE B15 (PAGE 5): CLINICAL OBSERVATIONS - INDIVIDUAL DATA - FO GENERATION MALE RATS

DOSAGE	GROUP IV	HIGH DOSAGE 250 MG/KG/DAY						
RAT #		DESCRIPTION						
17621	DS( 25 )	RED, SLIGHT PERIORAL SUBSTANCE						
	DS( 30)	RED, SLIGHT PERIORAL SUBSTANCE						
	DS( 31 )	EXCESS SALIVATION						
	DS( 35 )	EXCESS SALIVATION						
17622	DS( 16- 17)	RED, SLIGHT PERIORAL SUBSTANCE						
	DS( 23- 31)	RIGHT FORELIMB: SCAB(S) (DID NOT EXCEED 2.5 CM X 0.5 CM)						
	DS( 32 )	RIGHT FORELIMB: ULCERATION (1.0 CM IN DIAMETER)						
	DS( 32 )	RED, SLIGHT PERIORAL SUBSTANCE						
	DS( 33- 37)	RIGHT FORELIMB: SCAB(S) (DID NOT EXCEED 1.0 CM IN DIAMETER)a						
	DS( 37 )	CHROMODACRYORRHEA a						
	DS( 37 )	LOCALIZED ALOPECIA: LIMBS a						
17625	DS( 32 )	RED, SLIGHT PERIORAL SUBSTANCE						
17629	DS( 6- 7)	CHROMORHINORRHEA						
	DS( 14 )	URINE-STAINED ABDOMINAL FUR						
	DS( 19 )	RED, SLIGHT PERIORAL SUBSTANCE						
	DS( 24 )	RED, SLIGHT PERIORAL SUBSTANCE						
	DS( 30 )	EXCESS SALIVATION						
	DS( 31- 35)	URINE-STAINED ABDOMINAL FUR						
	DS( 37 )	URINE-STAINED ABDOMINAL FUR						
17636	DS( 14 )	EXCESS SALIVATION						
	DS( 37 )	URINE-STAINED ABDOMINAL FUR						
17637	DS( 15 )	EXCESS SALIVATION						
17641	DS( 11 )	EXCESS SALIVATION						
	DS( 15 )	EXCESS SALIVATION						
	DS( 23- 37)	LOCALIZED ALOPECIA: LIMBS a						
	DS( 31 )	EXCESS SALIVATION						
	DS( 33- 34)	EXCESS SALIVATION						
17644	DS( 17 )	RED, SLIGHT PERIORAL SUBSTANCE						
	DS( 32- 35)	URINE-STAINED ABDOMINAL FUR						
17647	DS( 3)	SOFT OR LIQUID FECES						
	DS( 10 )	EXCESS SALIVATION						
	DS( 13 )	EXCESS SALIVATION						
17654	DS( 3 )	SOFT OR LIQUID FECES						
	DS( 11 )	EXCESS SALIVATION						
	DS( 29 )	RED, SLIGHT PERIORAL SUBSTANCE						

DS = DAY OF STUDY

a. Observation confirmed at necropsy.

TABLE B16 (PAGE 1): NECROPSY OBSERVATIONS - INDIVIDUAL DATA - FO GENERATION MALE RATS

DOSAGE GROUP DOSAGE (MG/KG/DAY)	RAT NUMBER	DAY OF NECROPSY	DOSES ADMINISTERED	OBSERVATIONS a
I				
0 (VEHICLE)	17601	DS 37	36	ALL TISSUES APPEARED NORMAL.
	17602	DS 37	36	ALL TISSUES APPEARED NORMAL.
	17603	DS 37	36	ALL TISSUES APPEARED NORMAL.
	17604	DS 37	36	ALL TISSUES APPEARED NORMAL.
	17607	DS 37	36	ALL TISSUES APPEARED NORMAL.
	17608	DS 37	36	ALL TISSUES APPEARED NORMAL.
	17618	DS 37	36	ALL TISSUES APPEARED NORMAL.
	17630	DS 37	36	ALL TISSUES APPEARED NORMAL.
	17631	DS 37	36	ALL TISSUES APPEARED NORMAL.
	17639	DS 37	36	ALL TISSUES APPEARED NORMAL.
	17648	DS 37	36	ALL TISSUES APPEARED NORMAL.
	17652	DS 37	36	ALL TISSUES APPEARED NORMAL.
	17656	DS 37	36	ALL TISSUES APPEARED NORMAL.
	17658	DS 37	36	ALL TISSUES APPEARED NORMAL.
	17660	DS 37	36	ALL TISSUES APPEARED NORMAL.

a. Refer to the individual clinical observations table (Table B15) for external observations confirmed at necropsy.

TABLE B16 (PAGE 2): NECROPSY OBSERVATIONS - INDIVIDUAL DATA - FO GENERATION MALE RATS

OOSAGE GROUP OOSAGE (MG/KG/DAY)	RAT NUMBER	DAY OF NECROPSY	DOSES ADMINISTERED	OBSERVATIONS a
II				
10	17615	DS 37	36	ALL TISSUES APPEARED NORMAL.
	17616	DS 37	36	ALL TISSUES APPEARED NORMAL.
	17624	DS 37	36	ALL TISSUES APPEARED NORMAL.
	17626	DS 37	36	ALL TISSUES APPEARED NORMAL,
	17632	DS 37	36	ALL TISSUES APPEARED NORMAL.
	17634	DS 37	36	ALL TISSUES APPEARED NORMAL.
	17635	DS 37	36	ALL TISSUES APPEARED NORMAL.
	17638	DS 37	36	ALL TISSUES APPEARED NORMAL.
	17642	DS 37	36	ALL TISSUES APPEARED NORMAL.
	17643	DS 37	36	ALL TISSUES APPEARED NORMAL.
	17645	DS 37	36	ALL TISSUES APPEARED NORMAL.
	17649	DS 37	36	ALL TISSUES APPEARED NORMAL.
	17651	DS 37	36	ALL TISSUES APPEARED NORMAL.
	17653	DS 37	36	ALL TISSUES APPEARED NORMAL.
	17655	DS 37	36	ALL TISSUES APPEARED NORMAL.

a. Refer to the individual clinical observations table (Table B15) for external observations confirmed at necropsy.

TABLE B16 (PAGE 3): NECROPSY OBSERVATIONS - INDIVIDUAL DATA - FO GENERATION MALE RATS

DOSAGE DOSAGE	GROUP (MG/KG/DAY)	RAT NUMBER	DAY OF NECROPSY	DOSES ADMINISTERED	OBSERVATIONS a
	III				
	50	17605	DS 37	36	ALL TISSUES APPEARED NORMAL.
		17610	DS 37	36	ALL TISSUES APPEARED NORMAL.
		17611	DS 37	36	ALL TISSUES APPEARED NORMAL.
		17613	DS 37	36	ALL TISSUES APPEARED NORMAL.
		17619	DS 37	36	ALL TISSUES APPEARED NORMAL.
		17620	DS 37	36	ALL TISSUES APPEARED NORMAL.
		17623	DS 37	36	ALL TISSUES APPEARED NORMAL.
		17627	DS 37	36	ALL TISSUES APPEARED NORMAL.
		17628	DS 37	36	ALL TISSUES APPEARED NORMAL.
		17633	DS 37	36	ALL TISSUES APPEARED NORMAL.
		17640	DS 37	36	ALL TISSUES APPEARED NORMAL.
		17646	DS 37	36	ALL TISSUES APPEARED NORMAL.
		17650	DS 37	36	ALL TISSUES APPEARED NORMAL.
		17657	DS 37	36	ALL TISSUES APPEARED NORMAL.
		17659	DS 37	36	ALL TISSUES APPEARED NORMAL.

a. Refer to the individual clinical observations table (Table B15) for external observations confirmed at necropsy.

TABLE B16 (PAGE 4): NECROPSY OBSERVATIONS - INDIVIDUAL DATA - FO GENERATION MALE RATS

DOSAGE GROUP	RAT		DOSES	
DOSAGE (MG/KG/DAY)	NUMBER	NECROPSY	ADMINISTERED	OBSERVATIONS a
IV				
250	17606	DS 37	36	ALL TISSUES APPEARED NORMAL.
	17609	DS 37	36	ALL TISSUES APPEARED NORMAL.
	17612	DS 37	36	ALL TISSUES APPEARED NORMAL.
	17614	DS 37	36	ALL TISSUES APPEARED NORMAL.
	17617	DS 37	36	ALL TISSUES APPEARED NORMAL.
	17621	DS 37	36	ALL TISSUES APPEARED NORMAL.
	17622	DS 37	36	ALL TISSUES APPEARED NORMAL.
	17625	DS 37	36	ALL TISSUES APPEARED NORMAL.
	17629	DS 37	36	ALL TISSUES APPEARED NORMAL.
	17636	DS 37	36	PROSTATE: RIGHT HEMISPHERE, TAN, FIRM, LOBULAR MASS (2.8 CM X 0.9 CM X 0.7 CM), CUT SURFACE REVEALED A TAN, SMOOTH SURFACE; VENTRAL RIGHT SIDE, RED. ALL OTHER TISSUES APPEARED NORMAL.
	17637	DS 37	36	ALL TISSUES APPEARED NORMAL.
	17641	DS 37	36	ALL TISSUES APPEARED NORMAL.
	17644	DS 37	36	ALL TISSUES APPEARED NORMAL.
	17647	DS 37	36	ALL TISSUES APPEARED NORMAL.
	17654	DS 37	36	ALL TISSUES APPEARED NORMAL.

DS = DAY OF STUDY

a. Refer to the individual clinical observations table (Table B15) for external observations confirmed at necropsy.

TABLE B17 (PAGE 1): TERMINAL BODY WEIGHTS, ORGAN WEIGHTS AND RATIOS (%) OF ORGAN WEIGHT TO TERMINAL BODY WEIGHT - INDIVIDUAL DATA - FO GENERATION MALE RATS

DOSAGE	GROUP I			VE	HICLE			0	(VEHICLE)	MG/KG/DA	Y		
RAT	TERMINAL BODY		DYMIS FT		STIS EFT	EPID:	DYMIS HT	TE;	STIS GHT	BR	AIN	LI	ÆR
NUMBER	WEIGHT	ABS. WT.	REL. % TBW										
17601	439.	0.82	0.19	1.70	0.39	0.79	0.18	1.73	0.39			12.36	2.8
17602	512.	0.80	0.16	1.76	0.34	0.82	0.16	1.78	0.35			15.56	3.0
17603	446.	0.74	0.16	1.80	0.40	0.76	0.17	1.71	0.38			13.86	3.1
17604	433.	0.80	0.18	1.96	0.45	0.82	0.19	1.99	0.46			11.86	2.7
17607	418.	0.73	0.17	1.78	0.42	0.81	0.19	1.73	0.41			12.97	3.1
17608	469.	0.84	0.18	1.77	0.38	0.88	0.19	1.72	0.37	2.42	0.52	14.64	3.1
17618	422.	0.71	0.17	1.69	0.40	0.76	0.18	1.61	0.38	2.32	0.55	13.24	3.1
17630	448.	0.75	0.17	1.80	0.40	0.78	0.17	1.79	0.40	2.39	0.53	13.82	3.0
17631	439.	0.67	0.15	1.68	0.38	0.64	0.14	1.78	0.40	2.28	0.52	13.55	3.0
17639	483.	0.69	0.14	1.51	0.31	0.70	0.14	1.50	0.31	2.12	0.44	14.04	2.9
17648	415.	0.77	0.18	1.87	0.45	0.81	0.20	1.90	0.46	2.23	0.54	11.97	2.8
17652	520.	0.72	0.14	1.68	0.32	0.75	0.14	1.71	0.33	2.46	0.47	16.55	3.1
17656	428.	0.71	0.16	2.02	0.47	0.69	0.16	1.92	0.45	2.36	0.55	13.25	3.1
17658	433.	0.63	0.14	1.51	0.35	0.70	0.16	1.50	0.35	2.25	0.52	13.27	3.0
17660	401.	0.74	0.18	1.84	0.46	0.68	0.17	1.77	0.44	2.29	0.57	13.17	3.2

TABLE B17 (PAGE 2): TERMINAL BODY WEIGHTS, ORGAN WEIGHTS AND RATIOS (%) OF ORGAN WEIGHT TO TERMINAL BODY WEIGHT -INDIVIDUAL DATA - FO GENERATION MALE RATS

DOSAGE	GROUP I			VE	HICLE			0 (	VEHICLE) M	G/KG/DA	Y		
RAT	TERMINAL BODY		ONEY EFT		ONEY GHT	ADRE:		ADRE RIG		SPI	LEEN	TH	MUS
NUMBER	WEIGHT	ABS. WT.	REL. % TBW	ABS. WT.	REL. % TBW	ABS. WT.	REL. % TBW a	ABS. WT.	REL. % TBW a	ABS. WT.	REL. % TBW	ABS. WT.	REL. % TBW
17608	469.	2.06	0.44	2.11	0.45	0.033	7.04	0.032	6.82	0.77	0.16	0.53	0.11
17618	422.	2.09	0.50	2.02	0.48	0.031	7.34	0.034	8.06	0.87	0.21	0.49	0.12
17630	448.	1.98	0.44	2.03	0.45	0.032	7.14	0.026	5.80	0.81	0.18	0.34	0.08
17631	439.	1.81	0.41	1.92	0.44	0.027	6.15	0.029	6.60	1.01	0.23	0.59	0.13
17639	483.	2.02	0.42	2.10	0.43	0.027	5.59	0.026	5.38	1.02	0.21	0.71	0.15
17648	415.	1.89	0.46	2.00	0.48	0.025	6.02	0.030	7.23	0.84	0.20	0.50	0.12
17652	520.	2.04	0.39	1.97	0.38	0.034	6.54	0.029	5.58	0.85	0.16	0.56	0.13
17656	428.	1.69	0.39	1.84	0.43	0.028	6.54	0.024	5.61	0.86	0.20	0.35	0.08
17658	433.	1.69	0.39	1.94	0.45	0.029	6.70	0.030	6.93	1.02	0.24	0.82	0.19
17660	401.	2.10	0.52	2.09	0.52	d800.0	2.00b	0.021	5.24	0.86	0.21	0.54	0.13

ALL WEIGHTS WERE RECORDED IN GRAMS (G). ABS. WT. = ORGAN WEIGHT.

REL. % TBW = (ORGAN WEIGHT/TERMINAL BODY WEIGHT) X 100.

a. Value was multiplied by 1000.

b. Damaged during processing (weight affected); values excluded from group averages and statistical analyses.

TABLE B17 (PAGE 3): TERMINAL BODY WEIGHTS, ORGAN WEIGHTS AND RATIOS (%) OF ORGAN WEIGHT TO TERMINAL BODY WEIGHT - INDIVIDUAL DATA - FO GENERATION MALE RATS

DOSAGE (	GROUP I			VEHICLE	0 (VEHICLE) MG/KG/DAY
RAT 7	rerminal body	HE?	ART		
NUMBER	WEIGHT	ABS. WT.	REL. % TBW		
17608	469.	1.46	0.31		
17618	422.	1.43	0.34		
17630	448.	1.51	0.34		
17631	439.	1.61	0.37		
17639	483.	1.63	0.34		
17648	415.	1.66	0.40		
17652	520.	1.64	0.32		
17656	428.	1.36	0.32		
17658	433.	1.52	0.35		
17660	401.	1.28	0.32		

TABLE B17 (PAGE 4): TERMINAL BODY WEIGHTS, ORGAN WEIGHTS AND RATIOS (%) OF ORGAN WEIGHT TO TERMINAL BODY WEIGHT - INDIVIDUAL DATA - FO GENERATION MALE RATS

DOSAGE	GROUP II			LOV	N DOSAGE			10	MG/KG/DAY				
RAT	TERMINAL BODY		IDYMIS EFT		STIS EFT	EPID:	IDYMIS GHT		STIS SHT	BRA	AIN	LI	VER
NUMBER	WEIGHT	ABS. WT.	REL. % TBW										
17615	424.	0.66	0.16	1.76	0.42	0.70	0.16	1.75	0.41			12.66	2.98
17616	437.	0.83	0.19	1.71	0.39	0.91	0.21	1.73	0.40			14.57	3.33
17624	417.	0.65	0.16	0.69	0.16	0.68	0.16	1.57	0.38			12.06	2.8
17626	456.	0.74	0.16	1.68	0.37	0.69	0.15	1.67	0.37			14.49	3.1
17632	457.	0.68	0.15	1.76	0.38	0.71	0.16	1.83	0.40			13.60	2.9
17634	433.	0.64	0.15	1.51	0.35	0.70	0.16	1.60	0.37	2.29	0.53	13.01	3.0
17635	440.	0.83	0.19	1.69	0.38	0.87	0.20	1.80	0.41	2.31	0.52	14.06	3.2
17638	452.	0.80	0.18	1.88	0.42	0.79	0.17	1.88	0.42	2.45	0.54	14.20	3.1
17642	413.	0.72	0.17	1.70	0.41	0.76	0.18	1.72	0.42	2.21	0.54	12.00	2.9
17643	494.	0.79	0.16	1.86	0.38	0.80	0.16	1.84	0.37	2.26	0.46	18.47	3.7
17645	440.	0.90	0.20	1.91	0.43	0.86	0.20	1.91	0.43	2.40	0.54	16.04	3.6
17649	440.	0.57	0.13	1.47	0.33	0.59	0.13	1.47	0.33	2.02	0.46	12.55	2.8
17651	434.	0.69	0.16	1.58	0.36	0.68	0.16	1.68	0.39	2.20	0.51	11.98	2.7
17653	442.	0.60	0.14	1.76	0.40	0.55	0.12	1.70	0.38	2.18	0.49	14.34	3.2
17655	406.	0.69	0.17	1.70	0.42	0.75	0.18	1.69	0.42	2.15	0.53	12.82	3.10

TABLE B17 (PAGE 5): TERMINAL BODY WEIGHTS, ORGAN WEIGHTS AND RATIOS (%) OF ORGAN WEIGHT TO TERMINAL BODY WEIGHT - INDIVIDUAL DATA - FO GENERATION MALE RATS

DOSAGE	GROUP II			LO	V DOSAGE			10	MG/KG/DAY				
RAT	TERMINAL BODY		ONEY EFT		ONEY GHT	ADRE LE	NAL FT	ADRE RIG		SP	LEEN	TH	YMUS
NUMBER	WEIGHT	ABS. WT.	REL. % TBW	ABS. WT.	REL. % TBW	ABS. WT.	REL. % TBW a	ABS. WT.	REL. % TBW a	ABS. WT.	REL. % TBW	ABS. WT.	REL. % TBW
17634	433.	1.97	0.45	1.89	0.44	0.027	6.24	0.029	6.70	0.69	0.16	0.53	0.12
17635	440.	2.10	0.48	2.21	0.50	0.031	7.04	0.029	6.59	0.84	0.19	0.61	0.14
17638	452.	1.87	0.41	1.97	0.44	0.029	6.42	0.032	7.08	0.75	0.16	0.53	0.12
17642	413.	1.82	0.44	1.89	0.46	0.026	6.30	0.032	7.75	0.85	0.20	0.48	0.12
17643	494.	2.10	0.42	2.26	0.46	0.028	5.67	0.034	6.88	0.94	0.19	0.53	0.13
17645	440.	2.14	0.49	2.14	0.49	0.026	5.91	0.029	6.59	0.99	0.22	0.37	0.08
17649	440.	1.83	0.42	1.81	0.41	0.037	8.41	0.041	9.32	0.58	0.13	0.24	0.05
17651	434.	1.72	0.40	1.78	0.41	0.038	8.76	0.040	9.22	0.70	0.16	0.24	0.06
17653	442.	1.91	0.43	1.90	0.43	0.022	4.98	0.027	6.11	0.74	0.17	0.36	0.08
17655	406.	2.19	0.54	2.37	0.58	0.031	7.64	0.024	5.91	0.83	0.20	0.45	0.11

ALL WEIGHTS WERE RECORDED IN GRAMS (G). ABS. WT. = ORGAN WEIGHT. REL. % TBW = (ORGAN WEIGHT/TERMINAL BODY WEIGHT) X 100.

a. Value was multiplied by 1000.

TABLE B17 (PAGE 6): TERMINAL BODY WEIGHTS, ORGAN WEIGHTS AND RATIOS (%) OF ORGAN WEIGHT TO TERMINAL BODY WEIGHT - INDIVIDUAL DATA - FO GENERATION MALE RATS

DOSAGE (	GROUP II			LOW DOSAGE	10 MG/KG/DAY	
RAT 1	rerminal body	HEA	ART			
NUMBER	WEIGHT	ABS. WT.	REL. % TBW			
17634	433.	1.59	0.37		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
17635	440.	1.40	0.32			
17638	452.	1.57	0.35			
17642	413.	1.37	0.33			
17643	494.	1.82	0.37			
17645	440.	1.72	0.39			
17649	440.	1.28	0.29			
17651	434.	1.56	0.36			
17653	442.	1.18	0.27			
17655	406.	1.45	0.36			

TABLE B17 (PAGE 7): TERMINAL BODY WEIGHTS, ORGAN WEIGHTS AND RATIOS (%) OF ORGAN WEIGHT TO TERMINAL BODY WEIGHT - INDIVIDUAL DATA - FO GENERATION MALE RATS

DOSAGE	GROUP III			MII	DDLE DOSAG	Е		50	MG/KG/DAY				
RAT	TERMINAL BODY		IDYMIS EFT		STIS EFT	EPID:	IDYMIS HT	TE:	STIS SHT	BR	AIN	LIV	ÆR
NUMBER	WEIGHT	ABS. WT.	REL. % TBW										
17605	392.	0.73	0.19	1.66	0.42	0.75	0.19	1.62	0.41			12.49	3.1
17610	467.	0.74	0.16	1.73	0.37	0.71	0.15	1.77	0.38			15.99	3.4
17611	422.	0.64	0.15	1.65	0.39	0.64	0.15	1.67	0.40			12.49	2.9
17613	411.	0.92	0.22	1.94	0.47	0.97	0.24	2.09	0.51			13.00	3.1
17619	410.	0.70	0.17	1.88	0.46	0.76	0.18	1.82	0.44			14.61	3.5
17620	475.	0.70	0.15	1.63	0.34	0.65	0.14	1.67	0.35	2.48	0.52	16.22	3.4
17623	426.	0.70	0.16	1.64	0.38	0.71	0.17	1.64	0.38	2.46	0.58	13.91	3.2
17627	415.	0.67	0.16	1.61	0.39	0.71	0.17	1.68	0.40	2.39	0.58	12.79	3.0
17628	389.	0.80	0.20	1.86	0.48	0.80	0.20	1.77	0.46	2.24	0.58	12.94	3.3
17633	484.	0.74	0.15	1.94	0.40	0.74	0.15	1.92	0.40	2.38	0.49	16.89	3.4
17640	398.	0.69	0.17	1.76	0.44	0.72	0.18	1.82	0.46	2.21	0.56	12.58	3.1
17646	423.	0.64	0.15	1.66	0.39	0.64	0.15	1.64	0.39	2.29	0.54	13.15	3.1
17650	482.	0.73	0.15	1.58	0.33	0.75	0.16	1.59	0.33	2.42	0.50	15.87	3.2
17657	417.	0.57	0.14	1.49	0.36	0.62	0.15	1.54	0.37	2.34	0.56	13.85	3.3
17659	418.	0.81	0.19	1.98	0.47	0.80	0.19	1.88	0.45	2.34	0.56	14.18	3.3

TABLE B17 (PAGE 8): TERMINAL BODY WEIGHTS, ORGAN WEIGHTS AND RATIOS (%) OF ORGAN WEIGHT TO TERMINAL BODY WEIGHT - INDIVIDUAL DATA - FO GENERATION MALE RATS

DOSAGE	GROUP III			MII	DDLE DOSAG	E		50	MG/KG/DAY				
RAT	TERMINAL BODY		ONEY EFT	KII RIC	ONEY SHT	ADRE LE	NAL FT	ADRE RIG		SP	LEEN	THYMUS	
NUMBER		ABS. WT.	REL. % TBW	ABS. WT.	REL. % TBW	ABS. WT.	REL. % TBW a	ABS. WT.	REL. % TBW a	ABS. WT.	REL. % TBW	ABS. WT.	REL. % TBW
17620	475.	2.30	0.48	2.37	0.50	0.027	5.68	0.026	5.47	0.83	0.17	0.24	0.0
17623	426.	2.00	0.47	2.09	0.49	0.029	6.81	0.031	7.28	0.68	0.16	0.62	0.14
17627	415.	1.82	0.44	1.92	0.46	0.035	8.43	0.033	7.95	0.77	0.18	0.49	0.12
17628	389.	2.30	0.59	2.29	0.59	0.032	8.23	0.030	7.71	1.05	0.27	0.23	0.0
17633	484.	2.36	0.49	2.37	0.49	0.033	6.82	0.031	6.40	1.02	0.21	0.55	0.13
17640	398.	2.26	0.57	2.29	0.58	0.030	7.54	0.028	7.04	0.70	0.18	0.31	0.08
17646	423.	2.08	0.49	2.00	0.47	0.014	3.31	0.028	6.62	0.83	0.20	0.62	0.19
17650	482.	1.93	0.40	1.92	0.40	0.031	6.43	0.033	6.85	0.85	0.18	0.40	0.08
17657	417.	2.00	0.48	2.09	0.50	0.027	6.47	0.026	6.24	0.81	0.19	0.45	0.13
17659	418.	2.19	0.52	2.23	0.53	0.030	7.18	0.028	6.70	0.95	0.23	0.38	0.09

ALL WEIGHTS WERE RECORDED IN GRAMS (G). ABS. WT. = ORGAN WEIGHT. REL. % TBW = (ORGAN WEIGHT/TERMINAL BODY WEIGHT) X 100.

a. Value was multiplied by 1000.

TABLE B17 (PAGE 9): TERMINAL BODY WEIGHTS, ORGAN WEIGHTS AND RATIOS (%) OF ORGAN WEIGHT TO TERMINAL BODY WEIGHT - INDIVIDUAL DATA - FO GENERATION MALE RATS

DOSAGE	GROUP III			MIDDLE DOSAGE	50 MG/KG/DAY	
RAT NUMBER	TERMINAL BODY WEIGHT	HE. ABS. WT.	ART REL. % TBW			
17620	475.	1.62	0.34			
17623	426.	1.46	0.34			
17627	415.	1.08	0.26			
17628	389.	1.43	0.37			
17633	484.	1.54	0.32			
17640	398.	1.37	0.34			
17646	423.	1.52	0.36			
17650	482.	1.40	0.29			
17657	417.	1.57	0.38			
17659	418.	1.58	0.38			
ALL WEIG	HTS WERE RECORI	DED IN G	RAMS (G).	ABS. WT. = ORGAN WEIGHT.	REL. % TBW = (ORGAN WEIGHT/TE	RMINAL BODY WEIGHT) X 100.

TABLE B17 (PAGE 10): TERMINAL BODY WEIGHTS, ORGAN WEIGHTS AND RATIOS (%) OF ORGAN WEIGHT TO TERMINAL BODY WEIGHT - INDIVIDUAL DATA - FO GENERATION MALE RATS

DOSAGE	GROUP IV			HIC	GH DOSAGE			250	MG/KG/DA	Y.			
RAT	TERMINAL BODY		IDYMIS EFT	TE:	STIS EFT		EPIDIDYMIS RIGHT		TESTIS RIGHT		AIN	LIVER	
NUMBER	WEIGHT	ABS. WT.	REL. % TBW	ABS. WT.	REL. % TBW	ABS. WT.	REL. % TBW	ABS. WT.	REL. % TBW	ABS. WT.	REL. % TBW	ABS. WT.	REL. % TBW
17606	390.	0.71	0.18	1.81	0.46	0.71	0.18	1.81	0.46			14.69	3.7
17609	407.	0.84	0.21	1.80	0.44	0.77	0.19	1.92	0.47			15.67	3.8
17612	388.	0.76	0.20	1.88	0.48	0.78	0.20	1.89	0.49			16.48	4.2
17614	428.	0.76	0.18	1.80	0.42	0.74	0.17	1.80	0.42			23.34	5.4
17617	394.	0.67	0.17	1.80	0.46	0.69	0.18	1.87	0.47			19.20	4.8
17621	417.	0.70	0.17	1.80	0.43	0.67	0.16	1.81	0.43	2.52	0.60	16.80	4.0
17622	407.	0.66	0.16	1.66	0.41	0.76	0.19	1.72	0.42	2.47	0.61	18.75	4.6
17625	431.	0.69	0.16	1.53	0.35	0.64	0.15	1.48	0.34	2.20	0.51	18.98	4.4
17629	414.	0.73	0.18	1.66	0.40	0.67	0.16	1.70	0.41	2.44	0.59	18.26	4.4
17636	445.	0.67	0.15	1.96	0.44	0.72	0.16	1.96	0.44	2.01	0.45	21.64	4.8
17637	427.	0.64	0.15	1.63	0.38	0.65	0.15	1.65	0.39	2.23	0.52	19.80	4.6
17641	416.	0.73	0.18	1.56	0.38	0.73	0.18	1.54	0.37	2.33	0.56	18.99	4.5
17644	407.	0.70	0.17	1.67	0.41	0.71	0.17	1.64	0.40	2.27	0.56	17.54	4.3
17647	400.	0.74	0.18	1.93	0.48	0.72	0.18	1.85	0.46	2.19	0.55	18.47	4.6
17654	413.	0.62	0.15	1.60	0.39	0.57	0.14	1.65	0.40	2.50	0.60	16.03	3.8

TABLE B17 (PAGE 11): TERMINAL BODY WEIGHTS, ORGAN WEIGHTS AND RATIOS (%) OF ORGAN WEIGHT TO TERMINAL BODY WEIGHT - INDIVIDUAL DATA - FO GENERATION MALE RATS

DOSAGE	GROUP IV			HIC	GH DOSAGE			250	MG/KG/DAY	•			
RAT	TERMINAL BODY		ONEY EFT		ONEY SHT	ADRE LE	NAL FT	ADRE RIG		SPI	LEEN	THY	ZMUS
NUMBER	WEIGHT	ABS. WT.	REL. % TBW	ABS. WT.	REL. % TBW	ABS. WT.	REL. % TBW a	ABS. WT.	REL. % TBW a	ABS. WT.	REL. % TBW	ABS. WT.	REL. % TBW
17621	417.	2.09	0.50	2.29	0.55	0.030	7.19	0.029	6.95	0.75	0.18	0.51	0.1
17622	407.	2.17	0.53	2.05	0.50	0.031	7.62	0.028	6.88	0.70	0.17	0.43	0.1
17625	431.	2.15	0.50	2.12	0.49	0.020	4.64	0.018	4.18	1.05	0.24	0.60	0.1
17629	414.	1.94	0.47	2.02	0.49	0.023	5.56	0.027	6.52	0.80	0.19	0.36	0.0
17636	445.	2.21	0.50	2.29	0.51	0.045	10.11	0.027	6.07	0.89	0.20	0.20	0.0
17637	427.	2.11	0.49	2.19	0.51	0.032	7.49	0.029	6.79	0.84	0.20	0.37	0.0
17641	416.	2.39	0.57	2.34	0.56	0.034	8.17	0.034	8.17	0.70	0.17	0.40	0.10
17644	407.	2.34	0.57	2.35	0.58	0.022	5.40	0.028	6.88	0.82	0.20	0.25	0.0
17647	400.	2.08	0.52	2.09	0.52	0.028	7.00	0.028	7.00	0.84	0.21	0.40	0.1
17654	413.	2.13	0.52	2.07	0.50	0.031	7.51	0.027	6.54	0.87	0.21	0.49	0.1

TABLE B17 (PAGE 12): TERMINAL BODY WEIGHTS, ORGAN WEIGHTS AND RATIOS (%) OF ORGAN WEIGHT TO TERMINAL BODY WEIGHT - INDIVIDUAL DATA - FO GENERATION MALE RATS

DOSAGE (	GROUP IV			HIGH DOSAGE	250 MG/KG/DAY	
RAT 1	TERMINAL BODY	HE	ART			· · · · · · · · · · · · · · · · · · ·
NUMBER	WEIGHT	ABS. WT.	REL. % TBW			
17621	417.	1.35	0.32			
17622	407.	1.41	0.35			
17625	431.	1.88	0.44			
17629	414.	1.29	0.31			
17636	445.	1.37	0.31			
17637	427.	1.37	0.32			
17641	416.	1.39	0.33			
17644	407.	1.38	0.34			
17647	400.	1.57	0.39			
17654	413.	1.53	0.37			

TABLE B18 (PAGE 1): BRAIN WEIGHTS, ORGAN WEIGHTS AND RATIOS (%) OF ORGAN WEIGHT TO BRAIN WEIGHT - INDIVIDUAL DATA - FO GENERATION MALE RATS

DOSAGE G	ROUP I			VE	HICLE			0	(VEHICLE)	MG/KG/DA	Ž.		
RAT	BRAIN	EPIDII LEI		TEST		EPIDII RIGI		TES'		LIVI	ER	KIDî LE1	
NUMBER	 7608 2.42	ABS. WT.	REL. % BRW	ABS. WT.	REL. % BRW	ABS. WT.	REL. % BRW	ABS. WT.	REL. % BRW	ABS. WT.	REL. % BRW	ABS. WT.	REL. % BRW
17608	2.42	0.84	34.71	1.77	73.14	0.88	36.36	1.72	71.07	14.64	604.96	2.06	85.12
17618	2.32	0.71	30.60	1.69	72.84	0.76	32.76	1.61	69.40	13.24	570.69	2.09	90.09
17630	2.39	0.75	31.38	1.80 75.31 0.78	0.78	32.64	1.79	74.90	13.82	578.24	1.98	82.84	
17631	2.28	0.67	29.38	1.68	73.68	0.64	28.07	1.78	78.07	13.55	594.30	1.81	79.38
17639	2.12	0.69	32.55	1.51	71.23	0.70	33.02	1.50	70.75	14.04	662.26	2.02	95.28
17648	2.23	0.77	34.53	1.87	83.86	0.81	36.32	1.90	85.20	11.97	536.77	1.89	84.75
17652	2.46	0.72	29.27	1.68	68.29	0.75	30.49	1.71	69.51	16.55	672.76	2.04	82.93
17656	2.36	0.71	30.08	2.02	85.59	0.69	29.24	1.92	81.36	13.25	561.44	1.69	71.63
17658	2.25	0.63	28.00	1.51	67.11	0.70	31.11	1.50	66.67	13.27	589.78	1.69	75.13
17660	2.29	0.74	32.31	1.84	80.35	0.68	29.69	1.77	77.29	13.17	575.11	2.10	91.70

TABLE B18 (PAGE 2): BRAIN WEIGHTS, ORGAN WEIGHTS AND RATIOS (%) OF ORGAN WEIGHT TO BRAIN WEIGHT - INDIVIDUAL DATA - FO GENERATION MALE RATS

DOSAGE G	ROUP I			VEH:	ICLE			0	(VEHICLE)	MG/KG/DA	Y		
RAT	BRAIN	KIDI RIGI		ADRENZ LEF		ADREN RIGH		SPLI	EEN	ТНҮІ	MUS	HEAI	RT
NUMBER	WEIGHT	ABS. WT.	REL. % BRW	ABS. WT.	REL. % BRW	ABS. WT.	REL. % BRW	ABS. WT.	REL. % BRW	ABS. WT.	REL. % BRW	ABS. WT.	REL. % BRW
17608	2.42	2.11	87.19	0.033	1.36	0.032	1.32	0.77	31.82	0.53	21.90	1.46	60.33
17618	2.32	2.02	87.07	0.031	1.34	0.034	1.46	0.87	37.50	0.49	21.12	1.43	61.64
17630	2.39		1.09	0.81	33.89	0.34	14.22	1.51	63.18				
17631	2.28	1.92	84.21	0.027	1.18	0.029	1.27	1.01	44.30	0.59	25.88	1.61	70.6
17639	2.12	2.10	99.06	0.027	1.27	0.026	1.23	1.02	48.11	0.71	33.49	1.63	76.89
17648	2.23	2.00	89.69	0.025	1.12	0.030	1.34	0.84	37.67	0.50	22.42	1.66	74.44
17652	2.46	1.97	80.08	0.034	1.38	0.029	1.18	0.85	34.55	0.56	22.76	1.64	66.6
17656	2.36	1.84	77.97	0.028	1.19	0.024	1.02	0.86	36.44	0.35	14.83	1.36	57.63
17658	2.25	1.94	86.22	0.029	1.29	0.030	1.33	1.02	45.33	0.82	36.44	1.52	67.5
17660	2.29	2.09	91.27	0.008a	0.35a	0.021	0.92	0.86	37.55	0.54	23.58	1.28	55.90

a. Damaged during processing (weight affected); values excluded from group averages and statistical analyses.

TABLE B18 (PAGE 3): BRAIN WEIGHTS, ORGAN WEIGHTS AND RATIOS (%) OF ORGAN WEIGHT TO BRAIN WEIGHT - INDIVIDUAL DATA - FO GENERATION MALE RATS

DOSAGE G	ROUP II			LO	W DOSAGE			10	MG/KG/DAY	•			
RAT	BRAIN	EPIDII LEI		TEST	- ·-	EPIDII RIG		TES'		LIV	ER	KID LE:	
NUMBER	WEIGHT	ABS. WT.	REL. % BRW	ABS. WT.	REL. % BRW	ABS. WT.	REL. % BRW	ABS. WT.	REL. % BRW	ABS. WT.	REL. % BRW	ABS. WT.	REL. % BRW
17634	2.29	0.64	27.95	1.51	65.94	0.70	30.57	1.60	69.87	13.01	568.12	1.97	86.03
17635	2.31	0.83	35.93	1.69	73.16	0.87	37.66	1.80	77.92	14.06	608.66	2.10	90.91
17638	2.45	0.80	32.65	1.88	76.73	0.79	32.24	1.88	76.73	14.20	579.59	1.87	76.33
17642	2.21	0.72	32.58	1.70	76.92	0.76	34.39	1.72	77.83	12.00	542.99	1.82	82.35
17643	2.26	0.79	34.96	1.86	82.30	0.80	35.40	1.84	81.42	18.47	817.26	2.10	92.92
17645	2.40	0.90	37.50	1.91	79.58	0.86	35.83	1.91	79.58	16.04	668.33	2.14	89.17
17649	2.02	0.57	28.22	1.47	72.77	0.59	29.21	1.47	72.77	12.55	621.29	1.83	90.59
17651	2.20	0.69	31.36	1.58	71.82	0.68	30.91	1.68	76.36	11.98	544.54	1.72	78.18
17653	2.18	0.60	27.52	1.76	80.73	0.55	25.23	1.70	77.98	14.34	657.80	1.91	87.61
17655	2.15	0.69	32.09	1.70	79.07	0.75	34.88	1.69	78.60	12.82	596.28	2.19	101.86

TABLE B18 (PAGE 4): BRAIN WEIGHTS, ORGAN WEIGHTS AND RATIOS (%) OF ORGAN WEIGHT TO BRAIN WEIGHT - INDIVIDUAL DATA - FO GENERATION MALE RATS

DOSAGE G	ROUP II			LOW	DOSAGE			10	MG/KG/DAY				
RAT	BRAIN	KIDI RIGI		ADREN LEF		ADREN RIGH		SPLI	EEN	THY	MUS	HEAI	 RT
NUMBER	WEIGHT ABS. WT. 2.29 1.89	REL. % BRW	ABS. WT.	REL. % BRW									
17634	2.29	1.89	82.53	0.027	1.18	0.029	1.27	0.69	30.13	0.53	23.14	1.59	69.43
17635	2.31	2.21	95.67	0.031	1.34	0.029	1.26	0.84	36.36	0.61	26.41	1.40	60.6
17638	2.45	1.97	80.41	0.029	1.18	0.032	1.31	0.75	30.61	0.53	21.63	1.57	64.08
17642	2.21	1.89	85.52	0.026	1.18	0.032	1.45	0.85	38.46	0.48	21.72	1.37	61.99
17643	2.26	2.26	100.00	0.028	1.24	0.034	1.50	0.94	41.59	0.53	23.45	1.82	80.53
17645	2.40	2.14	89.17	0.026	1.08	0.029	1.21	0.99	41.25	0.37	15.42	1.72	71.67
17649	2.02	1.81	89.60	0.037	1.83	0.041	2.03	0.58	28.71	0.24	11.88	1.28	63.37
17651	2.20	1.78	80.91	0.038	1.73	0.040	1.82	0.70	31.82	0.24	10.91	1.56	70.93
17653	2.18	1.90	87.16	0.022	1.01	0.027	1.24	0.74	33.94	0.36	16.51	1.18	54.13
17655	2.15	2.37	110.23	0.031	1.44	0.024	1.12	0.83	38.60	0.45	20.93	1.45	67.44

TABLE B18 (PAGE 5): BRAIN WEIGHTS, ORGAN WEIGHTS AND RATIOS (%) OF ORGAN WEIGHT TO BRAIN WEIGHT - INDIVIDUAL DATA - FO GENERATION MALE RATS

DOSAGE G	ROUP III			MII	DDLE DOSAG	E		50	MG/KG/DAY	-			
RAT	BRAIN	EPIDII LEI		TEST		EPIDII RIGH		TEST RIG		LIV	ER	KIDI LE1	
NUMBER	WEIGHT	ABS. WT.	REL. % BRW	ABS. WT.	REL. % BRW	ABS. WT.	REL. % BRW	ABS. WT.	REL. % BRW	ABS. WT.	REL. % BRW	ABS. WT.	REL. % BRW
17620	2.48	0.70	28.22	1.63	65.72	0.65	26.21	1.67	67.34	16.22	654.03	2.30	92.74
17623	2.46	0.70	28.46	1.64	66.67	0.71	28.86	1.64	66.67	13.91	565.45	2.00	81.30
17627	2.39	0.67	28.03	1.61	67.36	0.71	29.71	1.68	70.29	12.79	535.15	1.82	76.19
17628	2.24	0.80	35.71	1.86	83.04	0.80	35.71	1.77	79.02	12.94	577.68	2.30	102.68
17633	2.38	0.74	31.09	1.94	81.51	0.74	31.09	1.92	80.67	16.89	709.66	2.36	99.16
17640	2.21	0.69	31.22	1.76	79.64	0.72	32.58	1.82	82.35	12.58	569.23	2.26	102.26
17646	2.29	0.64	27.95	1.66	72.49	0.64	27.95	1.64	71.62	13.15	574.24	2.08	90.83
17650	2.42	0.73	30.16	1.58	65.29	0.75	30.99	1.59	65.70	15.87	655.78	1.93	79.75
17657	2.34	0.57	24.36	1.49	63.68	0.62	26.50	1.54	65.81	13.85	591.88	2.00	85.47
17659	2.34	0.81	34.62	1.98	84.62	0.80	34.19	1.88	80.34	14.18	605.98	2.19	93.59

TABLE B18 (PAGE 6): BRAIN WEIGHTS, ORGAN WEIGHTS AND RATIOS (%) OF ORGAN WEIGHT TO BRAIN WEIGHT - INDIVIDUAL DATA - FO GENERATION MALE RATS

DOSAGE G	ROUP III			MID	DLE DOSAG	E		50	MG/KG/DAY				
RAT	BRAIN	KIDI RIGI		ADREN LEF		ADREN RIGH		SPL	EEN	ТНҮІ	MUS	HEA	RT
NUMBER	WEIGHT2.48 2.46	ABS. WT.	REL. % BRW	ABS. WT.	REL. % BRW	ABS. WT.	REL. % BRW	ABS. WT.	REL. % BRW	ABS. WT.	REL. % BRW	ABS. WT.	REL. % BRW
17620	2.48	2.37	95.56	0.027	1.09	0.026	1.05	0.83	33.47	0.24	9.68	1.62	65.32
17623	2.46	2.09	84.96	0.029	1.18	0.031	1.26	0.68	27.64	0.62	25.20	1.46	59.35
17627	2.39	1.92	80.33	0.035	1.46	0.033	1.38	0.77	32.22	0.49	20.50	1.08	45.19
17628	2.24	2.29	102.23	0.032	1.43	0.030	1.34	1.05	46.87	0.23	10.27	1.43	63.84
17633	2.38	2.37	99.58	0.033	1.39	0.031	1.30	1.02	42.86	0.55	23.11	1.54	64.70
17640	2.21	2.29	103.62	0.030	1.36	0.028	1.27	0.70	31.67	0.31	14.03	1.37	61.99
17646	2.29	2.00	87.34	0.014	0.61	0.028	1.22	0.83	36.24	0.62	27.07	1.52	66.38
17650	2.42	1.92	79.34	0.031	1.28	0.033	1.36	0.85	35.12	0.40	16.53	1.40	57.85
17657	2.34	2.09	89.32	0.027	1.15	0.026	1.11	0.81	34.62	0.45	19.23	1.57	67.09
17659	2.34	2.23	95.30	0.030	1.28	0.028	1.20	0.95	40.60	0.38	16.24	1.58	67.52

TABLE B18 (PAGE 7): BRAIN WEIGHTS, ORGAN WEIGHTS AND RATIOS (%) OF ORGAN WEIGHT TO BRAIN WEIGHT - INDIVIDUAL DATA -FO GENERATION MALE RATS

DOSAGE G	ROUP IV			HIO	GH DOSAGE			25	0 MG/KG/DA	ΥY			
RAT	BRAIN	EPIDII LE		TES:		EPIDII RIGI		TES' RIG		LIV	ER	KID LE:	
NUMBER	WEIGHT	ABS. WT.	REL. % BRW	ABS. WT.	REL. % BRW	ABS. WT.	REL. % BRW	ABS. WT.	REL. % BRW	ABS. WT.	REL. % BRW	ABS. WT.	REL. % BRW
17621	2.52	0.70	27.78	1.80	71.43	0.67	26.59	1.81	71.82	16.80	666.67	2.09	82.94
17622	2.47	0.66	26.72	1.66	67.21	0.76	30.77	1.72	69.64	18.75	759.11	2.17	87.8
17625	2.20	0.69	31.36	1.53	69.54	0.64	29.09	1.48	67.27	18.98	862.73	2.15	97.7
17629	2.44	0.73	29.92	1.66	68.03	0.67	27.46	1.70	69.67	18.26	748.36	1.94	79.5
17636	2.01	0.67	33.33	1.96	97.51	0.72	35.82	1.96	97.51	21.64	1076.62	2.21	109.9
17637	2.23	0.64	28.70	1.63	73.09	0.65	29.15	1.65	73.99	19.80	887.89	2.11	94.6
17641	2.33	0.73	31.33	1.56	66.95	0.73	31.33	1.54	66.09	18.99	815.02	2.39	102.5
17644	2.27	0.70	30.84	1.67	73.57	0.71	31.28	1.64	72.25	17.54	772.69	2.34	103.0
17647	2.19	0.74	33.79	1.93	88.13	0.72	32.88	1.85	84.47	18.47	843.38	2.08	94.9
17654	2.50	0.62	24.80	1.60	64.00	0.57	22.80	1.65	66.00	16.03	641.20	2.13	85.2

REL. % TBW = (ORGAN WEIGHT/BRAIN WEIGHT) X 100.

TABLE B18 (PAGE 8): BRAIN WEIGHTS, ORGAN WEIGHTS AND RATIOS (%) OF ORGAN WEIGHT TO BRAIN WEIGHT - INDIVIDUAL DATA - FO GENERATION MALE RATS

DOSAGE G	ROUP IV			HIG	H DOSAGE			25	0 MG/KG/DA	Y			
RAT	BRAIN	KID RIG		ADREN LEF		ADREN RIGH		SPL	EEN	тнуг	MUS	HEA	RT
NUMBER	WEIGHT	ABS. WT.	REL. % BRW	ABS. WT.	REL. % BRW	ABS. WT.	REL. % BRW	ABS. WT.	REL. % BRW	ABS. WT.	REL. % BRW	ABS. WT.	REL. % BRW
17621	2.52	2.29	90.87	0.030	1.19	0.029	1.15	0.75	29.76	0.51	20.24	1.35	53.57
17622	2.47	2.05	83.00	0.031	1.26	0.028	1.13	0.70	28.34	0.43	17.41	1.41	57.08
17625	2.20	2.12	96.36	0.020	0.91	0.018	0.82	1.05	47.73	0.60	27.27	1.88	85.45
17629	2.44	2.02	82.79	0.023	0.94	0.027	1.11	0.80	32.79	0.36	14.75	1.29	52.8
17636	2.01	2.29	113.93	0.045	2.24	0.027	1.34	0.89	44.28	0.20	9.95	1.37	68.1
17637	2.23	2.19	98.21	0.032	1.43	0.029	1.30	0.84	37.67	0.37	16.59	1.37	61.4
17641	2.33	2.34	100.43	0.034	1.46	0.034	1.46	0.70	30.04	0.40	17.17	1.39	59.60
17644	2.27	2.35	103.52	0.022	0.97	0.028	1.23	0.82	36.12	0.25	11.01	1.38	60.7
17647	2.19	2.09	95.43	0.028	1.28	0.028	1.28	0.84	38.36	0.40	18.26	1.57	71.6
17654	2.50	2.07	82.80	0.031	1.24	0.027	1.08	0.87	34.80	0.49	19.60	1.53	61.20

TABLE B19 (PAGE 1): BODY WEIGHTS - INDIVIDUAL DATA - FO GENERATION MALE RATS

RAT #	DOSAG	E GROUP	I		VEHIC	LE				0 (VE	HICLE)	MG/KG/D	AY			
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15a	16
17601	333.	331.	340.	348.	367.	365.	375.	383.	380.	388.	384.	396.	398.	401.	409.	403.
17602	362.	371.	380.	389.	400.	401.	410.	419.	425.	431.	436.	441.	449.	458.	463.	458.
17603	342.	350.	357.	364.	369.	373.	379.	383.	391.	395.	398.	406.	408.	413.	417.	412
17604	349.	353.	363.	368.	377.	376.	386.	389.	399.	396.	402.	403.	412.	414.	418.	413
17607	330.	333.	341.	348.	354.	358.	360.	364.	365.	369.	372.	377.	379.	382.	385.	382
17608	353.	364.	367.	379.	379.	388.	393.	396.	402.	404.	410.	412.	421.	423.	428.	433
17618	343.	347.	351.	361.	366.	374.	376.	383.	379.	384.	390.	396.	394.	394.	398.	404
17630	347.	352.	357.	366.	374.	381.	384.	387.	395.	402.	408.	412.	416.	424.	421.	418
17631	332.	337.	346.	355.	360.	364.	370.	376.	374.	380.	372.	389.	393.	394.	394.	398.
17639	350.	356.	358.	364.	371.	380.	385.	395.	397.	404.	407.	414.	421.	425.	425.	427.
17648	333.	340.	350.	354.	359.	363.	374.	372.	370.	381.	384.	389.	390.	390.	395.	391.
17652	349.	362.	370.	380.	386.	391.	399.	410.	415.	425.	430.	438.	445.	450.	456.	454.
17656	342.	348.	352.	359.	364.	371.	373.	380.	379.	380.	388.	386.	391.	393.	398.	392.
17658	345.	356.	360.	363.	368.	372.	374.	381.	378.	384.	384.	387.	391.	392.	393.	390.
17660	331.	338.	344.	343.	350.	353.	355.	354.	362.	360.	363.	367.	368.	374.	374.	375.

DAY = DAY OF STUDY

ALL WEIGHTS WERE RECORDED IN GRAMS (G).

a. Last value recorded before cohabitation.

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE B19 (PAGE 2): BODY WEIGHTS - INDIVIDUAL DATA - FO GENERATION MALE RATS

RAT #	DOSAG	E GROUP	I		VEHIC	LE				0 (VE	HICLE)	MG/KG/D	AY			
DAY	17	18	19	20	21	22	23	24	25	26	27	28	29a	30	31	32
17601	414.	416.	421.	416.	418.	427.	428.	433.	434.	444.	438.	444.	455.	453.	466.	460.
17602	464.	468.	476.	479.	479.	484.	490.	493.	496.	504.	514.	514.	522.	516.	532.	533.
17603	424.	428.	432.	434.	439.	444.	448.	447.	453.	458.	459.	468.	471.	473.	465.	470.
17604	418.	417.	421.	423.	420.	427.	433.	436.	430.	435.	438.	438.	449.	450.	447.	457.
17607	388.	395.	398.	402.	401.	405.	407.	410.	408.	415.	417.	418.	427.	425.	424.	429.
17608	436.	438.	442.	445.	444.	448.	454.	452.	456.	458.	463.	467.	474.	474.	477.	480.
17618	408.	405.	413.	414.	413.	420.	416.	424.	428.	430.	428.	436.	439.	434.	439.	440.
17630	423.	429.	434.	436.	439.	441.	446.	446.	451.	454.	456.	459.	459.	464.	468.	469.
17631	401.	406.	413.	418.	423.	428.	426.	433.	436.	440.	437.	449.	454.	454.	457.	467.
17639	431.	432.	438.	440.	446.	446.	452.	452.	462.	463.	465.	475.	481.	482.	489.	490.
17648	397.	391.	396.	397.	404.	410.	405.	412.	412.	416.	413.	422.	426.	426.	432.	438.
17652	459.	464.	475.	473.	479.	485.	487.	497.	497.	506.	509.	511.	524.	526.	531.	540.
17656	394.	400.	401.	406.	409.	412.	411.	416.	418.	423.	427.	429.	435.	438.	440.	444.
17658	400.	400.	402.	408.	414.	413.	418.	429.	425.	434.	440.	444.	448.	448.	449.	451.
17660	379.	379.	382.	379.	382.	388.	393.	394.	392.	399.	399.	402.	410.	404.	409.	414.

DAY = DAY OF STUDY

ALL WEIGHTS WERE RECORDED IN GRAMS (G).

a. First value recorded after cohabitation.

TABLE B19 (PAGE 3): BODY WEIGHTS - INDIVIDUAL DATA - FO GENERATION MALE RATS

RAT #	DOSA	GE GROUP	I		VEHICLE	0 (VEHICLE) MG/KG/DAY
DA	у 33	34	35	36	37	
17601	458.	467.	465.	473.	439.	
17602	533.	541.	545.	544.	512.	
17603	473.	471.	471.	476.	446.	
17604	450.	459.	462.	461.	433.	
17607	433.	438.	439.	436.	418.	
17608	484.	490.	495.	493.	469.	
17618	443.	443.	446.	446.	422.	
17630	475.	475.	476.	474.	448.	
17631	458.	466.	467.	469.	439.	
17639	495.	496.	503.	504.	483.	
17648	436.	436.	437.	440.	415.	
17652	537.	540.	547.	550.	520.	
17656	446.	451.	454.	457.	428.	
17658	449.	457.	462.	463.	433.	
17660	417.	420.	426.	427.	401.	

DAY = DAY OF STUDY

ALL WEIGHTS WERE RECORDED IN GRAMS (G).

TABLE B19 (PAGE 4): BODY WEIGHTS - INDIVIDUAL DATA - FO GENERATION MALE RATS

RAT #		DOSAGI	E GROUP	II		LOW D	OSAGE				10 MG	/KG/DAY					
1	DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15a	16
17615		328.	332.	334.	342.	339.	350.	348.	354.	363.	362.	367.	368.	381.	383.	389.	 391.
17616		354.	361.	365.	374.	380.	385.	390.	396.	403.	403.	409.	410.	413.	416.	420.	419.
17624		336.	339.	343.	352.	358.	360.	370.	374.	375.	381.	378.	382.	385.	388.	394.	387.
17626		344.	350.	360.	370.	376.	382.	391.	390.	390.	394.	403.	404.	407.	409.	415.	414.
17632		334.	341.	348.	356.	364.	373.	381.	387.	391.	399.	401.	414.	416.	422.	428.	422.
17634		357.	362.	366.	371.	378.	380.	386.	390.	392.	398.	399.	402.	407.	410.	416.	406.
17635		337.	341.	350.	353.	360.	368.	374.	373.	373.	385.	381.	387.	392.	396.	404.	397.
17638		347.	350.	358.	368.	373.	376.	385.	390.	393.	398.	400.	405.	405.	406.	417.	409.
17642		328.	331.	336.	342.	339.	351.	352.	360.	364.	363.	370.	375.	376.	380.	386.	386.
17643		350.	358.	362.	374.	385.	392.	399.	402.	410.	419.	422.	435.	436.	432.	449.	446.
17645		336.	339.	342.	352.	362.	366.	372.	376.	384.	382.	384.	388.	400.	392.	401.	391.
17649		340.	348.	353.	360.	364.	369.	372.	378.	383.	393.	396.	398.	401.	408.	411.	406.
17651		336.	341.	344.	348.	367.	370.	376.	375.	370.	381.	381.	388.	392.	394.	395.	397.
17653		353.	356.	363.	368.	374.	378.	385.	390.	393.	404.	404.	408.	413.	420.	420.	415.
17655		349.	348.	355.	361.	370.	365.	377.	379.	380.	388.	390.	393.	395.	396.	402.	386.

DAY = DAY OF STUDY

ALL WEIGHTS WERE RECORDED IN GRAMS (G).

a. Last value recorded before cohabitation.

TABLE B19 (PAGE 5): BODY WEIGHTS - INDIVIDUAL DATA - FO GENERATION MALE RATS

RAT #	DOSAG	E GROUP	II		LOW D	OSAGE				10 MG	/KG/DAY					
DA	Y 17	18	19	20	21	22	23	24	25	26	27	28	29a	30	31	32
17615	393.	399.	399.	406.	411.	414.	408.	414.	415.	417.	423.	424.	430.	425.	435.	438.
17616	427.	422.	424.	424.	428.	427.	428.	432.	436.	436.	445.	443.	447.	447.	450.	454.
17624	396.	405.	403.	409.	413.	412.	419.	420.	423.	423.	426.	432.	432.	431.	430.	441.
17626	414.	415.	424.	429.	434.	438.	446.	445.	443.	451.	456.	462.	463.	471.	469.	473.
17632	435.	425.	434.	434.	436.	443.	444.	451.	450.	457.	461.	464.	471.	473.	470.	484.
17634	415.	415.	420.	425.	421.	430.	429.	438.	440.	445.	440.	443.	454.	449.	456.	460.
17635	401.	404.	408.	411.	416.	419.	419.	429.	428.	436.	438.	447.	451.	445.	456.	453.
17638	407.	416.	409.	423.	427.	429.	429.	432.	436.	442.	447.	446.	455.	457.	467.	473.
17642	388.	393.	399.	403.	408.	410.	410.	416.	417.	420.	424.	423.	427.	424.	423.	425.
17643	456.	451.	455.	459.	466.	472.	476.	486.	484.	489.	496.	502.	506.	511.	512.	516.
17645	401.	402.	410.	415.	416.	419.	417.	426.	424.	431.	440.	441.	453.	452.	450.	458.
17649	407.	410.	414.	410.	416.	424.	425.	430.	430.	433.	439.	441.	452.	446.	451.	455.
17651	406.	410.	409.	412.	413.	417.	417.	425.	430.	434.	441.	440.	447.	450.	455.	456.
17653	426.	425.	427.	432.	431.	430.	437.	442.	443.	447.	452.	455.	455.	460.	461.	465.
17655	397.	386.	398.	400.	400.	403.	409.	413.	416.	408.	418.	415.	419.	423.	422.	426.

DAY = DAY OF STUDY

ALL WEIGHTS WERE RECORDED IN GRAMS (G).

a. First value recorded after cohabitation.

TABLE B19 (PAGE 6): BODY WEIGHTS - INDIVIDUAL DATA - FO GENERATION MALE RATS

RAT #	DOSA	GE GROUP	II		LOW DOSAGE	10 MG/KG/DAY	
DA	. У 33	34	35	36	37		
17615	440.	444.	448.	452.	424.		
17616	458.	460.	461.	461.	437.		
17624	440.	436.	444.	443.	417.		
17626	473.	467.	478.	476.	456.		
17632	484.	484.	486.	488.	457.		
17634	455.	453.	460.	460.	433.		
17635	457.	456.	459.	466.	440.		
17638	470.	475.	479.	482.	452.		
17642	423.	431.	438.	440.	413.		
17643	513.	522.	521.	529.	494.		
17645	454.	463.	465.	464.	440.		
17649	452.	455.	463.	464.	440.		
17651	453.	461.	459.	464.	434.		
17653	464.	464.	466.	468.	442.		
17655	420.	430.	431.	438.	406.		

DAY = DAY OF STUDY

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE B19 (PAGE 7): BODY WEIGHTS - INDIVIDUAL DATA - FO GENERATION MALE RATS

RAT #		DOSAGI	E GROUP	III		MIDDL	E DOSAG	Е			50 MG	/KG/DAY					
	DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15a	16
17605		325.	324.	330.	334.	339.	342.	346.	353.	356.	353.	352.	360.	359.	365.	367.	364.
17610		363.	373.	381.	385.	388.	394.	401.	406.	416.	419.	416.	423.	425.	432.	438.	431.
17611		339.	346.	354.	363.	367.	375.	377.	386.	386.	390.	394.	398.	398.	401.	405.	396.
17613		346.	350.	353.	366.	374.	377.	385.	396.	392.	396.	396.	406.	407.	412.	415.	412.
17619		330.	334.	336.	343.	348.	350.	355.	357.	360.	362.	367.	368.	373.	378.	380.	374.
17620		358.	364.	373.	379.	386.	395.	404.	412.	416.	417.	424.	429.	430.	436.	435.	441.
17623		342.	346.	356.	356.	368.	372.	373.	380.	381.	388.	389.	393.	397.	402.	409.	407.
17627		340.	337.	342.	345.	347.	352.	358.	363.	363.	370.	373.	375.	386.	388.	391.	396.
17628		328.	332.	341.	345.	342.	350.	353.	356.	352.	359.	362.	366.	365.	371.	369.	371.
17633		356.	366.	374.	382.	393.	402.	408.	404.	400.	415.	418.	422.	425.	427.	435.	435.
17640		338.	344.	345.	352.	358.	361.	367.	371.	371.	375.	376.	382.	380.	384.	388.	388.
17646		349.	354.	363.	368.	373.	379.	381.	384.	386.	376.	386.	387.	395.	395.	402.	387.
17650		370.	369.	376.	386.	389.	389.	398.	401.	408.	414.	418.	422.	425.	431.	437.	431.
17657		337.	338.	349.	359.	362.	367.	368.	365.	373.	374.	382.	389.	378.	380.	388.	386.
17659		336.	344.	346.	349.	359.	359.	362.	366.	370.	373.	376.	383.	384.	389.	392.	391.

DAY = DAY OF STUDY

ALL WEIGHTS WERE RECORDED IN GRAMS (G).

a. Last value recorded before cohabitation.

TABLE B19 (PAGE 8): BODY WEIGHTS - INDIVIDUAL DATA - FO GENERATION MALE RATS

RAT #	DOSAG	E GROUP	III		MIDDL	E DOSAG	E			50 MG	/KG/DAY					
DAY	17	18	19	20	21	22	23	24	25	26	27	28	29a	30	31	32
17605	367.	376.	381.	381.	385.	389.	390.	394.	391.	399.	403.	406.	407.	406.	408.	415.
17610	435.	439.	444.	448.	450.	457.	462.	465.	464.	465.	471.	473.	484.	482.	490.	489.
17611	403.	400.	411.	408.	407.	408.	410.	415.	415.	415.	420.	424.	433.	429.	432.	434.
17613	417.	418.	420.	419.	419.	417.	421.	422.	419.	418.	422.	422.	432.	433.	426.	435.
17619	384.	388.	389.	390.	394.	398.	401.	399.	404.	411.	416.	413.	425.	420.	420.	430.
17620	443.	446.	452.	455.	451.	457.	464.	466.	471.	473.	481.	481.	485.	487.	489.	491.
17623	411.	411.	413.	413.	415.	414.	422.	423.	421.	426.	430.	432.	438.	440.	444.	446.
17627	402.	400.	409.	406.	406.	408.	402.	415.	413.	418.	418.	421.	421.	424.	424.	430.
17628	378.	374.	379.	384.	385.	386.	389.	392.	391.	393.	390.	397.	388.	399.	401.	403.
17633	445.	443.	442.	450.	456.	460.	462.	468.	467.	472.	478.	484.	488.	489.	492.	502.
17640	387.	388.	391.	391.	395.	395.	399.	402.	402.	405.	407.	408.	416.	412.	416.	420.
17646	399.	400.	402.	408.	410.	414.	407.	417.	422.	420.	430.	432.	437.	437.	437.	444.
17650	448.	452.	459.	460.	459.	462.	464.	472.	469.	478.	480.	480.	491.	496.	496.	504.
17657	391.	393.	396.	403.	400.	402.	405.	410.	412.	418.	419.	422.	433.	431.	435.	439.
17659	397.	402.	399.	405.	406.	412.	412.	416.	422.	424.	422.	423.	432.	431.	436.	442.

DAY = DAY OF STUDY

ALL WEIGHTS WERE RECORDED IN GRAMS (G).

a. First value recorded after cohabitation.

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE B19 (PAGE 9): BODY WEIGHTS - INDIVIDUAL DATA - FO GENERATION MALE RATS

RAT #	DOSAG	E GROUP	III		MIDDLE DOSAGE	50 MG/KG/DAY
DA	7 33	34	35	36	37	
17605	412.	414.	421.	423.	392.	
17610	484.	487.	490.	488.	467.	
17611	437.	441.	439.	445.	422.	
17613	431.	427.	434.	433.	411.	
17619	428.	434.	433.	435.	410.	
17620	496.	503.	505.	498.	475.	
17623	444.	446.	447.	454.	426.	
17627	429.	430.	434.	438.	415.	
17628	400.	404.	409.	413.	389.	
17633	499.	505.	509.	510.	484.	
17640	417.	420.	420.	426.	398.	
17646	446.	452.	454.	454.	423.	
17650	498.	504.	509.	515.	482.	
17657	440.	446.	452.	457.	417.	
17659	437.	443.	443.	449.	418.	

DAY = DAY OF STUDY

TABLE B19 (PAGE 10): BODY WEIGHTS - INDIVIDUAL DATA - FO GENERATION MALE RATS

RAT #	DOSAG	E GROUP	IV		HIGH 1	DOSAGE				250 M	G/KG/DA	Y				
DA	Y 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15a	16
17606	321.	328.	321.	332.	338.	343.	348.	351.	355.	358.	365.	365.	366.	369.	373.	370.
17609	358.	358.	360.	373.	375.	382.	383.	388.	392.	394.	397.	400.	398.	392.	400.	409.
17612	340.	340.	345.	349.	354.	356.	357.	365.	369.	369.	374.	374.	374.	378.	379.	384.
17614	348.	343.	338.	355.	360.	371.	376.	382.	389.	396.	394.	398.	404.	408.	413.	403.
17617	330.	329.	332.	340.	344.	354.	352.	354.	358.	359.	362.	366.	365.	367.	370.	363.
17621	347.	349.	351.	361.	370.	373.	380.	387.	386.	392.	392.	395.	398.	401.	403.	394.
17622	336.	336.	327.	349.	353.	364.	367.	370.	380.	379.	385.	389.	389.	392.	394.	380.
17625	338.	342.	338.	350.	357.	366.	369.	376.	389.	388.	390.	392.	398.	405.	408.	393.
17629	332.	336.	341.	348.	349.	361.	361.	368.	372.	380.	379.	380.	387.	390.	396.	388.
17636	350.	350.	350.	357.	366.	368.	377.	380.	386.	396.	402.	401.	407.	411.	414.	403.
17637	342.	346.	352.	358.	362.	367.	370.	377.	374.	382.	382.	387.	389.	393.	402.	390.
17641	342.	340.	344.	350.	354.	362.	365.	369.	368.	373.	378.	381.	383.	392.	396.	392.
17644	328.	320.	316.	328.	331.	341.	346.	355.	353.	360.	363.	367.	368.	373.	380.	376.
17647	343.	349.	345.	354.	360.	362.	361.	366.	363.	370.	371.	375.	378.	377.	384.	381.
17654	338.	345.	341.	352.	360.	364.	370.	371.	381.	374.	379.	379.	382.	385.	390.	388.

DAY = DAY OF STUDY

ALL WEIGHTS WERE RECORDED IN GRAMS (G).

a. Last value recorded before cohabitation.

TABLE B19 (PAGE 11): BODY WEIGHTS - INDIVIDUAL DATA - FO GENERATION MALE RATS

RAT #	DO	OSAGE	E GROUP	IA		HIGH 1	DOSAGE				250 M	G/KG/DA	Y				
DA	AY 1	17 	18	19	20	21	22	23	24	25	26	27	28	29a	30	31	32
17606	3.	79.	384.	385.	391.	388.	394.	396.	395.	399.	398.	404.	403.	405.	402.	410.	408
17609	3.9	95.	407.	401.	416.	414.	416.	417.	421.	427.	424.	422.	432.	427.	426.	432.	433
17612	38	85.	384.	389.	390.	390.	393.	398.	399.	401.	401.	406.	406.	408.	406.	411.	410
17614	41	15.	418.	418.	420.	426.	425.	430.	432.	436.	434.	432.	431.	442.	437.	430.	449
17617	36	63.	363.	368.	371.	380.	379.	384.	381.	389.	392.	400.	404.	409.	412.	412.	411
17621	4 (	01.	402.	403.	408.	411.	407.	416.	417.	413.	423.	424.	421.	428.	432.	432.	437
17622	3.8	89.	393.	399.	410.	410.	411.	405.	412.	411.	418.	418.	421.	424.	423.	424.	423
17625	40	07.	411.	413.	418.	422.	424.	426.	430.	430.	438.	447.	453.	450.	442.	445.	456
17629	40	02.	405.	406.	416.	412.	412.	421.	423.	426.	425.	426.	432.	430.	436.	436.	436
17636	41	12.	408.	417.	422.	425.	429.	429.	432.	437.	439.	442.	445.	443.	446.	463.	466
17637	4 (	09.	400.	403.	406.	413.	416.	415.	424.	430.	428.	437.	435.	442.	446.	447.	449
17641	3 9	96.	395.	402.	401.	404.	409.	412.	423.	412.	420.	426.	430.	442.	435.	438.	442
17644	37	76.	386.	385.	389.	390.	399.	396.	406.	400.	405.	407.	418.	421.	420.	427.	428
17647	38	84.	390.	394.	392.	396.	403.	398.	404.	408.	408.	412.	419.	425.	422.	420.	430
17654	3 9	91.	392.	398.	404.	414.	409.	407.	415.	418.	419.	426.	431.	436.	433.	438.	439

DAY = DAY OF STUDY

ALL WEIGHTS WERE RECORDED IN GRAMS (G).

a. First value recorded after cohabitation.

TABLE B19 (PAGE 12): BODY WEIGHTS - INDIVIDUAL DATA - FO GENERATION MALE RATS

RAT #	DOSAG	E GROUP	IV		HIGH DOSAGE	250 MG/KG/DAY	
DA	33	34	35	36	37		·
17606	413.	415.	416.	421.	390.		
17609	430.	433.	438.	438.	407.		
17612	412.	414.	413.	418.	388.		
17614	447.	452.	449.	453.	428.		
17617	412.	416.	422.	427.	394.		
17621	437.	436.	442.	449.	417.		
17622	428.	436.	433.	438.	407.		
17625	447.	462.	466.	469.	431.		
17629	437.	440.	440.	444.	414.		
17636	460.	460.	470.	462.	445.		
17637	452.	452.	459.	458.	427.		
17641	439.	445.	449.	453.	416.		
17644	422.	430.	431.	436.	407.		
17647	425.	428.	436.	434.	400.		
17654	446.	445.	455.	452.	413.		

DAY = DAY OF STUDY

TABLE B20 (PAGE 1): FEED CONSUMPTION VALUES - INDIVIDUAL DATA - FO GENERATION MALE RATS

RAT #	DOSAGE	E GROUP	I .	VEHICLE	0 (VEHICLE) MG/KG/DAY
DA	YS 1- 8	8- 15a	29b-36		
17601	192.	189.	194.		
17602	220.	219.	230.		
17603	201.	200.	196.		
17604	195.	193.	202.		
17607	181.	167.	170.		
17608	196.	190.	205.		
17618	183.	176.	175.		
17630	206.	201.	190.		
17631	189.	177.	207.		
17639	194.	184.	220.		
17648	184.	164.	186.		
17652	216.	218.	240.		
17656	177.	159.	180.		
17658	178.	156.	180.		
17660	169.	172.	194.		

DAYS = DAYS OF STUDY

- a. Last value recorded before cohabitation.
- b. First value recorded after cohabitation.

TABLE B20 (PAGE 2): FEED CONSUMPTION VALUES - INDIVIDUAL DATA - FO GENERATION MALE RATS

RAT #	DOSAGI	E GROUP I	I	LOW DOSAGE	10 MG/KG/DAY
DAYS	1- 8	8- 15a	29b-36		
17615	158.	183.	189.		
17616	190.	184.	186.		
17624	177.	165.	178.		
17626	189.	176.	188.		
17632	200.	208.	209.		
17634	186.	180.	196.		
17635	191.	184.	196.		
17638	181.	169.	201.		
17642	171.	С	168.		
17643	202.	196.	220.		
17645	181.	172.	190.		
17649	173.	179.	191.		
17651	181.	172.	169.		
17653	188.	183.	188.		
17655	186.	180.	192.		

DAYS = DAYS OF STUDY

- a. Last value recorded before cohabitation.
- b. First value recorded after cohabitation.
- c. Spilled feed precluded the calculation of this value.

TABLE B20 (PAGE 3): FEED CONSUMPTION VALUES - INDIVIDUAL DATA - FO GENERATION MALE RATS

RAT #	DOSAGE	GROUP 1	II	MIDDLE DOSAGE	50 MG/KG/DAY	
DAYS	1- 8	8- 15a	29b-36			
17605	184.	169.	187.			
17610	195.	207.	199.			
17611	184.	170.	169.			
17613	198.	183.	169.			
17619	154.	157.	166.			
17620	214.	215.	229.			
17623	184.	168.	179.			
17627	164.	177.	165.			
17628	165.	181.	197.			
17633	207.	200.	216.			
17640	175.	162.	171.			
17646	186.	155.	187.			
17650	173.	196.	210.			
17657	170.	171.	191.			
17659	167.	171.	182.			

DAYS = DAYS OF STUDY

- a. Last value recorded before cohabitation.
- b. First value recorded after cohabitation.

TABLE B20 (PAGE 4): FEED CONSUMPTION VALUES - INDIVIDUAL DATA - FO GENERATION MALE RATS

RAT #	DOSAG	E GROUP	IV	HIGH DOSAGE	200 MG/KG	YAQ\E	
DAY	S 1- 8	8- 15a	29b-36		 		
17606	163.	165.	157.		 		
17609	179.	171.	177.				
17612	163.	157.	164.				
17614	186.	209.	190.				
17617	165.	162.	178.				
17621	195.	179.	188.				
17622	168.	185.	179.				
17625	178.	187.	192.				
17629	180.	167.	176.				
17636	164.	190.	189.				
17637	178.	167.	185.				
17641	178.	170.	186.				
17644	164.	165.	180.				
17647	169.	176.	197.				
17654	166.	169.	194.				

DAYS = DAYS OF STUDY

- a. Last value recorded before cohabitation.
- b. First value recorded after cohabitation.

TABLE B21 (PAGE 1): MATING AND FERTILITY - INDIVIDUAL DATA - FO GENERATION MALE RATS

DOSAGE GROUP I		VEHICLE		0 (VEHICLE) MG/KG/DAY	
	DAYS IN			FEMALE PREGNANCY	
RAT #	COHABITATION	MATING STATUS	MATING DATE	STATUS	
17601	3	M	С	P(17662)	
17602	4	M	C	P(17672)	
17603	1	M	C	P(17673)	
17604	1	М	C	P(17674)	
17607	3	М	C	P(17680)	
17608	3	М	C	P(17681)	
17618	3	М	C	P(17690)	
17630	1	М	C	P(17694)	
17631	2	М	C	P(17695)	
17639	3	М	C	P(17703)	
17648	3	М	C	P(17713)	
17652a	4	M	C	P(17715)	
17652b	2	М	C	P(17719)	
17656	4	М	C	P(17716)	
17658	1	M	C	P(17717)	
17660	7	DID NOT MATE	-	- (17719)	

M = MATED ( ) = FEMALE RAT NUMBER

C = CONFIRMED

P = PREGNANT NP = NOT PREGNANT

a. Result of first cohabitation period.

b. Male rat mated early in the first cohabitation period and was cohabited with a second female rat.

TABLE B21 (PAGE 2): MATING AND FERTILITY - INDIVIDUAL DATA - FO GENERATION MALE RATS

DOSAGE GROUP II		LOW DOSAGE		10 MG/KG/DAY	
RAT #	DAYS IN COHABITATION	MATING STATUS	MATING DATE	FEMALE PREGNANCY STATUS	
17615	3	M	C	NP(17663)	
17616	3	M	С	P(17665)	
17624	1	M	С	P(17666)	
17626	3	M	С	P(17668)	
17632	3	M	С	P(17671)	
17634	2	M	С	P(17675)	
17635	3	M	С	P(17679)	
17638	4	М	С	P(17684)	
17642	3	M	С	P(17688)	
17643	3	М	С	P(17698)	
17645	1	M	С	P(17702)	
17649	2	М	С	P(17704)	
17651	4	M	С	P(17707)	
17653	1	M	С	P(17708)	
17655	4	M	С	P(17710)	

M = MATED ( ) = FEMALE RAT NUMBER

C = CONFIRMED

P = PREGNANT NP = NOT PREGNANT

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE B21 (PAGE 3): MATING AND FERTILITY - INDIVIDUAL DATA - FO GENERATION MALE RATS

DOSAGE GROUP I	II	MIDDLE DOSAGE		50 MG/KG/DAY	
RAT #	DAYS IN COHABITATION	MATING STATUS	MATING DATE	FEMALE PREGNANCY STATUS	
17605	2	M	C	P(17661)	
17610	2	M	C	P(17667)	
17611	3	M	С	P(17669)	
17613	4	M	С	P(17670)	
17619	2	M	С	P(17676)	
17620	4	M	С	P(17687)	
17623	1	M	С	P(17693)	
17627	3	M	С	P(17697)	
17628a	3	M	С	P(17700)	
17628b	6	М	С	P(17709)	
17633	3	M	С	P(17701)	
17640	3	M	С	P(17705)	
17646	4	М	C	P(17706)	
17650	7	DID NOT MATE	-	- (17709)	
17657	7	DID NOT MATE	-	- (17718)	
17659a	4	M	С	P(17720)	
17659b	6	М	C	P(17718)	

M = MATED ( ) = FEMALE RAT NUMBER

C = CONFIRMED

P = PREGNANT NP = NOT PREGNANT

a. Result of first cohabitation period.

b. Male rat mated early in the first cohabitation period and was cohabited with a second female rat.

TABLE B21 (PAGE 4): MATING AND FERTILITY - INDIVIDUAL DATA - FO GENERATION MALE RATS

DOSAGE GROUP IV		HIGH DOSAGE		250 MG/KG/DAY	
RAT #	DAYS IN COHABITATION	MATING STATUS	MATING DATE	FEMALE PREGNANCY STATUS	·
17606	7	DID NOT MATE	-	- (17664)	
17609a	4	M	С	P(17677)	
17609b	6	M	С	P(17682)	
17612	4	M	С	P(17678)	
17614	7	DID NOT MATE	-	-(17682)	
17617	3	М	С	P(17683)	
17621	1	M	С	P(17685)	
17622	1	M	С	NP (17686)	
17625	1	M	С	P(17689)	
17629	4	М	С	P(17691)	
17636	1	М	С	P(17692)	
17637	1	M	С	P(17696)	
17641a	3	М	C	P(17699)	
17641b	7	DID NOT MATE	-	- (17664)	
17644	1	M	С	P(17711)	
17647	1	М	С	P(17712)	
17654	3	М	Ċ	P(17714)	

M = MATED ( ) = FEMALE RAT NUMBER

C = CONFIRMED

P = PREGNANT NP = NOT PREGNANT

a. Result of first cohabitation period.

b. Male rat mated early in the first cohabitation period and was cohabited with a second female rat.

TABLE B22 (PAGE 1): FUNCTIONAL OBSERVATIONAL BATTERY - INDIVIDUAL DATA - MALE RATS

DOSAGE GROUP I						0 (VEHICLE) MG/KG/DAY
RAT #	17601	17602	17603	17604	17607	
HOME CAGE BEHAVIOR	2	2	2	2	2	
ALTERATIONS (HOME CAGE)	1	1	1	1	1	
REACTION TO REMOVAL	. 1	1	1	1	1	
REACTION TO HANDLING	1	1	1	1	1	
REARS IN OPEN FIELD	8	9	9	2	8	
DEFECATION IN OPEN FIELD	1	2	3	2	1	
URINATION IN OPEN FIELD	2	2	2	1	2	
LEVEL OF AROUSAL	3	3	3	3	3	
ALTERATIONS (OPEN FIELD)	1	1	1	1	1	
GAIT PATTERN	1	1	1	1	1	
GAIT ABNORMALITY, SEVERITY	1	1	1	1	1	
PALPEBRAL CLOSURE	1	1	1	1	1	
PROMINENCE OF THE EYE	1	1	1	1	1	
LACRIMATION	1	1	1	1	1	
SALIVATION	1	1	1	1	1	
PILOERECTION	0	0	0	0	0	
ABNORMAL RESPIRATION	0	0	0	0	0	
APPEARANCE	1	1	1	1	1	
VISUAL REACTION	2	2	2	2	2	
TACTILE REACTION	2	2	2	2	2	
AUDITORY REACTION	3	3	3	3	3	
TAIL-PINCH REACTION	2	2	2	2	2	
VISUAL PLACING RESPONSE	1	1	1	1	1	
AIR RIGHTING RESPONSE	1	1	1	1	1	
PUPIL RESPONSE TO LIGHT	1	1	1	1	1	
FORELIMB GRIP TEST #1	345	510	190	355	370	
FORELIMB GRIP TEST #2	450	405	125	350	275	
HINDLIMB GRIP TEST #1	445	375	310	200	360	
HINDLIMB GRIP TEST #2	555	375	430	215	285	
LANDING FOOT SPLAY #1	8.7	7.5	9.5	7.7	7.5a	
LANDING FOOT SPLAY #2	8.9	7.6	12.6	9.6	6.9	
BODY WEIGHT (G)	455	525	469	449	425	

VALUES ARE THE QUANTITY, CATEGORY NUMBER, QUANTAL RESPONSE OR SCORE RECORDED FOR EACH ITEM IN THE BATTERY.

a. Soft or liquid feces were observed during during landing foot splay testing.

TABLE B22 (PAGE 2): FUNCTIONAL OBSERVATIONAL BATTERY - INDIVIDUAL DATA - MALE RATS

DOSAGE GROUP II						10 MG/KG/DAY
RAT #	17615	17616	17624	17626	17632	
HOME CAGE BEHAVIOR	2	2	2	2	2	***************************************
ALTERATIONS (HOME CAGE)	1	1	1	1	1	
REACTION TO REMOVAL	1	1	1	1	1	
REACTION TO HANDLING	1	1	1	1	1	
REARS IN OPEN FIELD	8	7	9	10	2	
DEFECATION IN OPEN FIELD	2	2	2	2	1	
URINATION IN OPEN FIELD	2	2	2	2	2	
LEVEL OF AROUSAL	3	3	3	3	3	
ALTERATIONS (OPEN FIELD)	1	1	1	1	1	
GAIT PATTERN	1	1	1	1	1	
GAIT ABNORMALITY, SEVERITY	1	1	1	1	1	
PALPEBRAL CLOSURE	1	1	1	1	1	
PROMINENCE OF THE EYE	1	1	1	1	1	
LACRIMATION	1	1	1	1	1	
SALIVATION	1	1	1	1	1	
PILOERECTION	0	0	0	0	0	
ABNORMAL RESPIRATION	0	0	0	0	0	
APPEARANCE	1	1	1	1	1	
VISUAL REACTION	2	2	2	2	2	
TACTILE REACTION	2	2	2	2	2	
AUDITORY REACTION	3	3	3	3	3	
TAIL-PINCH REACTION	2	2	2	2	2	
VISUAL PLACING RESPONSE	1	1	1	1	1	
AIR RIGHTING RESPONSE	1	1	1	1	1	
PUPIL RESPONSE TO LIGHT	1	1	1	1	1	
FORELIMB GRIP TEST #1	330	425	420	405	445	
FORELIMB GRIP TEST #2	325	470	290	450	370	
HINDLIMB GRIP TEST #1	410	335	345	205	365	
HINDLIMB GRIP TEST #2	275	355	245	230	325	
LANDING FOOT SPLAY #1	7.0	8.1	11.2	12.5	7.8	
LANDING FOOT SPLAY #2	9.8	8.5	11.3	12.7	7.2	
BODY WEIGHT (G)	433	450	441a	470	477	

BODY WEIGHT (G) 433 450 441a 470 477

VALUES ARE THE QUANTITY, CATEGORY NUMBER, QUANTAL RESPONSE OR SCORE RECORDED FOR EACH ITEM IN THE BATTERY.

a. Value appeared incorrectly recorded and was excluded from group averages and statistical analyses.

TABLE B22 (PAGE 3): FUNCTIONAL OBSERVATIONAL BATTERY - INDIVIDUAL DATA - MALE RATS

DOSAGE GROUP III						50 MG/KG/DAY	 	
RAT #	17605	17610	17611	17613	17619			
HOME CAGE BEHAVIOR	2	2	2	2	2		 	
ALTERATIONS (HOME CAGE)	1	1	1	1	1			
REACTION TO REMOVAL	1	1	1	1	1			
REACTION TO HANDLING	1	1	1	1	1			
REARS IN OPEN FIELD	10	10	7	9	0			
DEFECATION IN OPEN FIELD	1	1	1	1	1			
URINATION IN OPEN FIELD	1	1	2	2	1			
LEVEL OF AROUSAL	3	3	3	3	3			
ALTERATIONS (OPEN FIELD)	1	1	1	1	1			
GAIT PATTERN	1	1	1	1	1			
GAIT ABNORMALITY, SEVERITY	1	1	1	1	1			
PALPEBRAL CLOSURE	1	1	1	1	1			
PROMINENCE OF THE EYE	1	1	1	1	1			
LACRIMATION	1	1	1	1	1			
SALIVATION	1	1	1	1	1			
PILOERECTION	0	0	0	0	0			
ABNORMAL RESPIRATION	0	0	0	0	0			
APPEARANCE	1	1	1	1	1			
VISUAL REACTION	2	2	2	2	2			
TACTILE REACTION	2	2	2	2	2			
AUDITORY REACTION	3	3	3	3	3			
TAIL-PINCH REACTION	2	2	2	2	2			
VISUAL PLACING RESPONSE	1	1	1	1	1			
AIR RIGHTING RESPONSE	1	1	1	1	1			
PUPIL RESPONSE TO LIGHT	1	1	1	1	1			
FORELIMB GRIP TEST #1	205	395	315	380	195			
FORELIMB GRIP TEST #2	270	575	410	400	365			
HINDLIMB GRIP TEST #1	285	560	405	390	310			
HINDLIMB GRIP TEST #2	360	465	480	345	230			
LANDING FOOT SPLAY #1	7.2	7.2	9.9	7.0	8.1			
LANDING FOOT SPLAY #2	7.1	7.4	9.7	6.5	9.3			
BODY WEIGHT (G)	415	488	432	430	428			

VALUES ARE THE QUANTITY, CATEGORY NUMBER, QUANTAL RESPONSE OR SCORE RECORDED FOR EACH ITEM IN THE BATTERY.

TABLE B22 (PAGE 4): FUNCTIONAL OBSERVATIONAL BATTERY - INDIVIDUAL DATA - MALE RATS

DOSAGE GROUP IV						250 MG/KG/DAY
RAT #	17606	17609	17612	17614	17617	
HOME CAGE BEHAVIOR	2	2	2	2	2	
ALTERATIONS (HOME CAGE)	1	1	1	1	1	
REACTION TO REMOVAL	1	1	. 1	1	1	
REACTION TO HANDLING	1	1	1	1	1	
REARS IN OPEN FIELD	13	19	12	9	0	
DEFECATION IN OPEN FIELD	1	2	1	1	3	
URINATION IN OPEN FIELD	2	1	1	1	2	
LEVEL OF AROUSAL	3	3	3	3	3	
ALTERATIONS (OPEN FIELD)	1	1	1	1	1	
GAIT PATTERN	1	1	1	1	1	
GAIT ABNORMALITY, SEVERITY	1	1	1	1	1	
PALPEBRAL CLOSURE	1	1	1	1	1	
PROMINENCE OF THE EYE	1	1	1	1	1	
LACRIMATION	1	1	1	1	1	
SALIVATION	1	1	1	1	1	
PILOERECTION	0	0	0	0	0	
ABNORMAL RESPIRATION	0	0	0	0	0	
APPEARANCE	1	1	1	1a	1	
VISUAL REACTION	2	2	2	2	2	
TACTILE REACTION	2	2	2	2	2	
AUDITORY REACTION	3	3	3	3	3	
TAIL-PINCH REACTION	2	2	2	2	2	
VISUAL PLACING RESPONSE	1	1	1	1	1	
AIR RIGHTING RESPONSE	1	1	1	1	1	
PUPIL RESPONSE TO LIGHT	1	1	1	1	1	
FORELIMB GRIP TEST #1	210	275	400	170	285	
FORELIMB GRIP TEST #2	200	310	465	140	310	
HINDLIMB GRIP TEST #1	190	385	400	180	290	
HINDLIMB GRIP TEST #2	410	405	460	205	225	
LANDING FOOT SPLAY #1	8.0	7.6	6.6	6.9	8.7	
LANDING FOOT SPLAY #2	10.2	7.8	6.5	6.7	10.0	
BODY WEIGHT (G)	410	434	411	436	421	

VALUES ARE THE QUANTITY, CATEGORY NUMBER, QUANTAL RESPONSE OR SCORE RECORDED FOR EACH ITEM IN THE BATTERY.

a. Chromorhinorrhea.

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE B23 (PAGE 1): MOTOR ACTIVITY - INDIVIDUAL DATA - FO GENERATION MALE RATS

DOSAGE GROUP I				0 (VE	HICLE) MG/KG/DAY			
RAT NUMBER	17601	17602	17603	17604	17607	9-10-20-11	 - 1015 PL - 1	
DAY 86	W. C.						 -	
NUMBER OF MOVEMENTS								
BLOCK 1	76	58	75	54	64			
BLOCK 2	79	70	81	65	65			
BLOCK 3	72	63	70	70	74			
BLOCK 4	63	33	76	74	44			
BLOCK 5	36	0	7	74	32			
BLOCK 6	1	6	41	72	36			
BLOCK 7	0	2	79	62	32			
BLOCK 8	2	55	72	61	34			
BLOCK 9	0	81	6	57	31			
BLOCK 10	0	26	9	57	2			
BLOCK 11	28	4	3	64	ī			
BLOCK 12	77	1	6	71	4			
BLOCK 13	67	3	7	53	0			
BLOCK 14	9	2	3	60	0			
BLOCK 15	0	0	6	50	0			
BLOCK 16	4	2	14	54	0			
BLOCK 17	3	1	5	60	0			
BLOCK 18	1	0	6	55	0			
TOTAL	518	407	566	1113	419			

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE B23 (PAGE 2): MOTOR ACTIVITY - INDIVIDUAL DATA - Fo GENERATION MALE RATS

DOSAGE GROUP I				0 (VE	HICLE) MG/KG/DA	7A		
RAT NUMBER	17601	17602	17603	17604	17607			
DAY 86							 	
TIME (SECONDS) SPENT	IN MOVEMENT							
BLOCK 1	186	196	147	169	195			
BLOCK 2	161	149	180	168	196			
BLOCK 3	7 9	146	120	180	179			
BLOCK 4	84	54	104	78	69			
BLOCK 5	33	0	9	136	31			
BLOCK 6	0	2	53	154	46			
BLOCK 7	0	0	107	86	33			
BLOCK 8	0	85	88	109	42			
BLOCK 9	0	123	1	114	44			
BLOCK 10	0	25	3	110	1			
BLOCK 11	45	8	1	99	0			
BLOCK 12	103	0	2	91	2			
BLOCK 13	101	0	5	72	0			
BLOCK 14	7	1	0	113	0			
BLOCK 15	0	0	0	102	0			
BLOCK 16	2	0	7	100	0			
BLOCK 17	0	0	2	84	0			
BLOCK 18	0	0	2	72	0			
TOTAL	801	789	831	2037	838			

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE B23 (PAGE 3): MOTOR ACTIVITY - INDIVIDUAL DATA - FO GENERATION MALE RATS

DOSAGE GROUP II				10	MG/KG/DAY			
RAT NUMBER	17615	17616	17624	17626	17632	-	 	
DAY 86								
NUMBER OF MOVEMENTS								
BLOCK 1	52	66	78	65	74			
BLOCK 2	59	76	77	58	69			
BLOCK 3	57	91	7.5	54	75			
BLOCK 4	48	74	73	45	72			
BLOCK 5	31	85	70	63	68			
BLOCK 6	0	81	59	67	51			
BLOCK 7	0	71	27	64	45			
BLOCK 8	0	64	50	50	87			
BLOCK 9	0	43	55	55	54			
BLOCK 10	1	72	9	48	52			
BLOCK 11	0	27	30	60	48			
BLOCK 12	2	44	17	14	46			
BLOCK 13	0	65	0	5	44			
BLOCK 14	0	58	0	44	34			
BLOCK 15	0	37	0	52	4			
BLOCK 16	2	6	0	41	41			
BLOCK 17	1	3	0	13	7			
BLOCK 18	0	5	12	Ò	2			
TOTAL	253	968	632	798	873			

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE B23 (PAGE 4): MOTOR ACTIVITY - INDIVIDUAL DATA - FO GENERATION MALE RATS

DOSAGE GROUP II				10	MG/KG/DAY
RAT NUMBER	17615	17616	17624	17626	17632
DAY 86					
TIME (SECONDS) SPENT	IN MOVEMENT				
BLOCK 1	233	196	195	196	204
BLOCK 2	182	154	164	170	167
BLOCK 3	135	169	160	120	117
BLOCK 4	85	122	94	79	129
BLOCK 5	45	136	127	123	76
BLOCK 6	0	107	78	119	123
BLOCK 7	0	143	12	112	65
BLOCK 8	0	94	55	73	130
BLOCK 9	0	86	77	127	85
BLOCK 10	0	74	7	74	80
BLOCK 11	0	28	20	93	59
BLOCK 12	1	68	15	15	80
BLOCK 13	0	91	0	9	50
BLOCK 14	0	66	0	42	31
BLOCK 15	0	29	0	69	3
BLOCK 16	1	5	0	70	35
BLOCK 17	0	0	0	14	6
BLOCK 18	0	3	10	0	0
TOTAL	682	1571	1014	1505	1440

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE B23 (PAGE 5): MOTOR ACTIVITY - INDIVIDUAL DATA - FO GENERATION MALE RATS

DOSAGE GROUP III				50	MG/KG/DAY		
RAT NUMBER	17605	17610	17611	17613	17619		 
DAY 86							
NUMBER OF MOVEMENTS							
BLOCK 1	66	64	63	69	58		
BLOCK 2	67	37	64	75	73		
BLOCK 3	64	51	81	63	75		
BLOCK 4	70	40	43	50	70		
BLOCK 5	69	22	0	52	71		
BLOCK 6	41	0	11	28	62		
BLOCK 7	41	2	1	2	66		
BLOCK 8	2	52	29	3	41		
BLOCK 9	4	34	43	2	78		
BLOCK 10	1	68	66	48	39		
BLOCK 11	0	40	80	48	11		
BLOCK 12	0	37	51	1	23		
BLOCK 13	1	31	63	0	2		
BLOCK 14	0	55	34	0	10		
BLOCK 15	5	57	14	1	0		
BLOCK 16	54	31	11	0	14		
BLOCK 17	14	53	0	0	0		
BLOCK 18	1	34	0	2	1		
TOTAL	500	708	654	444	694		

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE B23 (PAGE 6): MOTOR ACTIVITY - INDIVIDUAL DATA - Fo GENERATION MALE RATS

DOSAGE GROUP III				50	MG/KG/DAY		
RAT NUMBER	17605	17610	17611	17613	17619		 
DAY 86						 	 
TIME (SECONDS) SPENT	IN MOVEMENT						
BLOCK 1	177	181	221	190	173		
BLOCK 2	119	134	166	164	92		
BLOCK 3	144	98	135	135	105		
BLOCK 4	145	88	67	88	120		
BLOCK 5	108	25	0	64	84		
BLOCK 6	59	0	8	39	60		
BLOCK 7	54	0	0	0	113		
BLOCK 8	0	71	17	0	46		
BLOCK 9	6	35	53	0	97		
BLOCK 10	0	112	137	77	37		
BLOCK 11	0	71	160	64	7		
BLOCK 12	0	66	39	0	26		
BLOCK 13	0	40	68	0	1		
BLOCK 14	0	71	36	0	6		
BLOCK 15	4	81	12	0	0		
BLOCK 16	58	56	4	0	14		
BLOCK 17	16	84	0	0	0		
BLOCK 18	0	59	0	1	1		
TOTAL	890	1272	1123	822	982		

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE B23 (PAGE 7): MOTOR ACTIVITY - INDIVIDUAL DATA - Fo GENERATION MALE RATS

DOSAGE GROUP IV				250	MG/KG/DAY
RAT NUMBER	17606	17609	17612	17614	17617
DAY 86					
NUMBER OF MOVEMENTS					
BLOCK 1	61	60	65	72	70
BLOCK 2	70	54	76	88	73
BLOCK 3	48	64	63	73	62
BLOCK 4	54	60	48	73	71
BLOCK 5	1	52	1	12	62
BLOCK 6	2	6	0	18	54
BLOCK 7	3	1	0	1	49
BLOCK 8	1	8	1	0	31
BLOCK 9	0	2	0	1	4
BLOCK 10	2	0	48	0	4
BLOCK 11	1	32	47	50	0
BLOCK 12	3	56	1	50	3
BLOCK 13	4	20	0	9	4
BLOCK 14	1	1	1	16	0
BLOCK 15	10	0	1	29	0
BLOCK 16	57	2	0	20	2
BLOCK 17	1	0	0	16	2
BLOCK 18	1	5	0	11	0
TOTAL	320	423	352	539	491

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE B23 (PAGE 8): MOTOR ACTIVITY - INDIVIDUAL DATA - FO GENERATION MALE RATS

DOSAGE GROUP IV				250	MG/KG/DAY			
RAT NUMBER	17606	17609	17612	17614	17617		 	
DAY 86						 		
TIME (SECONDS) SPENT	IN MOVEMENT							
BLOCK 1	192	197	181	187	141			
BLOCK 2	163	173	108	180	139			
BLOCK 3	82	114	95	142	125			
BLOCK 4	122	146	44	167	67			
BLOCK 5	0	70	0	14	77			
BLOCK 6	0	5	0	10	105			
BLOCK 7	0	0	0	0	68			
BLOCK 8	0	4	. 0	0	21			
BLOCK 9	0	1	0	0	2			
BLOCK 10	0	0	64	0	7			
BLOCK 11	0	33	79	52	0			
BLOCK 12	1	92	0	60	0			
BLOCK 13	1	19	0	8	1			
BLOCK 14	0	0	0	11	0			
BLOCK 15	7	0	0	26	0			
BLOCK 16	89	0	0	51	0			
BLOCK 17	0	0	0	20	0			
BLOCK 18	0	0	0	6	0			
TOTAL	657	854	571	934	753			

## $\label{eq:appendix} \mbox{\ensuremath{\mathsf{APPENDIX}}} \ \mbox{\ensuremath{\mathsf{C}}}$ $\mbox{\ensuremath{\mathsf{REPORT}}} \ \mbox{\ensuremath{\mathsf{TABLES}}} \ \mbox{\ensuremath{\mathsf{-}}} \ \mbox{\ensuremath{\mathsf{Fo}}} \ \mbox{\ensuremath{\mathsf{GENERATION}}} \ \mbox{\ensuremath{\mathsf{FEMALE}}} \ \mbox{\ensuremath{\mathsf{RATS}}}$

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE C1 (PAGE 1): CLINICAL OBSERVATIONS - SUMMARY - FO GENERATION FEMALE RATS

DOSAGE GROUP DOSAGE (MG/KG/DAY)	I O (VEHICLE)	II 10	III 50	IV 250
MORTALITY	0	0	0	0
PRECOHABITATION (DAY 1 OF STUDY TO THE	DAY OF COHABITATION):			
MAXIMUM POSSIBLE INCIDENCE	225/ 15	225/ 15	225/ 15	225/ 15
RED, SLIGHT PERIORAL SUBSTANCE	1/ 1	0/ 0	0/ 0	3/ 3
EXCESS SALIVATION	1/ 1	0/ 0	0/ 0	4/ 2
TAIL BENT	0/ 0	0/ 0	0/ 0	13/ 1
CHROMODACRYORRHEA	1/ 1	0/ 0	0/ 0	1/ 1
RIGHT EYE: CORNEAL OPACITY	0/ 0	0/ 0	12/ 1	0/ 0
LOCALIZED ALOPECIA: LIMBS	9/ 2	1/ 1	0/ 0	0/ 0

STATISTICAL ANALYSES OF CLINICAL OBSERVATION DATA WERE RESTRICTED TO THE NUMBER OF RATS WITH OBSERVATIONS.
MAXIMUM POSSIBLE INCIDENCE = (DAYS x RATS)/NUMBER OF RATS EXAMINED PER GROUP.
N/N = TOTAL NUMBER OF OBSERVATIONS/NUMBER OF RATS WITH OBSERVATION.

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TABLE C1 (PAGE 2): CLINICAL OBSERVATIONS - SUMMARY - FO GENERATION FEMALE RATS

DOSAGE GROUP	I			
DOSAGE (MG/KG/DAY)	0 (VEHICLE)	II 10	III 50	IV 250
MORTALITY	0	0	0	0
PRESUMED GESTATION: a				
MAXIMUM POSSIBLE INCIDENCE	330/ 15	335/ 15	331/ 15	316/ 14
EXCESS SALIVATION	0/ 0	0/ 0	0/ 0	25/ 7**
RED, SLIGHT OR MODERATE PERIORA	L SUBSTANCE 0/ 0	0/ 0	0/ 0	16/ 6**
LOCALIZED ALOPECIA: TOTAL	43/ 2	40/ 3	26/ 2	41/ 3
LIMBS	43/ 2	40/ 3	26/ 2	38/ 2
UNDERSIDE	0/ 0	0/ 0	0/ 0	4/ 1
HEAD	0/ 0	0/ 0	0/ 0	3/ 1
. URINE-STAINED ABDOMINAL FUR	0/ 0	0/ 0	0/ 0	12/ 2
TAIL BENT	0/ 0	0/ 0	0/ 0	22/ 1
RED PERIVAGINAL SUBSTANCE	0/ 0	0/ 0	0/ 0	1/ 1
CHROMODACRYORRHEA	0/ 0	0/ 0	2/ 1	0/ 0
INCISORS: MISSING/BROKEN	0/ 0	1/ 1	0/ 0	0/ 0
SOFT OR LIQUID FECES	0/ 0	1/ 1	0/ 0	0/ 0

STATISTICAL ANALYSES OF CLINICAL OBSERVATION DATA WERE RESTRICTED TO THE NUMBER OF RATS WITH OBSERVATIONS. MAXIMUM POSSIBLE INCIDENCE =  $(DAYS \times RATS)/NUMBER$  OF RATS EXAMINED PER GROUP.

 $<sup>{\</sup>tt N/N}$  = TOTAL NUMBER OF OBSERVATIONS/NUMBER OF RATS WITH OBSERVATION.

a. Restricted to rats with a confirmed mating date.

<sup>\*\*</sup> Significantly different from the vehicle control group value (p<0.01).

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE C1 (PAGE 3): CLINICAL OBSERVATIONS - SUMMARY - FO GENERATION FEMALE RATS

DOSAGE GROUP DOSAGE (MG/KG/DAY)	I 0 (VEHICLE)	II 10	III 50	IV 250
MORTALITY	0	0	0	0
LACTATION:				
MAXIMUM POSSIBLE INCIDENCE	90/ 15	84/ 14	90/ 15	70/ 13
LOCALIZED ALOPECIA: TOTAL LIMBS UNDERSID	12/ 2 12/ 2 E 0/ 0	13/ 3 13/ 3 0/ 0	12/ 2 12/ 2 0/ 0	7/ 2 7/ 2 6/ 1
EXCESS SALIVATION	0/ 0	0/ 0	0/ 0	4/ 2
TAIL BENT	0/ 0	0/ 0	0/ 0	6/ 1
DEHYDRATION	0/ 0	0/ 0	0/ 0	1/ 1

STATISTICAL ANALYSES OF CLINICAL OBSERVATION DATA WERE RESTRICTED TO THE NUMBER OF RATS WITH OBSERVATIONS.

MAXIMUM POSSIBLE INCIDENCE = (DAYS x RATS)/NUMBER OF RATS EXAMINED PER GROUP.

N/N = TOTAL NUMBER OF OBSERVATIONS/NUMBER OF RATS WITH OBSERVATION.

TABLE C2 (PAGE 1): NECROPSY OBSERVATIONS - SUMMARY - FO GENERATION FEMALE RATS

DOSAGE GROUP DOSAGE (MG/KG/DAY)		I 0 (VEHICLE)	II 10	III 50	IV 250
RATS EXAMINED a	N	15	15	15	15
MORTALITY	N	0	0	0	0
APPEARED NORMAL	N	15	15	14	14
KIDNEYS: RIGHT, ABSENT	N	0	0	1	0
THYMUS: SMALL	N	0	0	0	1

a. Refer to the individual clinical observations table (Table C27) for external observations confirmed at necropsy.

TABLE C3 (PAGE 1): TERMINAL BODY WEIGHTS AND ORGAN WEIGHTS - SUMMARY - FO GENERATION FEMALE RATS

DOSAGE GROUP DOSAGE (MG/KG/DAY)		I (VEHICLE)	II 10	III 50	IV 250
RATS TESTED	И	15	15	15	15
PREGNANT	N	15	14	15	13
INCLUDED IN ANALYSES	й	15	14	15	11a
TERMINAL BODY WEIGHT	MEAN±S.D.	299.1 ± 24.7	304.0 ± 18.9	296.0 ± 25.0	284.8 ± 11.1
BRAIN	MEAN±S.D.	2.20 ± 0.08 [ 10]b	2.19 ± 0.07 [ 10]b	2.19 ± 0.07 [ 10]b	2.20 ± 0.08 [ 9]b
LIVER	MEAN±S.D.			11.66 ± 1.28	13.56 ± 0.89**
KIDNEY LEFT	MEAN±S.D.	1.20 ± 0.13 [ 10]b	1.29 ± 0.14 [ 10]b	1.31 ± 0.32 [ 10]b	1.23 ± 0.08
KIDNEY RIGHT	MEAN±S.D.	1.20 ± 0.13 [ 10]b	1.31 ± 0.10 [ 10]b	1.27 ± 0.14 [ 9]b,c	1.27 ± 0.08 [ 9]b
ADRENAL LEFT	MEAN±S.D.	0.042 ± 0.004 [ 10]b	0.046 ± 0.008 [ 10]b	$0.041 \pm 0.008$ [ 10]b	0.045 ± 0.008 [ 9]b
ADRENAL RIGHT	MEAN±S.D.	0.041 ± 0.006 [ 10]b	0.043 ± 0.006 [ 10]b	0.038 ± 0.008 [ 10]b	$0.040 \pm 0.006$ [ 9]b
SPLEEN	MEAN±S.D.	0.70 ± 0.06 [ 10]b	0.74 ± 0.14 [ 10]b	0.76 ± 0.10 [ 10]b	0.64 ± 0.09 [ 9]b
THYMUS	MEAN±S.D.	0.27 ± 0.07 [ 10]b	0.34 ± 0.07 [ 10]b	0.29 ± 0.07 [ 10]b	0.22 ± 0.05 [ 91b
OVARY LEFT	MEAN±S.D.	$0.080 \pm 0.017$		0.079 ± 0.015	0.076 ± 0.010
OVARY RIGHT	MEAN±S.D.	0.081 ± 0.014	0.083 ± 0.013	0.084 ± 0.015	0.080 ± 0.014
UTERUS WITH CERVIX	MEAN±S.D.	0.80 ± 0.11	0.79 ± 0.10	0.78 ± 0.09	0.70 ± 0.06
HEART	MEAN±S.D.	1.08 ± 0.11 [ 10]b	1.15 ± 0.08 [ 10]b	1.11 ± 0.14 [ 10]b	1.00 ± 0.12 [ 9]b

<sup>[ ] =</sup> NUMBER OF VALUES AVERAGED

a. Excludes values for dams that were sacrificed due to no surviving pups.

b. Results did not warrant examination of the five additional rats.

c. Excludes rat 17706, which had an absent right kidney.

<sup>\*\*</sup> Significantly different from the vehicle control group value (p<0.01).

TABLE C4 (PAGE 1): RATIOS (%) OF ORGAN WEIGHT TO TERMINAL BODY WEIGHT - SUMMARY - FO GENERATION FEMALE RATS

DOSAGE GROUP DOSAGE (MG/KG/DAY)		I O (VEHICLE)	II 10	III 50	IV 250
RATS TESTED	N	15	15	15	15
PREGNANT	И	15	14	15	13
INCLUDED IN ANALYSES	N	15	14	15	11a
TERMINAL BODY WEIGHT	MEAN±S.D.	299.1 ± 24.7	304.0 ± 18.9	296.0 ± 25.0	284.8 ± 11.1
BRAIN	MEAN±S.D.	$0.733 \pm 0.059$ [ 10]b	[ 10]b	[ 10]b	[ 9]h
LIVER	MEAN±S.D.	$3.753 \pm 0.336$		3.935 ± 0.233	4.763 ± 0.284**
KIDNEY LEFT	MEAN±S.D.	[ 10]b	0.416 ± 0.042 [ 10]b	[ 10] b	0.434 ± 0.034 [ 9]b
KIDNEY RIGHT	MEAN±S.D.	$0.400 \pm 0.036$	0.421 ± 0.031	0.421 + 0.042	0 449 + 0 035**
ADRENAL LEFT C	MEAN±S.D.	$13.994 \pm 2.004$	$14.906 \pm 2.273$	13.476 ± 1.549	15.943 ± 3.030 [ 9]b
ADRENAL RIGHT C	MEAN±S.D.	[ 10]b	13.951 ± 1.699	12.481 ± 1.930	£ - 3
SPLEEN	MEAN±S.D.	0.234 ± 0.021 [ 10]b	0.236 ± 0.037	$0.255 \pm 0.047$	0.227 ± 0.031 [ 9]b
THYMUS	MEAN±S.D.	0.092 ± 0.019 [ 10]b	[ 10]b 0.107 ± 0.019 [ 10]b	0.094 ± 0.020 [ 10]b	
OVARY LEFT c	MEAN±S.D.	26.915 ± 6.046	[ 10]b 25.976 ± 4.034		
OVARY RIGHT C	MEAN±S.D.			28.301 ± 4.894	28.246 ± 4.797
TTERUS WITH CERVIX	MEAN±S.D.	$0.267 \pm 0.034$	0.258 ± 0.035	0.263 ± 0.028	0.246 ± 0.025
HEART	MEAN±S.D.	0.361 ± 0.019 [ 10]b	0.371 ± 0.026 [ 10]b	0.366 ± 0.036 [ 10]b	0.354 ± 0.034 [ 9]b

ALL WEIGHTS WERE RECORDED IN GRAMS (G).

RATIOS (%) = (ORGAN WEIGHT/TERMINAL BODY WEIGHT) X 100.

<sup>[ ] =</sup> NUMBER OF VALUES AVERAGED

a. Excludes values for dams that were sacrificed due to no surviving pups.

b. Results did not warrant examination of the five additional rats.

c. Value was multiplied by 1000.

d. Excludes rat 17706, which had an absent right kidney.

<sup>\*\*</sup> Significantly different from the vehicle control group value (p<0.01).

TABLE C5 (PAGE 1): RATIOS (%) OF ORGAN WEIGHT TO BRAIN WEIGHT - SUMMARY - FO GENERATION FEMALE RATS

DOSAGE GROUP DOSAGE (MG/KG/DAY)		I 0 (VEHICLE)	II 10	III 50	IV 250
RATS TESTED	N	10	10	10	12
PREGNANT	N	10	10	10	11
INCLUDED IN ANALYSES	N	10	10	10	9a
BRAIN WEIGHT	MEAN±S.D.	2.20 ± 0.08	2.19 ± 0.07	2.19 ± 0.07	2.20 ± 0.08
LIVER	MEAN±S.D.	521.53 ± 59.00	564.65 ± 40.68*	547.24 ± 48.14	616.82 ± 35.48**
KIDNEY LEFT	MEAN±S.D.	54.44 ± 5.35	59.07 ± 5.87	59.77 ± 14.09	55.99 ± 2.45
KIDNEY RIGHT	MEAN±S.D.	54.59 ± 5.44	59.89 ± 4.34	58.08 ± 6.21	57.96 ± 3.10
ADRENAL LEFT	MEAN±S.D.	1.90 ± 0.20	2.11 ± 0.34	[ 9]b 1.88 ± 0.36	2.04 ± 0.34
ADRENAL RIGHT	MEAN±S.D.	1.88 ± 0.29	1.98 ± 0.28	1.74 ± 0.38	1.83 ± 0.27
SPLEEN	MEAN±S.D.	32.11 ± 3.12	33.76 ± 6.06	34.92 ± 4.73	29.17 ± 3.90
THYMUS	MEAN±S.D.	12.42 ± 3.30	15.40 ± 2.84	13.18 ± 3.13	9.85 ± 2.66
OVARY LEFT	MEAN±S.D.	3.69 ± 0.86	3.66 ± 0.59	3.82 ± 0.73	3.42 ± 0.44
OVARY RIGHT	MEAN±S.D.	3.75 ± 0.77	3.94 ± 0.42	3.95 ± 0.67	3.63 ± 0.73
UTERUS WITH CERVIX	MEAN±S.D.	36.63 ± 5.32	36.42 ± 4.93	36.07 ± 2.57	32.66 ± 2.24
HEART	MEAN±S.D.	49.34 ± 4.16	52.51 ± 3.48	50.74 ± 6.49	45.77 ± 5.51

ALL WEIGHTS WERE RECORDED IN GRAMS (G).

RATIOS (%) = (ORGAN WEIGHT/BRAIN WEIGHT) X 100.

<sup>[ ] =</sup> NUMBER OF VALUES AVERAGED

a. Excludes values for dams that were sacrificed due to no surviving pups.

b. Excludes rat 17706, which had an absent right kidney.

<sup>\*</sup> Significantly different from the vehicle control group value ( $p \le 0.05$ ).

<sup>\*\*</sup> Significantly different from the vehicle control group value  $(p \le 0.01)$ .

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE C6 (PAGE 1): HEMATOLOGY - SUMMARY - Fo GENERATION FEMALE RATS (See last page of this table for abbreviations)

DOSAGE GROUP		I	II	III	· IV	
DOSAGE (MG/KG/DAY)		0 (VEHICLE)	10	50	250	
RATS TESTED	$\mathbf{N}$	5	5	6	4	
INCLUDED IN ANALYSES	N	4a	5	6	4	
WBC (THSN/CU MM)	MEAN±S.D.	20.2 ± 2.70	14.9 ± 1.92	20.2 ± 2.71	21.6 ± 2.83	
RBC (MILL/CU MM)	MEAN±S.D.	5.86 ± 0.466	6.00 ± 0.246	5.77 ± 0.578	5.76 ± 0.371	
HGB (GRAMS/DL)	MEAN±S.D.	13.9 ± 0.61	14.3 ± 0.46	13.7 ± 0.78	13.2 ± 0.68	
HCT (%)	MEAN±S.D.	36.8 ± 1.61	38.2 ± 1.08	36.3 ± 2.88	34.1 ± 2.46	
MCV (CU MICRONS)	MEAN±S.D.	63.0 ± 2.88	63.6 ± 2.77	63.0 ± 1.87	59.2 ± 1.38	
MCH (PICO GRAMS)	MEAN±S.D.	23.8 ± 1.21	23.8 ± 1.08	23.8 ± 1.26	22.9 ± 0.46	
MCHC (%)	MEAN±S.D	37.8 ± 0.72	$37.4 \pm 0.17$	37.8 ± 1.01	38.7 ± 1.36	
PLAT (THSN/CU MM)	MEAN±S.D.	1534 ± 140.4	947 ± 531.0	1598 ± 423.9	1547 ± 236.6	
PT (SECONDS)	MEAN±S.D.	$13.3 \pm 0.40$	13.3 $\pm$ 0.34 [ 4]a	13.2 ± 0.16 [ 5]a	13.2 ± 0.22	
APTT (SECONDS)	MEAN±S.D	$21.2 \pm 2.32$	18.2 ± 1.95	22.0 ± 3.70	19.8 ± 4.39	

<sup>[ ] =</sup> NUMBER OF VALUES AVERAGED

a. Excludes values for rats that had clotted samples.

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE C6 (PAGE 2): HEMATOLOGY - SUMMARY - Fo GENERATION FEMALE RATS (See last page of this table for abbreviations)

DOSAGE GROUP DOSAGE (MG/KG/DAY)		I 0 (VEHICLE)	II 10	III 50	IV 250	
RATS TESTED	N	5	5	6	4	
INCLUDED IN ANALYSES	N	4a	5	6	4	
MPV (CU MICRONS)	MEAN±S.D.	7.7 ± 0.91	8.8 ± 2.08 [ 4]a	8.0 ± 1.02 [ 5]a	8.2 ± 0.58	
NRBC COUNT	MEAN±S.D.	0 ± 0.0	0 ± 0.0	0 ± 0.0	0 ± 0.0	
Lymphocyte (THSN/CU MM	) MEAN±S.D.	15.9 ± 1.81	12.6 ± 2.28	15.5 ± 2.48	16.4 ± 4.17	
Segmented (THSN/CU MM)	MEAN±S.D.	3.9 ± 1.38	$2.0 \pm 0.76$	4.4 ± 1.54	4.1 ± 1.95	
Bands (THSN/CU MM)	MEAN±S.D.	0.0 ± 0.00	$0.0 \pm 0.00$	0.0 ± 0.00	0.1 ± 0.12	
Monocytes (THSN/CU MM)	MEAN±S.D.	$0.3 \pm 0.34$	0.2 ± 0.16	0.2 ± 0.27	0.9 ± 0.56	
Eosinophil (THSN/CU MM	) MEAN±S.D.	0.1 ± 0.12	0.0 ± 0.00	0.1 ± 0.17	0.0 ± 0.00	
Basophils (THSN/CU MM)	MEAN±S.D.	0.0 ± 0.00	0.0 ± 0.00	$0.0 \pm 0.00$	0.0 ± 0.00	
Abnormal L (THSN/CU MM	) MEAN±S.D.	0.1 ± 0.10	0.0 ± 0.00	0.0 ± 0.00	0.1 ± 0.15	
Other (THSN/CU MM)	MEAN±S.D.	0.0 ± 0.00	0.0 ± 0.00	0.0 ± 0.00	0.0 ± 0.00	

<sup>[ ] =</sup> NUMBER OF VALUES AVERAGED

a. Excludes values for rats that had clotted samples.

PROTOCOL 418-027:	ORAL (GAVAGE)	COMBINED REPEATED	ED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXIC	ITY
	SCREENING TEST	(SPONSOR'S STUDY	DY NUMBER: T-7599)	

TABLE C6 (PAGE 3): HEMATOLOGY - SUMMARY - FO GENERATION FEMALE RATS

KEY TO HEMATOLOGY TABLE	·
ABBREVATION	TERMINOLOGY
WBC	White Blood Cells (Leukocytes)
RBC	Red Blood Cells (Erythrocytes)
HGB	Hemoglobin
HCT	Hematocrit (Packed Cell Volume)
MCV	Mean Corpuscular Volume
мсн	Mean Corpuscular Hemoglobin
MCHC	Mean Corpuscular Hemoglobin Concentration
PLAT	Platelets
MPV	Mean Platelet Volume
PT	Prothrombin Time
APTT	Activated Partial Thromboplastin
NRBC	Nucleated Red Blood Cell Count
Segmented	Segmented Neutrophils
Abnormal L	Abnormal Lymphocytes
Other	Other Cells

TABLE C7 (PAGE 1): CLINICAL CHEMISTRY - SUMMARY - FO GENERATION FEMALE RATS (See last page of this table for abbreviations)

DOSAGE GROUP DOSAGE (MG/KG/DAY)		I 0 (VEHICLE)	II 10	III 50	IV 250	
RATS TESTED	N	5	5	6	4	
TP (G/DL)	MEAN±S.D.	6.5 ± 0.45	6.5 ± 0.61	6.2 ± 0.44	6.3 ± 0.59	
A (G/DL)	MEAN±S.D.	4.2 ± 0.30	4.2 ± 0.25	4.1 ± 0.33	4.1 ± 0.14	
GLU (MG/DL)	MEAN±S.D.	125 ± 26.9	138 ± 6.6	124 ± 27.4	114 ± 28.1	
CHOL (MG/DL)	MEAN±S.D.	52 ± 11.8	61 ± 7.5	58 ± 14.5	57 ± 12.9	
TBILI (MG/DL)	MEAN±S.D.	0.1 ± 0.05	0.1 ± 0.04	0.1 ± 0.00	0.1 ± 0.05	
BUN (MG/DL)	MEAN±S.D.	20 ± 3.6	18 ± 3.3	19 ± 3.3	21 ± 2.5	
CREAT (MG/DL)	MEAN±S.D.	0.4 ± 0.04	0.3 ± 0.09	0.3 ± 0.04	0.4 ± 0.08	
ALT (U/L)	MEAN±S.D.	60 ± 7.4	57 ± 13.0	62 ± 13.3	94 ± 7.4	
AST (U/L)	MEAN±S.D.	100 ± 9.1	94 ± 18.8	117 ± 20.0	120 ± 23.8	

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE C7 (PAGE 2): CLINICAL CHEMISTRY - SUMMARY - FO GENERATION FEMALE RATS (See last page of this table for abbreviations)

DOSAGE GROUP		I				
DOSAGE GROUP DOSAGE (MG/KG/DAY)		0 (VEHICLE)	11 10	III 50	IV 250	
RATS TESTED	N	5	5	6	4	
ALK (U/L)	MEAN±S.D.	63 ± 19.5	51 ± 9.5	54 ± 23.0	87 ± 28.5	
CA (MG/DL)	MEAN±S.D.	11.8 ± 0.37	11.7 ± 0.54	11.5 ± 0.31	11.9 ± 0.66	
PHOS (MG/DL)	MEAN±S.D.	9.3 ± 0.13	8.1 ± 0.85	8.8 ± 1.54	9.5 ± 0.50	
TRI (MG/DL)	MEAN±S.D.	56 ± 12.5	57 ± 22.2	48 ± 22.2	66 ± 10.6	
NA (MMOL/L)	MEAN±S.D.	143 ± 2.1	142 ± 1.1	143 ± 1.0	140 ± 2.1	
K (MMOL/L)	MEAN±S.D.	6.7 ± 0.37	6.4 ± 0.74	6.7 ± 0.51	6.7 ± 0.22	
CL (MMOL/L)	MEAN±S.D.	97 ± 3.0	98 ± 1.2	101 ± 1.8	98 ± 2.9	
G (G/DL)	MEAN±S.D.	2.3 ± 0.19	2.4 ± 0.38	2.2 ± 0.13	2.2 ± 0.46	
A/G	MEAN±S.D.	1.8 ± 0.11	1.8 ± 0.20	1.9 ± 0.12	2.0 ± 0.44	

TABLE C7 (PAGE 3): CLINICAL CHEMISTRY - SUMMARY - FO GENERATION FEMALE RATS

ABBREVATION	TERMINOLOGY
TP	Total Protein
A	Albumin
GLU	Glucose
CHOL	Cholesterol
TBILI	Total Bilirubin
BUN	Blood Urea Nitrogen
CREAT	Creatinine
ALT	Alanine Aminotransferase
AST	Aspartate Aminotransferase
ALK	Alkaline Phosphatase
CA	Calcium
PHOS	Phosphorus (inorganic)
TRI	Triglycerides
NA	Sodium
к	Potassium
CL	Chloride
G	Globulin
A/G	Albumin/Globulin Ratio

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE C8 (PAGE 1): BODY WEIGHTS - PRECOHABITATION - SUMMARY - Fo GENERATION FEMALE RATS

DOSAGE GROUP DOSAGE (MG/KG/DAY)		I O (VEHICLE)	II 10	III 50	IV 250
RATS TESTED	N	15	15	15	15
BODY WEIGHT (G)					
DAY 1	MEAN±S.D.	227.2 ± 7.9	227.3 ± 7.5	226.5 ± 5.9	226.5 ± 5.7
DAY 8	MEAN±S.D.	248.2 ± 11.8	248.8 ± 9.1	248.5 ± 12.1	242.5 ± 10.0
DAY 15a	MEAN±S.D.	262.3 ± 14.7	262.3 ± 13.5	260.7 ± 14.6	252.9 ± 12.8

DAY = DAY OF STUDY

a. Last value recorded before cohabitation.

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE C9 (PAGE 1): BODY WEIGHT CHANGES - PRECOHABITATION - SUMMARY - FO GENERATION FEMALE RATS

DOSAGE GROUP DOSAGE (MG/KG/DAY)		I 0 (VEHICLE)	II 10	III 50	IV 250
RATS TESTED	N	15	15	15	15
BODY WEIGHT CHANGE (G	(1)				
DAYS 1 - 8	MEAN±S.D.	+21.0 ± 6.2	+21.5 ± 4.4	+21.9 ± 7.5	+16.0 ± 6.5*
DAYS 8 - 15a	MEAN±S.D.	+14.1 ± 5.2	+13.5 ± 6.0	+12.2 ± 5.3	+10.3 ± 4.1
DAYS 1 - 15a	MEAN±S.D.	+35.1 ± 10.0	+34.9 ± 8.4	+34.1 ± 10.4	+26.3 ± 8.9*

DAYS = DAYS OF STUDY

a. Last value recorded before cohabitation.

<sup>\*</sup> Significantly different from the vehicle control group value ( $p \le 0.05$ ).

TABLE C10 (PAGE 1): MATERNAL BODY WEIGHTS - GESTATION - SUMMARY - FO GENERATION FEMALE RATS

DOSAGE GROUP DOSAGE (MG/KG/DAY)		I O (VEHICLE)	II 10	III 50	IV 250
RATS TESTED	N	15	15	15	15
PREGNANT	N	15	14	15	13
MATERNAL BODY WEIGHT (G)					
DAY 0	MEAN±S.D.	268.5 ± 13.4	272.9 ± 13.0	272.1 ± 17.0	262.0 ± 16.2
DAY 1	MEAN±S.D.	276.3 ± 14.5	277.6 ± 14.8	276.8 ± 16.8	268.2 ± 13.1
DAY 2	MEAN±S.D.	281.8 ± 15.5	282.7 ± 15.0	280.6 ± 17.7	272.5 ± 14.2
DAY 3	MEAN±S.D.	284.4 ± 15.6	286.5 ± 17.4	282.5 ± 17.6	273.7 ± 14.8
DAY 4	MEAN±S.D.	288.0 ± 15.0	289.4 ± 15.9	287.6 ± 19.0	278.3 ± 16.6
DAY 5	MEAN±S.D.	292.1 ± 16.4	291.9 ± 17.3	289.8 ± 18.5	280.9 ± 16.4
DAY 6	MEAN±S.D.	295.8 ± 17.9	295.8 ± 17.7	292.0 ± 18.4	283.1 ± 15.7
DAY 7	MEAN±S.D.	299.7 ± 18.4	298.7 ± 16.5	296.8 ± 19.3	285.5 ± 17.2
DAY 8	MEAN±S.D.	303.5 ± 18.9	301.9 ± 17.4	299.0 ± 20.6	288.3 ± 17.5
DAY 9	MEAN±S.D.	306.0 ± 20.0	306.8 ± 19.2	302.4 ± 21.2	292.8 ± 18.0
DAY 10	MEAN±S.D.	312.5 ± 20.6	311.8 ± 20.1	308.1 ± 21.9	298.7 ± 17.1
DAY 11	MEAN±S.D.	319.3 ± 21.8	318.4 ± 19.6	315.3 ± 22.2	304.8 ± 17.3
DAY 12	MEAN±S.D.	325.3 ± 22.7	327.1 ± 21.6	322.9 ± 24.1	311.5 ± 16.7
DAY 13	MEAN±S.D.	329.8 ± 24.6	329.2 ± 21.8	324.9 ± 24.1	315.2 ± 16.7
DAY 14	MEAN±S.D.	338.3 ± 26.4	336.9 ± 23.8	331.3 ± 23.6	321.5 ± 17.2

DAY = DAY OF GESTATION

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE C10 (PAGE 2): MATERNAL BODY WEIGHTS - GESTATION - SUMMARY - FO GENERATION FEMALE RATS

DOSAGE GROUP DOSAGE (MG/KG/DAY)		I 0 (VEHICLE)	II 10	III 50	IV 250
RATS TESTED	и	15	15	15	15
PREGNANT	И	15	14	15	13
MATERNAL BODY WEIGHT	G)				
DAY 15	MEAN±S.D.	345.4 ± 25.9	341.4 ± 24.5	338.8 ± 24.0	328.3 ± 17.0
DAY 16	MEAN±S.D.	355.7 ± 25.5	354.2 ± 25.9	$350.5 \pm 23.4$	340.9 ± 16.5
DAY 17	MEAN±S.D.	368.6 ± 27.4	368.8 ± 26.5	363.9 ± 24.5	353.2 ± 16.4
DAY 18	MEAN±S.D.	386.9 ± 29.4	387.1 ± 29.6	380.1 ± 24.1	366.2 ± 17.6
DAY 19	MEAN±S.D.	400.6 ± 29.7	400.9 ± 30.7	395.7 ± 24.2	381.2 ± 15.9
DAY 20	MEAN±S.D.	418.1 ± 34.5	416.5 ± 32.8	411.4 ± 26.7	395.6 ± 17.0

DAY = DAY OF GESTATION

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE C11 (PAGE 1): MATERNAL BODY WEIGHT CHANGES - GESTATION - SUMMARY - FO GENERATION FEMALE RATS

DOSAGE GROUP DOSAGE (MG/KG/DAY)		I O (VEHICLE)	II 10	III 50	IV 250
RATS TESTED	И	15	15	15	15
PREGNANT	N	15	14	15	13
MATERNAL BODY WEIGHT CHANGE (G)					
DAYS 0 - 3	MEAN±S.D.	+15.9 ± 4.8	+13.6 ± 5.7	+10.4 ± 5.7*	+11.7 ± 5.4
DAYS 3 - 6	MEAN±S.D.	+11.4 ± 5.5	+9.4 ± 4.9	+9.5 ± 4.2	+9.4 ± 3.7
DAYS 6 - 9	MEAN±S.D.	+10.2 ± 4.5	+11.0 ± 3.8	+10.4 ± 5.2	+9.7 ± 4.3
DAYS 9 - 12	MEAN±S.D.	+19.3 ± 4.9	+20.3 ± 5.3	+20.5 ± 4.2	+18.7 ± 6.5
DAYS 12 - 15	MEAN±S.D.	+20.1 ± 4.6	+14.3 ± 6.2**	+15.9 ± 5.2*	+16.8 ± 4.1
DAYS 15 - 18	MEAN±S.D.	+41.5 ± 6.2	+45.7 ± 9.2	+41.3 ± 5.5	+37.9 ± 6.0
DAYS 18 - 20	MEAN±S.D.	+31.2 ± 8.6	+29.4 ± 6.7	+31.3 ± 6.3	+29.4 ± 5.6
DAYS 0 - 20	MEAN±S.D.	+149.6± 24.8	+143.6± 23.0	+139.3± 17.1	+133.6± 12.8

## DAYS = DAYS OF GESTATION

<sup>\*</sup> Significantly different from the vehicle control group value  $(p \le 0.05)$ . \*\* Significantly different from the vehicle control group value  $(p \le 0.01)$ .

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE C12 (PAGE 1): MATERNAL BODY WEIGHTS - LACTATION - SUMMARY - FO GENERATION FEMALE RATS

DOSAGE GROUP DOSAGE (MG/KG/DAY)		I O (VEHICLE)	II 10	III 50	IV 250
RATS TESTED	N	15	15	15	15
PREGNANT	N	15	14	15	13
DELIVERED A LITTER	N	15	14	15	13
MATERNAL BODY WEIGHT	(G)				
DAY 1	MEAN±S.D.	321.2 ± 24.7	319.8 ± 20.8	316.5 ± 25.0	296.3 ± 25.7*
DAY 2	MEAN±S.D.	320.9 ± 27.2	324.6 ± 25.7	318.7 ± 26.1	308.2 ± 14.1 [ 11]a
DAY 3	MEAN±S.D.	320.9 ± 26.5	$326.4 \pm 24.7$	322.7 ± 25.9	308.4 ± 15.0 [ 11]a
DAY 4	MEAN±S.D.	324.1 ± 27.6	329.1 ± 25.0	320.6 ± 25.8	$310.6 \pm 14.6$
DAY 5	MEAN±S.D.	327.5 ± 29.4	339.1 ± 21.6	327.9 ± 27.5	[ 11]a 317.4 ± 12.3
DAY 6	MEAN±S.D.	299.1 ± 24.7	304.0 ± 18.9	296.0 ± 25.0	[ 11]a 284.8 ± 11.1 [ 11]a

DAY = DAY OF LACTATION

<sup>[ ] =</sup> NUMBER OF VALUES AVERAGED

a. Excludes values for dams that were sacrificed due to no surviving pups. \* Significantly different from the vehicle control group value  $(p \le 0.05)$ .

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE C13 (PAGE 1): MATERNAL BODY WEIGHT CHANGES - LACTATION - SUMMARY - FO GENERATION FEMALE RATS

DOSAGE GROUP DOSAGE (MG/KG/DAY)		I O (VEHICLE)	II 10	III 50	IV 250
RATS TESTED	N	15	15	15	15
PREGNANT	N	15	14	15	13
DELIVERED A LITTER	N	15	14	15	13
MATERNAL BODY WEIGHT CHANGE (G)					
DAYS 1 - 2	MEAN±S.D.	-0.3 ± 9.3	+4.7 ± 8.2	+2.2 ± 7.2	+3.1 ± 4.6 [ 11]a
DAYS 2 - 3	MEAN±S.D.	-0.1 ± 8.0	+1.8 ± 6.5	+3.9 ± 5.9	+0.3 ± 6.3 [ 11]a
DAYS 3 - 4	MEAN±S.D.	+3.3 ± 6.4	+2.7 ± 8.3	-2.1 ± 6.0	+2.2 ± 4.3 [ 11]a
DAYS 4 - 5	MEAN±S.D.	+3.4 ± 9.0	+10.0 ± 6.9	+7.3 ± 4.3	+6.8 ± 7.7 [ 11]a
DAYS 5 - 6	MEAN±S.D.	-28.4 ± 8.6	$-35.1 \pm 8.5$	$-31.9 \pm 5.8$	-32.6 ± 8.0 [ 11]a
DAYS 1 - 6	MEAN±S.D.	-22.1 ± 9.6	-15.8 ± 6.5	$-20.5 \pm 9.7$	-20.3 ± 13.3 [ 11]a

DAYS = DAYS OF LACTATION

<sup>[ ] =</sup> NUMBER OF VALUES AVERAGED

a. Excludes values for dams that were sacrificed due to no surviving pups.

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE C14 (PAGE 1): ABSOLUTE FEED CONSUMPTION VALUES (G/DAY) - PRECOHABITATION - SUMMARY - FO GENERATION FEMALE RATS

DOSAGE GROUP DOSAGE (MG/KG/DAY)		I 0 (VEHICLE)	II 10	III 50	IV 250
RATS TESTED	N	15	15	15	15
FEED CONSUMPTION (G/D	AY)				
DAYS 1 - 8	MEAN±S.D.	19.4 ± 2.8	19.4 ± 1.7	19.8 ± 2.8	18.5 ± 2.6
DAYS 8 - 15a	MEAN±S.D.	20.3 ± 2.5	20.7 ± 2.1	20.3 ± 2.8	19.2 ± 1.6 [ 14]b
DAYS 1 - 15a	MEAN±S.D.	19.8 ± 2.6	20.0 ± 1.8	20.0 ± 2.7	18.6 ± 1.6 [ 14]b

DAYS = DAYS OF STUDY

<sup>[ ] =</sup> NUMBER OF VALUES AVERAGED

a. Last value recorded before cohabitation.

b. Excludes values that were associated with spillage.

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE C15 (PAGE 1): RELATIVE FEED CONSUMPTION VALUES (G/KG/DAY) - PRECOHABITATION - SUMMARY - FO GENERATION FEMALE RATS

DOSAGE GROUP DOSAGE (MG/KG/DAY)		I 0 (VEHICLE)	II 10	III 50	IV 250
RATS TESTED	N	15	15	15	15
FEED CONSUMPTION (G/KG	G/DAY)				
DAYS 1 - 8	MEAN±S.D.	82.2 ± 12.7	81.6 ± 5.4	83.4 ± 9.3	79.0 ± 9.4
DAYS 8 - 15a	MEAN±S.D.	79.6 ± 10.7	80.7 ± 5.3	79.5 ± 7.3	77.3 ± 3.9 [ 14]b
DAYS 1 - 15a	MEAN±S.D.	80.9 ± 11.6	81.3 ± 4.6	81.5 ± 7.9	77.2 ± 4.0 [ 14]b

DAYS = DAYS OF STUDY

<sup>[ ] =</sup> NUMBER OF VALUES AVERAGED

a. Last value recorded before cohabitation.

b. Excludes values that were associated with spillage.

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE C16 (PAGE 1): MATERNAL ABSOLUTE FEED CONSUMPTION VALUES (G/DAY) - GESTATION - SUMMARY - FO GENERATION FEMALE RATS

DOSAGE GROUP		I (	II	III	IV
DOSAGE (MG/KG/DAY)		0 (VEHICLE)	10	50	250
RATS TESTED	N	15	15	15	15
PREGNANT	N	15	14	15	13
MATERNAL FEED CONSUMPTION (G/DAY)					
DAYS 0 - 7	MEAN±S.D.	23.3 ± 1.9	23.3 ± 2.7	22.6 ± 3.2	22.2 ± 2.3 [ 12]a
DAYS 7 - 10	MEAN±S.D.	25.1 ± 2.4	25.2 ± 2.7	23.7 ± 3.6	24.2 ± 2.7
DAYS 10 - 12	MEAN±S.D.	25.4 ± 2.9	25.6 ± 4.0	25.0 ± 3.2	26.5 ± 3.4
DAYS 12 - 15	MEAN±S.D.	26.4 ± 2.9	26.5 ± 3.8	25.7 ± 4.2	26.4 ± 2.3
DAYS 15 - 18	MEAN±S.D.	26.8 ± 3.1	28.3 ± 3.2	26.9 ± 3.7	28.1 ± 3.2
DAYS 18 - 20	MEAN±S.D.	$25.7 \pm 3.7$	$25.3 \pm 3.4$	25.8 ± 2.8	25.0 ± 2.8
DAYS 0 - 20	MEAN±S.D.	25.0 ± 2.3	25.2 ± 2.7	24.4 ± 3.0	24.8 ± 1.8

DAYS = DAYS OF GESTATION

<sup>[ ] =</sup> NUMBER OF VALUES AVERAGED

a. Excludes values that were associated with spillage.

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE C17 (PAGE 1): MATERNAL RELATIVE FEED CONSUMPTION VALUES (G/KG/DAY) - GESTATION - SUMMARY - FO GENERATION FEMALE RATS

DOSAGE GROUP		I	II	III	IV
DOSAGE (MG/KG/DAY)		0 (VEHICLE)	10	50	250
RATS TESTED	N	15	15	15	15
PREGNANT	N	15	14	15	13
MATERNAL FEED CONSUMPTION (G/KG/DAY)					
DAYS 0 - 7	MEAN±S.D.	81.6 ± 4.0	80.9 ± 5.7	79.0 ± 7.1	80.8 ± 6.6 [ 12]a
DAYS 7 - 10	MEAN±S.D.	82.1 ± 5.0	82.4 ± 6.2	78.4 ± 8.3	83.2 ± 8.1
DAYS 10 - 12	MEAN±S.D.	79.5 ± 5.7	80.0 ± 9.5	79.3 ± 8.9	86.8 ± 10.3
DAYS 12 - 15	MEAN±S.D.	78.8 ± 4.9	79.1 ± 7.2	$77.7 \pm 10.1$	82.8 ± 5.9
DAYS 15 - 18	MEAN±S.D.	73.6 ± 5.5	77.9 ± 5.1	75.0 ± 8.1	81.2 ± 9.1**
DAYS 18 - 20	MEAN±S.D.	64.0 ± 7.4	62.9 ± 6.2	65.1 ± 4.7	65.8 ± 7.5
DAYS 0 - 20	MEAN±S.D.	77.3 ± 3.7	77.8 ± 4.4	76.1 ± 6.0	80.2 ± 4.8

DAYS = DAYS OF GESTATION

<sup>[ ] =</sup> NUMBER OF VALUES AVERAGED

a. Excludes values that were associated with spillage. \*\* Significantly different from the vehicle control group value  $(p \le 0.01)$ .

TABLE C18 (PAGE 1): MATERNAL ABSOLUTE FEED CONSUMPTION VALUES (G/DAY) - LACTATION - SUMMARY - FO GENERATION FEMALE RATS

DOSAGE GROUP

I II III IV

DOSAGE GROUP DOSAGE (MG/KG/DAY)		I O (VEHICLE)	II 10	III 50	IV 250
RATS TESTED	N	15	15	15	15
PREGNANT	N	15	14	15	13
DELIVERED A LITTER	N	15	14	15	13
MATERNAL FEED CONSUMP	TION (G/DAY)				
DAYS 1 - 5	MEAN±S.D.	31.4 ± 5.6	36.4 ± 4.2 [ 13]a	33.0 ± 5.6 [ 14]a	30.8 ± 7.4 [ 11]b

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY

## DAYS = DAYS OF LACTATION

SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

<sup>[ ] =</sup> NUMBER OF VALUES AVERAGED

a. Excludes values that were associated with spillage.

b. Excludes values for dams that were sacrificed due to no surviving pups.

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE C19 (PAGE 1): MATERNAL RELATIVE FEED CONSUMPTION VALUES (G/KG/DAY) - LACTATION - SUMMARY - FO GENERATION FEMALE RATS

DOSAGE GROUP DOSAGE (MG/KG/DAY)		I 0 (VEHICLE)	II 10	III 50	IV 250
RATS TESTED	И	15	15	15	15
PREGNANT	И	15	14	15	13
DELIVERED A LITTER	И	15	14	15	13
MATERNAL FEED CONSUMPTION (G/KG/DAY)					
DAYS 1 - 5	MEAN±S.D.	97.0 ± 13.4	110.9 ± 8.4 [ 13]a	103.3 ± 13.2 [ 14]a	99.2 ± 22.8 [ 11]b

## DAYS = DAYS OF LACTATION

<sup>[ ] =</sup> NUMBER OF VALUES AVERAGED

a. Excludes values that were associated with spillage.b. Excludes values for dams that were sacrificed due to no surviving pups.

TABLE C20 (PAGE 1): MATING AND FERTILITY, ESTROUS CYCLING AND DAYS IN COHABITATION - SUMMARY - FO GENERATION FEMALE RATS

DOSAGE GROUP		I	II	III	IV
DOSAGE (MG/KG/DAY)		0 (VEHICLE)	10	50	250
ESTROUS CYCLING OBSERVATI	CONS			<del>-</del>	
RATS EVALUATED	N	15	15	15	15
PRECOHABITATION ESTROUS C	CYCLING				
ESTROUS STAGES/ 14 DAYS	MEAN+S.D.	3.1 <u>+</u> 1.1	3.4 <u>+</u> 0.8	3.2 <u>+</u> 1.0	3.4 <u>+</u> 0.6
RATS WITH 6 OR MORE CONSECUTIVE DAYS OF DIESTRUS	N	1	0	1	0
RATS WITH 6 OR MORE CONSECUTIVE DAYS OF ESTRUS	N	0	0	0	0

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE C20 (PAGE 2): MATING AND FERTILITY, ESTROUS CYCLING AND DAYS IN COHABITATION - SUMMARY - FO GENERATION FEMALE RATS

DOSAGE GROUP		I	II	III	IV
DOSAGE (MG/KG/DAY)		0 (VEHICLE)	10	50	250
MATING OBSERVATIONS					
RATS IN COHABITATION	N	15	15	15	15
DAYS IN COHABITATION a	MEAN+S.D.	3.0 <u>+</u> 2.0	2.7 <u>+</u> 1.0	4.3 <u>+</u> 3.6	3.7 <u>+</u> 4.2
RATS THAT MATED	N(%)	15(100.0)	15(100.0)	15(100.0)	14( 93.3)
FERTILITY INDEX b	N/N	15/ 15	14/ 15	15/ 15	13/ 14
	(%)	(100.0)	(93.3)	(100.0)	(92.8)
	(-,	,,	( 22.27,	(====,	( 2210)
RATS WITH CONFIRMED					
MATING DATES	N	15	15	15	14
MATED BY FIRST MALE c					
DAYS 1-7	N (%)	14( 93.3)	15(100.0)	13 ( 86.7)	13 ( 92.8)
MATED BY SECOND MALE C					
DAYS 7-14	N (%)	1( 6.7)	0( 0.0)	2(13.3)	1(7.1)
RATS PREGNANT/RATS IN	4 -				
COHABITATION	N/N	15/ 15	14/ 15.	15/ 15	13/ 15
	(웅)	(100.0)	( 93.3)	(100.0)	( 86.7)

a. Restricted to rats with a confirmed mating date and rats that did not mate.

b. Number of pregnancies/number of rats that mated.

c. Restricted to rats with a confirmed mating date.

TABLE C21 (PAGE 1): FUNCTIONAL OBSERVATIONAL BATTERY - SUMMARY - FEMALE RATS

DOSAGE GROUP		I	II	III	IV	
DOSAGE (MG/KG/DAY)		0 (VEHICLE)	10	50	250	
RATS	N	5	4	5	5	
HOME CAGE BEHAVIOR						
1: Sleeping	Ñ	3	2	0	2	
2: Awake, Immobile	N	2	2	5	3	
3: Normal movement	N	0	0	0	0	
4: Unusual posture	N	0	0	. 0	0	
5: Unusual behavior	N	0	0	0	0	
ALTERATIONS (HOME CAGE)						
1: None	N	5	4	5	5	
2: Stereotyped behavior	N	0	0	0	0	
3: Bizarre behavior	N	0	0	0	0	
4: Limb twitches/tremor	N	0	0	0	0	
5: Whole body tremor/spasm	N	0	0	0	0	
6: Unusual posture	N	0	0	0	0	
7: Tonic-clonic seizure	N	0	0	0	0	
REACTION TO REMOVAL						
(1) Sits quietly	N	5	4	5	5	
(2) Vocalization	N	0	0	0	0	
(3) Runs or freezes	N	0	0	0	0	
(4) Tail or throat rattles	N	0	0	0	0	
	MEAN SCORE	1.0	1.0	1.0	1.0	
REACTION TO HANDLING						
(1) No resistance	N	5	4	5	5	
(2) Vocalization	N	0	0	0	0	
(3) Tense	N	0	0	0	0	
(4) Squirming	N	0	0	0	0	
	MEAN SCORE	1.0	1.0	1.0	1.0	

n: = Category number for descriptive test item.

<sup>(</sup>n) = Score assigned to graded test items; mean score was calculated by multiplying each score by the number of rats with that score and then dividing the sum of the products by the total number of rats

TABLE C21 (PAGE 2): FUNCTIONAL OBSERVATIONAL BATTERY - SUMMARY - FEMALE RATS

DOSAGE GROUP		I	II	III	IV	***************************************
DOSAGE (MG/KG/DAY)		0 (VEHICLE)	10	50	250	
RATS	N	5	4	5	5	
REARS IN OPEN FIELD	MEAN±S.D.	7.8 ± 1.8	10.3 ± 1.7	10.0 ± 2.8	9.0 ± 2.2	
DEFECATION IN OPEN FIELD						
1: None	N	5	3	5	5	
2: Feces normal	N	0	1	0	0	
3: Soft or liquid feces	N	0	0	0	0	
URINATION IN OPEN FIELD						
(1) None	N	5	3	5	5	
(2) Normal urination	N	0	1	0	0	
(3) Excess urination	N	0	0	0	0	
	MEAN SCORE	1.0	1.3	1.0	1.0	
LEVEL OF AROUSAL						
(1) Stuporous	N	0	0	0	0	
(2) Sluggish	N	0	0	0	0	
(3) Apparently normal	N	5	4	5	5	
(4) Sudden darting	N	0	0	0	0	
(5) Freezing, vocalization	N	0	0	0	0	
	MEAN SCORE	3.0	3.0	3.0	3.0	
ALTERATIONS (OPEN FIELD)						
1: None	N	4	4	5	5	
2: Stereotyped behavior	N	0	0	0	0	
3: Bizarre behavior	N	0	0	0	0	
4: Limb twitches/tremor	N	0	0	0	0	
5: Whole body tremor/spasm	N	0	0	0	0	
6: Unusual posture	N	0	0	. 0	0	
7: Tonic-clonic seizure	NN	0	0	0	0	

n: = Category number for descriptive test item.

<sup>(</sup>n) = Score assigned to graded test items; mean score was calculated by multiplying each score by the number of rats with that score and then dividing the sum of the products by the total number of rats

TABLE C21 (PAGE 3): FUNCTIONAL OBSERVATIONAL BATTERY - SUMMARY - FEMALE RATS

DOSAGE GROUP		I	II	III	IV	
DOSAGE (MG/KG/DAY)		0 (VEHICLE)	10	50	250	
RATS	N	5	4	5	5	
GAIT PATTERN						
1: Apparently normal	N	5	4	5	5	
2: Ataxic	N	0	0	0	0	
3: Limbs splay or drag	N	0	0	0	0	
4: Spastic, tip-toe	N	0	0	0	0	
5: Duck-walk	N	0	0	0	0	
6: Scissors gait	N	0	0	0	0	
GAIT ABNORMALITY, SEVERIT	Y					
(1) Normal gait	N	5	4	5	5	
(2) Slight	N	0	0	0	0	
(3) Moderate	N	0	0	0	0	
(4) Extreme	N	0	0	0	0	
	MEAN SCORE	1.0	1.0	1.0	1.0	
PALPEBRAL CLOSURE						
(1) Wide open	N	5	4	5 .	5	
(2) Slightly drooping	N	0	0	0	0	
(3) Half-closed	N	0	0	0	0	
(4) Completely shut	N	0	0	0	0	
	MEAN SCORE	1.0	1.0	1.0	1.0	
PROMINENCE OF THE EYE						
1: Normal	N	5	4	5	5	
2: Exophthalmos	N	0	0	0	0	
3: Enophthalmos	N	0	0	0	0	

n: = Category number for descriptive test item.

<sup>(</sup>n) = Score assigned to graded test items; mean score was calculated by multiplying each score by the number of rats with that score and then dividing the sum of the products by the total number of rats

TABLE C21 (PAGE 4): FUNCTIONAL OBSERVATIONAL BATTERY - SUMMARY - FEMALE RATS

DOSAGE GROUP		 I	II	III	IV	
DOSAGE (MG/KG/DAY)		0 (VEHICLE)	10	50	250	
RATS	N	5	4	5	5	
LACRIMATION						
(1) No excess	N	5	4	5	5	
(2) Excess at eyelid margin	N	0	0	0	0	
(3) Margin persistently damp		0	0	0	0	
(4) Extends beyond margin	N	0	0	0	0	
	MEAN SCORE	1.0	1.0	1.0	1.0	
SALIVATION						
(1) No excess	N	5	4	4	5	
(2) Margin of mouth wet	N	0	0	1	0	
(3) 1/4 to 1/2 submandibular	n N	0	0	0	0	
(4) Entire submandibular	И	0	0	0	0	
	MEAN SCORE	1.0	1.0	1.2	1.0	
PILOERECTION	N	0	0	0	0	
ABNORMAL RESPIRATION	N	0	0	0	0	
APPEARANCE						
(1) Clean and groomed	N	5	4	5	5	
(2) Unkempt	И	0	0	0	0	
(3) Urine and/or fecal stair	n N	0	0	0	. 0	
	MEAN SCORE	1.0	1.0	1.0	1.0	
VISUAL REACTION						
(1) None	N	0	0	0	0	
(2) Orienting	N	5	4	5	5	
(3) Startle	N	0	0	0	0	
(4) More energetic reaction	N	0	0	0	0	
(5) Attacks	N	0	0	0	0	
	MEAN SCORE	2.0	2.0	2.0	2.0	

n: = Category number for descriptive test item.

<sup>(</sup>n) = Score assigned to graded test items; mean score was calculated by multiplying each score by the number of rats with that score and then dividing the sum of the products by the total number of rats

TABLE C21 (PAGE 5): FUNCTIONAL OBSERVATIONAL BATTERY - SUMMARY - FEMALE RATS

DOSAGE GROUP		I	II	III	IV	
DOSAGE (MG/KG/DAY)		0 (VEHICLE)	10	50	250	
RATS	N	5	4	5	5	
FACTILE REACTION						
(1) None	N	0	0	0	0	
(2) Orienting	N	5	4	5	5	
(3) Startle	N	0	0	0	0	
(4) More energetic reaction	N	0	. 0	0	0	
(5) Attacks	N	0	0	0	0	
	MEAN SCORE	2.0	2.0	2.0	2.0	
AUDITORY REACTION						
(1) None	N	0	0	0	0	
(2) Orienting	N	0	0	0	0	
(3) Startle	N	5	4	5	5	
(4) More energetic reaction	N	0	0	0	0	
(5) Intense vocalization	N	0	0	0	0	
	MEAN SCORE	3.0	3.0	3.0	3.0	
TAIL-PINCH REACTION						
(1) None	N	0	0	0	0	
(2) Orienting	N	5	4	5	5	
(3) Startle	N	0	0	0	0	
(4) More energetic reaction	N	0	0	0	0	
(5) Attacks	N	0	0	0	0	
	MEAN SCORE	2.0	2.0	2.0	2.0	
VISUAL PLACING RESPONSE						
(1) Early extension	N	5	4	5	5	
(2) Extension after contact	N	0	0	0	0	
(3) No extension	N	0	0	0	0	
	MEAN SCORE	1.0	1.0	1.0	1.0	

n: = Category number for descriptive test item.

<sup>(</sup>n) = Score assigned to graded test items; mean score was calculated by multiplying each score by the number of rats with that score and then dividing the sum of the products by the total number of rats

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TABLE C21 (PAGE 6): FUNCTIONAL OBSERVATIONAL BATTERY - SUMMARY - FEMALE RATS

DOSAGE GROUP		I	II	III	IV	
DOSAGE (MG/KG/DAY)		0 (VEHICLE)	10	50	250	
RATS	N	5	4	5	5	
AIR RIGHTING RESPONSE						
(1) All feet land on ground	N	5	4	5	5	
(2) Lands on side	N	0	0	0	0	
(3) Lands on back	N	0	0	0	0	
	MEAN SCORE	1.0	1.0	1.0	1.0	
PUPIL RESPONSE TO LIGHT	N	5	4	5	5	
FORELIMB GRIP TEST						
Maximum (G)	MEAN±S.D.	316.0 ± 53.4	303.8 ± 105.5	260.0 ± 40.8	381.0 ± 114.9	
Average (G)	MEAN±S.D.	296.2 ± 43.2	276.8 ± 101.7	240.6 ± 23.2	358.0 ± 108.7	
HINDLIMB GRIP TEST						
Maximum (G)	MEAN±S.D.	298.0 ± 90.7	321.3 ± 65.4	258.0 ± 44.2	359.0 ± 106.5	
Average (G)	MEAN±S.D.	274.0 ± 85.3	306.0 ± 58.2	221.2 ± 38.6	328.8 ± 119.0	
LANDING FOOT SPLAY						
Average (CM)	MEAN±S.D.	6.7 ± 0.3	6.3 ± 1.6	$6.7 \pm 0.7$	6.8 ± 0.9	
BODY WEIGHT (G)	MEAN±S.D.	332.8 ± 24.7	322.5 ± 26.9	321.2 + 23.8	313.8 ± 25.9	

n: = Category number for descriptive test item.

<sup>(</sup>n) = Score assigned to graded test items; mean score was calculated by multiplying each score by the number of rats with that score and then dividing the sum of the products by the total number of rats

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TABLE C22 (PAGE 1): MOTOR ACTIVITY - SUMMARY - FO GENERATION FEMALE RATS

DOSAGE DOSAGE	GROUP (MG/KG/	/DAY)	I 0 (VEHICLE)	11 10	III 50	IV 250	
DAY 86							PROSECUTION OF A PART OF A
NUMBER	OF RATE	S N	5	4	5	5	
NUMBER	OF MOVE	EMENTS					
BLOCK	1	MEAN ± S.D.	75.0 ± 8.5	73.0 ± 4.7	66.8 ± 12.8	77.0 ± 13.0	
BLOCK	2	$MEAN \pm S.D.$	80.8 ± 12.8	78.2 ± 6.7	$72.0 \pm 16.8$	77.6 ± 23.7	
BLOCK	3	$MEAN \pm S.D.$	$69.8 \pm 17.3$	$77.8 \pm 9.1$	54.8 ± 38.4	75.2 ± 13.7	
BLOCK	4	$MEAN \pm S.D.$	58.0 ± 29.8	62.5 ± 33.3	$46.4 \pm 41.6$	74.6 ± 16.5	
BLOCK	5	MEAN ± S.D.	65.4 ± 30.3	$51.8 \pm 27.7$	47.4 ± 37.8	69.2 ± 20.8	
BLOCK	6	MEAN $\pm$ S.D.	65.0 ± 33.3	56.0 ± 39.0	51.6 ± 29.8	64.0 ± 16.8	
BLOCK	7	$MEAN \pm S.D.$	63.6 ± 28.6	$61.5 \pm 44.4$	$72.4 \pm 8.2$	63.6 ± 23.8	
BLOCK	8	$MEAN \pm S.D.$	$38.4 \pm 30.4$	$52.8 \pm 35.0$	54.2 ± 10.1	63.4 ± 31.0	
BLOCK	9	$MEAN \pm S.D.$	$46.8 \pm 32.4$	$65.5 \pm 9.1$	45.4 ± 39.6	39.8 ± 30.4	
BLOCK	10	$MEAN \pm S.D.$	56.0 ± 30.4	$69.5 \pm 12.9$	52.4 ± 13.0	$47.0 \pm 32.1$	
BLOCK	11	MEAN ± S.D.	60.2 ± 39.1	53.0 ± 11.0	52.6 ± 23.6	61.6 ± 23.4	
BLOCK		$MEAN \pm S.D.$	47.6 ± 36.6	$41.0 \pm 32.3$	33.8 ± 25.0	73.2 ± 17.7	
BLOCK		$MEAN \pm S.D.$	50.2 ± 25.2	34.2 ± 23.3	35.0 ± 27.1	50.0 ± 27.4	
BLOCK		MEAN ± S.D.	$60.4 \pm 17.9$	29.5 ± 28.5	43.2 ± 25.8	$34.8 \pm 27.6$	
BLOCK		$MEAN \pm S.D.$	$55.2 \pm 10.1$	$49.5 \pm 32.3$	54.4 ± 30.2	42.4 ± 37.8	
BLOCK	16	$MEAN \pm S.D.$	$53.4 \pm 14.3$	54.5 ± 35.9	46.6 ± 29.1	39.0 ± 27.3	
BLOCK	17	$MEAN \pm S.D.$	69.8 ± 28.0	$25.2 \pm 32.6$	55.4 ± 29.1	38.4 ± 32.9	
BLOCK	18	$MEAN \pm S.D.$	$54.4 \pm 13.4$	$31.5 \pm 30.6$	39.2 ± 29.7	50.2 ± 27.7	
TOTAL		MEAN ± S.D.	1070.0 ± 277.2	967.0 ± 219.2	923.6 ± 256.7	1041.0 ± 192.9	

TOTAL = SUM OF BLOCKS; EACH BLOCK CONSISTS OF A 5 MINUTE PERIOD.

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TABLE C22 (PAGE 2): MOTOR ACTIVITY - SUMMARY - FO GENERATION FEMALE RATS

						Mark Andrew Mark and Andrew Ma
DOSAGE GROUP		I	II	III	IV	
DOSAGE (MG/KG/	DAY)	0 (VEHICLE)	10	50	250	
DAY 86						WHEN WEY STATES OF THE STATES
NUMBER OF RATS	N	5	4	5	5	
TIME (SECONDS)	SPENT IN MOVEME	ENT				
BLOCK 1	MEAN ± S.D.	190.2 ± 37.2	183.2 ± 29.5	220.4 ± 29.9	178.6 ± 28.4	
BLOCK 2	$MEAN \pm S.D.$	178.8 ± 47.1	150.8 ± 22.8	141.6 ± 54.2	154.2 ± 29.9	
BLOCK 3	MEAN $\pm$ S.D.	130.4 ± 61.0	$137.2 \pm 43.1$	84.2 ± 72.6	124.6 ± 33.6	
BLOCK 4	$MEAN \pm S.D.$	91.8 ± 61.6	103.8 ± 71.5	62.8 ± 62.9	110.0 ± 38.5	
BLOCK 5	$MEAN \pm S.D.$	99.4 ± 51.8	81.5 ± 62.8	77.2 ± 80.6	107.4 ± 40.2	
BLOCK 6	MEAN ± S.D.	86.4 ± 49.0	76.0 ± 50.8	$77.0 \pm 48.4$	89.2 ± 30.8	
BLOCK 7	$MEAN \pm S.D.$	87.8 ± 42.3	85.0 ± 57.7	110.8 ± 17.4	96.2 ± 35.6	
BLOCK 8	MEAN $\pm$ S.D.	67.6 ± 55.4	84.2 ± 64.3	87.6 ± 49.7	81.0 ± 43.6	
BLOCK 9	MEAN $\pm$ S.D.	$74.6 \pm 57.8$	119.0 ± 23.8	$72.0 \pm 71.9$	62.4 ± 56.7	
BLOCK 10	$MEAN \pm S.D.$	88.0 ± 55.3	107.8 ± 20.2	64.2 ± 36.6	$61.0 \pm 43.3$	
BLOCK 11	MEAN $\pm$ S.D.	75.4 ± 54.6	104.0 ± 73.8	82.6 ± 46.8	89.8 ± 46.8	
BLOCK 12	MEAN ± S.D.	71.8 ± 56.4	74.2 ± 80.8	45.2 ± 39.6	114.8 ± 15.0	
BLOCK 13	MEAN ± S.D.	83.0 ± 54.6	$45.5 \pm 40.1$	56.8 ± 48.8	68.8 ± 44.3	
BLOCK 14	MEAN ± S.D.	85.8 ± 21.9	48.2 ± 65.4	69.0 ± 39.3	42.6 ± 38.6	
BLOCK 15	$MEAN \pm S.D.$	92.4 ± 17.7	69.0 ± 53.1	87.6 ± 48.4	65.0 ± 62.0	
BLOCK 16	MEAN ± S.D.	$78.2 \pm 32.9$	77.0 ± 54.6	68.6 ± 52.8	49.8 ± 39.2	
BLOCK 17	MEAN ± S.D.	89.0 ± 46.3	$44.2 \pm 74.1$	86.6 ± 47.4	$52.4 \pm 47.0$	
BLOCK 18	MEAN ± S.D.	$70.2 \pm 27.2$	55.5 ± 69.8	56.2 ± 50.4	66.4 ± 40.0	
TOTAL	MEAN ± S.D.	1740.8 ± 585.8	1646.2 ± 621.4	1550.4 ± 528.7	1614.2 ± 357.2	

TOTAL = SUM OF BLOCKS; EACH BLOCK CONSISTS OF A 5 MINUTE PERIOD.

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TABLE C23 (PAGE 1): NATURAL DELIVERY OBSERVATIONS - SUMMARY - FO GENERATION FEMALE RATS

DOSAGE GROUP DOSAGE (MG/KG/DAY)		I 0 (VEHICLE)	II 10	III 50	IV 250
RATS ASSIGNED TO NATURAL DELIVERY	N	15	15	15	15
PREGNANT	N(%)	15(100.0)	14( 93.3)	15 (100.0)	13 ( 86.7)
DELIVERED A LITTER	N(%)	15(100.0)	14(100.0)	15(100.0)	13 (100.0)
DURATION OF GESTATION a	MEAN±S.D.	22.7 ± 0.4	22.5 ± 0.5	22.8 ± 0.4	22.9 ± 0.3
IMPLANTATION SITES PER DELIVERED LITTER	N MEAN±S.D.	251 16.7 ± 2.4	226 16.1 <u>±</u> 2.5	247 16.5 ± 1.1	204 15.7 ± 1.5
DAMS WITH STILLBORN PUPS	5 N(%)	1( 6.7)	0( 0.0)	2(13.3)	4 ( 30.8)
DAMS WITH NO LIVEBORN PU	JPS N	0( 0.0)	0(0.0)	0(0.0)	0( 0.0)
GESTATION INDEX b	* N/N	100.0 15/ 15	100.0 14/ 14	100.0 15/ 15	100.0 13/ 13
DAMS WITH ALL PUPS DYING DAYS 1-5 POSTPARTUM	G N(%)	0( 0.0)	0( 0.0)	0( 0.0)	3 ( 23.1)**

a. Calculated as the time (in days) elapsed between confirmed mating (arbitrarily defined as day 0) and the time (in days) the first pup was delivered.

b. Number of rats with live offspring/number of pregnant rats.

\*\* Significantly different from the vehicle control group value  $(p \le 0.01)$ .

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TABLE C24 (PAGE 1): LITTER OBSERVATIONS (NATURALLY DELIVERED PUPS) - SUMMARY - F1 GENERATION LITTERS

MATERNAL DOSAGE GROUP	/DAY)	I	II	III	IV
MATERNAL DOSAGE (MG/KG/		O (VEHICLE)	10	50	250
DELIVERED LITTERS WITH ONE OR MORE LIVEBORN PU	JPS N	15	14	15	13
PUPS DELIVERED (TOTAL)	N	236	215	231	183
	MEAN±S.D.	15.7 ± 2.3	15.4 ± 2.6	15.4 ± 1.2	14.1 ± 2.8
LIVEBORN	MEAN±S.D.	15.7 ± 2.2	15.4 ± 2.6	15.1 ± 0.9	13.3 ± 3.3
	N(%)	235( 99.6)	215(100.0)	227( 98.3)	173(94.5)**
STILLBORN	MEAN±S.D.	$0.1 \pm 0.2$	0.0 ± 0.0	0.3 ± 0.7	0.5 ± 0.8
	N(%)	1( 0.4)	0( 0.0)	4( 1.7)	6( 3.3)**
UNKNOWN VITAL STATE	us n	0	0	0	4
PUPS FOUND DEAD OR PRES	SUMED CANNIBALIZ	ED			
DAY 1	N/N(%)	2/235( 0.8)	0/215( 0.0)	0/227( 0.0)	4/173( 2.3)**
DAYS 2-5	N/N(%)	0/233( 0.0)	2/215( 0.9)	2/227( 0.9)	28/169( 16.6)**
VIABILITY INDEX a	%	99.1	99.1	99.1	81.5**
	N/N	233/235	213/215	225/227	141/173

DAY(S) = DAY(S) POSTPARTUM

a. Number of live pups on day 5 postpartum/number of liveborn pups on day 1 postpartum.

<sup>\*\*</sup> Significantly different from the vehicle control group value  $(p \le 0.01)$ .

TABLE C24 (PAGE 2): LITTER OBSERVATIONS (NATURALLY DELIVERED PUPS) - SUMMARY - F1 GENERATION LITTERS

MATERNAL DOSAGE GROUP MATERNAL DOSAGE (MG/KC		I 0 (VEHICLE)	II 10	III 50	IV 250
DELIVERED LITTERS WITH ONE OR MORE LIVEBORN 1		15	14	15	13
SURVIVING PUPS/LITTER	a				
DAY 1b	MEAN±S.D.	15.7 ± 2.2	15.4 ± 2.6	15.1 ± 0.9	13.3 ± 3.3
DAY 5	MEAN±S.D.	15.5 ± 2.1	15.2 ± 2.4	15.0 ± 1.0	10.8 ± 6.3*
PERCENT MALE PUPS PER NUMBER OF PUPS SEXED					
DAY 1b	MEAN±S.D.	53.0 ± 9.2	$52.7 \pm 12.2$	52.2 ± 17.0	44.2 ± 16.2
DAY 5	MEAN±S.D.	53.1 ± 9.7	52.9 ± 12.2	52.8 ± 17.4	47.0 ± 17.4 [ 10]c

DAY = DAY POSTPARTUM

<sup>[ ] =</sup> NUMBER OF VALUES AVERAGED

a. Average number of live pups per litter, including litters with no surviving pups.b. Includes pups born alive, found dead day 1 postpartum.

c. Excludes values for dams that were sacrificed due to no surviving pups.

<sup>\*</sup> Significantly different from the vehicle control group value (p<0.05).

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE C24 (PAGE 3): LITTER OBSERVATIONS (NATURALLY DELIVERED PUPS) - SUMMARY - F1 GENERATION LITTERS

MATERNAL DOSAGE GRO MATERNAL DOSAGE (MO		I 0 (VEHICLE)	II 10	III 50	IV 250
DELIVERED LITTERS V		15	14	15	13
LIVE LITTER SIZE AT	r weighing				
DAY 1	MEAN±S.D.	15.5 ± 2.1	15.4 ± 2.6	15.1 ± 0.9	14.1 ± 1.8 [ 12]a
DAY 5	MEAN±S.D.	15.5 ± 2.1	15.2 ± 2.4	15.0 ± 1.0	14.1 ± 1.7 [ 10]a
PUP WEIGHT/LITTER (	GRAMS)				
DAY 1	MEAN±S.D.	6.4 ± 0.7	6.3 ± 0.4	6.5 ± 0.3	5.9 ± 0.8 [ 12]a
DAY 5	MEAN±S.D.	9.6 ± 1.0	10.0 ± 0.8	10.0 ± 1.0	9.3 ± 1.3 [ 10]a

DAY = DAY POSTPARTUM

<sup>[ ] =</sup> NUMBER OF VALUES AVERAGED

a. Excludes values for dams that were sacrificed due to no surviving pups.

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TABLE C25 (PAGE 1): CLINICAL OBSERVATIONS FROM BIRTH TO DAY 5 POSTPARTUM - SUMMARY - F1 GENERATION PUPS

MATERNAL DOSAGE GROUP MATERNAL DOSAGE (MG/KG/DAY) LITTERS EXAMINED (N)	(	I O (VEHICLE) 15	II 10 14	III 50 15	IV 250 13	
TRANSIENT CLINICAL OBSERVATIONS: a		TOTAL FREQUEN	CY (DAYS x PUP	S)/LITTERS WITH OBSERVATIONS		
COLD TO TOUCH	N/N	0/0	0/0	0/0	2/1	
NOT NESTING	N/N	0/0	0/0	0/0	2/1	
NOT NURSING	N/N	0/0	0/0	0/0	2/1	
PALE	N/N	0/0	2/1	0/0	0/0	
BRUISE b	N/N	2/1	9/1	2/1	9/3	

STATISTICAL ANALYSES WERE RESTRICTED TO THE NUMBER OF LITTERS WITH OBSERVATIONS.

a. Tabulation restricted to adverse observations; all other pups appeared normal.

b. Head, back, mouth, lower midline, chest, and/or neck.

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TABLE C26 (PAGE 1): NECROPSY OBSERVATIONS - SUMMARY - F1 GENERATION PUPS

	I	II	III	IV
	0 (VEHICLE)	10	50	250
	15	14	15	13
N	2	0	4	5
N	1	0	4	3
N	1	0	0	2
N(%)	1(100.0)	0( 0.0)	0( 0.0)	1(50.0)
ON DAY 5 PC	STPARTUM b			
N	15	14	15	10
N	233	213	225	141
N(%)	15(100.0)	14(100.0)	15(100.0)	10(100.0)
N(%)	233 (100.0)	212 ( 99.5)	225 (100.0)	141(100.0)
DILATION				
DITIMITON				
N(%)	0( 0.0)	1(7.1)	0(0.0)	0(0.0)
•	N(%) OON DAY 5 PO N N	15  N 2 N 1 N 1 N(%) 1(100.0)  O ON DAY 5 POSTPARTUM b N 15 N 233  N(%) 15(100.0)	15 14  N 2 0 N 1 0 N 1 0 N 1 0 N(%) 1(100.0) 0(0.0)  O ON DAY 5 POSTPARTUM b  N 15 14 N 233 213  N(%) 15(100.0) 14(100.0)	0 (VEHICLE) 10 50  15 14 15  N 2 0 4 N 1 0 4 N 1 0 0 N(%) 1(100.0) 0(0.0) 0(0.0)  O ON DAY 5 POSTPARTUM b  N 15 14 15 N 233 213 225  N(%) 15(100.0) 14(100.0) 15(100.0)

a. Restricted to pups in which complete necropsies were performed. Complete necropsies were not performed on pups in which autolysis or cannibalization precluded evaluation.

b. Refer to the individual pup clinical observations table (Table C44) for external clinical observations confirmed at necropsy.

c. Analysis restricted to pups found dead and necropsied.

TABLE C27 (PAGE 1): CLINICAL OBSERVATIONS - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

DOSAGE G	ROUP I	<u>.</u> -	VEHICLE		0 (VEHICLE)	MG/KG/DAY
 RAT #			DESCRIPTION			
 17662			NO ADVERSE FINDINGS			
17672	DS (	14 )	EXCESS SALIVATION			
17673			NO ADVERSE FINDINGS			
17674	DS (	3 )	CHROMODACRYORRHEA			
17680	DS (	14 )	RED, SLIGHT PERIORAL	SUBSTANCE		
17681			NO ADVERSE FINDINGS			
17690			NO ADVERSE FINDINGS			
17694			NO ADVERSE FINDINGS			
17695	DS ( 1	.1- 16)	LOCALIZED ALOPECIA:	LIMBS		
	DG (	0- 20)	LOCALIZED ALOPECIA:	LIMBS		
	DL(	1- 6)	LOCALIZED ALOPECIA:	LIMBS a		
17703			NO ADVERSE FINDINGS			
17713			NO ADVERSE FINDINGS			
17715			NO ADVERSE FINDINGS			
17716			NO ADVERSE FINDINGS			
17717	DS ( 1	L2- 15)	LOCALIZED ALOPECIA:	LIMBS		
	DG (	0- 21)	LOCALIZED ALOPECIA:	LIMBS		
	DL (	1- 6)	LOCALIZED ALOPECIA:	LIMBS a		
17719			NO ADVERSE FINDINGS			

DS = DAY OF STUDY DG = DAY OF PRESUMED GESTATION DL = DAY OF LACTATION

a. Observation confirmed at necropsy.

TABLE C27 (PAGE 2): CLINICAL OBSERVATIONS - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

DOSAGE	GROUP II		LOW DOSAGE 10 MG/KG/DAY
RAT #			DESCRIPTION
17663	DG( 0	)	SOFT OR LIQUID FECES
17665			NO ADVERSE FINDINGS
17666			NO ADVERSE FINDINGS
17668			NO ADVERSE FINDINGS
17671	DG( 9- :	21)	LOCALIZED ALOPECIA: LIMBS
	DL( 1-	6)	LOCALIZED ALOPECIA: LIMBS a
17675			NO ADVERSE FINDINGS
17679	DG( 14	)	INCISORS: MISSING/BROKEN
17684			NO ADVERSE FINDINGS
17688			NO ADVERSE FINDINGS
17698	DS( 13	)	LOCALIZED ALOPECIA: LIMBS
	DG( 12-	19)	LOCALIZED ALOPECIA: LIMBS
17702			NO ADVERSE FINDINGS
17704			NO ADVERSE FINDINGS
17707	DG ( 3 - :	21)	LOCALIZED ALOPECIA: LIMBS
	DL( 1-	5)	LOCALIZED ALOPECIA: LIMBS
17708	DL( 5-	6)	LOCALIZED ALOPECIA: LIMBS a
17710			NO ADVERSE FINDINGS

DS = DAY OF STUDY DG = DAY OF PRESUMED GESTATION DL = DAY OF LACTATION

a. Observation confirmed at necropsy.

TABLE C27 (PAGE 3): CLINICAL OBSERVATIONS - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

DOSAGE	GROUP III	MIDDLE DOSAGE 50 MG/KG/DAY	
RAT #		DESCRIPTION	
17661	DG( 20- 21)	CHROMODACRYORRHEA	
17667		NO ADVERSE FINDINGS	
17669	DG( 18- 21)	LOCALIZED ALOPECIA: LIMBS	
	DL( 1- 6)	LOCALIZED ALOPECIA: LIMBS a	
17670	DS( 16 )	URINE-STAINED ABDOMINAL FUR	
17676		NO ADVERSE FINDINGS	
17687	DS( 3- 13)	RIGHT EYE: CORNEAL OPACITY	
	DS( 15- 16)	RIGHT EYE: CORNEAL OPACITY	
17693		NO ADVERSE FINDINGS	
17697		NO ADVERSE FINDINGS	
17700		NO ADVERSE FINDINGS	
17701		NO ADVERSE FINDINGS	
17705		NO ADVERSE FINDINGS	
17706		NO ADVERSE FINDINGS	
17709	DS( 17- 27)	LOCALIZED ALOPECIA: LIMBS	
	DG( 0-21)	LOCALIZED ALOPECIA: LIMBS	
	DL( 1- 6)	LOCALIZED ALOPECIA: LIMBS a	
17718		NO ADVERSE FINDINGS	
17720	DS( 16 )	URINE-STAINED ABDOMINAL FUR	

DS = DAY OF STUDY DG = DAY OF PRESUMED GESTATION DL = DAY OF LACTATION

a. Observation confirmed at necropsy.

TABLE C27 (PAGE 4): CLINICAL OBSERVATIONS - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

DOSAGE	GROUP IV	HIGH DOSAGE	250 MG/KG/DAY
RAT #		DESCRIPTION	
 17664	DS( 21- 28)	INCISORS: MISSING/BROKEN	
	DS( 50 )	RED, SLIGHT PERIORAL SUBSTANCE	
17677	DS( 16- 18)	URINE-STAINED ABDOMINAL FUR	
	DG(0-2)	URINE-STAINED ABDOMINAL FUR	
17678	DS( 17 )	RED, SLIGHT PERIORAL SUBSTANCE	
	DG( 1)	EXCESS SALIVATION	
	DG( 13 )	RED, SLIGHT PERIORAL SUBSTANCE	
	DG( 20)	EXCESS SALIVATION	
17682	DS( 23- 25)	EXCESS SALIVATION	
	DG ( 3 )	RED, SLIGHT PERIORAL SUBSTANCE	
	DG( 15 )	RED, SLIGHT PERIORAL SUBSTANCE	
17683	DG( 5- 21)	LOCALIZED ALOPECIA: LIMBS	
	DG( 18- 21)	LOCALIZED ALOPECIA: UNDERSIDE	
	DL( 1- 6)	LOCALIZED ALOPECIA: LIMBS a	
	DL( 1- 6)	LOCALIZED ALOPECIA: UNDERSIDE a	
17685	DS( 12 )	EXCESS SALIVATION	
	DS( 14- 15)	EXCESS SALIVATION	
	DG( 0- 7)	EXCESS SALIVATION	
	DG( 13- 16)	EXCESS SALIVATION	
	DG( 19- 20)	EXCESS SALIVATION	
	DL( 1 )	EXCESS SALIVATION	
	DL( 3)	EXCESS SALIVATION	
	DL( 5)	EXCESS SALIVATION	
17686	DS( 15 )	RED, SLIGHT PERIORAL SUBSTANCE	
	DG ( 0 )	RED, SLIGHT PERIORAL SUBSTANCE	
	DG ( 3 )	URINE-STAINED ABDOMINAL FUR	
	DG ( 6 )	RED, SLIGHT PERIORAL SUBSTANCE	
	DG( 7- 14)	URINE-STAINED ABDOMINAL FUR	
	DG(8-9)	RED, SLIGHT PERIORAL SUBSTANCE	
	DG( 15 )	RED, SLIGHT PERIORAL SUBSTANCE	
	DG( 16 )	EXCESS SALIVATION	
	DG(20-22)	LOCALIZED ALOPECIA: HEAD	
	DG( 21 )	EXCESS SALIVATION	

DS = DAY OF STUDY DG = DAY OF PRESUMED GESTATION DL = DAY OF LACTATION

a. Observation confirmed at necropsy.

TABLE C27 (PAGE 5): CLINICAL OBSERVATIONS - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

DOSAGE	GROUP IV		HIGH DOSAGE	250 MG/KG/DAY
RAT #			DESCRIPTION	
17689			NO ADVERSE FINDINGS	
17691	DS (	3 )	CHROMODACRYORRHEA	
	DG (	11 )	EXCESS SALIVATION	
17692	DG (	3 )	RED, SLIGHT PERIORAL SUBSTANCE	
	DG (	7)	RED, SLIGHT PERIORAL SUBSTANCE	
17696	DS(	13 )	EXCESS SALIVATION	
	DG (	1 )	RED, SLIGHT PERIORAL SUBSTANCE	
	DG (	5 )	EXCESS SALIVATION	
	DG (	9 )	EXCESS SALIVATION	
	DG (	13 )	EXCESS SALIVATION	
	DG (	16 )	EXCESS SALIVATION	
	DL (	2 )	SACRIFICED DUE TO NO SURVIVING PUPS	
17699			NO ADVERSE FINDINGS	
17711	DS (	14 )	RED, SLIGHT PERIORAL SUBSTANCE	
	DG (	0 )	RED, SLIGHT PERIORAL SUBSTANCE	
	DG (	4 )	RED, SLIGHT PERIORAL SUBSTANCE	
	DG (	6 )	RED, SLIGHT PERIORAL SUBSTANCE	
	DG (	9 )	RED, SLIGHT PERIORAL SUBSTANCE	
	DG (	14 )	RED PERIVAGINAL SUBSTANCE	
	DG (	15 )	RED, MODERATE PERIORAL SUBSTANCE	
	DG (	17 )	EXCESS SALIVATION	
	DL (	1 )	DEHYDRATION a	
	DL (	2 )	SACRIFICED DUE TO NO SURVIVING PUPS	
17712	DS ( 3	- 15)	TAIL BENT	
	DS (	15 )	RED, SLIGHT PERIORAL SUBSTANCE	
	DG ( 0	- 21)	TAIL BENT	
	DG( 1	- 21)	LOCALIZED ALOPECIA: LIMBS	
	DG (	14 )	EXCESS SALIVATION	
	DL (	1 )	EXCESS SALIVATION	
	DL (	1 )	LOCALIZED ALOPECIA: LIMBS	
	DL( 1	- 6)	TAIL BENT a	
17714		17 )	RED, SLIGHT PERIORAL SUBSTANCE	

DS = DAY OF STUDY DG = DAY OF PRESUMED GESTATION DL = DAY OF LACTATION

a. Observation confirmed at necropsy.

TABLE C28 (PAGE 1): NECROPSY OBSERVATIONS - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

OOSAGE GROUP OOSAGE (MG/KG/DAY)	RAT NUMBER				OBSERVATIONS a
I					
0 (VEHICLE)	17662	DL 6	P	44	ALL TISSUES APPEARED NORMAL.
	17672	DL 6	P	45	ALL TISSUES APPEARED NORMAL.
	17673	DL 6	P	42	ALL TISSUES APPEARED NORMAL.
	17674	DL 6	P	42	ALL TISSUES APPEARED NORMAL.
	17680	DL 6	P	44	ALL TISSUES APPEARED NORMAL.
	17681	DL 6	P	44	ALL TISSUES APPEARED NORMAL.
	17690	DL 6	P	44	ALL TISSUES APPEARED NORMAL.
	17694	DL 6	P	42	ALL TISSUES APPEARED NORMAL.
	17695	DL 6	P	41	ALL TISSUES APPEARED NORMAL.
	17703	DL 6	P	42	ALL TISSUES APPEARED NORMAL.
	17713	DL 6	P	44	ALL TISSUES APPEARED NORMAL.
	17715	DL 6	P	45	ALL TISSUES APPEARED NORMAL.
	17716	DL 6	P	45	ALL TISSUES APPEARED NORMAL.
	17717	DL 6	P	42	ALL TISSUES APPEARED NORMAL.
	17719	DL 6	P	49	ALL TISSUES APPEARED NORMAL.
II					
10	17663	DG 25	NP	42	ALL TISSUES APPEARED NORMAL.
	17665	DL 6	P	43	ALL TISSUES APPEARED NORMAL.
	17666	DL 6	P	42	ALL TISSUES APPEARED NORMAL.
	17668	DL 6	P	44	ALL TISSUES APPEARED NORMAL.
	17671	DL 6	P	44	ALL TISSUES APPEARED NORMAL.
	17675	DL 6	P	43	ALL TISSUES APPEARED NORMAL.
	17679	DL 6	P	44	ALL TISSUES APPEARED NORMAL.
	17684	DL 6	P	45	ALL TISSUES APPEARED NORMAL.
	17688	DL 6	P	43	ALL TISSUES APPEARED NORMAL.
	17698	DL 6	P	43	ALL TISSUES APPEARED NORMAL.
	17702	DL 6	P	42	ALL TISSUES APPEARED NORMAL.
	17704	DL 6	P	43	ALL TISSUES APPEARED NORMAL.
	17707	DL 6	P	45	ALL TISSUES APPEARED NORMAL.
	17708	DL 6	P	42	ALL TISSUES APPEARED NORMAL.
	17710	DL 6	P	45	ALL TISSUES APPEARED NORMAL.

DS = DAY OF STUDY DG = DAY OF PRESUMED GESTATION DL = DAY OF LACTATION

P = PREGNANT NP = NOT PREGNANT

a. Refer to the individual clinical observations table (Table C27) for external observations confirmed at necropsy.

TABLE C28 (PAGE 2): NECROPSY OBSERVATIONS - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

	RAT NUMBER	DAY OF NECROPSY		DOSES ADMINISTERED	OBSERVATIONS a
III					
50	17661	DL 6	P	43	ALL TISSUES APPEARED NORMAL.
	17667	DL 6	P	43	ALL TISSUES APPEARED NORMAL.
	17669	DL 6	P	44	ALL TISSUES APPEARED NORMAL.
	17670	DL 6	P	45	ALL TISSUES APPEARED NORMAL.
	17676	DL 6	P	43	ALL TISSUES APPEARED NORMAL.
	17687	DL 6	P	45	ALL TISSUES APPEARED NORMAL.
	17693	DL 6	P	42	ALL TISSUES APPEARED NORMAL.
	17697	DL 6	P	44	ALL TISSUES APPEARED NORMAL.
	17700	DL 6	P	43	ALL TISSUES APPEARED NORMAL.
	17701	DL 6	P	44	ALL TISSUES APPEARED NORMAL.
	17705	DL 6	P	44	ALL TISSUES APPEARED NORMAL.
	17706	DL 6	P	45	KIDNEYS: RIGHT, ABSENT. ALL OTHER TISSUES APPEARED NORMAL.
	17709	DL 6	P	53	ALL TISSUES APPEARED NORMAL.
	17718	DL 6	P	53	ALL TISSUES APPEARED NORMAL.
	17720	DL 6	P	45	ALL TISSUES APPEARED NORMAL.
IV					
250	17664	DS 54	NP	53	ALL TISSUES APPEARED NORMAL.
	17677	DL 6	P	46	ALL TISSUES APPEARED NORMAL.
	17678	DL 6	P	45	ALL TISSUES APPEARED NORMAL.
	17682	DL 6	P	53	ALL TISSUES APPEARED NORMAL.
	17683	DL 6	P	44	ALL TISSUES APPEARED NORMAL.
	17685	DL 6	P	42	ALL TISSUES APPEARED NORMAL.
	17686	DG 25	NP	40	ALL TISSUES APPEARED NORMAL.
	17689	DL 6	P	41	ALL TISSUES APPEARED NORMAL.
	17691	DL 6	P	45	ALL TISSUES APPEARED NORMAL.
	17692	DL 6	P	42	ALL TISSUES APPEARED NORMAL.

DS = DAY OF STUDY DG = DAY OF PRESUMED GESTATION DL = DAY OF LACTATION

P = PREGNANT NP = NOT PREGNANT

a. Refer to the individual clinical observations table (Table C27) for external observations confirmed at necropsy.

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE C28 (PAGE 3): NECROPSY OBSERVATIONS - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

DOSAGE GROUP DOSAGE (MG/KG/DAY)	RAT NUMBER	DAY OF NECROPSY	PREGNANCY STATUS	ODSES ADMINISTERED	OBSERVATIONS a
IV 250 cont.	17696	DL 2	P	39	SACRIFICED DUE TO NO SURVIVING PUPS ON DAY 2 OF LACTATION. THYMUS: SMALL. ALL OTHER TISSUES APPEARED NORMAL.
	17699	DL 6	P	44	ALL TISSUES APPEARED NORMAL.
	17711	DL 2	Р	39	SACRIFICED DUE TO NO SURVIVING PUPS ON DAY 2 OF LACTATION. ALL TISSUES APPEARED NORMAL.
	17712 17714	DL 6	P P	<b>42</b> <b>44</b>	ALL TISSUES APPEARED NORMAL. ALL TISSUES APPEARED NORMAL.
DS = DAY OF STUDY	DG = DAY OF PR	ESUMED GESTA	ATION	DL = DAY OF LAG	CTATION

DS = DAY OF STUDY

P = PREGNANT NP = NOT PREGNANT

a. Refer to the individual clinical observations table (Table C27) for external observations confirmed at necropsy.

TABLE C29 (PAGE 1): TERMINAL BODY WEIGHTS AND ORGAN WEIGHTS AND RATIOS (%) OF ORGAN WEIGHT TO TERMINAL BODY WEIGHT - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

DOSAGE (	GROUP I			VEHICI	LE		0 (VEHICLE) MG/KG/DAY							
RAT :	TERMINAL BODY	BRZ	BRAIN		LIVER		KIDNEY LEFT		KIDNEY RIGHT		:NAL :FT	ADRENAL RIGHT		
NUMBER	WEIGHT	ABS. WT.	REL. % TBW	ABS. WT.	REL. % TBW	ABS. WT.	REL. % TBW	ABS. WT.	REL. % TBW	ABS. WT.	REL. % TBW a	ABS. WT.	REL. % TBW a	
17662	P 303.			9.58	3.16									
17672	P 319.			12.34	3.87									
17673	P 271.			10.17	3.75									
17674	P 282.			10.10	3.58									
17680	P 303.			11.66	3.85									
17681	P 303.	2.04	0.67	11.10	3.66	1.13	0.37	1.19	0.39	0.034	11.22	0.034	11.22	
17690	P 345.	2.27	0.66	12.40	3.59	1.28	0.37	1.31	0.38	0.047	13.62	0.047	13.62	
17694	P 291.	2.28	0.78	11.10	3.81	1.21	0.42	1.33	0.46	0.041	14.09	0.042	14.43	
17695	P 271.	2.16	0.80	10.63	3.92	1.08	0.40	1.00	0.37	0.039	14.39	0.033	12.18	
17703	P 339.	2.27	0.67	13.19	3.89	1.51	0.44	1.43	0.42	0.042	12.39	0.044	12.98	
17713	P 292.	2.26	0.77	9.91	3.39	1.03	0.35	1.03	0.35	0.037	12.67	0.034	11.64	
17715	P 328.	2.22	0.68	11.72	3.57	1.24	0.38	1.17	0.36	0.041	12.50	0.041	12.50	
17716	P 298.	2.15	0.72	13.55	4.55	1.19	0.40	1.21	0.41	0.044	14.76	0.042	14.09	
17717	P 274.	2.15	0.78	9.57	3.49	1.15	0.42	1.15	0.42	0.049	17.88	0.054	19.71	
17719	P 268.	2.16	0.80	11.30	4.22	1.14	0.42	1.17	0.44	0.044	16.42	0.041	15.30	

ALL WEIGHTS WERE RECORDED IN GRAMS (G). ABS. WT. = ORGAN WEIGHT. REL. % TBW = (ORGAN WEIGHT/TERMINAL BODY WEIGHT) X 100.

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)

a. Value was multiplied by 1000.

TABLE C29 (PAGE 2): TERMINAL BODY WEIGHTS AND ORGAN WEIGHTS AND RATIOS (%) OF ORGAN WEIGHT TO TERMINAL BODY WEIGHT -INDIVIDUAL DATA - FO GENERATION FEMALE RATS

DOSAGE	GROUP I			VEHIC	LE		0 (VEHICLE) MG/KG/DAY							
RAT	TERMINAL BODY	SPI	SPLEEN		THYMUS		OVARY LEFT		RY HT	UTE WITH C	RUS ERVIX	HEART		
NUMBER	WEIGHT	ABS. WT.	REL. % TBW	ABS. WT.	REL. % TBW	ABS. WT.	REL. % TBW a	ABS. WT.	REL. % TBW a	ABS. WT.	REL. % TBW	ABS. WT.	REL. % TBW	
17662	P 303.					0.089	29.37	0.075	24.75	0.71	0.23			
17672	P 319.					0.070	21.94	0.080	25.08	0.82	0.26			
17673	P 271.					0.098	36.16	0.068	25.09	0.71	0.26			
17674	P 282.					0.067	23.76	0.095	33.69	0.77	0.27			
17680	P 303.					0.068	22.44	0.081	26.73	0.93	0.31			
17681	P 303.	0.76	0.25	0.33	0.11	0.080	26.40	0.096	31.68	0.74	0.24	1.04	0.3	
17690	P 345.	0.70	0.20	0.38	0.11	0.094	27.25	0.078	22.61	0.84	0.24	1.17	0.3	
17694	P 291.	0.66	0.23	0.23	0.08	0.081	27.84	0.070	24.05	0.77	0.26	1.11	0.3	
17695	P 271.	0.70	0.26	0.24	0.09	0.103	38.01	0.090	33.21	0.96	0.35	0.94	0.3	
17703	P 339.	0.79	0.23	0.37	0.11	0.111	32.74	0.113	33.33	0.95	0.28	1.25	0.3	
17713	P 292.	0.65	0.22	0.31	0.11	0.044	15.07	0.057	19.52	0.74	0.25	1.02	0.3	
17715	P 328.	0.76	0.23	0.25	0.08	0.066	20.12	0.096	29.27	0.98	0.30	1.24	0.3	
17716	P 298.	0.70	0.23	0.20	0.07	0.080	26.84	0.071	23.82	0.68	0.23	1.00	0.3	
17717	P 274.	0.73	0.27	0.27	0.10	0.068	24.82	0.071	25.91	0.62	0.23	1.08	0.3	
17719	P 268.	0.59	0.22	0.15	0.06	0.083	30.97	0.079	29.48	0.77b	0.29	0.99	0.3	

ALL WEIGHTS WERE RECORDED IN GRAMS (G). ABS. WT. = ORGAN WEIGHT. REL. % TBW = (ORGAN WEIGHT/TERMINAL BODY WEIGHT) X 100. P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)

a. Value was multiplied by 1000.

b. Damaged during processing (weight not affected).

TABLE C29 (PAGE 3): TERMINAL BODY WEIGHTS AND ORGAN WEIGHTS AND RATIOS (%) OF ORGAN WEIGHT TO TERMINAL BODY WEIGHT - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

OSAGE GE	ROUP II			LOW DO	SAGE			10 MG,	/KG/DAY				
RAT TE	ERMINAL BODY	BR2	AIN	LIV	/ER		ONEY EFT		DNEY GHT	ADRE LE	NAL FT	ADRE RIG	
UMBER	WEIGHT	ABS. WT.	REL. % TBW a	ABS. WT.	REL. % TBW								
17663 NE	267.			7.49	2.80								
17665 P	308.			10.81	3.51								
17666 P	289.			12.16	4.21								
17668 P	299.			10.54	3.52								
17671 P	256.			8.16	3.19								
17675 P	297.	2.18	0.73	12.27	4.13	1.31	0.44	1.34	0.45	0.044	14.81	0.039	13.13
17679 P	295.	2.13	0.72	11.54	3.91	1.35	0.46	1.30	0.44	0.037	12.54	0.036	12.20
17684 P	317.	2.15	0.68	12.17	3.84	1.30	0.41	1.37	0.43	0.042	13.25	0.042	13.29
17688 P	311.	2.21	0.71	11.60	3.73	1.02	0.33	1.20	0.38	0.054	17.36	0.049	15.76
17698 P	299.	2.24	0.75	11.43	3.82	1.38	0.46	1.41	0.47	0.047	15.72	0.036	12.04
17702 P	307.	2.05	0.67	11.83	3.85	1.14	0.37	1.23	0.40	0.041	13.36	0.040	13.03
17704 P	327.	2.26	0.69	13.36	4.08	1.41	0.43	1.41	0.43	0.049	14.98	0.049	14.98
17707 P	296.	2.18	0.74	11.40	3.85	1.15	0.39	1.10	0.37	0.047	15.88	0.045	15.20
17708 P	328.	2.29	0.70	14.27	4.35	1.49	0.45	1.35	0.41	0.039	11.89	0.042	12.80
17710 P	327.	2.20	0.67	13.78	4.21	1.39	0.42	1.40	0.43	0.063	19.27	0.056	17.12

ALL WEIGHTS WERE RECORDED IN GRAMS (G). ABS. WT. = ORGAN WEIGHT. REL. % TBW = (ORGAN WEIGHT/TERMINAL BODY WEIGHT) X 100.

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)

a. Value was multiplied by 1000.

TABLE C29 (PAGE 4): TERMINAL BODY WEIGHTS AND ORGAN WEIGHTS AND RATIOS (%) OF ORGAN WEIGHT TO TERMINAL BODY WEIGHT - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

DOSAGE	GRO	UP II			LOW DO	DSAGE			10 MG/					
RAT	TER	MINAL BODY	SPI	SPLEEN		THYMUS		OVARY LEFT		RY HT		ERUS CERVIX	HEART	
NUMBER	•	WEIGHT	ABS. WT.	REL. % TBW	ABS. WT.	REL. % TBW	ABS. WT.	REL. % TBW a	ABS. WT.	REL. % TBW a	ABS. WT.	REL. % TBW	ABS. WT.	REL. % TBW
17663	NP	267.					0.053	19.85	0.062	23.22	0.48	0.18		
17665	P	308.					0.078	25.32	0.094	30.52	0.62	0.20		
17666	P	289.					0.067	23.18	0.076	26.30	0.91	0.31		
17668	P	299.					0.082	27.42	0.073	24.41	0.80	0.27		
17671	P	256.					0.073	28.52	0.053	20.70	0.74	0.29		
17675	P	297.	0.75	0.25	0.36	0.12	0.078	26.26	0.086	28.96	0.89	0.30	1.13	0.3
17679	₽	295.	0.55	0.19	0.29	0.10	0.063	21.36	0.071	24.07	0.71	0.24	1.00	0.3
17684	P	317.	0.74	0.23	0.36	0.11	0.080	25.24	0.090	28.39	0.84	0.26	1.19	0.3
17688	P	311.	0.64	0.20	0.26	0.08	0.090	28.94	0.086	27.65	0.76	0.24	1.23	0.4
17698	P	299.	0.66	0.22	0.30	0.10	0.110	36.79	0.092	30.77	0.70	0.23	1.26	0.4
17702	P	307.	0.71	0.23	0.29	0.09	0.071	23.13	0.082	26.71	0.92	0.30	1.16	0.3
17704	P	327.	0.98	0.30	0.37	0.11	0.074	22.63	0.100	30.58	0.95	0.29	1.18	0.3
17707	P	296.	0.60	0.20	0.29	0.10	0.077	26.01	0.086	29.05	0.66	0.22	1.08	0.3
17708	P	328.	0.82	0.25	0.50	0.15	0.069	21.04	0.072	21.95	0.78	0.24	1.10	0.3
17710	P	327.	0.95	0.29	0.36	0.11	0.091	27.83	0.097	29.66	0.75	0.23	1.16	0.3

ALL WEIGHTS WERE RECORDED IN GRAMS (G). ABS. WT. = ORGAN WEIGHT. REL. % TBW = (ORGAN WEIGHT/TERMINAL BODY WEIGHT) X 100.

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)

a. Value was multiplied by 1000.

TABLE C29 (PAGE 5): TERMINAL BODY WEIGHTS AND ORGAN WEIGHTS AND RATIOS (%) OF ORGAN WEIGHT TO TERMINAL BODY WEIGHT - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

OSAGE	GRO	UP III			MIDDLI	DOSAGE			50 MG,	/KG/DAY				
RAT	TER	MINAL BODY	BRA	AIN	LIV	ÆR		ONEY SFT		ONEY GHT	ADRE LE	NAL FT	ADRE	
NUMBER		WEIGHT	ABS. WT.	REL. % TBW a	ABS. WT.	REL. % TBW								
17661	P	280.			10.84	3.87								
17667	P	311.			13.45	4.32								
17669	P	296.			10.92	3.69								
17670	P	268.			10.80	4.03								
17676	P	265.			9.21	3.48								
17687	P	337.	2.13	0.63	13.22	3.92	1.25	0.37	1.33	0.39	0.045	13.35	0.042	12.46
17693	P	274.	2.15	0.78	10.76	3.93	1.05	0.38	1.16	0.42	0.033	12.04	0.033	12.04
17697	P	268.	2.17	0.81	10.23	3.82	1.11	0.41	1.10	0.41	0.030	11.19	0.026	9.70
17700	P	310.	2.13	0.69	10.96	3.54	1.35	0.44	1.46	0.47	0.043	13.87	0.043	13.87
17701	P	311.	2.26	0.73	12.74	4.10	1.12	0.36	1.19	0.38	0.047	15.11	0.042	13.50
17705	₽	330.	2.11	0.64	12.94	3.92	1.19	0.36	1.19	0.36	0.053	16.06	0.047	14.24
17706	₽	315.	2.22	0.70	12.79	4.06	2.15	0.68	b	b	0.043	13.65	0.039	12.38
17709	P	262.	2.13	0.81	11.06	4,22	1.12	0.43	1.12	0.43	0.031	11.83	0.029	11.07
17718	₽	295.	2,27	0.77	12.17	4.12	1.46	0.49	1.45	0.49	0.038	12.88	0.029	9.83
17720	₽	318.	2.29	0.72	12.75	4.01	1.28	0.40	1.41	0.44	0.047	14.78	0.050	15.72

ALL WEIGHTS WERE RECORDED IN GRAMS (G). ABS. WT. = ORGAN WEIGHT. REL. % TBW = (ORGAN WEIGHT/TERMINAL BODY WEIGHT) X 100.

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)

a. Value was multiplied by 1000.

b. Dam 17706 had an absent right kidney. See the individual necropsy observations table (Table C28).

TABLE C29 (PAGE 6): TERMINAL BODY WEIGHTS AND ORGAN WEIGHT SAND RATIOS (%) OF ORGAN WEIGHT TO TERMINAL BODY WEIGHT - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

DOSAGE 0	ROUP III			MIDDLE	E DOSAGE			50 MG/	KG/DAY				
RAT T	TERMINAL BODY	SPI	EEN	THY	MUS	OVA LE	RY FT	OVA RIG		UTE WITH C		HE?	ART
NUMBER	WEIGHT	ABS. WT.	REL. % TBW	ABS. WT.	REL. % TBW	ABS. WT.	REL. % TBW a	ABS. WT.	REL. % TBW a	ABS. WT.	REL. % TBW	ABS. WT.	REL. % TBW
17661 I	280.					0.073	26.07	0.088	31.43	0.63	0.22		
17667 I	311.					0.067	21.54	0.097	31.19	0.94b	0.30		
17669 I	296.					0.072	24.32	0.080	27.03	0.89	0.30		
17670 I	268.					0.078	29.10	0.054	20.15	0.67	0.25		
17676 I	265.					0.060	22.64	0.072	27.17	0.67	0.25		
17687 I	? 337.	0.78	0.23	0.37	0.11	0.101	29.97	0.101	29.97	0.74	0.22	1.05	0.3
17693 I	274.	0.79	0.29	0.18	0.06	0.062	22.63	0.081	29.56	0.72b	0.26	0.99	0.3
17697 I	268.	0.66	0.25	0.19	0.07	0.071	26.49	0.093	34.70	0.85	0.32	0.98	0.3
17700 I	310.	0.62	0.20	0.35	0.11	0.082	26.45	0.077	24.84	0.82	0.26	1.12	0.3
17701 I	311.	0.74	0.24	0.32	0.10	0.072	23.15	0.064	20.58	0.86	0.28	1.17	0.3
17705 I	330.	0.73	0.22	0.27	0.08	0.097	29.39	0.075	22.73	0.83	0.25	1.38	0.4
17706 I	315.	0.84	0.27	0.31	0.10	0.108	34.28	0.111	35.24	0.82	0.26	1.11	0.3
17709 I	262.	0.90	0.34	0.31	0.12	0.066	25.19	0.090	34.35	0.72	0.27	0.91	0.3
17718 I	295.	0.92	0.31	0.23	0.08	0.082	27.80	0.074	25.08	0.76	0.26	1.28	0.4
17720 I	318.	0.65	0.20	0.35	0.11	0.093	29.24	0.097	30.50	0.76	0.24	1.10	0.3

ALL WEIGHTS WERE RECORDED IN GRAMS (G). ABS. WT. = ORGAN WEIGHT. REL. % TBW = (ORGAN WEIGHT/TERMINAL BODY WEIGHT) X 100.

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)

a. Value was multiplied by 1000.

b. Damaged during processing (weight not affected).

TABLE C29 (PAGE 7): TERMINAL BODY WEIGHTS AND ORGAN WEIGHTS AND RATIOS (%) OF ORGAN WEIGHT TO TERMINAL BODY WEIGHT - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

DOSAGE GRO	OUP IV			HIGH I	OOSAGE			250 M	G/KG/DAY				
RAT TEI	RMINAL BODY	BRA	IN	LIV	/ER		ONEY EFT		ONEY GHT	ADRE LE	 NAL FT	ADRE RIG	
NUMBER	WEIGHT	ABS. WT.	REL. % TBW a	ABS. WT.	REL. % TBW a								
17664 NP				11.51									
17677 P	287.			13.06	4.55								
17678 P	293.	2.23	0.76	13.68	4.67	1.23	0.42	1.25	0.43	0.050	17.06	0.038	12.97
17682 P	300.			14.07	4.69								
17683 P	259.	2.19	0.84	12.48	4.82	1.17	0.45	1.28	0.49	0.054	20.85	0.048	18.53
17685 P	277.	2.31b	0.83	13.29	4.80	1.37	0.49	1.40	0.50	0.043	15.52	0.034	12.27
17686 NP	284.	2.10	0.74	12.31	4.33	1.30	0.46	1.31	0.46	0.037	13.03	0.036	12.68
17689 P	285.	2.27	0.80	14.32	5.02	1.30	0.46	1.27	0.44	0.045	15.79	0.043	15.09
17691 P	286.	2.02	0.71	11.62	4.06	1.12	0.39	1.21	0.42	0.037	12.94	0.036	12.59
17692 P	277.	2.17	0.78	13.67	4.94	1.22	0.44	1.21	0.44	0.031	11.19	0.033	11.91
17696 P d	:	2.17		14.77		1.28		1.24		0.053		0.041	
17699 P	283.	2.18	0.77	14.51	5.13	1.30	0.46	1.40	0.49	0.055	19.43	0.050	17.67
17711 P o	:	2.10		12.56		1.38		1.38		0.059		0.052	
17712 P	292.	2.19	0.75	14.14	4.84	1.21	0.41	1.22	0.42	0.041	14.04	0.039	13.36
17714 P	294.	2.22	0.76	14.33	4.87	1.16	0.39	1.22	0.41	0.049	16.67	0.042	14.28

ALL WEIGHTS WERE RECORDED IN GRAMS (G). ABS. WT. = ORGAN WEIGHT.

REL. % TBW = (ORGAN WEIGHT/TERMINAL BODY WEIGHT) X 100.

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)

a. Value was multiplied by 1000.

b. Damaged during processing (weight not affected).

c. Dam was sacrificed due to no surviving pups on day 2 of lactation; values excluded from group averages and statistical analyses.

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE C29 (PAGE 8): TERMINAL BODY WEIGHTS AND ORGAN WEIGHTS AND RATIOS (%) OF ORGAN WEIGHT TO TERMINAL BODY WEIGHT - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

DOSAGE G	ROUP IV			HIGH D	OSAGE			250 MG	KG/DAY				
RAT T	ERMINAL BODY	SPI	LEEN	ТНҮ	MUS	OVA LE	RY FT	OVA RIG		UTE WITH C	RUS ERVIX	HEA	ART
NUMBER	WEIGHT	ABS. WT.	REL. % TBW	ABS. WT.	REL. % TBW	ABS. WT.	REL. % TBW a	ABS. WT.	REL. % TBW a	ABS. WT.	REL. % TBW	ABS. WT.	REL. % TBW
17664 N	P					0.068		0.081		0.51b			
17677 P						0.072	25.09	0.083	28.92	0.68	0.24		
17678 P	293.	0.81	0.28	0.30	0.10	0.074	25.26	0.100	34.13	0.76	0.26	1.21	0.43
17682 P	300.					0.092	30.67	0.086	28.67	0.58	0.19		
17683 P	259.	0.60	0.23	0.23	0.09	0.074	28.57	0.074	28.57	0.68	0.26	0.90	0.3
17685 P	277.	0.54	0.19	0.20	0.07	0.079	28.52	0.072	25.99	0.70	0.25	0.94	0.34
17686 N	P 284.	0.48	0.17	0.43	0.15	0.058	20.42	0.053	18.66	0.42	0.15	1.09	0.3
17689 P	285.	0.70	0.24	0.19	0.07	0.072	25.26	0.066	23.16	0.82	0.29	0.99	0.3
17691 P	286.	0.54	0.19	0.29	0.10	0.066	23.08	0.074	25.87	0.67	0.23	0.94	0.33
17692 P	277.	0.66	0.24	0.15	0.05	0.057	20.58	0.076	27.44	0.71	0.26	0.84	0.30
17696 P	C	0.49		0.06d		0.070		0.083		1.71		0.85	
17699 P	283.	0.67	0.24	0.23	0.08	0.090	31.80	0.102	36.04	0.64	0.23	1.00	0.3
17711 P	C	0.39		0.23		0.062		0.086		2.15		1.04	
17712 P	292.	0.69	0.24	0.20	0.07	0.088	30.14	0.095	32.53	0.77	0.26	1.18	0.40
17714 P	294.	0.56	0.19	0.15	0.05	0.076	25.85	0.057	19.39	0.71	0.24	1.05	0.36

REL. % TBW = (ORGAN WEIGHT/TERMINAL BODY WEIGHT) X 100.

ALL WEIGHTS WERE RECORDED IN GRAMS (G). ABS. WT. = ORGAN WEIGHT.

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)

a. Value was multiplied by 1000.

b. Damaged during processing (weight not affected).

c. Dam was sacrificed due to no surviving pups on day 2 of lactation; values excluded from group averages and statistical analyses.

d. Dam 17696 had a small thymus. See the individual necropsy observations table (Table C28).

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE C30 (PAGE 1): ORGAN WEIGHTS AND RATIOS (%) OF ORGAN WEIGHT TO BRAIN WEIGHT - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

DOSAGE	GRO				VEHICI				0 (VEH	ICLE) MG/	KG/DAY			
RAT		BRAIN	LIV		KIDI LEI	IEY	KIDN RIGH	IEY	ADREN LEF		ADREN RIGH	<u>-</u>	SPLI	EEN
NUMBER		WEIGHT	ABS. WT.	REL. % BRW	ABS. WT.	REL. % BRW	ABS. WT.	REL. % BRW	ABS. WT.	% BRW	ABS. WT.		ABS. WT.	REL. % BRW
17681	P	2.04	11.10	544.12	1.13	55.39	1.19	58.33	0.034	1.67	0.034	1.67	0.76	37.25
17690	P	2.27	12.40	546.26	1.28	56.39	1.31	57.71	0.047	2.07	0.047	2.07	0.70	30.84
17694	P	2.28	11.10	486.84	1.21	53.07	1.33	58.33	0.041	1.80	0.042	1.84	0.66	28.9
17695	P	2.16	10.63	492.13	1.08	50.00	1.00	46.30	0.039	1.80	0.033	1.53	0.70	32.4
17703	P	2.27	13.19	581.06	1.51	66.52	1.43	63.00	0.042	1.85	0.044	1.94	0.79	34.8
17713	P	2.26	9.91	438.50	1.03	45.58	1.03	45.58	0.037	1.64	0.034	1.50	0.65	28.7
17715	P	2.22	11.72	527.93	1.24	55.86	1.17	52.70	0.041	1.85	0.041	1.85	0.76	34.2
17716	P	2.15	13.55	630.23	1.19	55.35	1.21	56.28	0.044	2.05	0.042	1.95	0.70	32.5
17717	P	2.15	9.57	445.12	1.15	53.49	1.15	53.49	0.049	2.28	0.054	2.51	0.73	33.9
17719	₽	2.16	11.30	523.15	1.14	52.78	1.17	54.17	0.044	2.04	0.041	1.90	0.59	27.3
RAT		BRAIN	тнүг	MUS	OVAF LEF		OVAR RIGH		UTER WITH CE		HEAR	.T		
NUMBER		WEIGHT	ABS.	REL.	ABS.	REL.	ABS.	REL.	ABS.		ABS.	REL.		
			WT.	% BRW	WT.	% BRW	WT.		WT.	% BRW	WT.	% BRW		
17681	P	2.04	0.33	16.18	0.080	3.92	0.096	4.70	0.74	36,27	1.04	50.98		
17690	P	2.27	0.38	16.74	0.094	4.14	0.078	3.44	0.84	37.00	1.17	51.54		
17694	P	2.28	0.23	10.09	0.081	3.55	0.070	3.07	0.77	33.77	1.11	48.68		
17695	P	2.16	0.24	11.11	0.103	4.77	0.090	4.17	0.96	44.44	0.94	43.52		
17703	P	2.27	0.37	16.30	0.111	4.89	0.113	4.98	0.95	41.85	1.25	55.07		
17713	P	2.26	0.31	13.72	0.044	1.95	0.057	2.52	0.74	32.74	1.02	45.13		
17715	P	2.22	0.25	11.26	0.066	2.97	0.096	4.32	0.98	44.14	1.24	55.86		
1//10	D	2.15	0.20	9.30	0.080	3.72	0.071	3.30	0.68	31.63	1.00	46.51		
17716	+											10.51		
		2.15	0.27	12.56	0.068	3.16	0.071	3.30	0.62	28.84	1.08	50.23		

ALL WEIGHTS WERE RECORDED IN GRAMS (G). ABS. WT. = ORGAN WEIGHT.

REL. % TBW = (ORGAN WEIGHT/BRAIN WEIGHT) X 100.

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)

a. Damaged during processing (weight not affected).

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PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE C30 (PAGE 2): ORGAN WEIGHTS AND RATIOS (%) OF ORGAN WEIGHT TO BRAIN WEIGHT - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

DOSAGE	GRO	UP II			LOW DO	OSAGE			10 MG/	KG/DAY				
RAT	:	BRAIN	LIV	ER	KIDI LEI		KIDN RIGH		ADREN LEF		ADREN RIGH		SPLI	EEN
NUMBER	,	WEIGHT	ABS. WT.	REL. % BRW	ABS. WT.	REL. % BRW	ABS. WT.	REL. % BRW	ABS. WT.	% BRW	ABS. WT.	% BRW	WT.	REL. % BRW
17675	P	2.18	12.27	562.84	1.31	60.09	1.34	61.47	0.044	2.02	0.039	1.79	0.75	34.40
17679	P	2.13	11.54	541.78	1.35	63.38	1.30	61.03	0.037	1.74	0.036	1.69	0.55	25.82
17684	P	2.15	12.17	566.05	1.30	60.46	1.37	63.72	0.042	1.95	0.042	1.95	0.74	34.42
17688	P	2.21	11.60	524.89	1.02	46.15	1.20	54.30	0.054	2.44	0.049	2.22	0.64	28.96
17698	P	2.24	11.43	510.27	1.38	61.61	1.41	62.95	0.047	2.10	0.036	1.61	0.66	29.46
17702	P	2.05	11.83	577.07	1.14	55.61	1.23	60.00	0.041	2.00	0.040	1.95	0.71	34.63
17704	P	2.26	13.36	591.15	1.41	62.39	1.41	62.39	0.049	2.17	0.049	2.17	0.98	43.36
17707	P	2.18	11.40	522.94	1.15	52.75	1.10	50.46	0.047	2.16	0.045	2.06	0.60	27.52
17708	P	2.29	14.27	623.14	1.49	65.06	1.35	58.95	0.039	1.70	0.042	1.83	0.82	35.81
17710	P	2.20	13.78	626.36	1.39	63.18	1.40	63.64	0.063	2.86	0.056	2.54	0.95	43.18
			THY	MUS	OVA	KX X	OVAR	.Y	UTER	US	HEAR	T		
RAT	1	BRAIN			LEE	T	RIGH	T	WITH CE	RVIX				
NUMBER	1	WEIGHT	ABS.	REL.	ABS.	REL.	ABS.	REL.	ABS.	REL.	ABS.	REL.		
			WT.	% BRW	WT.	% BRW	WT.	% BRW	WT.	% BRW	WT.	% BRW		
17675	P	2.18	0.36	16.51	0.078	3.58	0.086	3.94	0.89	40.82	1.13	51.83		
17679	P	2.13	0.29	13.62	0.063	2.96	0.071	3.33	0.71	33.33	1.00	46.95		
17684	P	2.15	0.36	16.74	0.080	3.72	0.090	4.19	0.84	39.07	1.19	55.35		
17688		2.21	0.26	11.76	0.090	4.07	0.086	3.89	0.76	34.39	1.23	55.66		
17698		2.24	0.30	13.39	0.110	4.91	0.092	4.11	0.70	31.25	1.26	56.25		
17702		2.05	0.29	14.15	0.071	3.46	0.082	4.00	0.92	44.88	1.16	56.58		
17704		2.26	0.37	16.37	0.074	3.27	0.100	4.42	0.95	42.04	1.18	52.21		
17707		2.18	0.29	13.30	0.077	3.53	0.086	3.94	0.66	30.28	1.08	49.54		
17708	P	2.29	0.50	21.83	0.069	3.01	0.072	3.14	0.78	34.06	1.10	48.03		
17710		2.20	0.36	16.36	0.091	4.14	0.097	4.41						

ALL WEIGHTS WERE RECORDED IN GRAMS (G). ABS. WT. = ORGAN WEIGHT. REL. % TBW = (ORGAN WEIGHT/BRAIN WEIGHT) X 100.

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE C30 (PAGE 3): ORGAN WEIGHTS AND RATIOS (%) OF ORGAN WEIGHT TO BRAIN WEIGHT - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

DOSAGE	GRO	UP III			MIDDLE	E DOSAGE			50 MG/	KG/DAY				
RAT	:	BRAIN	LIVI		KIDN	1EY		ΙΕΥ	ADREN LEF		ADREN RIGH		SPLI	EEN
NUMBER	,	WEIGHT	ABS. WT.	REL. % BRW	ABS. WT.		ABS. WT.		ABS. WT.		ABS. WT.		ABS. WT.	REL. % BRW
17687	P	2.13	13.22	620.66	1.25	58.68	1.33	62.44	0.045	2.11	0.042	1.97	0.78	36.62
17693	P	2.15	10.76	500.46	1.05	48.84	1.16	53.95	0.033	1.53	0.033	1.53	0.79	36.74
17697	P	2.17	10.23	471.43	1.11	51.15	1.10	50.69	0.030	1.38	0.026	1.20	0.66	30.41
17700		2.13	10.96	514.55	1.35	63.38	1.46	68.54	0.043	2.02	0.043	2.02	0.62	29.11
17701	P	2.26	12.74	563.72	1.12	49.56	1.19	52.65	0.047	2.08	0.042	1.86	0.74	32.74
17705	P	2.11	12.94	613.27	1.19	56.40	1.19	56.40	0.053	2.51	0.047	2.23	0.73	34.60
17706	P	2.22	12.79	576.13	2.15	96.85	a	a	0.043	1.94	0.039	1.76	0.84	37.84
17709	P		11.06	519.25	1.12	52.58	1.12	52.58	0.031	1.46	0.029	1.36	0.90	42.25
17718	P	2.27	12.17	536.12	1.46	64.32	1.45	63.88	0.038	1.67	0.029	1.28	0.92	40.53
17720	P	2.29	12.75	556.77	1.28	55.90	1.41	61.57	0.047	2.05	0.050	2.18	0.65	28.38
RAT	:	BRAIN		MUS	OVAF LEI		OVAR RIGH		UTER WITH CE	US RVIX	HEAR	RT		
NUMBER	1	WEIGHT	ABS.	REL.	ABS.	REL.	ABS.		ABS.	REL.	ABS.	REL.		
			WT.	% BRW	WT.	% BRW	WT.	% BRW	WT.	% BRW	WT.	% BRW		
17687	P	2.13	0.37	17.37	0.101	4.74	0.101	4.74	0.74	34.74	1.05	49.30		·
17693	P	2.15	0.18	8.37	0.062	2.88	0.081	3.77	0.72b	33.49	0.99	46.05		
17697	P	2.17	0.19	8.76	0.071	3.27	0.093	4.28	0.85	39.17	0.98	45.16		
17700	P	2.13	0.35	16.43	0.082	3.85	0.077	3.62	0.82	38.50	1.12	52.58		
17701	P	2.26	0.32	14.16	0.072	3.18	0.064	2.83	0.86	38.05	1.17	51.77		
17705		2.11	0.27	12.80	0.097	4.60	0.075	3.55	0.83	39.34	1.38	65.40		
17706	P	2.22	0.31	13.96	0.108	4.86	0.111	5.00	0.82	36.94	1.11	50.00		
17709	P	2.13	0.31	14.55	0.066	3.10	0.090	4.22	0.72	33.80	0.91	42.72		
				10 10	0 000	3.61	0 074	3.26	0.76	33.48	1.28	56.39		
17718 17720		2.27	0.23	10.13	0.082	3.61	0.074	3.20	0.76	33.40	1.20	56.35		

ALL WEIGHTS WERE RECORDED IN GRAMS (G). ABS. WT. = ORGAN WEIGHT. REL. % TBW = (ORGAN WEIGHT/BRAIN WEIGHT) X 100.

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)

a. Dam 17706 had an absent right kidney. See the individual necropsy observations table (Table C28).

b. Damaged during processing (weight not affected).

TABLE C30 (PAGE 4): ORGAN WEIGHTS AND RATIOS (%) OF ORGAN WEIGHT TO BRAIN WEIGHT - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

DOSAGE G	ROUP IV			HIGH I	OSAGE			250 MG	G/KG/DAY				<b></b>
RAT	BRAIN	LIVE		KIDN	IEY	KIDN RIGH	IEY IT	ADREN LEF	IAL 'T	ADREN RIGH		SPLI	EEN
NUMBER	WEIGHT	ABS. WT.	REL. % BRW	ABS. WT.	REL. % BRW	ABS. WT.	% BRW	ABS. WT.	% BRW	ABS. WT.		ABS. WT.	REL. % BRW
17678		13.68	613.45	1.23	55.16	1.25	56.05	0.050	2.24	0.038	1.70	0.81	36.32
17683		12.48	569.86	1.17	53.42	1.28	58.45	0.054	2.46	0.048	2.19	0.60	27.40
17685	P 2.31a	13.29	575.32	1.37	59.31	1.40	60.61	0.043	1.86	0.034	1.47	0.54	23.38
17686 N		12.31	586.19	1.30	61.90	1.31	62.38	0.037	1.76	0.036	1.71	0.48	22.86
17689	P 2.27	14.32	630.84	1.30	57.27	1.27	55.95	0.045	1.98	0.043	1.89	0.70	30.84
17691	P 2.02	11.62	575.25	1.12	55.44	1.21	59.90	0.037	1.83	0.036	1.78	0.54	26.73
17692	P 2.17	13.67	629.95	1.22	56.22	1.21	55.76	0.031	1.43	0.033	1.52	0.66	30.41
17696b	P 2.17	14.77	680.64	1.28	58.99	1.24	57.14	0.053	2.44	0.041	1.89	0.49	22.58
17699	P 2.18	14.51	665.60	1.30	59.63	1.40	64.22	0.055	2.52	0.050	2.29	0.67	30.73
17711b	P 2.10	12.56	598.10	1.38	65.71	1.38	65.71	0.059	2.81	0.052	2.48	0.39	18.57
17712	P 2.19	14.14	645.66	1.21	55.25	1.22	55.71	0.041	1.87	0.039	1.78	0.69	31.51
17714	P 2.22	14.33	645.50	1.16	52.25	1.22		0.049		0.042	1.89	0.56	25.22
		ТНҮМ	NUS	OVAR	Y	OVAR	 .Y	UTER	US	HEAR	 T		
RAT	BRAIN			LEF	T	RIGH	T	WITH CE	RVIX				
NUMBER	WEIGHT	ABS.	REL.	ABS.	REL.	ABS.	REL.	ABS.	REL.	ABS.	REL.		
		WT.	% BRW	WT.	% BRW	WT.	% BRW	WT.	% BRW	WT.	% BRW		
17678		0.30	13.45	0.074	3.32	0.100	4.48	0.76	34.08	1.21	54.26		
17683		0.23	10.50	0.074	3.38	0.074	3.38	0.68	31.05	0.90	41.10		
17685		0.20	8.66	0.079	3.42	0.072	3.12	0.70	30.30	0.94	40.69		
17686 N	P 2.10	0.43	20.48	0.058	2.76	0.053	2.52	0.42	20.00	1.09	51.90		
17689	P 2.27	0.19	8.37	0.072	3.17	0.066	2.91	0.82	36.12	0.99	43.61		
17691		0.29	14.36	0.066	3.27	0.074	3.66	0.67	33.17	0.94	46.53		
17692		0.15	6.91	0.057	2.63	0.076	3.50	0.71	32.72	0.84	38.71		
17696b		0.06c	2.76	0.070	3.22	0.083	3.82	1.71	78.80	0.85	39.17		
17699		0.23	10.55	0.090	4.13	0.102	4.68	0.64	29.36	1.00	45.87		
17711b	P 2.10	0.23	10.95	0.062	2.95	0.086	4.10	2.15	102.38	1.04	49.52		
1,,111		0.20	9.13	0 000	4.02	0.095	4.34						
17712	P 2.19	0.20	2.13	0.088	4.02	0.095	4.34	0.77	35.16	1.18	53.88		

ALL WEIGHTS WERE RECORDED IN GRAMS (G). ABS. WT. = ORGAN WEIGHT.

REL. % TBW = (ORGAN WEIGHT/BRAIN WEIGHT) X 100.

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)

a. Damaged during processing (weight not affected).

b. Dam was sacrificed due to no surviving pups on day 2 of lactation; values excluded from group averages and statistical analyses.

c. Dam 17696 had a small thymus. See the individual necropsy observations table (Table C28).

TABLE C31 (PAGE 1): BODY WEIGHTS - PRECOHABITATION - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

RAT #	DOSAG:	E GROUP	I			VEHIC	LE				0 (VE	HICLE)	MG/KG/D	AY	
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15a
17662	222.	221.	229.	231.	234.	234.	238.	241.	243.	239.	246.	247.	249.	247.	252.
17672	237.	241.	240.	243.	254.	250.	253.	262.	266.	264.	267.	276.	279.	279.	275.
17673	225.	225.	224.	229.	232.	234.	228.	239.	237.	241.	236.	238.	245.	247.	246.
17674	229.	230.	237.	240.	242.	243.	251.	254.	261.	264.	261.	270.	271.	277.	270.
17680	222.	220.	229.	232.	233.	229.	235.	245.	246.	243.	247.	251.	256.	250.	257.
17681	239.	235.	242.	245.	244.	247.	252.	257.	253.	256.	260.	262.	265.	263.	267.
17690	224.	226.	234.	237.	242.	242.	248.	258.	253.	261.	262.	262.	269.	271.	275.
17694	226.	226.	230.	232.	237.	243.	245.	243.	249.	251.	253.	251.	257.	264.	265.
17695	216.	220.	227.	224.	226.	231.	237.	234.	233.	241.	244.	239.	244.	254.	250.
17703	240.	238.	248.	248.	256.	252.	260.	268.	266.	266.	273.	279.	283.	278.	292.
17713	230.	229.	239.	239.	240.	237.	245.	252.	249.	249.	253.	257.	252.	254.	260.
17715	237.	238.	247.	249.	246.	247.	258.	259.	261.	262.	270.	273.	271.	269.	274.
17716	221.	222.	224.	227.	227.	229.	231.	233.	238.	235.	233.	240.	242.	242.	244.
17717	224.	227.	232.	229.	234.	240.	246.	250.	256.	262.	260.	264.	270.	270.	271.
17719	216.	217.	221.	219.	219.	224.	228.	228.	227.	230.	233.	238.	238.	234.	237.

DAY = DAY OF STUDY

ALL WEIGHTS WERE RECORDED IN GRAMS (G).

TABLE C31 (PAGE 2): BODY WEIGHTS - PRECOHABITATION - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

RAT #	DOSAG	E GROUP	II			LOW D	OSAGE				10 MG	/KG/DAY			
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15a
17663	221.	220.	224.	222.	229.	223.	235.	235.	237.	237.	240.	243.	246.	247.	247.
17665	234.	232.	238.	244.	242.	238.	245.	250.	247.	247.	251.	256.	256.	257.	262.
17666	223.	226.	233.	234.	240.	244.	248.	248.	256.	259.	259.	259.	263.	269.	268.
17668	224.	225.	231.	235.	233.	233.	236.	240.	241.	240.	244.	247.	248.	246.	252.
17671	215.	215.	222.	222.	224.	220.	224.	236.	230.	226.	231.	235.	235.	232.	235.
17675	233.	236.	238.	238.	238.	241.	246.	250.	248.	256.	254.	253.	253.	259.	260.
17679	221.	225.	231.	234.	236.	236.	240.	249.	246.	248.	254.	257.	257.	260.	262.
17684	228.	234.	236.	239.	243.	245.	247.	251.	259.	260.	261.	264.	266.	268.	264.
17688	225.	226.	229.	232.	234.	235.	240.	246.	246.	250.	255.	258.	256.	261.	265.
17698	237.	230.	239.	246.	246.	242.	250.	258.	258.	255.	262.	264.	267.	266.	272.
17702	223.	230.	227.	233.	240.	246.	244.	250.	263.	263.	254.	259.	270.	269.	261.
17704	233.	232.	236.	240.	246.	248.	250.	255.	261.	268.	271.	267.	273.	278.	280.
17707	218.	224.	220.	226.	227.	230.	232.	237.	235.	234.	236.	238.	243.	242.	245.
17708	239.	238.	245.	252.	254.	254.	260.	266.	270.	272.	271.	278.	283.	286.	285.
17710	236.	238.	239.	249.	246.	251.	256.	261.	264.	265.	265.	272.	280.	278.	276.

DAY = DAY OF STUDY

ALL WEIGHTS WERE RECORDED IN GRAMS (G).

TABLE C31 (PAGE 3): BODY WEIGHTS - PRECOHABITATION - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

RAT #	DOS	GE GROU	PIII			MIDDL	E DOSAG	E			50 MG	/KG/DAY			
DA	Υ 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15a
17661	218	220.	226.	222.	222.	229.	230.	226.	228.	234.	235.	233.	232.	237.	239.
17667	232	240.	247.	249.	244.	252.	258.	257.	256.	263.	268.	264.	262.	270.	272.
17669	231	231.	241.	242.	244.	242.	253.	257.	258.	258.	265.	268.	267.	267.	271.
17670	228	226.	229.	234.	238.	238.	238.	249.	247.	245.	247.	249.	258.	254.	249.
17676	217	218.	218.	223.	226.	227.	225.	231.	232.	235.	236.	234.	238.	243.	246.
17687	238	238.	248.	252.	255.	256.	262.	270.	268.	276.	281.	288.	289.	287.	289.
17693	222	226.	230.	234.	237.	237.	238.	249.	249.	250.	248.	246.	256.	255.	253.
17697	225	225.	230.	235.	233.	232.	237.	243.	241.	240.	244.	250.	249.	253.	252.
17700	225	229.	233.	238.	242.	244.	249.	256.	254.	255.	261.	263.	266.	266.	273.
17701	236	235.	244.	248.	249.	249.	255.	261.	262.	264.	269.	269.	271.	272.	278.
17705	225	225.	230.	235.	239.	240.	242.	255.	253.	248.	263.	262.	268.	261.	271.
17706	227	231.	234.	238.	243.	244.	246.	253.	257.	259.	259.	266.	266.	262.	266.
17709	222	220.	223.	224.	228.	223.	229.	232.	233.	230.	236.	240.	243.	240.	245.
17718	228	231.	230.	234.	235.	237.	236.	243.	244.	248.	246.	250.	254.	253.	249.
17720	224	226.	222.	229.	233.	235.	245.	245.	253.	258.	259.	264.	278.	269.	257.

DAY = DAY OF STUDY

ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE C31 (PAGE 4): BODY WEIGHTS - PRECOHABITATION - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

RAT #	DOSAG	E GROUP	IV			HIGH :	DOSAGE				250 M	G/KG/DA	Y		
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15a
17664	217.	219.	214.	219.	225.	227.	223.	232.	233.	235.	232.	241.	244.	244.	242.
17677	236.	239.	244.	240.	249.	255.	257.	256.	251.	263.	264.	273.	271.	270.	268.
17678	228.	227.	229.	231.	236.	238.	234.	244.	243.	246.	242.	249.	251.	248.	250.
17682	224.	233.	234.	235.	237.	242.	247.	248.	252.	253.	256.	256.	256.	256.	260.
17683	222.	220.	226.	226.	228.	226.	228.	234.	233.	236.	240.	241.	240.	241.	243.
17685	233.	233.	235.	230.	236.	241.	239.	241.	246.	251.	250.	246.	253.	257.	258.
17686	227.	225.	227.	228.	229.	230.	228.	237.	237.	235.	235.	242.	241.	243.	244.
17689	226.	226.	229.	235.	238.	238.	241.	247.	248.	250.	252.	256.	256.	256.	260.
17691	229.	222.	215.	223.	233.	234.	235.	243.	244.	245.	243.	249.	248.	253.	252.
17692	222.	224.	225.	224.	231.	235.	235.	236.	241.	244.	243.	241.	246.	247.	246.
17696	218.	219.	218.	225.	228.	225.	223.	232.	233.	236.	234.	236.	241.	235.	234.
17699	232.	234.	239.	243.	247.	248.	254.	256.	257.	256.	260.	260.	264.	260.	267.
17711	223.	222.	223.	224.	232.	234.	233.	234.	239.	239.	238.	240.	243.	243.	241.
17712	227.	228.	221.	228.	234.	237.	226.	234.	238.	239.	236.	235.	243.	244.	246.
17714	234.	235.	242.	248.	252.	252.	258.	264.	264.	264.	270.	278.	280.	278.	282.

DAY = DAY OF STUDY

ALL WEIGHTS WERE RECORDED IN GRAMS (G).

TABLE C32 (PAGE 1): MATERNAL BODY WEIGHTS - PRESUMED GESTATION - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

RAT #	DOSAGE	GROUP I			VEHICL	E			O (VEH	ICLE) MG/	KG/DAY		
PREGNANC	Y										:		
STATUS	DAY 0	1	2	3	4	5	6	7	8	9	10	11	1:
17662 P	255.	263.	270.	270.	276.	281.	287.	288.	293.	300.	303.	310.	31!
17672 P	289.	298.	299.	301.	304.	312.	316.	323.	326.	324.	336.	348.	346
17673 P	248.	253.	261.	265.	267.	269.	275.	276.	283.	284.	286.	296.	30
17674 P	272.	284.	290.	293.	294.	302.	304.	308.	315.	316.	321.	329.	338
17680 P	268.	272.	286.	281.	285.	288.	289.	297.	300.	304.	312.	320.	328
17681 P	277.	284.	286.	287.	292.	298.	301.	306.	309.	312.	320.	328.	334
17690 P	281.	289.	301.	300.	307.	312.	324.	328.	330.	340.	343.	351.	36:
17694 P	265.	274.	277.	278.	284.	286.	295.	292.	299.	300.	309.	312.	319
17695 P	254.	259.	262.	268.	270.	278.	280.	284.	280.	281.	292.	293.	309
17703 P	286.	296.	309.	313.	316.	319.	327.	331.	336.	341.	347.	354.	36:
17713 P	260.	269.	274.	276.	283.	279.	281.	292.	293.	293.	302.	304.	31
17715 P	288.	298.	300.	310.	308.	316.	316.	320.	327.	328.	337.	344.	352
17716 P	253.	264.	265.	271.	276.	280.	277.	283.	285.	292.	295.	303.	30'
17717 P	269.	276.	279.	282.	284.	286.	288.	285.	291.	292.	297.	306.	30!
17719 P	262.	266.	268.	271.	274.	275.	277.	282.	286.	283.	287.	291.	29:
	DAY 13	14	15	16	17	18	19	20	21	22	23	24	2!
17662 P	316.	323.	329.	342.	354.	367.	380.	392.	406.				
17672 P	354.	360.	372.	380.	394.	408.	424.	442.	464.				
17673 P	304.	308.	316.	326.	336.	351.	364.	380.	393.				
17674 P	341.	352.	360.	371.	385.	407.	429.	453.	461.				
17680 P	332.	341.	352.	360.	377.	397.	412.	438.	458.				
17681 P	334.	346.	348.	358.	370.	391.	403.	414.	427.				
17690 P	371.	380.	386.	400.	413.	440.	454.	476.	512.				
17694 P	325.	338.	344.	354.	367.	383.	399.	417.	437.				
17695 P	299.	307.	319.	332.	341.	362.	372.	380.	237.				
17703 P	370.	387.	389.	400.	419.	439.	448.	477.					
17713 P	318.	331.	333.	345.	355.	376.	380.	392.	413.				
17715 P	360.	364.	373.	377.	392.	410.	423.	444.	469.				
17716 P	313.	316.	327.	337.	352.	361.	379.	392.	410.				
		318.	324.	332.	339.	357.	367.	381.	387.				
17717 P	310.	318.	324.										

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)

DAY = DAY OF PRESUMED GESTATION

ALL WEIGHTS WERE RECORDED IN GRAMS (G).

TABLE C32 (PAGE 2): MATERNAL BODY WEIGHTS - PRESUMED GESTATION - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

RAT #	DOSAGE	GROUP II			LOW DO	SAGE			10 MG/	KG/DAY			
PREGNANC	Y												
STATUS	DAY 0	1	2	3	4	5	6	7	8	9	10	11	12
17663 NP	258.	253.	250.	256.	261.	261.	259.	260.	262.	267.	271.	268.	266
17665 P	267.	271.	274.	280.	284.	286.	295.	296.	297.	300.	308.	315.	324
17666 P	272.	275.	279.	284.	286.	278.	283.	288.	289.	293.	292.	298.	303
17668 P	263.	261.	269.	276.	280.	279.	291.	290.	294.	298.	306.	314.	324
17671 P	244.	251.	255.	249.	258.	260.	263.	265.	271.	273.	280.	281.	292
17675 P	266.	267.	272.	277.	278.	282.	283.	291.	291.	298.	299.	306.	313
17679 P	271.	277.	282.	279.	284.	284.	286.	291.	290.	294.	298.	306.	316
17684 P	283.	286.	294.	294.	298.	304.	303.	309.	311.	314.	324.	333.	339
17688 P	275.	281.	285.	288.	293.	298.	303.	305.	310.	316.	324.	329.	336
17698 P	278.	284.	298.	300.	305.	309.	314.	309.	317.	321.	334.	336.	342
17702 P	273.	284.	286.	291.	292.	289.	296.	299.	300.	309.	306.	316.	319
17704 P	277.	291.	294.	299.	298.	304.	306.	313.	316.	324.	329.	336.	348
17707 P	264.	261.	265.	270.	271.	278.	275.	279.	283.	283.	286.	299.	304
17708 P	288.	290.	294.	301.	303.	310.	312.	320.	323.	328.	332.	334.	349
17710 P	300.	308.	311.	323.	322.	326.	332.	327.	335.	345.	347.	354.	371
	DAY 13	14	15	16	17	18	19	20	21	22	23	24	<b></b> 25
17663 NP	268.	269.	270.	272.	269.	268.	267.	269.	277.	279.	281.	279.	 267
17665 P	326.	336.	339.	354.	368.	390.	396.	417.	434.		202.	2,5.	207
17666 P	307.	309.	314.	326.	339.	355.	371.	387.	400.				
17668 P	322.	338.	337.	353.	373.	382.	391.	405.	426.				
17671 P	289.	294.	300.	310.	322.	334.	346.	359.	371.				
17675 P	317.	317.	321.	335.	353.	377.	395.	411.	434.				
17679 P	313.	323.	323.	330.	343.	348.	362.	375.	383.				
17684 P	348.	351.	361.	373.	388.	404.	425.	441.	468.				
17688 P	332.	351.	344.	366.	387.	406.	419.	432.					
17698 P	340.	356.	353.	364.	376.	397.	402.	413.					
17702 P	329.	332.	345.	357.	370.	389.	404.	416.	436.		1		
17704 P	349.	356.	372.	382.	399.	425.	445.	459.	468.				
17707 P	313.	315.	320.	328.	340.	363.	377.	389.	408.				
17708 P	350.	355.	363.		389.	414.	431.	456.	472.				
17710 P	374.	384.	388.	403.	416.	436.	449.	471.	498.				

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)

DAY = DAY OF PRESUMED GESTATION

ALL WEIGHTS WERE RECORDED IN GRAMS (G).

TABLE C32 (PAGE 3): MATERNAL BODY WEIGHTS - PRESUMED GESTATION - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

RAT #	DOSAGE	GROUP II	I		MIDDLE	DOSAGE			50 MG/	KG/DAY			
PREGNANC	 Y												
STATUS	DAY 0	1	2	3	4	5	6	7	8	9	10	11	12
17661 P	243.	251.	248.	253.	259.	258.	265.	276.	275.	279.	286.	293.	302
17667 P	273.	287.	290.	296.	295.	299.	301.	308.	313.	316.	321.	327.	335
17669 P	282.	288.	290.	290.	294.	295.	293.	301.	305.	307.	309.	317.	325
17670 P	262.	262.	265.	262.	269.	275.	274.	275.	279.	287.	292.	295.	305
17676 P	247.	250.	253.	253.	255.	260.	261.	265.	262.	265.	270.	274.	282
17687 P	305.	305.	311.	313.	322.	326.	326.	333.	336.	337.	348.	356.	366
17693 P	255.	262.	265.	268.	272.	275.	279.	281.	283.	283.	288.	298.	302
17697 P	258.	262.	274.	274.	271.	274.	275.	275.	277.	280.	286.	297.	298
17700 P	277.	280.	285.	288.	293.	296.	297.	300.	305.	310.	312.	321.	328
17701 P	293.	298.	299.	301.	311.	311.	312.	322.	324.	331.	341.	346.	354
17705 P	280.	288.	297.	297.	303.	299.	311.	316.	320.	325.	330.	338.	352
17706 P	276.	282.	283.	286.	294.	301.	302.	301.	306.	314.	317.	324.	337
17709 P	273.	272.	276.	278.	284.	286.	286.	293.	291.	287.	296.	301.	300
17718 P	288.	292.	297.	294.	299.	298.	301.	304.	305.	306.	311.	320.	324
17720 P	269.	273.	276.	284.	293.	294.	297.	302.	304.	309.	314.	323.	333
	DAY 13	14	15	16	17	18	19	20	21	22	23	24	25
17661 P	306.	312.	326.	340.	355.	376.	391.	402.	424.				
17667 P	337.	342.	353.	361.	378.	395.	412.	419.	440.				
17669 P	325.	330.	338.	348.	367.	386.	403.	416.	436.				
17670 P	306.	315.	320.	337.	346.	362.	380.	394.	416.				
17676 P	284.	291.	298.	308.	324.	334.	350.	358.	373.				
17687 P	370.	370.	376.	388.	403.	417.	434.	450.	476.				
17693 P	301.	306.	312.	327.	330.	351.	369.	385.	405.				
17697 P	300.	310.	318.	326.	344.	361.	373.	386.	405.				
17700 P	333.	341.	352.	361.	375.	390.	405.	416.					
17701 P	355.	365.	366.	383.	388.	410.	423.	442.	466.				
17705 P	350.	359.	367.	377.	394.	407.	418.	443.	467.				
17706 P	340.	339.	351.	359.	377.	377.	401.	423.	443.				
17709 P	304.	308.	307.	324.	331.	352.	362.	379.	391.				
17718 P	326.	335.	344.	352.	367.	386.	402.	423.					
17720 P	336.	346.	354.	366.	380.	397.	413.	435.	454.				

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)

DAY = DAY OF PRESUMED GESTATION

ALL WEIGHTS WERE RECORDED IN GRAMS (G).

TABLE C32 (PAGE 4): MATERNAL BODY WEIGHTS - PRESUMED GESTATION - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

RAT #	DOSAGE	GROUP IV	7		HIGH D	OSAGE			250 MG	/KG/DAY			
PREGNANCY													
STATUS	DAY 0	1	2	3	4	5	6	7	8	9	10	11	1:
17664 NP	MATING	NOT CONF	'IRMED										
17677 P	268.	276.	278.	281.	288.	290.	286.	289.	296.	297.	303.	313.	31
17678 P	263.	269.	274.	283.	284.	289.	292.	297.	299.	303.	309.	320.	32
17682 P	288.	284.	288.	290.	293.	292.	293.	299.	299.	303.	308.	310.	31
17683 P	250.	264.	265.	261.	264.	267.	270.	266.	278.	279.	293.	304.	31
17685 P	262.	268.	270.	275.	280.	282.	288.	289.	290.	295.	299.	301.	30
17686 NP	243.	251.	259.	265.	267.	268.	272.	271.	278.	284.	286.	302.	293
17689 P	264.	268.	267.	268.	270.	272.	276.	282.	288.	290.	293.	302.	30!
17691 P	264.	268.	274.	277.	281.	288.	287.	295.	296.	304.	309.	316.	31'
17692 P	254.	260.	262.	264.	269.	269.	274.	278.	276.	283.	284.	291.	29:
17696 P	231.	244.	252.	252.	252.	255.	257.	256.	259.	263. 261.	204. 272.	291. 274.	
17699 P	272.	275.	283.	282.	289.	292.	299.	295.	296.	302.	309.		28:
	249.	254.	256.	256.	261.	264.	266.	268.	264.	271.		312.	32
	250.	261.	267.	264.		274.	275.	276.	280.	271.	278. 288.	282.	293
17714 P	291.	296.		305.	316.	318.	317.	322.	327.	333.	338.	295. 341.	30: 348
	DAY 13	14	15	16	17	18	19	20	21	22	23	24	25
17664 NP	MATING	NOT CONF	IRMED										
17677 P	319.	325.	332.	341.	358.	363.	373.	386.	398.	381.			
17678 P	330.	332.	338.	347.	364.	373.	385.	405.	422.	301.			
17682 P	324.	331.	341.	355.	367.	371.	389.	401.	422.				
17683 P	318.	328.	326.	339.	348.	369.	380.	396.	417.				
17685 P	313.	319.	328.	340.	351.	373.	389.	403.	409.				
17686 NP	272.	277.	275.	266.	270.	278.	284.	294.	290.	296.	299.	298.	20
17689 P	316.	324.	327.	350.	355.	369.	389.	409.	420.	296.	299.	298.	284
17691 P	324.	324.	331.	340.	351.	359.	374.	381.	391.				
17692 P	298.	307.	315.	329.	340.	357.	371.	395.					
17696 P	284.	290.	299.	311.	323.	337.	371. 356.	395. 369.	409. 377.	270			
17699 P	326	333.	340.	352.	366.	380.	396.	403.		370.			
17711 P	295.	300.	305.	319.	332.	337.	355.		415.	254			
17712 P	304.	309.	320.	333.	352. 350.	337. 366.	355. 385.	366.	364.	354.			
17714 P	347.	358.	366.	333. 376.	387.	406.	385. 414.	399. 430.	408.				
- · · <b></b>	J	550.	500.	3,0.	307.	<b>400.</b>	414.	43U.	443.				

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)

DAY = DAY OF PRESUMED GESTATION

ALL WEIGHTS WERE RECORDED IN GRAMS (G).

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE C33 (PAGE 1): MATERNAL BODY WEIGHTS - LACTATION - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

	0 (VEHICLE) MG/KG/DAY	VEHICLE				GROUP I	DOSAGE	RAT #
		6	5	4	3	2	DAY 1	
·;		303.	328.	328.	321.	315.	304.	17662
		319.	361.	354.	350.	329.	339.	17672
		271.	295.	301.	290.	287.	304.	17673
		282.	306.	318.	321.	326.	321.	17674
	•	303.	338.	339.	332.	331.	331.	17680
		303.	337.	331.	327.	329.	326.	17681
		345.	388.	372.	366.	381.	360.	17690
		291.	317.	328.	322.	317.	315.	17694
		271.	299.	298.	286.	293.	294.	17695
		339.	371.	362.	354.	354.	366.	17703
		292.	321.	302.	311.	305.	312.	17713
		328.	350.	353.	353.	357.	356.	17715
		298.	307.	298.	302.	306.	305.	17716
		274.	295.	286.	293.	294.	291.	17717
		268.	300.	292.	285.	290.	294.	17719

DAY = DAY OF LACTATION

TABLE C33 (PAGE 2): MATERNAL BODY WEIGHTS - LACTATION - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

RAT #	DOSAGE	GROUP II		LOW DO	SAGE		10 MG/KG/DAY	
	DAY 1	2	3	4	5	6		
17663	NOT PR	EGNANT						
17665	325.	324.	327.	326.	335.	308.		
17666	297.	304.	299.	301.	309.	289.		
17668	308.	312.	323.	329.	342.	299.		
17671	276.	273.	270.	262.	290.	256.		
17675	307.	313.	323.	325.	335.	297.		
17679	322.	313.	307.	319.	328.	295.		
17684	332.	345.	344.	339.	348.	317.		
17688	332.	339.	337.	352.	355.	311.		
17698	315.	318.	328.	339.	341.	299.		
17702	328.	327.	333.	340.	344.	307.		
17704	342.	350.	346.	349.	351.	327.		
17707	299.	299.	309.	319.	330.	296.	•	
17708	351.	357.	359.	344.	360.	328.		
17710	344.	370.	364.	363.	379.	327.		

DAY = DAY OF LACTATION

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE C33 (PAGE 3): MATERNAL BODY WEIGHTS - LACTATION - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

KG/DAY	50	MIDDLE DOSAGE			I	GROUP II	DOSAGE	RAT #
		6	5	4	3	2	DAY 1	
 		280.	306.	297.	306.	299.	311.	17661
		311.	341.	329.	332.	329.	331.	17667
		296.	336.	325.	319.	322.	321.	17669
		268.	294.	292.	294.	297.	294.	17670
		265.	294.	289.	287.	276.	269.	17676
		337.	364.	354.	359.	354.	351.	17687
		274.	302.	299.	295.	286.	294.	17693
		268.	304.	295.	311.	297.	295.	17697
		310.	348.	335.	344.	343.	334.	17700
		311.	348.	345.	350.	348.	351.	17701
		330.	374.	362.	361.	349.	331.	17705
		315.	340.	341.	337.	337.	337.	17706
		262.	290.	286.	284.	287.	282.	17709
		295.	326.	318.	320.	323.	314.	17718
		318.	351.	342.	341.	334.	333.	17720

DAY = DAY OF LACTATION

TABLE C33 (PAGE 4): MATERNAL BODY WEIGHTS - LACTATION - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

RAT #	DOSAGE	GROUP IV	•	HIGH D	OSAGE		250 MG/KG/DAY
	DAY 1	2	3	4	5	6	
17664	NOT PR	EGNANT; M	ATING NOT	CONFIRME	 D		
17677	304.	298.	304.	304.	304.	287.	
17678	327.	324.	332.	328.	330.	293.	
17682	306.	310.	317.	321.	338.	300.	
17683	298.	302.	296.	294.	304.	259.	
17685	293.	304.	295.	294.	307.	277.	
17686	NOT PR	EGNANT					
17689	301.	302.	307.	312.	324.	285.	
17691	303.	308.	310.	307.	315.	286.	
17692	273.	279.	282.	291.	300.	277.	
17696	248.	SACRIF	ICED DUE '	TO NO SUR	VIVING PUPS	ON DAY 2	2 OF LACTATION
17699	314.	318.	315.	320.	322.	283.	
17711	248.	SACRIF	ICED DUE	TO NO SUR	VIVING PUPS		2 OF LACTATION
17712	307.	313.	304.	310.	322.	292.	
17714	330.	332.	331.	336.	326.	294.	

DAY = DAY OF LACTATION

TABLE C34 (PAGE 1): FEED CONSUMPTION VALUES - PRECOHABITATION - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

RAT #	DOSAGE	GROUP I	VEHICLE	0 (VEHICLE) MG/KG/DAY
DAY	S 1- 8	8- 15a		
17662	138.	132.		
17672	141.	150.		
17673	103.	110.		
17674	145.	150.		
17680	133.	145.		
17681	134.	141.		
17690	127.	146.		
17694	128.	141.		
17695	141.	139.		
17703	136.	147.		
17713	129.	130.		·
17715	136.	136.		
17716	196.	192.		
17717	129.	148.		
17719	123.	124.		

DAY = DAY OF STUDY

ALL WEIGHTS WERE RECORDED IN GRAMS (G).

TABLE C34 (PAGE 2): FEED CONSUMPTION VALUES - PRECOHABITATION - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

RAT #	DOSAGE O	GROUP II	LOW DOSAGE	10 MG/	/KG/DAY	
DAYS	1- 8 8	3- 15a				
17663	117.	139.				
17665	156.	149.				
17666	134.	141.				
17668	126.	131.				
17671	115.	112.				
17675	128.	143.				
17679	145.	151.				
17684	140.	156.				
17688	128.	153.				
17698	142.	141.				
17702	143.	150.				
17704	139.	162.				
17707	124.	122.				
17708	151.	160.				
17710	145.	164.				

DAY = DAY OF STUDY

ALL WEIGHTS WERE RECORDED IN GRAMS (G).

TABLE C34 (PAGE 3): FEED CONSUMPTION VALUES - PRECOHABITATION - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

RAT #	DOSAGE GROUP	MIDDLE DOSAGE	50 MG/KG/DAY
DAYS	5 1- 8 8- 15a		
17661	123. 117.		
17667	130. 132.		
17669	150. 146.		
17670	138. 132.		
17676	119. 125.		
17687	187. 191.		
17693	140. 133.		
17697	129. 136.		
17700	157. 153.		
17701	160. 167.		
17705	124. 150.		
17706	140. 146.		
17709	110. 118.		
17718	124. 133.		
17720	144. 158.		

DAY = DAY OF STUDY

ALL WEIGHTS WERE RECORDED IN GRAMS (G).

TABLE C34 (PAGE 4): FEED CONSUMPTION VALUES - PRECOHABITATION - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

RAT #	DOSAGE	GROUP IV	HIGH DOSAGE	250 MG/KG/DAY	
DAYS	1- 8	8- 15a		·	
17664	125.	134.			
17677	147.	145.			
17678	123.	129.			
17682	178.	b			
17683	118.	122.			
17685	133.	149.			
17686	121.	122.			
17689	135.	139.			
17691	113.	141.			
17692	126.	137.			
17696	108.	124.			
17699	138.	141.			
17711	119.	122.			
17712	109.	122.			
17714	147.	153.			

DAY = DAY OF STUDY

- a. Last value recorded before cohabitation.
- b. Spilled feed precluded the calculation of this value.

TABLE C35 (PAGE 1): MATERNAL FEED CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

RAT #	DOSAGE	GROUP I		VEHICL	E		0 (VEHICLE) MG/KG/DAY
PREGNANCY STATUS DAY	S 0 - 7	7 - 10	10 - 12	12 - 15	15 - 18	18 - 20	
17662 P	159.	80.	50.	74.	78.	42.	
17672 P	171.	75.	55.	85.	85.	54.	
17673 P	138.	64.	45.	67.	67.	50.	
17674 P	171.	83.	53.	85.	92.	68.	
17680 P	165.	79.	55.	85.	91.	56.	
17681 P	159.	77.	53.	82.	78.	49.	
17690 P	190.	89.	61.	94.	99.	62.	
17694 P	168.	76.	44.	80.	83.	52.	
17695 P	161.	72.	52.	81.	80.	51.	
17703 P	183.	84.	55.	85.	91.	47.	
17713 P	154.	74.	49.	75.	71.	39.	
17715 P	176.	77.	58.	90.	75.	56.	
17716 P	159.	66.	48.	75.	69.	52.	
17717 P	148.	66.	41.	65.	75.	44.	
17719 P	149.	67.	43.	66.	74.	50.	

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE C35 (PAGE 2): MATERNAL FEED CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

RAT #	DOSAGE	GROUP II		LOW D	OSAGE			10 MG/KG/DAY	
PREGNANCY STATUS DAYS	G 0 - 7	7 - 10	10 - 12	12 - 15	15 - 18	18 - 20			 
17663 NP	139.	63.	39.	57.	56.	31.			
17665 P	168.	75.	56.	78.	83.	45.			
17666 P	135.	59.	39.	61.	71.	46.			
17668 P	157.	83.	55.	81.	88.	44.			
17671 P	139.	69.	41.	62.	72.	41.			
17675 P	152.	71.	47.	69.	76.	51.			
17679 P	164.	75.	52.	82.	83.	49.			
17684 P	170.	76.	57.	87.	86.	58.			
17688 P	165.	80.	43.	74.	101.	55.			
17698 P	168.	81.	55.	83.	85.	40.			
17702 P	166.	71.	42.	81.	84.	58.			
17704 P	179.	82.	60.	98.	99.	57.	-		
17707 P	139.	63.	51.	73.	74.	48.			
17708 P	172.	87.	52.	83.	95.	61.			
17710 P	207.	84.	67.	101.	92.	55.			

TABLE C35 (PAGE 3): MATERNAL FEED CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

RAT #	DOSAGE	GROUP II	Ι	MIDDL	E DOSAGE		50 MG/KG/DAY	
PREGNANCY STATUS DAY	7S 0 - 7	7 - 10	10 - 12	12 - 15	15 - 18	18 - 20		
17661 P	140.	71.	58.	86.	90.	58.		
17667 P	154.	73.	47.	74.	80.	50.		
17669 P	155.	70.	52.	76.	89.	48.		
17670 P	129.	60.	44.	73.	70.	50.		
17676 P	126.	58.	47.	66.	65.	41.		
17687 P	207.	87.	58.	92.	81.	61.		
17693 P	146.	65.	40.	54.	68.	52.		
17697 P	146.	64.	48.	77.	86.	44.		
17700 P	169.	81.	54.	91.	98.	52.		
17701 P	188.	83.	53.	88.	94.	58.		
17705 P	167.	84.	56.	85.	94.	54.		
17706 P	178.	78.	53.	83.	75.	52.		
17709 P	143.	52.	38.	53.	65.	45.		
17718 P	152.	62.	45.	67.	72.	51.		
17720 P	172.	79.	57.	91.	84.	58.		

 $<sup>{\</sup>tt P} = {\tt PREGNANT} \quad {\tt NP} = {\tt NOT} \ {\tt PREGNANT} \ ({\tt VALUES} \ {\tt EXCLUDED} \ {\tt FROM} \ {\tt AVERAGES})$   ${\tt DAYS} \ = \ {\tt DAYS} \ {\tt OF} \ {\tt PRESUMED} \ {\tt GESTATION}$ 

TABLE C35 (PAGE 4): MATERNAL FEED CONSUMPTION VALUES - PRESUMED GESTATION - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

RAT #	DOSAGE	GROUP IV		HIGH I	OSAGE		250 MG/KG/DAY
PREGNANCY STATUS DAYS	S 0 - 7	7 - 10	10 - 12	12 - 15	15 - 18	18 - 20	
L7664 NP	MATING	NOT CONF	ERMED				
17677 P	153.	73.	52.	82.	72.	45.	
17678 P	175.	73.	58.	79.	79.	55.	
17682 P	170.	72.	68.	77.	80.	52.	
17683 P	136.	82.	57.	85.	93.	46.	
17685 P	174.	76.	42.	69.	86.	51.	
17686 NP	148.	63.	34.	50.	48.	44.	
17689 P	140.	78.	50.	76.	82.	51.	
17691 P	a	74.	46.	76.	76.	42.	
17692 P	152.	67.	47.	77.	84.	51.	
17696 P	136.	60.	53.	72.	79.	47.	
17699 P	162.	72.	58.	87.	97.	49.	
17711 P	136.	55.	47.	71.	75.	50.	
17712 P	174.	82.	54.	89.	106.	65.	
17714 P	164.	82.	56.	90.	89.	47.	

P = PREGNANT NP = NOT PREGNANT (VALUES EXCLUDED FROM AVERAGES)

DAYS = DAYS OF PRESUMED GESTATION

ALL WEIGHTS WERE RECORDED IN GRAMS (G).

a. Spilled feed precluded the calculation of this value.

TABLE C36 (PAGE 1): MATERNAL FEED CONSUMPTION VALUES - LACTATION - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

RAT #	DOSAGE GROUP I	VEHICLE	0 (VEHICLE) MG/KG	DAY
D	AY 1 - 5			
17662	144.			
17672	143.			
17673	93.			
17674	97.			
17680	150.			
17681	129.			
17690	168.			
17694	126.			
17695	118.			
17703	127.			
17713	100.			
17715	138.			
17716	138.			
17717	94.			•
17719	121.			

DAY = DAY OF LACTATION

TABLE C36 (PAGE 2): MATERNAL FEED CONSUMPTION VALUES - LACTATION - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

RAT #	DOSAGE GROUP II	LOW DOSAGE	10 MG/KG/DAY	
Di	AY 1 - 5			
17663	NOT PREGNANT			
17665	133.			
17666	131.			
17668	158.			
17671	117.			
17675	153.			
17679	118.			
17684	156.			
17688	147.			
17698	a			
17702	139.			
17704	164.			
17707	147.			
17708	166.			
17710	163.			

DAY = DAY OF LACTATION

ALL WEIGHTS WERE RECORDED IN GRAMS (G).

a. Spilled feed precluded the calculation of this value.

TABLE C36 (PAGE 3): MATERNAL FEED CONSUMPTION VALUES - LACTATION - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

RAT #	DOSAGE GROUP III	MIDDLE DOSAGE	50 MG/KG/D	AY
I	DAY 1 - 5			
17661	116.			
17667	110.			
17669	141.			
17670	109.			
17676	130.			
17687	154.			
17693	119.			
17697	110.			
17700	167.			
17701	126.			
17705	a			
17706	150.			
17709	105.			
17718	141.			
17720	173.			

DAY = DAY OF LACTATION

ALL WEIGHTS WERE RECORDED IN GRAMS (G).

a. Spilled feed precluded the calculation of this value.

TABLE C36 (PAGE 4): MATERNAL FEED CONSUMPTION VALUES - LACTATION - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

DAY 1 - 5  17664 NOT PREGNANT; MATING NOT CONFIRMED 17677 74. 17678 111. 17682 186. 17683 109. 17685 114. 17686 NOT PREGNANT 17689 141. 17691 133. 17692 106. 17696 SACRIFICED DUE TO NO SURVIVING PUPS ON DAY 2 OF LACTATION 17699 113. 17711 SACRIFICED DUE TO NO SURVIVING PUPS ON DAY 2 OF LACTATION 17712 155.	RAT #	DOSAGE GROUP IV	HIGH DOSAGE	250 MG/KG/DAY	
17677 74. 17678 111. 17682 186. 17683 109. 17685 114. 17686 NOT PREGNANT 17689 141. 17691 133. 17692 106. 17696 SACRIFICED DUE TO NO SURVIVING PUPS ON DAY 2 OF LACTATION 17699 113. 17711 SACRIFICED DUE TO NO SURVIVING PUPS ON DAY 2 OF LACTATION 17712 155.		DAY 1 - 5			
17677 74. 17678 111. 17682 186. 17683 109. 17685 114. 17686 NOT PREGNANT 17689 141. 17691 133. 17692 106. 17696 SACRIFICED DUE TO NO SURVIVING PUPS ON DAY 2 OF LACTATION 17699 113. 17711 SACRIFICED DUE TO NO SURVIVING PUPS ON DAY 2 OF LACTATION 17712 155.	17664	NOT PREGNANT; MATING	NOT CONFIRMED		
17682 186. 17683 109. 17685 114. 17686 NOT PREGNANT 17689 141. 17691 133. 17692 106. 17696 SACRIFICED DUE TO NO SURVIVING PUPS ON DAY 2 OF LACTATION 17699 113. 17711 SACRIFICED DUE TO NO SURVIVING PUPS ON DAY 2 OF LACTATION 17712 155.	17677				
17683 109. 17685 114. 17686 NOT PREGNANT 17689 141. 17691 133. 17692 106. 17696 SACRIFICED DUE TO NO SURVIVING PUPS ON DAY 2 OF LACTATION 17699 113. 17711 SACRIFICED DUE TO NO SURVIVING PUPS ON DAY 2 OF LACTATION 17712 155.	17678	111.			
17685 114. 17686 NOT PREGNANT 17689 141. 17691 133. 17692 106. 17696 SACRIFICED DUE TO NO SURVIVING PUPS ON DAY 2 OF LACTATION 17699 113. 17711 SACRIFICED DUE TO NO SURVIVING PUPS ON DAY 2 OF LACTATION 17712 155.	17682	186.			
17686 NOT PREGNANT 17689 141. 17691 133. 17692 106. 17696 SACRIFICED DUE TO NO SURVIVING PUPS ON DAY 2 OF LACTATION 17699 113. 17711 SACRIFICED DUE TO NO SURVIVING PUPS ON DAY 2 OF LACTATION 17712 155.	17683	109.	,		
17689 141. 17691 133. 17692 106. 17696 SACRIFICED DUE TO NO SURVIVING PUPS ON DAY 2 OF LACTATION 17699 113. 17711 SACRIFICED DUE TO NO SURVIVING PUPS ON DAY 2 OF LACTATION 17712 155.	17685	114.			
17691 133. 17692 106. 17696 SACRIFICED DUE TO NO SURVIVING PUPS ON DAY 2 OF LACTATION 17699 113. 17711 SACRIFICED DUE TO NO SURVIVING PUPS ON DAY 2 OF LACTATION 17712 155.	17686	NOT PREGNANT			
17692 106. 17696 SACRIFICED DUE TO NO SURVIVING PUPS ON DAY 2 OF LACTATION 17699 113. 17711 SACRIFICED DUE TO NO SURVIVING PUPS ON DAY 2 OF LACTATION 17712 155.	17689	141.			
17696 SACRIFICED DUE TO NO SURVIVING PUPS ON DAY 2 OF LACTATION 17699 113. 17711 SACRIFICED DUE TO NO SURVIVING PUPS ON DAY 2 OF LACTATION 17712 155.	17691	133.			
17699 113. 17711 SACRIFICED DUE TO NO SURVIVING PUPS ON DAY 2 OF LACTATION 17712 155.	17692	106.			
17699 113. 17711 SACRIFICED DUE TO NO SURVIVING PUPS ON DAY 2 OF LACTATION 17712 155.	17696	SACRIFICED DUE TO NO	SURVIVING PUPS ON DAY 2 OF LACTA	TION	
17712 155.	17699				
17712 155.	17711	SACRIFICED DUE TO NO	SURVIVING PUPS ON DAY 2 OF LACTA	TION	
18814	17712				
1//14 113.	17714	113.			

DAY = DAY OF LACTATION

TABLE C37 (PAGE 1): MATING AND FERTILITY, ESTROUS CYCLING AND DAYS IN COHABITATION - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

	PRECOHABITATION					
	ESTROUS STAGES/	DAYS IN	MATING	MATING	PREGNANCY	
RAT #	14 DAYS	COHABITATION	STATUS	DATE	STATUS	
DOSAGE GROUP I		VEHICLE	0 (VEHIC	CLE) MG/KG/DAY		
17662	3	3	M	C	P	
17672	4	4	М	C	P	
17673	2	1	M	C	P	
17674	3	1	M	C	. P	
17680	4	3	M	Č	P	
17681	3	3	M	Č	D	
17690	4	3	M	č	D D	
17694	3	ī	M	č	r D	
17695	2	2	M	C	p D	
17703	4	3	M	C	P	
17713	4	3	M	C	P	
17715	4	4	M	C	P P	
17716	4	4	M	C	P P	
17717	1a	1	M	C	P P	
17719	1	9	M	C	P	
					P	
OOSAGE GROUP II	[	LOW DOSAGE	10 MG/KG	G/DAY		
L7663	4	3	M	C	NP	
L7665	3	- 3	М	C	P	
17666	3	1	M	C	P	
L7668	4	3	M	C	P	
17671	4	3	M	C	Þ	
17675	3	2	М	C	p	
17679	3	3	М	Č	P	
17684	4	4	M	C	P	
L7688	4	3	M	C	Þ	
17698	4	3	 М	C	p P	
17702	1	1	M	Č	P P	
L7704	3	2	M	Č	p	
L7707	3	4	M	C	P P	
L7708	4	1	M	C	_	
.7710	1	4	M	C	P P	

M = MATED C = CONFIRMED P = PREGNANT NP = NOT PREGNANT

a. Six or more consecutive days of diestrus were observed.

TABLE C37 (PAGE 2): MATING AND FERTILITY, ESTROUS CYCLING AND DAYS IN COHABITATION - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

	PRECOHABITATION					
	ESTROUS STAGES/	DAYS IN	MATING	MATING	PREGNANCY	
	14 DAYS	COHABITATION	STATUS	DATE	STATUS	
OOSAGE GROUP II	I	MIDDLE DOSAGE	50 MG/KG/DAY	r		
	3	2	M	C	P	
L7667	3	2	M	Ċ	P	
17669	4	3	M	Ċ	P	
.7670	4	4	M	Č .	P	
.7676	3	2	M	Č	P	
7687	3	4	M	C	P.	
7693	3	1	M	C	P	
7697	3	3	M	C	E E	
7700	4	3	M	C	r D	
7701	4	3	 М	C	r B	
.7705	4	3	M	C	r F	
7706	1	4	M	C	r D	
7709	4	13	M	C	r D	
7718	4	13	M	C	P	
.7720	1a	4	M	C	P P	
OOSAGE GROUP IV		TITOU DOGACE				
OBAGE GROUP IV		HIGH DOSAGE	250 MG/KG/DA			
7664	4	14	DID NOT MATE	_	-	
7677	3	4	М	C	P	
7678	3	4	M	C	P	
7682	3	13	M	C	P	
7683	3	3	M	C	P	
7685	2	1	M	C	P	
7686	4	1	M	С	NP	
7689	4	1	М	C	P	
7691	4	4	М	С	P	
7692	3	1	М	С	- P	
7696	4	1	М	Ċ	- P	
7699	4	3	M	Ċ	- P	
7711	3	. 1	M	Ċ	p p	
7712	3	1	M	Ċ	- P	
7714	4	3	M	ď	-	

M = MATED C = CONFIRMED P = PREGNANT NP = NOT PREGNANT

a. Six or more consecutive days of diestrus were observed.

TABLE C38 (PAGE 1): FUNCTIONAL OBSERVATIONAL BATTERY - INDIVIDUAL DATA - FEMALE RATS

DOSAGE GROUP I						0 (VEHICLE) MG/KG/DAY
RAT #	17662	17672	17673	17674	17680	
HOME CAGE BEHAVIOR	2	1	1	1	2	
ALTERATIONS (HOME CAGE)	1	1	1	1	1	
REACTION TO REMOVAL	1	1	1	1	1	
REACTION TO HANDLING	1	1	1	1	1	
REARS IN OPEN FIELD	6	9	6	8	10	
DEFECATION IN OPEN FIELD	1	1	1	1	1	
URINATION IN OPEN FIELD	1	1	1	1	1	
LEVEL OF AROUSAL	3	3	3	3	3	
ALTERATIONS (OPEN FIELD)	1	1	1	1	4c	
GAIT PATTERN	1	1	1	1	1	
GAIT ABNORMALITY, SEVERITY	1	1	1	1	1	
PALPEBRAL CLOSURE	1	1	1	1	1	
PROMINENCE OF THE EYE	1	1	1	1	1	
LACRIMATION	1	1	1	1	1	
SALIVATION	1	1	1	1	1	
PILOERECTION	0	0	0	0	0	
ABNORMAL RESPIRATION	0	0	0	0	0	
APPEARANCE	1	1	1	1	1	
VISUAL REACTION	2	2	2	2	2	
TACTILE REACTION	2	2	2	2	2	
AUDITORY REACTION	3	3	3	3	3	
TAIL-PINCH REACTION	2	2	2	2	2	
VISUAL PLACING RESPONSE	1	1	1	1	1	
AIR RIGHTING RESPONSE	1	1	1	1	1	
PUPIL RESPONSE TO LIGHT	1	1	1	1	1	
FORELIMB GRIP TEST #1	310a	315	355	320b	225	
FORELIMB GRIP TEST #2	355	325	255	285	220	
HINDLIMB GRIP TEST #1	145	305	205	370	375	
HINDLIMB GRIP TEST #2	190	325	215	220	390	
LANDING FOOT SPLAY #1	6.6	6.1	7.2	6.7	6.7	
LANDING FOOT SPLAY #2	7.7	6.8	5.5	6.8	6.8	
BODY WEIGHT (G)	343	360	295	324	342	

a. Soft or liquid feces were observed during the forelimb grip testing.

b. Animal fell aproximately 3 feet to floor, animal appeared normal.

c. Value appeared incorrectly recorded and was excluded from group averages and statistical analyses.

TABLE C38 (PAGE 2): FUNCTIONAL OBSERVATIONAL BATTERY - INDIVIDUAL DATA - FEMALE RATS

DOSAGE GROUP II					10 MG/KG/DAY
RAT #	17665	17666	17668	17671	
HOME CAGE BEHAVIOR	1	2	2	1	
ALTERATIONS (HOME CAGE)	1	1	1	1	
REACTION TO REMOVAL	1	1	1	1	
REACTION TO HANDLING	1	1	1	1	
REARS IN OPEN FIELD	12	8	11	10	
DEFECATION IN OPEN FIELD	1	1	2	1	
URINATION IN OPEN FIELD	1	1	2	1	
LEVEL OF AROUSAL	3	3	3	3	
ALTERATIONS (OPEN FIELD)	1	1	1	1	
GAIT PATTERN	1	1	1	1	
GAIT ABNORMALITY, SEVERITY	1	1	1	1	
PALPEBRAL CLOSURE	1	1	1	1	
PROMINENCE OF THE EYE	1	1	1	1	
LACRIMATION	1	1	1	1	
SALIVATION	1	1	1	1	
PILOERECTION	0	0	0	0	
ABNORMAL RESPIRATION	0	0	0	0	
APPEARANCE	1a	1	1	1c	
VISUAL REACTION	2	2	2	2	
TACTILE REACTION	2	2	2	2	
AUDITORY REACTION	3	3	3	3	
TAIL-PINCH REACTION	2	2	2	2	
VISUAL PLACING RESPONSE	1	1	1	1	
AIR RIGHTING RESPONSE	1	1	1	1	
PUPIL RESPONSE TO LIGHT	1	1	1	1	
FORELIMB GRIP TEST #1	210	385	175b	280	
FORELIMB GRIP TEST #2	170	455	270	270	
HINDLIMB GRIP TEST #1	285	370	335	220	
HINDLIMB GRIP TEST #2	340	325	350	225	
LANDING FOOT SPLAY #1	6.7	6.5	7.7	4.1	
LANDING FOOT SPLAY #2	6.8	6.4	8.1	4.1	
BODY WEIGHT (G)	335	310	353	292	

a. Localized alopecia: both forepaws (0.5 cm in diameter).

b. Animal fell apprroximately 3 to 4 feet and appeared normal.

c. Localized alopecia: both forepaws and forelimbs (2.0 cm x 0.5 cm).

TABLE C38 (PAGE 3): FUNCTIONAL OBSERVATIONAL BATTERY - INDIVIDUAL DATA - FEMALE RATS

DOSAGE GROUP III						50 MG/KG/DAY
RAT #	17661	17667	17669	17670	17676	
HOME CAGE BEHAVIOR	2	2	2	2	2	
ALTERATIONS (HOME CAGE)	1	1	1	1	1	
REACTION TO REMOVAL	1	1	1	1	1	
REACTION TO HANDLING	1	1	1	1	1	
REARS IN OPEN FIELD	9	9	15	8	9	
DEFECATION IN OPEN FIELD	1	1	1	1	1	
URINATION IN OPEN FIELD	1	1	1	1	1	
LEVEL OF AROUSAL	3	3	3	3	3	
ALTERATIONS (OPEN FIELD)	1	1	1	1	1	
GAIT PATTERN	1	1	1	1	1	
GAIT ABNORMALITY, SEVERITY	1	1	1	1	1	
PALPEBRAL CLOSURE	1	1	1	1	1	
PROMINENCE OF THE EYE	1	1	1	1	1	
LACRIMATION	1	1	1	1	1	
SALIVATION	2	1	1	1	1	
PILOERECTION	0	0	0	0	0	
ABNORMAL RESPIRATION	0	0	0	0	0	
APPEARANCE	1	1	1a	1	1	
VISUAL REACTION	2	2	2	2	2	
TACTILE REACTION	2	2	2	2	2	
AUDITORY REACTION	3	3	3	3	3	
TAIL-PINCH REACTION	2	2	2	2	2	•
VISUAL PLACING RESPONSE	1	1	1	1	1	
AIR RIGHTING RESPONSE	1	1	1	1	1	
PUPIL RESPONSE TO LIGHT	1	1	1	1	1	
FORELIMB GRIP TEST #1	190	200	245	275	230	
FORELIMB GRIP TEST #2	310	200	245	240	270	
HINDLIMB GRIP TEST #1	270	180	280	310	135	
HINDLIMB GRIP TEST #2	170	235	215	220	195	
LANDING FOOT SPLAY #1	8.7	6.1	6.0	6.7	5.7	
LANDING FOOT SPLAY #2	6.8	7.7	5.8	6.6	6.7	
BODY WEIGHT (G)	308	346	347	295	310	

a. Localized alopecia: both forepaws and forelimbs (2.0 cm  $\times$  0.5 cm).

TABLE C38 (PAGE 4): FUNCTIONAL OBSERVATIONAL BATTERY - INDIVIDUAL DATA - FEMALE RATS

DOSAGE GROUP IV						250 MG/KG/DAY
RAT #	17677	17678	17682	17683	17691	
HOME CAGE BEHAVIOR	1	2	2	1	2	
ALTERATIONS (HOME CAGE)	1	1	1	1	1	
REACTION TO REMOVAL	1	1	1	1	1	
REACTION TO HANDLING	1	1	1	1	1	
REARS IN OPEN FIELD	9	8	12	6	10	
DEFECATION IN OPEN FIELD	1	1	1	1	1	
URINATION IN OPEN FIELD	1	1	1	1	1	
LEVEL OF AROUSAL	3	3	3	3	3	
ALTERATIONS (OPEN FIELD)	1	1	1	1	1	
GAIT PATTERN	1	1	i	1	1	
GAIT ABNORMALITY, SEVERITY	1	1	1	1	1	
PALPEBRAL CLOSURE	1	1	1	1	1	
PROMINENCE OF THE EYE	1	1	1	1	1	
LACRIMATION	1	1	1	1	1	
SALIVATION	1	1	1	1	1	
PILOERECTION	0	0	0	0	0	
ABNORMAL RESPIRATION	0	0	0	0	0	
APPEARANCE	1	1	1	1a	1	
VISUAL REACTION	2	2	2	2	2	
FACTILE REACTION	2	2	2	2	2	
AUDITORY REACTION	3	3	3	3	3	
FAIL-PINCH REACTION	2	2	2	2	2	
ISUAL PLACING RESPONSE	1	1	1	1	1	
AIR RIGHTING RESPONSE	1	1	1	1	1	
PUPIL RESPONSE TO LIGHT	1	1	1	1	1	
FORELIMB GRIP TEST #1	405	200	455	350	455	
FORELIMB GRIP TEST #2	330	190	410	290	495	
HINDLIMB GRIP TEST #1	210	365	510	190	225	
HINDLIMB GRIP TEST #2	345	360	535	270	280	
LANDING FOOT SPLAY #1	5.5	6.3	6.2	7.6	6.5	
LANDING FOOT SPLAY #2	6.8	7.4	5.2	8.6	7.6	
BODY WEIGHT (G)	316	340	337	296	280	

a. Localized alopecia: right forelimb (1.5 cm x 1.0 cm), right inguinal area (6.0 cm x 2.0 cm) and right hindlimb (2.0 cm x 2.0 cm).

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE C39 (PAGE 1): MOTOR ACTIVITY - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

DOSAGE GROUP I				0 (VE	HICLE) MG/KG/DA	Y
RAT NUMBER	17662	17672	17673	17674	17680	
DAY 86	***************************************					
NUMBER OF MOVEMENTS						
BLOCK 1	70	70	90	71	74	
BLOCK 2	78	84	92	90	60	
BLOCK 3	56	84	47	85	77	
BLOCK 4	40	51	26	103	70	
BLOCK 5	25	77	92	91	42	
BLOCK 6	14	50	91	93	77	
BLOCK 7	42	76	27	98	75	
BLOCK 8	47	5	8	72	60	
BLOCK 9	75	29	1	78	51	
BLOCK 10	76	64	4	79	57	
BLOCK 11	37	77	3	90	94	
BLOCK 12	7	74	8	74	75	
BLOCK 13	40	60	12	78	61	
BLOCK 14	38	75	80	62	47	
BLOCK 15	44	58	56	70	48	
BLOCK 16	46	44	41	75	61	
BLOCK 17	28	63	71	104	83	
BLOCK 18	34	61	62	48	67	
TOTAL	797	1102	811	1461	1179	

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE C39 (PAGE 2): MOTOR ACTIVITY - INDIVIDUAL DATA - Fo GENERATION FEMALE RATS

DOSAGE GROUP I				0 (VE	HICLE) MG/KG/I	DAY		
RAT NUMBER	17662	17672	17673	17674	17680			 
DAY 86						,	, , , , , , , , , , , , , , , , , , , ,	 
TIME (SECONDS) SPENT	IN MOVEMENT							
BLOCK 1	179	180	139	231	222			
BLOCK 2	172	172	113	193	244			
BLOCK 3	135	157	27	146	187			
BLOCK 4	58	69	20	164	148			
BLOCK 5	16	105	105	159	112			
BLOCK 6	9	97	75	113	138			
BLOCK 7	55	119	30	118	117			
BLOCK 8	89	10	7	108	124			
BLOCK 9	158	50	0	90	75			
BLOCK 10	146	126	2	83	83			
BLOCK 11	38	113	1	92	133			
BLOCK 12	7	129	17	91	115			
BLOCK 13	42	137	9	116	111			
BLOCK 14	63	115	95	65	91			
BLOCK 15	95	112	68	105	82			
BLOCK 16	114	77	26	78	96			
BLOCK 17	28	82	67	146	122			
BLOCK 18	47	96	62	44	102			
TOTAL	1451	1946	863	2142	2302			

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE C39 (PAGE 3): MOTOR ACTIVITY - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

DOSAGE GROUP II				10 MG/	KG/DAY	
RAT NUMBER	17665	17666	17668	17671		
DAY 86						
NUMBER OF MOVEMENTS						
BLOCK 1	66	75	75	76		
BLOCK 2	85	72	83	73		
BLOCK 3	69	87	84	71		
BLOCK 4	96	17	74	63		
BLOCK 5	76	37	20	74		
BLOCK 6	71	60	1	92		
BLOCK 7	108	68	1	69		
BLOCK 8	74	57	2	78		
BLOCK 9	56	61	77	68		
BLOCK 10	76	71	80	51		
BLOCK 11	45	62	42	63		
BLOCK 12	2	27	65	70		
BLOCK 13	28	4	54	51		
BLOCK 14	14	33	3	68		
BLOCK 15	74	58	2	64		
BLOCK 16	83	65	2	68		
BLOCK 17	12	16	0	73		
BLOCK 18	7	3	57	59		
TOTAL	1042	873	722	1231		

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE C39 (PAGE 4): MOTOR ACTIVITY - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

DOSAGE GROUP II				10 MG/	KG/DAY	
RAT NUMBER	17665	17666	17668	17671		
DAY 86			- 10-40000	TOTAL STATE OF THE		 
TIME (SECONDS) SPENT	IN MOVEMENT					
BLOCK 1	194	220	156	163		
BLOCK 2	176	138	163	126		
BLOCK 3	194	90	139	126		
BLOCK 4	151	20	70	174		
BLOCK 5	91	54	17	164		
BLOCK 6	104	104	0	96		
BLOCK 7	125	116	0	99		
BLOCK 8	101	81	0	155		
BLOCK 9	99	100	129	148		
BLOCK 10	128	122	93	88		
BLOCK 11	63	117	34	202		
BLOCK 12	0	37	73	187		
BLOCK 13	21	2	77	82		
BLOCK 14	5	44	2	142		
BLOCK 15	89	61	0	126		
BLOCK 16	77	120	0	111		
BLOCK 17	7	15	0	155		
BLOCK 18	6	1	64	151		
TOTAL	1631	1442	1017	2495		

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE C39 (PAGE 5): MOTOR ACTIVITY - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

DOSAGE GROUP III				50	MG/KG/DAY		
RAT NUMBER	17661	17667	17669	17670	17676	7. ol	
DAY 86				***************************************			 
NUMBER OF MOVEMENTS							
BLOCK 1	59	57	74	58	86		
BLOCK 2	81	85	43	73	78		
BLOCK 3	78	81	13	13	89		
BLOCK 4	75	73	2	0	82		
BLOCK 5	68	15	9	45	100		
BLOCK 6	60	0	76	66	56		
BLOCK 7	66	74	62	81	79		
BLOCK 8	64	65	43	53	46		
BLOCK 9	84	81	6	54	2		
BLOCK 10	61	60	33	63	45		
BLOCK 11	64	70	15	44	70		
BLOCK 12	59	25	5	19	61		
BLOCK 13	61	9	3	46	56		
BLOCK 14	52	4	31	63	66		
BLOCK 15	68	3	54	67	80		
BLOCK 16	67	3	72	60	31		
BLOCK 17	65	4	73	62	73		
BLOCK 18	60	2	12	58	64		
TOTAL	1192	711	626	925	1164		

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE C39 (PAGE 6): MOTOR ACTIVITY - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

DOSAGE GROUP III				50 M	G/KG/DAY
RAT NUMBER	17661	17667	17669	17670	17676
DAY 86					
TIME (SECONDS) SPENT	IN MOVEMENT				
BLOCK 1	242	251	196	231	182
BLOCK 2	190	177	54	128	159
BLOCK 3	179	116	12	10	104
BLOCK 4	140	67	0	0	107
BLOCK 5	193	17	8	39	129
BLOCK 6	96	0	104	123	62
BLOCK 7	122	86	121	126	99
BLOCK 8	134	144	45	79	36
BLOCK 9	136	154	3	66	1
BLOCK 10	82	67	23	114	35
BLOCK 11	127	118	10	68	90
BLOCK 12	99	27	2	25	73
BLOCK 13	107	10	1	70	96
BLOCK 14	75	1	86	102	81
BLOCK 15	98	2	117	114	107
BLOCK 16	129	1	89	97	27
BLOCK 17	113	3	94	114	109
BLOCK 18	116	2	5	77	81
TOTAL	2378	1243	970	1583	1578

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE C39 (PAGE 7): MOTOR ACTIVITY - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

DOSAGE GROUP IV				250	MG/KG/DAY	
RAT NUMBER	17677	17678	17682	17683	17691	
DAY 86		•				 TO STATE OF THE ST
NUMBER OF MOVEMENTS						
BLOCK 1	71	88	59	76	91	
BLOCK 2	49	91	57	105	86	
BLOCK 3	55	88	69	77	87	
BLOCK 4	64	80	80	96	53	
BLOCK 5	48	51	80	98	69	
BLOCK 6	76	50	73	79	42	
BLOCK 7	88	31	82	69	48	
BLOCK 8	87	9	77	73	71	
BLOCK 9	61	3	12	52	71	
BLOCK 10	68	27	0	68	72	
BLOCK 11	74	79	21	63	71	
BLOCK 12	79	78	90	43	76	
BLOCK 13	4	74	67	55	50	
BLOCK 14	1	44	11	65	53	
BLOCK 15	3	60	0	77	72	
BLOCK 16	5	61	14	53	62	
BLOCK 17	5	50	2	73	62	
BLOCK 18	81	62	6	54	48	
TOTAL	919	1026	800	1276	1184	

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE C39 (PAGE 8): MOTOR ACTIVITY - INDIVIDUAL DATA - FO GENERATION FEMALE RATS

DOSAGE GROUP IV				250	MG/KG/DAY		
RAT NUMBER	17677	17678	17682	17683	17691		
DAY 86		7 to 1 to 1	***************************************			 	
TIME (SECONDS) SPENT	IN MOVEMENT						
BLOCK 1	160	186	225	166	156		
BLOCK 2	133	150	155	204	129		
BLOCK 3	98	118	122	182	103		
BLOCK 4	73	104	142	157	74		
BLOCK 5	53	118	112	163	91		
BLOCK 6	126	71	92	109	48		
BLOCK 7	114	44	128	120	75		
BLOCK 8	100	6	107	112	80		
BLOCK 9	78	0	10	135	89		
BLOCK 10	72	36	0	88	109		
BLOCK 11	102	138	15	114	80		
BLOCK 12	121	105	109	101	138		
BLOCK 13	0	93	117	77	57		
BLOCK 14	0	40	10	86	77		
BLOCK 15	3	131	0	119	72		
BLOCK 16	2	83	13	82	69		
BLOCK 17	4	67	2	104	85		
BLOCK 18	85	97	. 3	96	51		
TOTAL	1324	1587	1362	2215	1583		

TABLE C40 (PAGE 1): NATURAL DELIVERY, IMPLANTATION SITES, AND PUP VIABILITY AND SEX - INDIVIDUAL DATA - FO GENERATION FEMALE RATS/F1 GENERATION LITTERS

	DIDATION OF				1777777
RAT/	DURATION OF GESTATION				NUMBER OF LIVE PUPS AT TOTAL
LITTER	(DAYS)	LIVE S	DODM 2TTTT-	TOTAL BORN	COMPLETION OF DAY POSTPARTUM IMPLAN-  1 5 TATIONS
NUMBER	(DAIS) N	BORN N	BURIN	BORN N	1 5 TATIONS
					1 5 TATIONS M F M F N
DOSAGE	GROUP I	VEHICI	LE		0 (VEHICLE) MG/KG/DAY
17662	23	14	0		8 6 8 6 15
17672	23	16	0	16	10 6 10 6 17
17673	23	13	0	13	5 8 5 8 15
17674	23	18	0	18	12 6 12 6 18
17680	23	17	0	17	8 9 8 9 18
17681	23	16	0	16	9 7 9 7 18
17690	23	18	0	18	9 9 9 9
17694	22	16(1)	0 .	16	10 5 10 5 18
17695	22	15	0	15	9 6 9 6 15
17703	22	20(1)	1	21	8 11 8 11 22
17713	23	14	0	14	6 8 6 8 15
17715	23	13	0	13	8 5 8 5 15
17716	23	14	0	14	8 6 8 6 14
17717	22	13	0	13	5 8 5 8 13
17719	23	18	0	18	9 9 9 9
	GROUP II	LOW DO	SAGE		10 MG/KG/DAY
17663	NOT PREGNAN				
17665	23	15	0	15	8 7 8 7
17666	22	14	0	14	4 10 4 10 15
17668	23	16	0	16	7 9 7 9
17671	22	13	0	13	5 8 5 8 14
17675	23	18	0	18	12 6 12 6 18
17679	23	9	0	9	4 5 4 5 10
17684	22	16	0	16	9 7 9 7
17688	22	14	0	14	9 5 9 5
17698	22	16	0	16	9 7 9 6
17702	22	15	0	15	8 7 8 7
17704	23	19	0	19	13 6 13 6
17707	23	15	0	15	6 9 6 9
17708	22	16	0	16	9 7 9 7
17710	23	19	0	19	13 6 12 6 20

M = MALE F = FEMALE

<sup>( ) =</sup> NUMBER OF PUPS DYING PRIOR TO WEIGHING ON DAY 1 POSTPARTUM.

TABLE C40 (PAGE 2): NATURAL DELIVERY, IMPLANTATION SITES, AND PUP VIABILITY AND SEX - INDIVIDUAL DATA - FO GENERATION FEMALE RATS/F1 GENERATION LITTERS

	DURATION OF	LITTE	ER DELIV	ERED				PUPS AT	TOTAL
	GESTATION	LIVE	STILL-	ERED TOTAL	COMPLET	ION C	F DAY	POSTPARTUM	IMPLAN-
LITTER	(DAYS)	BORN	BORN	BORN		1		5	TATIONS
NUMBER	(DAYS) N	N	N	N	М	F	M	F	И
	GROUP III	MIDDI	LE DOSAG	E	50 MG	KG/I	ΆΥ		
17661	23	15		15		5			16
17667	23	13	0	13	7	6	7	6	15
17669	23	16	0	16	2	14	2	14	17
17670	23	16	0	16	6	10	6	10	16
17676	23	15	0	15	11	4	11	4	15
17687	23	15	0	15	8	7	8	7	16
17693	23	15	2	17	8	7	8	6	17
17697	23	15	0	15	9	6	9	6	16
17700	22	14	0	14	10	4	10	4	16
17701	23	14	0	14	4	10	4	10	19
17705	23	16	2	18	7	9	7	9	18
17706	23	15	0	15	10	5	10	4	16
17709	23	16	0	16	7	9	7	9	16
17718	22	16	0	16		5		5	18
	22	16		16	8	8	8	8	16
		HIGH			250 M	G/KG/	DAY		
17664	NOT PREGNANT;	MATING	NOT CON						
17677	23	4(4)	0	7[3]	_	_	-	-	13
17678	23	12	0	12	5	7	5	7	15
17682	22	14	0	14	6	8	6	8	15
17683	23	16	0	16	10	6	10	6	16
17685	23	16	1	17		13		13	17
17686	NOT PREGNANT								
17689	23	17	0	18[1]	12	5	12	5	18
17691	23	12	0	12	4	8	4	8	13
17692	23	14	2	16	7	_	7	7	16
17696	23	13	2	15	4	9	-	<u>-</u>	17
17699	23	14	0	14	8	6	7	6	16
	23	12	1	13	5	7	<i>.</i>	-	15
17711			_			-			
17711 17712	23	13	0	13	8	5	8	5	16

M = MALE F = FEMALE

<sup>( ) =</sup> NUMBER OF PUPS DYING PRIOR TO WEIGHING ON DAY 1 POSTPARTUM.

<sup>[ ] =</sup> NUMBER OF PUPS IN WHICH CANNIBALIZATION AND/OR AUTOLYSIS PRECLUDED THE DETERMINATION OF VIABILITY.

TABLE C41 (PAGE 1): PUP BODY WEIGHT LITTER AVERAGES FROM BIRTH TO DAY 5 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION LITTERS

RAT/							
LITTER	D	AY 1		I	DAY 5		
NUMBER	M		T	М	F	Т	
MATERNAL I	OSAGE G	ROUP I			VEHI	CLE	0 (VEHICLE) MG/KG/DAY
17662	7.0	6.5	6.8	11.1	10.2	10.7	
17672	6.4	6.2	6.4	10.9	9.7	10.4	
17673	6.5	5.9	6.1	8.7	8.5	8.6	
17674	6.7	6.5	6.6	9.2	8.7	9.0	
17680	7.5	6.8	7.1	11.4	10.5	10.9	
17681	6.1	5.8	6.0	9.8	9.5	9.6	
17690	6.3	6.1	6.2	9.8	9.5	9.6	
17694	6.2	5.7	6.0	10.0	9.2	9.8	
17695	5.9	5.7	5.8	9.3	9.1	9.2	
17703	5.5	5.2	5.4	8.7	7.9	8.2	
17713	6.5	6.4	6.4	10.1	10.0	10.0	
17715	8.1	8.5	8.3	11.8	12.4	12.0	
17716	7.2	6.8	7.0	9.4	9.1	9.3	
17717	6.3	6.0	6.1	8.8	8.8	8.8	
17719	6.2	6.0	6.1	8.3	8.4	8.4	
MATERNAL I	OSAGE G	ROUP I	I		LOW	DOSAGE	10 MG/KG/DAY
17663	NOT	PREGNA	NT				
17665	7.1	6.9	7.0	10.4	10.0	10.2	
17666	6.3	5.9	6.0	10.0	9.4	9.5	
17668	6.2	5.9	6.0	10.4	9.4	9.8	
17671	6.5	6.4	6.4	9.5	9.3	9.4	
17671		5.9	6.0	9.1	8.6	8.9	
17671	6.0	5.9			10 0	12.0	
	6.0 7.3	7.1	7.2	12.1	12.0	12.0	
17675			7.2 6.7	12.1 10.6	10.0	10.3	
17675 17679	7.3	7.1				10.3	
17675 17679 17684	7.3 6.8	7.1 6.6	6.7	10.6	10.0	10.3 10.5	
17675 17679 17684 17688	7.3 6.8 6.0	7.1 6.6 5.7	6.7 5.9	10.6 10.6	10.0	10.3 10.5	
17675 17679 17684 17688 17698	7.3 6.8 6.0 6.3	7.1 6.6 5.7 6.4	6.7 5.9 6.3	10.6 10.6 10.6	10.0 10.4 10.1	10.3 10.5 10.4	
17675 17679 17684 17688 17698 17702	7.3 6.8 6.0 6.3 6.2	7.1 6.6 5.7 6.4 5.7	6.7 5.9 6.3 6.0	10.6 10.6 10.6 9.8	10.0 10.4 10.1 9.0 9.4	10.3 10.5 10.4 9.5	
17675 17679 17684 17688 17698 17702 17704	7.3 6.8 6.0 6.3 6.2 6.0	7.1 6.6 5.7 6.4 5.7 6.2	6.7 5.9 6.3 6.0	10.6 10.6 10.6 9.8 9.0	10.0 10.4 10.1 9.0 9.4 10.2	10.3 10.5 10.4 9.5 9.1	

TABLE C41 (PAGE 2): PUP BODY WEIGHT LITTER AVERAGES FROM BIRTH TO DAY 5 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION LITTERS

RAT/ LITTER		AY 1			AY 5					
NUMBER	M	F	T	М	F	T				
MATERNAL D	OSAGE G	ROUP I	II		MIDI	LE DOSAGE			50 MG/KG/DAY	
17661	6.7	6.1	6.5	9.8	8.6	9.4				
17667	7.1	6.9	7.0	10.8	10.2	10.5				
17669	6.8	5.9	6.0	10.4	9.0	9.2				
17670	7.0	6.8	6.8	9.5	9.1	9.2				
17676	6.3	6.2	6.3	9.3	8.9	9.2				
17687	6.8	6.4	6.6	12.0	11.8	11.9				
17693	6.4	6.3	6.4	10.0	9.6	9.8				
17697	6.5	6.2	6.4	10.0	9.3	9.7				
17700	6.6	6.2	6.5	11.2	10.7	11.1				
17701	7.1	6.8	6.9	11.0	9.9	10.2				
17705	7.1	6.4	6.7	10.8	9.0	9.8				
17706	7.1	6.6	6.9	11.9	11.5	11.8				
17709	6.0	5.6	5.7	9.0	8.5	8.7				
17718	6.5	6.2	6.4	9.6	9.8	9.7				
17720	6.3	6.2	6.3	10.1	10.7	10.4				
MATERNAL D	OSAGE G	ROUP I	v		HIGH	DOSAGE			250 MG/KG/DAY	
17664	NOT	PREGNAI	NT; MA'	TING NO	T CONF	IRMED				
17677	NO S	JRVIVII	NG PUP	S ON DA	Y 1 OF	LACTATIO	1			
17678	7.0	6.5	6.7	10.9	10.4	10.6				
17682	6.8	6.8	6.8		11.2					
17683	6.2	6.1	6.2	7.7	7.2	7.5				
17685	5.5	5.4	5.4	7.4	7.7	7.7				
17686	NOT :	PREGNAI	NT							
17689	5.8	5.8	5.8	9.2	9.2	9.2				
17691	7.2	7.0	7.0	9.8	9.6	9.7				
17692	5.7	5.5	5.6	8.1	8.0	8.1				
17696	4.8	4.5	4.6				DAY 2 OF	LACTATION		
17699	5.8	5.5	5.7	9.0	8.8	8.9		· · · · · · · · · · · · · · · · · · ·		
17711	4.9	4.5	4.7				N DAY 2 OF	LACTATION		
17712	6.5	6.0	6.3	11.0		10.5				
17714	7.0	6.1	6.4	10.5	9.2					

M = MALE F = FEMALE T = TOTAL (SUM OF PUP WEIGHTS/NUMBER OF LIVE PUPS) DAY = DAY POSTPARTUM ALL WEIGHTS WERE RECORDED IN GRAMS (G) . MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE C42 (PAGE 1): PUP BODY WEIGHTS FROM BIRTH TO DAY 5 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS

PUP #	1 21	2 22	3 23	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
RAT/ LITTER #	MATE	RNAL D	OSAGE (	GROUP	I	VEHI	CLE			0 (V	EHICLE	) MG/K	G/DAY			OSTPAR	TUM DA	Y 1		
17662	6.8	7.3	7.3	7.5	7.1	7.0	6.5	6.9	6.6	5.3	6.5	6.7	6.5	7.2						
17672	6.6	6.2	6.7	6.9	6.0	6.1	6.5	6.8	6.0	6.3	6.5	7.0	6.1	6.4	5.9	5.6				
17673	6.6	6.7	6.7	6.2	6.2	6.1	6.2	6.6	6.2	5.8	5.6	6.0	4.9							
17674	6.0	5.8	6.8	7.0	6.2	7.0	6.7	7.0	7.4	7.2	7.0	6.7	7.1	6.6	6.5	6.4	5.8	6.6		
17680	7.0	7.3	7.4	7.9	7.4	7.6	7.6	7.6	7.0	6.0	6.6	7.0	6.5	7.6	6.9	7.5	6.6			
17681	5.9	5.9	6.6	6.0	5.3	6.5	5.6	6.2	6.6	5.9	5.7	6.0	5.9	6.1	5.7	5.7				
17690	6.8	5.0	6.3	7.0	6.1	6.4	5.9	6.7	6.4	5.7	6.2	5.7	5.9	5.9	7.0	5.6	6.3	6.3		
17694	6.5	6.4	5.7	6.1	6.0	6.2	6.4	6.5	6.0	6.5	6.2	5.5	5.6	5.2	5.8	FD 1				
17695	5.9	6.0	6.2	6.0	5.6	6.1	5.6	5.7	5.7	5.9	5.8	5.2	5.7	5.8	5.7					
17703	5.7	5.8	5.6	5.7	5.4	5.2	5.7	5.1	MD 1	MS	5.8	4.7	5.5	5.3	5.5	5.0	5.4	5.1	5.5	5.3
	4.6														3.3	3.0	3.1	3.1	3.3	3.3
17713	6.6	6.6	6.5	6.8	6.3	6.3	6.1	6.7	6.3	6.3	6.1	6.2	6.9	6.2						
17715	7.0	9.0	8.0	7.1	8.9	7.3	8.9	8.8	8.4	9.0	8.5	8.6	8.0	0.2						
17716	7.4	7.1	7.1	7.2	7.3	7.3	6.9	7.3	6.9	6.8	6.6	6.1	7.3	6.8						
17717	6.0	6.2	6.5	6.5	6.1	5.3								0.8						
							5.9	5.9	6.4	5.8	6.4	6.4	6.0							
17719	6.3	6.3	6.6	6.0	6.8	5.2	5.7	6.6	6.2	5.5	5.9	6.2	6.6	5.6	6.2	6.1	5.9	6.1		

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.

FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE

SECOND LETTER -- A-ALIVE, S-STILLBORN, U-UNCERTAIN, D-DIED, M-MISSING (PRESUMED CANNIBALIZED)

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE C42 (PAGE 2): PUP BODY WEIGHTS FROM BIRTH TO DAY 5 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS

PUP #	1 21	2 22	3 23	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
RAT/ LITTER #	MATE	RNAL D	OSAGE (	GROUP :	 II	LOW	DOSAGE			10 M	G/KG/D	AY			P	OSTPAR	TUM DA	Y 1		
17663	NOT	PREGNA	NT																	
17665	7.1	6.9	7.3	7.4	6.7	6.7	7.1	7.3	6.9	6.8	6.8	6.9	7.3	6.7	6.7					
17666	6.3	6.4	6.3	6.2	5.6	5.9	6.2	6.1	5.5	5.9	6.1	6.0	5.9	5.9						
17668	6.2	6.5	6.3	6.4	5.6	6.3	6.4	5.8	5.9	5.8	6.0	5.6	5.7	6.1	6.0	6.0				
17671	6.8	6.5	6.0	6.9	6.3	6.4	6.2	6.6	6.5	6.3	6.2	6.5	6.5							
17675	6.1	6.3	5.4	6.2	6.1	6.6	6.5	5.8	6.0	5.5	6.1	5.7	6.2	5.9	5.5	6.1	5.9	6.0		
17679	7.4	7.3	7.2	7.4	7.4	6.8	6.9	7.6	6.9											
17684	6.7	6.5	6.6	7.1	7.2	6.9	6.8	7.0	6.7	7.0	6.7	6.4	6.2	6.5	6.3	6.9				
17688	6.3	6.0	6.1	6.1	6.2	6.4	6.4	5.0	5.3	5.7	5.9	5.7	5.3	5.8						
17698	7.0	6.2	6.0	3.8	6.6	7.5	6.6	7.0	5.8	6.2	6.2	6.6	6.4	6.6	6.9	6.0				
17702	6.0	6.0	6.1	6.5	6.4	6.0	6.2	6.5	5.5	6.2	5.4	5.6	5.9	6.2	5.1					
17704	6.3	5.7	5.8	4.9	6.5	6.6	6.3	5.5	6.0	6.8	5.1	6.4	5.7	6.1	6.1	6.3	6.3	6.1	6.2	
17707	6.6	6.4	5.8	6.0	6.1	5.3	6.1	5.5	6.1	5.3	5.8	6.2	5.9	6.3	6.0					
17708	6.1	6.1	6.2	5.9	5.6	6.6	6.5	6.3	6.4	5.8	6.2	5.4	6.0	5.7	5.9	6.2				
17710	6.7	6.7	7.2	6.6	6.9	6.6	6.3	7.1	5.7	6.3	6.3	6.9	7.0	6.7	6.1	6.3	6.1	6.3	5.6	

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.

FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE

SECOND LETTER -- A-ALIVE, S-STILLBORN, U-UNCERTAIN, D-DIED, M-MISSING (PRESUMED CANNIBALIZED)

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE C42 (PAGE 3): PUP BODY WEIGHTS FROM BIRTH TO DAY 5 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS

PUP #	1 21	2 22	3 23	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
RAT/ LITTER #	MATE	RNAL D	OSAGE	GROUP :	III	MIDD:	LE DOS	AGE		50 M	G/KG/D	AY			P	ostpar	TUM DA	Y 1		
17661 17667 17669 17670 17676 17687 17693 17697 17700 17701 17705 17706 17706 17709 17718	6.5 6.9 6.6 6.6 5.5 6.7 6.2 7.2 6.7 7.3 5.9	6.8 7.1 6.2 6.5 6.4 6.7 7.1 7.4 5.6 6.5	6.6 6.5 7.1 6.6 6.5 6.4 6.5 7.0 7.5 6.8 7.4 5.8 4.4	6.4 8.7 5.6 7.5 5.8 6.0 6.8 6.5 7.0 6.9 5.7 6.5	6.7 6.5 5.4 6.6 5.0 6.6 7.3 7.3 6.4 6.9	6.7 7.5 6.1 7.4 6.7 7.0 6.9 6.7 6.9 6.5 7.4 6.7 6.0 6.9	6.8 6.9 6.1 6.7 6.2 7.2 6.5 6.1 5.8 6.7 7.4 6.9 6.1 6.7	6.3 6.5 6.0 7.5 6.0 7.2 6.1 6.6 7.0 6.7 MS 7.1 6.0 6.7	7.6 5.6 6.1 6.8 6.7 6.2 6.8 6.7 6.4 6.5 16.5	7.0 7.8 6.1 7.4 6.8 6.7 MS 5.7 6.1 7.0 7.1 6.5 6.5	6.0 6.7 6.2 6.1 6.4 6.3 6.5 6.2 6.7 6.6 5.6	6.4 6.4 6.1 6.9 6.0 6.7 6.3 6.4 6.2 7.3 6.4 6.5 5.5	5.2 8.3 6.1 5.1 6.4 6.5 6.6 5.3 6.0 6.6 6.7 6.6 5.8 5.9 6.3	6.1 5.5 6.9 6.2 6.0 6.1 6.5 6.4 6.5 6.4 5.5	6.6 6.2 7.0 6.1 6.5 6.0 6.8	5.9 7.1 6.1 6.4 5.2 6.5	FS	FS		

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.

FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE

SECOND LETTER -- A-ALIVE, S-STILLBORN, U-UNCERTAIN, D-DIED, M-MISSING (PRESUMED CANNIBALIZED)

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE C42 (PAGE 4): PUP BODY WEIGHTS FROM BIRTH TO DAY 5 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS

PUP #	1 21	2 22	3 23	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
RAT/ LITTER #	MATE	RNAL D	OSAGE	GROUP	IV	HIGH	DOSAG	E	<del></del>	250 1	 MG/KG/	DAY			P	OSTPAR	TUM DA	Y 1		
17664	NOT	PREGNA	NT; MA	ATING N	OT CON	FIRMED														
17677	MD 1	UU	ŬŪ	FD 1	FD 1	FD 1	UU													
17678	6.9	7.4	7.0	7.0	6.5	6.9	6.2	6.7	5.8	6.1	7.1	6.7								
17682	6.9	6.5	7.1	6.7	6.9	6.5	6.8	7.1	6.6	7.2	6.7	6.1	6.9	6.6						
17683	6.8	5.7	6.8	6.0	6.3	6.0	6.2	6.1	6.1	6.3	6.3	6.6	5.6	6.0	5.9	6.2				
17685	5.4	5.2	6.0	4.9	5.6	5.4	5.6	5.3	5.2	5.5	5.4	5.4	5.4	5.1	5.9	5.1	FS			
17686	NOT	PREGNA	NT																	
17689	5.6	5.8	6.0	5.6	6.2	5.7	5.7	6.0	5.2	6.0	5.5	5.7	5.5	6.0	5.7	5.7	5.9	UU		
17691	7.1	7.8	6.6	7.3	6.9	7.4	6.4	7.1	6.5	6.9	7.4	7.3								
17692	6.0	5.4	5.4	5.6	5.3	6.7	5.7	MS	MS	5.7	5.5	5.7	5.5	5.2	5.2	5.9				
17696	4.5	5.0	5.1	4.8	4.6	4.7	4.5	4.1	4.1	4.6	5.2	4.1	4.6	FS	FS					
17699	5.8	5.5	6.2	5.5	5.4	6.2	5.4	6.5	5.4	5.2	5.8	5.4	5.5	5.6						
17711	5.0	4.9	4.8	4.9	4.8	MS	4.5	4.7	4.3	4.5	4.5	4.4	4.8							
17712	6.1	6.5	6.3	6.8	6.6	6.8	6.3	6.5	5.9	6.4	5.8	6.1	5.8							
17714	7.0	6.8	7.0	7.3	7.0	6.0	6.1	6.2	6.3	5.6	6.4	6.7	5.8	5.6	6.6	6.0				
						-,														

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.

FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE

SECOND LETTER -- A-ALIVE, S-STILLBORN, U-UNCERTAIN, D-DIED, M-MISSING (PRESUMED CANNIBALIZED)

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE C42 (PAGE 5): PUP BODY WEIGHTS FROM BIRTH TO DAY 5 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS

PUP # 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23

RAT/ LITTER #	MATE	RNAL D	OSAGE	GROUP	I	VEHI	CLE			v) 0	EHICLE	) MG/K	G/DAY		 P	OSTPAR	TUM DA	Y 5		
17662	11.6	11.1	10.2	10.5	11.7	11.1	11.2	11.7	11.6	8.2	10.2	10.5	10.3	10.4						
17672	9.8	10.8	11.2	11.0	11.6	10.5	10.5	11.1	11.6	10.6	9.0	9.1	9.7	10.0	10.6	9.7				
17673	8.4	7.7	8.8	9.0	9.8	8.2	9.3	8.9	8.8	8.7	8.0	8.4	8.0							
17674	9.3	9.7	8.1	9.8	8.7	9.5	9.5	8.8	9.8	9.7	8.2	9.6	8.6	8.4	8.8	9.0	8.7	8.6		
17680	11.8	11.6	10.8	11.9	11.7	10.8	11.4	11.0	10.8	10.9	10.6	11.4	9.7	10.1	11.7	9.7	10.0			
17681	10.1	10.6	9.7	9.2	10.9	9.1	9.1	11.0	8.2	9.4	9.0	9.6	9.9	9.9	9.6	9.2				
17690	10.7	10.2	10.5	10.5	7.0	10.5	9.2	10.2	9.5	10.9	9.2	9.3	9.4	9.4	9.3	9.2	9.6	9.0		
17694	10.9	10.5	9.9	10.4	10.0	9.5	8.6	10.1	11.0	9.5	10.5	9.7	8.4	9.0	8.5	FD 1				
17695	9.7	8.9	9.7	9.0	9.4	9.1	9.0	9.5	9.2	9.0	8.9	9.5	8.9	8.7	9.8					
17703	8.7	9.3	9.3	8.3	9.1	8.4	8.5	8.2	MD 1	MS	7.9	7.0	7.5	7.8	9.2	8.3	8.1	8.8	6.7	8.2
	7.2																			
17713	10.1	10.4	9.5	9.3	10.9	10.4	10.0	9.8	9.6	10.6	10.1	10.0	10.2	9.5						
17715	12.2	11.1	10.8	12.4	12.5	12.7	12.2	10.4	12.6	12.3	12.6	12.3	12.3							
17716	9.6	9.9	9.7	8.5	9.7	8.9	9.6	9.4	8.2	9.5	9.4	10.0	8.4	9.2						
17717	8.6	7.6	9.9	9.2	8.9	8.6	8.6	8.5	9.0	9.5	8.3	8.9	9.3							
17719	9.2	8.6	6.7	7.9	6.6	9.0	9.8	7.0	9.7	7.8	8.6	7.5	8.8	8.3	8.8	8.0	9.4	8.8		

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.

FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE

SECOND LETTER -- A-ALIVE, S-STILLBORN, U-UNCERTAIN, D-DIED, M-MISSING (PRESUMED CANNIBALIZED)

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE C42 (PAGE 6): PUP BODY WEIGHTS FROM BIRTH TO DAY 5 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS

PUP #	1 21	2 22	3 23	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
RAT/ LITTER #	MATE	RNAL D	OSAGE	GROUP	II	LOW	DOSAGE			10 M	IG/KG/I	)AY				POSTPAR	TUM DA	Y 5		
17663	NOT F	REGNAN	IT																	
17665	10.7	10.9	10.4	10.4	10.1	11.0	10.2	9.9	10.8	10.3	10.4	10.0	9.7	9.6	9.2					
17666	10.2	9.4	9.7	10.5	9.1	9.6	9.1	9.4	9.1	9.3	10.7	8.9	9.8	8.8						
17668	11.0	10.5	10.3	10.6	10.8	9.2	10.1	9.8	9.6	9.5	9.7	9.2	9.3	9.2	9.5	9.3				
17671	9.4	9.5	9.1	9.7	9.9	9.4	8.7	9.5	9.5	9.0	9.6	9.5	9.2							
17675	9.1	9.7	8.1	9.7	8.1	9.2	9.1	10.1	8.7	9.5	9.6	8.4	7.8	9.0	8.9	8.7	8.5	8.6		
17679	12.5	11.8	12.2	11.9	12.8	12.1	11.6	11.4	12.1											
17684	10.2	11.6	10.2	9.7	10.3	11.4	10.5	10.7	10.8	9.7	11.1	9.3	10.2	9.8	9.7	10.0				
17688	11.2	7.3	10.5	10.9	11.4	11.7	11.4	9.7	11.4	10.8	9.9	10.6	10.4	10.4						
17698	10.5	10.5	10.5	11.6	10.9	10.6	11.1	11.0	8.3	10.1	9.8	10.7	10.7	9.2	10.1	FD 2				
17702	10.4	10.3	10.0	9.4	9.2	9.2	10.3	10.0	10.4	8.6	9.4	8.2	8.4	9.2	9.2					
17704	7.6	9.2	9.1	9.0	10.3	9.3	10.0	9.8	9.2	8.8	7.9	9.1	8.0	8.5	10.7	10.0	9.0	8.9	9.4	
17707	11.1	8.3	10.4	10.1	11.1	10.1	9.3	10.5	10.8	9.3	10.5	11.1	9.1	10.7	10.3					
17708	10.4	11.5	10.6	10.1	10.9	10.5	10.2	10.1	9.0	8.5	9.9	10.6	9.9	9.3	9.2	9.7				
17710	10.9	10.5	9.0	10.3	10.3	11.3	9.6	10.6	10.5	10.2	11.4	11.3	MM 2	10.3	10.3	10.2	8.5	10.4	9.1	

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.

FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE

SECOND LETTER -- A-ALIVE, S-STILLBORN, U-UNCERTAIN, D-DIED, M-MISSING (PRESUMED CANNIBALIZED)

TABLE C42 (PAGE 7): PUP BODY WEIGHTS FROM BIRTH TO DAY 5 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS

PUP #	1 21	2 22	3 23	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
RAT/ LITTER #	MATE	RNAL I	OSAGE	GROUP	III	MIDD	LE DOS	SAGE		50 M	IG/KG/E	)AY			F	OSTPAR	TUM DA	Y 5		
17661	9.8	9.4	10.0	9.7	10.8	10.1	9.6	10.3	9.4	9.3	9.7	9.1	7.9	7.6	8.7					
17667	9.7	10.6	11.8	10.0	9.8	13.6	10.2	9.7	12.0	7.8	10.0	12.2	9.3							
17669	10.4	10.5	8.5	7.6	9.2	9.0	8.6	9.8	9.3	9.0	9.5	8.2	9.5	9.6	9.6	8.2				
17670	9.5	9.9	9.8	10.3	9.0	8.6	8.8	9.6	9.2	9.8	9.8	9.5	8.3	7.5	9.2	9.2				
17676	9.3	9.8	10.0	9.2	9.8	9.8	8.6	7.9	9.2	9.6	9.1	9.6	9.0	9.1	7.8					
17687	12.7	11.2	11.7	12.5	12.4	11.7	12.0	11.6	12.1	11.7	12.5	11.7	11.5	11.3	11.7					
17693	10.4	10.3	9.6	10.6	10.1	10.3	9.0	10.1	9.3	MS	8.8	9.6	9.7	9.9	10.1	FM 3	FS			
17697	9.9	9.8	9.9	10.2	10.1	9.7	9.8	10.3	9.9	10.0	9.2	9.2	9.5	10.5	7.5					
17700	11.2	11.7	9.7	10.8	12.5	12.6	10.9	11.8	10.5	10.4	11.1	11.1	10.9	9.8						
17701	10.6	10.5	11.3	11.8	10.4	11.0	8.7	10.2	10.6	10.8	10.3	9.5	9.5	8.4						
17705	11.5	9.9	12.2	11.6	9.2	10.3	11.2	MS	9.2	8.1	9.5	10.1	9.4	7.1	9.7	10.6	7.7	FS		
17706	12.3	12.3	12.1	12.4	11.2	10.9	12.7	12.8	11.3	11.4	12.0	11.0	11.3	11.6	FD 5					
17709	9.6	9.5	8.5	9.0	8.3	8.6	9.5	8.6	8.3	7.8	9.2	9.3	8.2	7.8	8.4	8.6				

8.3 10.7 10.1 9.9 9.7 9.4 9.9 10.5 10.6 9.6 7.1 10.3 10.1 9.0 9.9 9.5

11.3 11.4 10.5 5.7 10.9 10.4 9.4 11.4 10.7 9.5 10.2 11.0 11.3 11.0 11.7 10.1

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.

FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE

17718 17720

SECOND LETTER -- A-ALIVE, S-STILLBORN, U-UNCERTAIN, D-DIED, M-MISSING (PRESUMED CANNIBALIZED)

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE C42 (PAGE 8): PUP BODY WEIGHTS FROM BIRTH TO DAY 5 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS

PUP #	1 21	2 22	3 23	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
RAT/ LITTER #	MATE	RNAL D	OSAGE	GROUP	IV	HIGH	DOSAG	}E		250	MG/KG/	DAY			 I	POSTPAR	TUM DA	Y 5		
17664	NOT	PREGNA	NT: MA	TING N	OT CON	FIRMED														
17677	MD 1	UU	ŬŪ	FD 1	FD 1	FD 1	UÜ													
17678	11.0	10.5	11.2	10.7	11.3	10.5	9.4	10.3	10.4	11.4	9.8	11.0								
17682	11.7	11.6	11.9	11.4	11.4	10.8	11.0	11.9	11.5	10.6	11.4	11.4	10.9	10.5						
17683	8.4	8.5	7.7	7.3	7.7	8.2	7.0	7.3	7.0	7.5	7.6	7.2	7.3	7.1	7.3	6.9				
17685	7.2	7.6	MM 2	7.9	6.8	7.1	8.2	8.7	7.3	7.5	6.8	8.2	7.9	8.2	8.1	7.5	FS			
17686	NOT P	REGNAN	T											• • •		,	7			
17689	9.1	8.9	8.9	9.2	9.5	9.4	9.9	9.3	8.6	8.5	9.8	9.3	9.0	9.1	9.3	9.2	9.5	IΠI -		
17691	9.9	9.3	9.4	10.8	10.3	10.2	10.0	10.2	9.5	8.6	8.2	10.1					,	•		
17692	8.1	7.9	8.1	8.8	7.8	7.8	8.5	MS	MS	8.1	8.0	8.6	8.2	8.0	8.1	7.2				
17696	MD 2	MD 2	MD 2	MD 2	FD 2	FD 2	FD 2	FD 2	FD 2	FM 2	FM 2	FM 2	FM 2	FS	FS					
17699	8.9	9.0	8.4	8.9	9.0	8.9	10.0	MM 2	8.7	9.0	9.2	8.8	8.4	8.6						
17711	MD 2	MD 2	MD 2	MD 2	MM 2	MS	FD 2	FD 2	FD 2	FD 2	FD 2	FD 2	FD 2							
17712	11.4	10.9	10.6	11.5	10.8	10.1	10.8	11.6	9.4	9.8	11.0	9.7	9.4							
17714	10.7	9.9	10.3	10.8	11.0	8.4	8.7	9.3	9.0	9.7	9.8	9.5	8.7	9.4	9.6	FM 2				

ALL WEIGHTS WERE RECORDED IN GRAMS (G). MEAN LITTER WEIGHTS INCLUDE ONLY WEIGHTS OF LIVE PUPS.

FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE

SECOND LETTER -- A-ALIVE, S-STILLBORN, U-UNCERTAIN, D-DIED, M-MISSING (PRESUMED CANNIBALIZED)

TABLE C43 (PAGE 1): PUP VITAL STATUS AND SEX FROM BIRTH TO DAY 5 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS

PUP #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	:	19	20	21	22	23
RAT/																								
LITTER #		MATE	RNAL	DOSAG	SE GRO	OUP I			VEHI	CLE				י) ס	VEHIC	LE) MO	3/KG/1	YAC						
17662	мА	M A	M A	M A	ма	M A	M A	ма	F A	FA	FA	FA	F A	FA										
17672	M A	M A	ΜA	M A	M A	M A	мА	M A	M A	M A	FΑ	FΑ	FΑ	FΑ	FΑ	FA								
17673									FΑ															
17674	M A	M A	ΜA	M A	M A	M A	M A	M A	M A	M A	M A	M A	FΑ	FΑ	FΑ	FA	FΑ	FΑ						
17680	M A	M A	M A	M A	M A	M A	M A	M A	FΑ	FΑ	FΑ	FΑ	FΑ	FΑ	FΑ	FA	FΑ							
17681	M A	M A	M A	A M	M A	M A	M A	M A	M A	F A	F A	F A	FΑ	FΑ	FΑ	FA								
17690	M A	M A	M A	M A	M A	M A	M A	M A	M A	FΑ	FΑ	F A	FΑ	FΑ	FΑ	FA	FΑ	FΑ						
17694	M A	M A	M A	M A	M A	M A	M A	M A	M A	M A	FΑ	F A	FΑ	FΑ	FΑ	FD 1								
17695	M A	M A	M A	M A	M A	M A	ΜA	M A	M A	FΑ	FΑ	FΑ	FΑ	FΑ	FΑ									
17703	M A	M A	A M	M A	M A	ΜA	ма	M A	MD 1	мs	FΑ	FΑ	FΑ	FΑ	FΑ	FA	FΑ	FΑ	F	A	FΑ	FΑ		
17713	A M	A M	M A	M A	M A	M A	FΑ	F A	FΑ	FΑ	FΑ	F A	FΑ	FA										
17715	M A	M A	M A	M A	M A	M A	M A	M A	F A	FΑ	F A	FΑ	FΑ											
17716	M A	A M	M A	M A	M A	M A	M A	M A	FΑ	F A	FA	FΑ	FA	FΑ										
17717	M A	M A	M A	M A	M A	F A	F A	FΑ	F A	F A	FΑ	FΑ	FΑ											
17719	M A	M A	M A	M A	M A	M A	M A	M A	M A	FΑ	FΑ	FΑ	FΑ	FΑ	FΑ	FΑ	FΑ	FΑ						

FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE

SECOND LETTER -- A-ALIVE, S-STILLBORN, U-UNCERTAIN, D-DIED, M-MISSING (PRESUMED CANNIBALIZED)

TABLE C43 (PAGE 2): PUP VITAL STATUS AND SEX FROM BIRTH TO DAY 5 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS

PUP #	1	2	3	4	5	6	7	8	9	10	11	12	13	1	.4	15	16	1'	7	18	19	20	21	22	23
RAT/ LITTER #		MATE	RNAL	DOSAG	E GRO	OUP II			LOW	DOSAG	;E				10	MG/F	G/DA	Y							
17663	NOT	PREGN	ANT																						
17665	M A	M A	ΜA	M A	M A	M A	M A	M A	FΑ	FΑ	FΑ	FΑ	FΑ	F	A	FΑ									
17666	M A	M A	M A	M A	FΑ	FA	FA	FΑ	FΑ	F A	FΑ	FΑ	FΑ	F	A										
17668	M A	ΜA	M A	M A	M A	M A	M A	FΑ	FΑ	F A	FΑ	FΑ	FΑ	F	A	FΑ	FΑ								
17671	M A	M A	M A	M A	M A	FΑ	FΑ	FA	FΑ	F A	FΑ	FΑ	FΑ												
17675	M A	M A	M A	M A	M A	M A	M A	M A	M A	мА	мА	ΜA	FΑ	F	A	FΑ	FΑ	F A	A F	Α					
17679	M A	M A	M A	M A	FΑ	FΑ																			
17684	M A	M A	M A	M A	M A	M A	M A	M A	M A	FΑ	FΑ	FΑ	FΑ	F	Α	FΑ	FΑ								
17688	A M	M A	M A	M A	M A	M A	M A	M A	мА	FA	FΑ	FΑ	FA	F	Α										
17698	M A	M A	M A	M A	M A	M A	M A	M A	M A	FΑ	FΑ	FΑ	FΑ	F	A	FΑ	FD 2								
17702	M A	M A	M A	A M	M A	M A	МА	M A	FΑ	FΑ	FA	FΑ	FΑ	F	A	FΑ									
17704	M A	M A	M A	A M	A M	M A	M A		A M				M A				FΑ	F A	A F	А	FΑ				
17707	M A	M A	M A	M A	M A	M A	F A	FA	FA	FA									_						
17708	A M	A M	M A	M A	A M	A M	A M	M A	M A	F A	FA	FΑ	FΑ	F	A	FΑ	FΑ								
17710	M A	MA	M A	M A	M A	M A	M A	M A	M A	M A	M A	M A	MM 2	F	A	F A	F A	F A	A F	A	F A				

FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE

SECOND LETTER -- A-ALIVE, S-STILLBORN, U-UNCERTAIN, D-DIED, M-MISSING (PRESUMED CANNIBALIZED)

TABLE C43 (PAGE 3): PUP VITAL STATUS AND SEX FROM BIRTH TO DAY 5 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS

PUP #	1		2 3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
RAT/ LITTER #		мат	ZRNAT.	DOSAG	E GROI	JP III		MTDD	TE DO	SACE			50 1	ig/kg	/Dav								
										DAGE				10/10	, DAI								
17661	M A	. м.	A M A	MA	MA	ма	ма	ма	мА	ма	FΑ	FΑ	FΑ	FΑ	FΑ								
17667						M A																	
17669	M A	M .	A FA	FA	FΑ	F A	F A	FΑ	FΑ	F A	FΑ	FA	FΑ	FΑ	FΑ	FΑ							
17670	M A	M	A M A	M A	M A	M A	F A	F A	F A	F A	FA	FA	FΑ	FΑ	FΑ	FΑ							
17676	M A	M .	A M A	. MA	M A	M A	мА	M A	M A	M A	M A	F A	FΑ	F A	FΑ								
17687	M A	M A	A M A	MA	M A	M A	M A	A M	F A	F A	F A	F A	F A	F A	F A							*	
17693					M A	M A	M A	A M	FΑ	M S	FΑ	FΑ	FΑ	F A	FΑ	FM 3	F S						
17697			A M A			A M																	
17700				M A		M A																	
17701						F A																	
17705						M A										FΑ	FΑ	F S					
17706		M A				M A						FA											
17709		M A		. MA . MA		MA						FA				FA							
17718 17720						A M																	
1//20	I'I F	ı M.	-1 IM P	A M	M A	M A	M A	мА	r A	г А	r A	r A	r A	r A	r A	r A							

FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE

SECOND LETTER -- A-ALIVE, S-STILLBORN, U-UNCERTAIN, D-DIED, M-MISSING (PRESUMED CANNIBALIZED)
NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

TABLE C43 (PAGE 4): PUP VITAL STATUS AND SEX FROM BIRTH TO DAY 5 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS

PUP #	1	2	3	3	4	5	6	7		8	9	1	.0	11	1	2	13	1	4	15	1	L6	17	18	19	Ð	20	21	22	23
RAT/																														
LITTER #		MAT	ERNAI	DOS	AGE	GROU	JP IV	7		1	HIGI	H DC	SAG	E					25	O MG	/KC	3/DA	Y							
17664	NOT	PREG	NANT;	TAM	'ING	 NOT	CONF	IRME	 D																					
17677	MD 1	ט ט	U	J FD	1 FD	1 F	'D 1	υυ																						
17678	ма	M A	. M A	M A	A M	Α	F A	FΑ	F	A :	7 A	F	A 1	FΑ	F	A														
17682	M A	M A	. M .	M A	A M	Α	A M	F A	F	A :	7 A	F	A 1	FΑ	F	A I	7 A	F.	A											
17683	M A	M A	. M A	M A	A M	Α	A M	M A	М	A I	A N	M	A 1	FΑ	F	A I	7 A	F.	A	FΑ	F	Α								
17685	ΜA	M A	MM 2	F	A F	Α	FΑ	FΑ	F	A :	Ŧ A	F	<b>A</b> 1	F A	F	A I	7 A	F.	A	FΑ	F	Α	FS							
17686	NOT	PREG	TNAN																											
17689	ΜA	M A	. M .	M A	A M	A	A M	M A	M	A I	A N	M	A I	A N	M	A I	A	F.	A.	FΑ	F	Α	FΑ	υυ						
17691		M A																												
17692	ΜА	M A	. M .	M A	M A	A	A M	ΜA	M	SI	1 S	M	A :	FΑ	F	A I	A	F.	A	FΑ	F	A								
17696	MD 2	MD 2	MD 2	MD	2 FD	2 F	'D 2	FD 2	FD	2 F	2	FM	2 FI	M 2	FM :	2 FM	12	F	S	F S										
17699	M A	M A	. M 2	M A	A M	Α	M A	ΜA	MM	2	7 A	F	A )	FΑ	F	A I	A	F.	A											
17711	MD 2	MD 2	MD 2	MD	2 MM	2	M S	FD 2	FD	2 F	2	FD	2 F1	2 0	FD :	2 FI	2													
17712	M A	M A	M Z	M A	A M	A	A M	M A	М	A :	A	F	A 1	FA	F	A I	A													
17714	M A	ΜA	M Z	M A	A M	Α	FΑ	FΑ	F	A 1	A	F	A 1	FA	F	A E	A	F	A	FΑ	В'n	2								

FIRST LETTER -- M-MALE, F-FEMALE, U-SEX UNDETERMINABLE

SECOND LETTER -- A-ALIVE, S-STILLBORN, U-UNCERTAIN, D-DIED, M-MISSING (PRESUMED CANNIBALIZED)

NUMBER FOLLOWING "SECOND LETTER" INDICATES THE DAY POSTPARTUM THE EVENT OCCURRED.

TABLE C44 (PAGE 1): CLINICAL OBSERVATIONS FROM BIRTH TO DAY 5 POSTPARTUM - INDIVIDUAL DATA - F1 GENERATION PUPS

MATERNAL DOSAGE GROUP MATERNAL DOSAGE (MG/KG/DAY)	LITTER NUMBER	DAY(S) POSTPARTUM	OBSERVATIONS a
I			
0 (VEHICLE)	17690	1- 2	1/18 PUPS: HEAD, BRUISE (DID NOT EXCEED 0.8 CM X 0.3 (
II			
10	17688	1- 4	1/14 PUPS: BACK, BRUISE (DID NOT EXCEED 0.5 CM X 1.0 (
		1- 2	1/14 PUPS: LOWER MIDLINE, BRUISE (DID NOT EXCEED 1.5 (
			X 2.0 CM); PALE.
		3 - 5	1/14 PUPS: LOWER MIDLINE, BRUISE (DID NOT EXCEED 1.5 (
			X 1.0 CM).
III			
50	17720	1- 2	1/16 PUPS: NECK, BRUISE (DID NOT EXCEED 2.0 CM X 2.5 (
IV			
250	17683	1- 4	1/16 DUDG. DAGK DRUIGH (DID NOW BUGHED O A GW W 4 5 6
230	1/663	1- 4	1/16 PUPS: BACK, BRUISE (DID NOT EXCEED 2.0 CM X 1.5 C
	17685	1	1/16 PUPS: CHEST AND NECK, BRUISE (1.0 CM IN DIAMETER)
		2- 3	1/15 PUPS: CHEST AND NECK, BRUISE (1.0 CM IN DIAMETER)
	18606	_	
	17696	1	2/15 PUPS: MOUTH, BRUISE (0.2 CM X 0.1 CM).
	17699	4	2/13 PUPS: COLD TO TOUCH; NOT NESTING OR NURSING.

a. Tabulation restricted to adverse observations; all other pups appeared normal.

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE C45 (PAGE 1): NECROPSY OBSERVATIONS - INDIVIDUAL DATA - F1 GENERATION PUPS

MATERNAL DOSAGE ( MATERNAL DOSAGE	 LITTER NUMBER	DAY POSTPARTUM	OBSERVATIONS a						
I	 								
0 (VEHICLE)	17662	5	14 PUPS:	APPEARED NORMAL.					
	17672	5	16 PUPS:	APPEARED NORMAL.					
	17673	5	13 PUPS:	APPEARED NORMAL.					
	17674	5	18 PUPS:	APPEARED NORMAL.					
	17680	5	17 PUPS:	APPEARED NORMAL.					
	17681	5	16 PUPS:	APPEARED NORMAL.					
	17690	5	18 PUPS:	APPEARED NORMAL.					
	17694	1	1 PUP:	FOUND DEAD. ALL TISSUES APPEARED NORMAL.					
		5		APPEARED NORMAL.					
	17695	5	15 PUPS:	APPEARED NORMAL.					
	17703	1	1 PUP:	STILLBORN. ALL TISSUES APPEARED NORMAL.					
			1 PUP:	FOUND DEAD. NO MILK IN STOMACH.					
		5	19 PUPS:	APPEARED NORMAL.					
	17713	5	14 PUPS:	APPEARED NORMAL.					
	17715	5	13 PUPS:	APPEARED NORMAL.					
	17716	5		APPEARED NORMAL.					
	17717	5	13 PUPS:	APPEARED NORMAL.					
	17719	5		APPEARED NORMAL.					

a. Complete necropsies were not performed on pups in which autolysis or cannibalization precluded evaluation.

PROTOCOL 418-027: ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST (SPONSOR'S STUDY NUMBER: T-7599)

TABLE C45 (PAGE 2): NECROPSY OBSERVATIONS - INDIVIDUAL DATA - F1 GENERATION PUPS

MATERNAL DOSAGE GROUP MATERNAL DOSAGE (MG/KG/	LITTER DAY) NUMBER	DAY POSTPARTUM	OBSERVATI	IONS a
II				
10	17665	5	15 PUPS:	APPEARED NORMAL.
	17666	5	14 PUPS:	
	17668	5	16 PUPS:	APPEARED NORMAL.
	17671	5	13 PUPS:	
	17675	5	18 PUPS:	
	17679	5	9 PUPS:	
	17684	5	16 PUPS:	APPEARED NORMAL.
	17688	5	14 PUPS:	APPEARED NORMAL.
	17698	2	1 PUP:	FOUND DEAD. AUTOLYSIS PRECLUDED FURTHER EVALUATION.
		5	15 PUPS:	APPEARED NORMAL.
	17702	5	15 PUPS:	APPEARED NORMAL.
	17704	5	1 PUP:	KIDNEYS: BILATERAL, PELVIS, SLIGHT DILATION. ALL OTHER TISSUES APPEARED NORMAL.
			18 PUPS:	APPEARED NORMAL.
	17707	5	15 PUPS:	APPEARED NORMAL.
	17708	5	16 PUPS:	
	17710	5	18 PUPS:	•

a. Complete necropsies were not performed on pups in which autolysis or cannibalization precluded evaluation.

TABLE C45 (PAGE 3): NECROPSY OBSERVATIONS - INDIVIDUAL DATA - F1 GENERATION PUPS

MATERNAL DOSAGE GROUP MATERNAL DOSAGE (MG/KG/DAY)	LITTER NUMBER	DAY POSTPARTUM	OBSERVATIONS a
III			
50	17661	5	15 PUPS: APPEARED NORMAL.
	17667	5	13 PUPS: APPEARED NORMAL.
	17669	5	16 PUPS: APPEARED NORMAL.
	17670	5	16 PUPS: APPEARED NORMAL.
	17676	5	15 PUPS: APPEARED NORMAL.
	17687	5	15 PUPS: APPEARED NORMAL.
	17693	1	2 PUPS: STILLBORN. ALL TISSUES APPEARED NORMAL.
		5	14 PUPS: APPEARED NORMAL.
	17697	5	15 PUPS: APPEARED NORMAL.
	17700	5	14 PUPS: APPEARED NORMAL.
	17701	5	14 PUPS: APPEARED NORMAL.
	17705	1	2 PUPS: STILLBORN. ALL TISSUES APPEARED NORMAL.
		5	16 PUPS: APPEARED NORMAL.
	17706	5	1 PUP: FOUND DEAD. AUTOLYSIS PRECLUDED FURTHER EVALUATION.
			14 PUPS: APPEARED NORMAL.
	17709	5	16 PUPS: APPEARED NORMAL.
	17718	5	16 PUPS: APPEARED NORMAL.
	17720	5	16 PUPS: APPEARED NORMAL.

a. Complete necropsies were not performed on pups in which autolysis or cannibalization precluded evaluation. Refer to the individual pup clinical observations table (Table C44) for external clinical observations confirmed at necropsy.

TABLE C45 (PAGE 4): NECROPSY OBSERVATIONS - INDIVIDUAL DATA - F1 GENERATION PUPS

IATERNAL DOSAGE GROUP IATERNAL DOSAGE (MG/KG/DAY)	LITTER NUMBER	DAY POSTPARTUM	OBSERVATI	IONS a
IV				
250	17677	1	1 PUP:	FOUND DEAD. NO MILK IN STOMACH.
				ALL TISSUES APPEARED NORMAL.
			1 PUP:	FOUND DEAD. ALL TISSUES APPEARED NORMAL.
			2 PUPS:	FOUND DEAD. NO MILK IN STOMACH.
				AUTOLYSIS PRECLUDED FURTHER EVALUATION.
	17678	5	12 PUPS:	APPEARED NORMAL.
	17682	5	14 PUPS:	APPEARED NORMAL.
	17683	5	16 PUPS:	APPEARED NORMAL.
	17685	1	1 PUP:	STILLBORN. ALL TISSUES APPEARED NORMAL.
		5	15 PUPS:	APPEARED NORMAL.
	17689	5	17 PUPS:	APPEARED NORMAL.
	17691	5	12 PUPS:	APPEARED NORMAL.
	17692	1	2 PUPS:	STILLBORN. ALL TISSUES APPEARED NORMAL.
		5	14 PUPS:	APPEARED NORMAL.
	17696	1	2 PUPS:	STILLBORN. AUTOLYSIS PRECLUDED FURTHER
		_		EVALUATION.
		2	3 PUPS:	FOUND DEAD. AUTOLYSIS PRECLUDED FURTHER EVALUATION.
			6 PUPS:	FOUND DEAD. CANNIBALIZATION PRECLUDED FURTH
				EVALUATION.
	17699	5	13 PUPS:	APPEARED NORMAL.
	17711	1	1 PUP:	STILLBORN. AUTOLYSIS PRECLUDED FURTHER
				EVALUATION.
		2	11 PUPS:	FOUND DEAD. AUTOLYSIS PRECLUDED FURTHER
				EVALUATION.
	17712	5	13 PUPS:	APPEARED NORMAL.
	17714	5	15 PUPS:	APPEARED NORMAL.

a. Complete necropsies were not performed on pups in which autolysis or cannibalization precluded evaluation. Refer to the individual pup clinical observations table (Table C44) for external clinical observations confirmed at necropsy.

# APPENDIX D PROTOCOL AND AMENDMENTS

905 Sheehy Drive, Bldg. A Horsham, PA 19044 Telephone: (215) 443-8710 Telefax: (215) 443-8587



#### PROTOCOL 418-027

SPONSOR'S STUDY NUMBER: T-7599

STUDY TITLE:

Oral (Gavage) Combined Repeated Dose Toxicity Study of T 7599.7 with

the Reproduction/Developmental Toxicity Screening Test

**PURPOSE:** 

The purpose of this study is to provide information on the possible health hazards that may result from repeated exposure of Crl:CD®(SD)IGS BR VAF/Plus® male and female rats to a test substance beginning before cohabitation, through mating and continuing for at least 28 days (male rats) or through parturition until day 4 or 5 of lactation (female rats). This repeated dose study incorporates a reproduction/developmental toxicity screening test that can be used to provide initial information on possible effects on male and female reproductive performance (e.g., gonadal function, mating behavior, conception, development of the conceptus and parturition). The study also places emphasis on neurological effects as a specific endpoint and should identify the neurotoxic potential of a test substance, which may warrant further in-depth investigation.

Because of the selectivity of the endpoints and the short duration of the study, the screening test will not provide evidence for definitive claims of no reproduction/developmental effects. In particular, it offers only limited means of detecting postnatal manifestations of prenatal exposure or effects that may be induced during postnatal exposure.

TESTING **FACILITY:** 

Argus Research

905 Sheehy Drive, Building A

Horsham, Pennsylvania 19044-1297

Telephone:

(215) 443-8710

Telefax:

(215) 443-8587

STUDY

DIRECTOR:

Raymond G. York, Ph.D., DABT

Associate Director of Research

Address as cited above for Testing Facility.

Email:

raymond.york@criver.com

SPONSOR:

3M Corporate Toxicology

3M Center, Building 220-2E-02 St. Paul, Minnesota 55144-1000

STUDY

MONITOR:

Paul H. Lieder, Ph.D., DABT 3M Corporate Toxicology 3M Medical Department Telephone: (651) 737-2678

Telefax:

(651) 733-1773

Email:

phlieder1@mmm.com

#### **REGULATORY CITATIONS:**

Organisation for Economic Co-operation and Development (1996). OECD Guideline for Testing of Chemicals. Section 4, No. 422: Combined Repeated Dose Toxicity Study with the Reproduction/Developmental Toxicity Screening Test, adopted 22 March 1996.

Organisation for Economic Co-operation and Development (1998). The Revised OECD Principles of Good Laboratory Practices [C(97)186/Final].

U.S. Food and Drug Administration. Good Laboratory Practice Regulations; Final Rule. 21 CFR Part 58.

Japanese Ministry of Health and Welfare (1997). Good Laboratory Practice Standard for Safety Studies on Drugs, MHW Ordinance Number 21, March 26, 1997.

#### **REGULATORY COMPLIANCE:**

This study will be conducted in compliance with the Good Laboratory Practice (GLP) regulations cited above with the exception of analysis of blood and liver samples sent to Southern Research Institute for metabolite analysis.

All changes or revisions of this protocol shall be documented, signed by the Study Director and the Sponsor, dated and maintained with the protocol.

The Testing Facility's Quality Assurance Unit (QAU) will audit the protocol, the raw data and the report, and will inspect critical phases of those portions of the study conducted at the Testing Facility in accordance with the Standard Operating Procedures of the Testing Facility.

The final report will include a compliance statement signed by the Study Director that the report accurately reflects the raw data obtained during the performance of the study and that all applicable GLP regulations were followed in the conduct of the study. Should significant deviations from GLP regulations occur, each will be described in detail, together with how the deviation might affect the quality or integrity of the study.

Should any portion of the study be conducted by a subcontractor or by the Sponsor, the Study Director will ensure that a qualified Principal Investigator is identified by the facility conducting that portion of the study. The QAU for that facility will conduct critical phase inspections and audit respective results and reports for that study portion according to the SOPs of that facility. Such critical phase inspection reports and report audits will be submitted by that facility to the Principal Investigator and the Study Director. The dates of the inspections and report submissions will be incorporated into a QAU Statement generated by that facility and provided to the Testing Facility for inclusion in the final report. In addition, that facility will provide a statement of GLP compliance, as described above, signed by the Principal Investigator for inclusion in the final report.

#### **SCHEMATIC OF STUDY DESIGN AND STUDY SCHEDULE:**

See ATTACHMENT 1 to the protocol.

# TEST SUBSTANCE AND VEHICLE:

#### Identification:

#### Test Substance:

T 7599.7. Lot identification to be documented in the raw data.

The Sponsor will provide to the Testing Facility documentation or certification of the identity, composition, method of synthesis, strength and activity/purity of the test substance. This documentation will be included in the final report.

#### Vehicle:

Aqueous 0.5% carboxymethylcellulose (CMC) (medium viscosity) prepared using reverse osmosis membrane processed deionized water (R.O. deionized water). Lot identification to be documented in the raw data.

Neither the Sponsor nor the Study Director is aware of any potential contaminants likely to be present in the vehicle that would interfere with the results of this study. Therefore, no analyses other than those mentioned in this protocol will be conducted.

#### Safety Precautions:

Gloves, dust-mist/HEPA-filtered mask, appropriate eye protection and uniform/lab coat to be worn during formulation preparation and dosage. The Material Safety Data Sheet (MSDS) will be included in the raw data.

#### Storage:

**Bulk Test Substance:** 

Room temperature, protected from light.

**Bulk Vehicle Components:** 

Room temperature.

Prepared Test Substance and

Vehicle Formulations:

Room temperature, protected from light.

All test substance shipments to the Testing Facility should be addressed to the attention of Julian Gulbinski, Manager of Formulation Laboratory, at the previously cited address and telephone number.

Shipments should include information concerning storage conditions and shipping cartons should be labeled appropriately. The recipient should be notified in advance of shipment.

# **FORMULATION:**

#### Frequency of Preparation:

Formulations (suspensions) will be prepared weekly at the Testing Facility.

Detailed preparation procedures are attached to this protocol (ATTACHMENT 2).

#### Adjustment for Purity:

The test substance will be considered 100% pure for the purpose of dosage calculations.

#### **Testing Facility Reserve Samples:**

The Testing Facility will reserve a sample (approximately 1 g) of each lot of bulk test substance and bulk vehicle components used during the course of the study. Samples will be stored under the previously cited conditions.

# **ANALYSES**:

Results of required analyses will be provided to the Testing Facility for inclusion in the study report.

Samples additional to those described below may be taken if deemed necessary during the course of the study. Additional analyses, if required, will be documented by protocol amendment.

# **Bulk Test Substance Sampling:**

A sample (approximately 1 g) of the test substance will be taken on the last day of treatment and sent (ambient conditions, protected from light) to the Sponsor for analysis. This sample will be sent to:

Principal Investigator: Gregory S. Gorman, Ph.D. Staff Chemist
Bioanalytical Chemistry Group
Southern Research Institute
2000 Ninth Avenue South
Birmingham, Alabama 35255-5305

Telephone:

(205) 581-2725

Telefax:

(205) 581-2044

Email:

gorman@sri.org

The recipient will be notified in advance of sample shipment.

#### **Analyses of Prepared Formulations:**

#### Concentration and Homogeneity:

Concentration and homogeneity of the prepared formulations will be verified during the course of this study. Quadruplicate samples (2 mL each) will be taken from the top, middle and bottom of each concentration on the first day of preparation. Two samples from each quadruplicate set will be shipped for analysis; the remaining samples will be retained at the Testing Facility as backup samples. Quadruplicate samples will be taken from each concentration on the last day of preparation. Two samples from each quadruplicate set will be shipped for analysis; the remaining samples will be retained as backup samples. Backup samples will be stored under the previously cited conditions and discarded at the Testing Facility upon the request of the Sponsor.

# Stability:

Stability of the prepared formulations will be documented during this study. Two sets of duplicate samples (2 mL each) from each concentration will be taken on the first day of preparation. One sample of each duplicate set will be shipped on the day of preparation. These samples will be analyzed at the following time points: as soon after preparation as possible and ten days after the first analysis. The remaining samples will be retained at the Testing Facility as backup samples. Backup samples will be stored under the previously cited conditions and discarded at the Testing Facility upon the request of the Sponsor.

#### **Shipping Instructions:**

Samples to be analyzed will be shipped (ambient conditions) to:

Gregory S. Gorman, Ph.D. **Staff Chemist** Bioanalytical Chemistry Group Southern Research Institute 2000 Ninth Avenue South Birmingham, Alabama 35255-5305

Telephone:

(205) 581-2725

Telefax:

(205) 581-2044

gorman@sri.org

Email:

The recipient will be notified in advance of sample shipment.

# **DISPOSITION:**

Prepared formulations will be discarded at the Testing Facility. All remaining bulk test substance will be returned to the Sponsor at the previously cited address.

#### TEST SYSTEM:

#### Species/Strain and Reason for Selection:

The Crl:CD®(SD)IGS BR VAF/Plus® rat was selected as the Test System because: 1) it is one mammalian species accepted for use in toxicity studies and it has been widely used throughout industry; 2) this strain of rat has been demonstrated to be sensitive to reproductive and developmental toxins; and 3) historical data and experience exist at the Testing Facility<sup>(1-3)</sup>.

# Number:

Initial population acclimated:

70 male and 70 virgin female rats.

Population selected for study:

60 male and 60 virgin female rats (15 per sex per

dosage group).

#### Body Weight and Age:

Male rats will be ordered to weigh from 300 g to 325 g each at receipt, at which time they will be expected to be at least 60 days of age. Female rats will be ordered to weigh from 200 g to 225 g each at receipt, at which time they will be expected to be at least 60 days of age. Actual body weights will be recorded the day after receipt and will be documented in the raw data. The weight ranges will be included in the final report. At study initiation, the weight variation of the rats will not exceed  $\pm 20\%$  of the mean weight of each sex.

#### Sex:

Both male and female rats will be evaluated.

#### Source:

Charles River Laboratories, Inc.

The rats will be shipped in filtered cartons by air freight and/or truck from Charles River Laboratories, Inc., to the Testing Facility.

#### Identification:

Rats are permanently identified using Monel® self-piercing ear tags (Gey Band and Tag Co., Inc., No. MSPT 20101). Male and female rats are assigned temporary numbers at receipt and given unique permanent identification numbers when assigned to the study before administration of the first dosage. Pups will not be individually identified during lactation; all parameters will be evaluated in terms of the litter.

#### ANIMAL HUSBANDRY:

All cage sizes and housing conditions are in compliance with the Guide for the Care and Use of Laboratory Animals<sup>(4)</sup>.

# Housing:

Fo generation rats will be individually housed in stainless steel, wire-bottomed cages, except during the cohabitation and postpartum periods. During cohabitation, each pair of rats will be housed in the male rat's cage. Beginning no later than day 20 of presumed gestation, Fo generation female rats will be individually housed in nesting boxes. Each dam and delivered litter will be housed in a common nesting box during the postpartum period.

#### Nesting Material:

Nesting material (bed-o'cobs®) will be provided.

Bedding will be changed as often as necessary to keep the animals dry and clean. Analyses for possible contamination are conducted semi-annually and documented in the raw data.

#### Room Air, Temperature and Humidity:

The animal room is independently supplied with at least ten changes per hour of 100% fresh air that has been passed through 99.97% HEPA filters. Room temperature will be maintained at 66°F to 77°F (19°C to 25°C) and monitored constantly. Room humidity will also be monitored constantly and maintained at 30% to 70%.

#### Light:

An automatically controlled 12-hour light:12-hour dark fluorescent light cycle will be maintained. Each dark period will begin at 1900 hours EST. The light cycle may be adjusted by the Study Director or designee if deemed necessary to accommodate scheduled laboratory activities. Any such adjustment will be documented in the raw data.

#### Diet:

Rats will be given Certified Rodent Diet® #5002 (PMI Nutrition International), available ad libitum from individual feeders except during fasting.

# Water:

Water will be available ad libitum from individual bottles attached to the cages or from an automatic watering access system. All water will be from a local source and passed through a reverse osmosis membrane before use. Chlorine will be added to the processed water as a bacteriostat; processed water is expected to contain no more than 1.2 ppm chlorine at the time of analysis. Water is analyzed monthly for possible bacterial contamination and twice annually for possible chemical contamination.

#### Contaminants:

Neither the Sponsor nor the Study Director is aware of any potential contaminants likely to be present in the certified diet, in the drinking water or in the nesting materials at levels that would interfere with the results of this study. Therefore, no analyses other than those routinely performed by the feed supplier or those mentioned in this protocol will be conducted.

#### DAY NUMBERING SYSTEM:

Gestation day 0 is defined as the day spermatozoa are observed in a smear of the vaginal contents and/or a copulatory plug observed in situ.

The day of birth is designated lactation day 0 (postpartum day 0) in the Health Effects Test Guidelines - Reproduction and Fertility Effects (Office of Prevention, Pesticides and Toxic Substances 870.3800, August, 1998) and in the OECD Guideline for the Testing of Chemicals - Combined Repeated Dose Toxicity Study with the Reproduction/Developmental Toxicity Screening Test (Section 4, No. 422, 22 March 1966). This same day is designated day 1 postpartum (day 1 of lactation) in the Standard Operating Procedures of the Testing Facility. Throughout this protocol, the day of birth will be designated day 1 postpartum (day 1 of lactation) and all subsequent ages of the F1 generation rats and days of the lactation period will be determined and cited accordingly.

#### **RANDOMIZATION AND COHABITATION:**

Upon arrival, rats will be assigned to individual housing on the basis of computer-generated random units. After an acclimation period of at least five days, male and female rats will be selected for study on the basis of physical appearance and body weights recorded during acclimation. The rats will be assigned to dosage groups based on computer-generated (weight-ordered) randomization procedures.

Within each dosage group, consecutive order will be used to assign rats to cohabitation, one male rat per female rat. The cohabitation period will consist of a maximum of 14 days. Female rats with spermatozoa observed in a smear of the vaginal contents and/or a copulatory plug observed in situ will be considered to be at day 0 of presumed gestation and assigned to individual housing. Female rats not mated within the first seven days of cohabitation will be assigned alternate male rats that have mated (same dosage group) and will remain in cohabitation for a maximum of seven additional days.

Day 1 of lactation (postpartum) is defined as the day of birth and is also the first day on which all pups in a litter are individually weighed (pup body weights will be recorded after all pups in a litter are delivered and groomed by the dam).

Within each dosage group, consecutive order will be used to assign the first five male and the first five female rats to a functional observational battery (FOB) and motor activity assessment. The next five rats per sex in each group will be assigned to hematology and clinical biochemistry evaluations. The last five rats per sex in each group will be assigned to metabolite analysis. Histological evaluations will be performed on the last ten rats per sex in each group.

#### **ADMINISTRATION:**

### Route and Reason for Choice:

The oral (gavage) route was selected for use because: 1) in comparison with the dietary route, the exact dosage can be accurately administered; and 2) it is one possible route of human exposure.

#### Method and Frequency:

Dosages will be adjusted daily for body weight changes and given at approximately the same time each day.

Male rats will be given the test substance and/or the vehicle once daily beginning 14 days before cohabitation (maximum 14 days) and continuing until sacrifice, after completion of the cohabitation period, after a minimum of 28 days of dosage.

Female rats will be given the test substance and/or the vehicle once daily beginning 14 days before cohabitation (maximum 14 days) and continuing until the day before scheduled sacrifice on day 6 of lactation.

Pups will not be directly given the test substance or the vehicle but may be possibly exposed to the test substance during maternal gestation (in utero exposure) or via maternal milk during the lactation period.

#### Rationale for Dosage Selection:

Dosages will be selected by the Sponsor based on previous studies conducted with the test substance, taking into account possible differences in sensitivity between pregnant and nonpregnant rats. The highest dosage will be expected to cause toxic effects but not mortality or obvious suffering. The descending sequence of the lower dosage levels will be selected for the purpose of demonstrating any dosage-related response, with no adverse effects expected at the lowest level.

# **Dosage Levels, Concentrations and Volumes:**

Dosage Group	Number Of Rats Per Sex	Dosage (mg/kg/day)	Concentration (mg/mL)	Dosage Volume (mL/kg)	Argus Batch Number
I	15	0 (Vehicle)	0	10	B-418-027-A(Day.Month.Year)
II	15	10	1	10	B-418-027-B(Day.Month.Year)
Ш	15	50	5	10	B-418-027-C(Day.Month.Year)
IV	15	250	25	10	B-418-027-D(Day.Month.Year)

The test substance will be considered 100% pure for the purpose of dosage calculations.

#### TESTS, ANALYSES AND MEASUREMENTS - Fo GENERATION:

#### Viability - Male and Female Rats:

All Periods:

At least twice daily.

# Clinical Observations and/or General Appearance - Male and Female Rats:

Acclimation Period:

Weekly.

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Dosage Period:

Daily before dosage. On the first day of dosage,

postdosage observations will be recorded at approximately hourly intervals after administration for the first four hours and at the end of the normal working day. Postdosage observations for subsequent days of dosage will be recorded at intervals determined appropriate by the Study Director and/or Study Monitor after determination of the onset of peak pharmacologic/toxicologic effects.

Postdosage Period:

Before sacrifice.

Maternal Behavior:

Days 1 and 5 postpartum. Observed abnormal behavior

recorded daily.

Clinical observations may be recorded more frequently than cited above, if deemed appropriate by the Study Director and/or Study Monitor.

# **Detailed Clinical Observations - Male and Female Rats:**

Once before the first dosage and at least once weekly thereafter, detailed clinical observations will be conducted for all male and female rats. These observations will be made outside the cage in a standard arena at the same time each day of conduct. Effort will be made to ensure that variations in the test conditions are minimal and that observations are conducted by observers unaware of treatment groups. Signs noted should include, but not be limited to: changes in skin, fur, eyes, mucous membranes, occurrence of secretions and excretions and autonomic activity (e.g., lacrimation, piloerection, pupil size, unusual respiratory pattern). Changes in gait, posture and response to handling as well as the presence of clonic or tonic movements, stereotypic behavior (e.g., excessive grooming, repetitive circling), difficult or prolonged parturition or bizarre behavior (e.g., self-mutilation, walking backwards) should also be recorded.

#### Body Weights - Male and Female Rats:

Acclimation Period:

Weekly.

Dosage Period:

Daily.

Sacrifice:

Terminal weight.

# Feed Consumption Values - Male Rats (recorded and tabulated):

Dosage Period:

Weekly. Feed left recorded on the day before sacrifice.

Rats will be fasted overnight before sacrifice.

# Feed Consumption Values - Female Rats (recorded and tabulated):

Dosage Period:

Weekly to cohabitation.

Days 0, 7, 10, 12, 15, 18, 20 and 25 (if necessary) of presumed gestation and days 1 and 5 postpartum. Feed left will be recorded on the day before sacrifice. Rats will be fasted overnight before sacrifice.

# Feed Consumption Values - Male and Female Rats:

Feed consumption values may be recorded more frequently than cited above if it is necessary to replenish the feed. During cohabitation, when two rats occupy the same cage with one feed jar, replenishment of the feed jars will be documented. Individual values will not be recorded or tabulated.

#### **Estrous Cycling and Mating:**

Estrous cycling will be evaluated by examination of vaginal cytology beginning with the day after the first administration and then until spermatozoa are observed in a smear of the vaginal contents and/or a copulatory plug is observed *in situ* during the cohabitation period.

# Natural Delivery:

Female rats will be evaluated for:

Adverse Clinical Signs Observed During Parturition.

Duration of Gestation (day 0 of presumed gestation to the time the first pup is observed).

Litter Size (defined as all pups delivered).

Pup Viability at Birth.

#### **Functional Observational Battery**:

On one occasion during the course of the study, a functional observational battery (FOB)<sup>(5-8)</sup> will be conducted on five male and five female rats per group. For male rats, this assessment will be conducted shortly before scheduled sacrifice. Female rats should be tested during the lactation period, shortly before scheduled sacrifice. To avoid hyperthermia of pups, dams will be separated from their litters for no longer than 30 to 40 minutes.

The FOB, to be conducted by an observer unaware of the group assignment of the rat, will assess the following parameters:

- 1. Lacrimation, salivation, palpebral closure, prominence of the eye, pupillary reaction to light, piloerection, respiration, and urination and defecation (autonomic functions).
- 2. Sensorimotor responses to visual, auditory, tactile and painful stimuli (reactivity and sensitivity).
- 3. Reactions to handling and behavior in the open field (excitability).
- 4. Gait pattern in the open field, severity of gait abnormalities, air righting reaction, visual placing response and landing foot splay (gait and sensorimotor coordination).
- 5. Forelimb and hindlimb grip strength.
- 6. Abnormal clinical signs including but not limited to convulsions, tremors and other unusual behavior, hypotonia or hypertonia, emaciation, dehydration, unkempt appearance and deposits around the eyes, nose or mouth.

Evidence of the ability of this battery to detect the effects of positive control substances will be provided (Testing Facility Positive Control Data). Data will also be provided to document interobserver reliability if more than one observer is involved in the testing.

## **Motor Activity Test:**

Motor activity will be evaluated on five male and five female rats per group once during the course of the study. For male rats, this assessment will be conducted shortly before scheduled sacrifice. Female rats should be tested during the lactation period, shortly before scheduled sacrifice.

The movements of each rat will be monitored by a passive infrared sensor mounted outside a stainless steel, wire-bottomed cage (40.6 x 25.4 x 17.8 cm). Each test session will be 1.5 hours in duration with the number of movements and time spent in movement tabulated at each five-minute interval. The apparatus will monitor a rack of up to 32 cages and sensors during each session, with each rat tested in the same location on the rack across test sessions. Groups will be counterbalanced across testing sessions and cages.

Data will be provided to demonstrate that the test system is capable of detecting increases in activity produced by positive control substances (Testing Facility Positive Control Data).

#### HEMATOLOGY AND CLINICAL CHEMISTRY:

At scheduled sacrifice, the five male and five female rats per group assigned to hematology and clinical chemistry sample collection will be exsanguinated from the inferior vena cava following sacrifice by carbon dioxide asphyxiation. Rats will be fasted overnight before sacrifice. Approximately 5 mL of blood (fasted) will be collected and processed as described below. Determinations additional to those described below may be conducted if the known properties of the test substance may, or are suspected to, affect related metabolic profiles (e.g., calcium, phosphate, fasting triglycerides and fasting glucose, specific hormones, and cholinesterase). The tubes containing the samples will be labeled with the protocol number, Sponsor study number, animal number, group number, dosage level, day of study, collection interval, date of collection, species, generation and storage conditions.

#### Hematology:

Approximately 1 mL of blood will be collected into EDTA-coated tubes and maintained on wet ice or refrigerated until shipment for analysis of the following hematologic parameters:

Erythrocyte Count (RBC)
Hematocrit (HCT)
Hemoglobin (HGB)
Mean Corpuscular Hemoglobin (MCH)
Mean Corpuscular Hemoglobin
Concentration (MCHC)

Mean Corpuscular Volume (MCV)
Leukocyte Count, Total (WBC)
Leukocyte Count, Differential
Platelet Count (PLAT)
Mean Platelet Volume (MPV)
Cell Morphology

Two blood smear slides will be prepared at the Testing Facility for each sample for measurements of differential leukocyte count. All samples (on wet ice) and slides (ambient conditions) will be shipped on the day of collection to Redfield Laboratories at the following address.

Approximately 1.8 mL of blood will be added to a tube containing 0.2 mL of sodium citrate (0.129 M). The contents will be mixed and maintained on wet ice until the tubes are centrifuged (within 30 minutes of the collection time). The resulting plasma will be transferred to a transport tube and immediately frozen. Plasma samples will be maintained on dry ice or in a freezer ( $\leq$ -70°C) until shipped on dry ice to Redfield Laboratories at the following address, for measurement of prothrombin time (PT) and activated partial thromboplastin time (APTT).

# Clinical Chemistry:

Approximately 2 mL of blood will be collected into serum separator tubes and centrifuged. The resulting sera samples will be immediately frozen on dry ice and maintained frozen (≤-70°C) until shipment for analysis of the following parameters:

Total Protein (TP)

Creatinine (CREAT)

Triglycerides (TRI)

Alanine Aminotransferase (ALT) Aspartate Aminotransferase (AST)

Albumin (A) Globulin (G)

Alkaline Phosphatase (ALK)

Albumin/Globulin Ratio (A/G)

Calcium (CA)

Glucose (GLU)

Cholesterol (CHOL)

Phosphorus (PHOS)

Total Bilirubin (TBILI)

Sodium (NA) Potassium (K)

Urea Nitrogen (BUN)

Chloride (CL)

Samples will be shipped (on dry ice) to arrive on Monday through Friday at Redfield Laboratories at the following address.

#### **Shipping Instructions:**

Samples will be shipped according to the conditions described above to:

Principal Investigator: Ms. Phyllis Powell

Redfield Laboratories A Division of CRL-DDS 100 East Boone Street

P.O. Box 308

Redfield, Arkansas 72132

Telephone:

(501) 397-2540

Telefax:

(501) 397-2002

The recipient will be notified in advance of sample shipment.

#### **URINALYSIS:**

Urinalysis will not be conducted unless indicated based on expected or observed toxicity of the test substance.

#### **METHOD OF SACRIFICE:**

Fo generation rats will be sacrificed by carbon dioxide asphyxiation.

# GROSS NECROPSY AND HISTOPATHOLOGY - Fo GENERATION RATS:

#### Scheduled Sacrifice:

Scheduled sacrifice of male rats will be conducted on the day following the last dosage administration, after a minimum of 28 days of dosage. Scheduled sacrifice of female rats will be conducted on day 6 of lactation.

Gross necropsy of all male and female rats will include an initial physical examination of external surfaces and all orifices, as well as the cranial, thoracic and abdominal cavities and their contents. Special attention will be paid to the organs of the reproductive system. The number of implantation sites and corpora lutea will be recorded.

Male and female rats will be examined for gross lesions. Gross lesions will be retained in neutral buffered 10% formalin and examined histologically. Tissue trimming and histopathology will be performed under the supervision of or by a Board-Certified Veterinary Pathologist. The testes and epididymides of all male rats will be weighed, and the testes, epididymides, seminal vesicles with coagulating gland and prostate will be retained in neutral buffered 10% formalin. The testes will be fixed in Bouin's solution for 48 to 96 hours before being retained in neutral buffered 10% formalin. The ovaries and the uterus with cervix of each female rat will be weighed, and ovaries, uterus, vagina and a mammary gland will be retained in neutral buffered 10% formalin. Uteri of apparently nonpregnant rats will be examined after being pressed between glass plates to confirm the absence of implantation sites, and retained in neutral buffered 10% formalin.

Blood samples (approximately 3 mL) will be collected from the five rats per sex per group assigned to metabolite analysis. Blood will be collected from the vena cava. Each sample will be divided into two aliquots. One aliquot of 2 mL will be transferred into an EDTA-coated (purple top) tube and refrigerated. The second aliquot (approximately 1 mL) will be transferred into a serum tube, allowed to clot and spun in a centrifuge. The resulting serum will be transferred into polypropylene tubes labeled with the protocol number, Sponsor study number, animal number, group number, dosage level, day of study, collection interval, date of collection, species, generation and storage conditions. All samples will be immediately frozen on dry ice and maintained frozen ( $\leq$ -70°C) until shipment for analysis.

The liver will be excised and the organ weight recorded. One lobe (right lateral) will be placed in a conical tube and flash frozen in an ice/alcohol bath. Liver samples will be maintained frozen ( $\leq$ -70°C) until shipment for analysis.

# **Shipping Instructions:**

Liver and serum samples will be shipped on dry ice and whole blood will be shipped on ice packs. Samples to be analyzed will be shipped to:

Principal Investigator: Gregory S. Gorman, Ph.D. Staff Chemist
Bioanalytical Chemistry Group
Southern Research Institute
200 Ninth Avenue South
Birmingham, Alabama 35255-5305

Telephone:

(205) 581-2725

Telefax:

(205) 581-2044

Email:

gorman@sri.org

The recipient will be notified in advance of sample shipment.

See ATTACHMENT 3 for additional tissues to be weighed and retained from the ten rats per sex per group assigned to histological sample collection and evaluation.

All other tissues will be discarded.

#### Scheduled Sacrifice of Female Rats that Do Not Deliver Litters:

Rats that do not deliver a litter will be sacrificed on day 25 of presumed gestation. Gross necropsy, examination and tissue retention will be conducted as described above for rats at scheduled sacrifice.

#### Dams with No Surviving Pups:

Dams with no surviving pups will be sacrificed after the last pup is found dead, missing or presumed cannibalized. Gross necropsy, examination and tissue retention will be conducted as described above for rats at scheduled sacrifice.

# Rats Found Dead or Moribund:

Rats that die or are sacrificed because of moribund condition, abortion or premature delivery will be examined for the cause of death or moribund condition on the day the observation is made. The rats will be examined for gross lesions. Testes and epididymides of male rats will be excised and paired organ weights will be recorded. The epididymides will be retained in neutral buffered 10% formalin. The testes will be fixed in Bouin's solution for 48 to 96 hours and then retained in neutral buffered 10% formalin. Pregnancy status and uterine contents of female rats will be recorded. Aborted fetuses and/or delivered pups will be examined to the extent possible. Uteri of apparently nonpregnant rats will be examined after being pressed between glass plates to confirm the absence of implantation sites. Ovaries and uteri will be retained in neutral buffered 10% formalin.

#### TESTS, ANALYSES AND MEASUREMENTS - F1 GENERATION:

Viability:

Preweaning Period:

Litters will be observed for dead pups at least twice daily. The

pups in each litter will be counted once daily.

Clinical Observations and/or General Appearance:

Preweaning Period:

Once daily.

Clinical observations may be recorded more frequently than cited above, if deemed appropriate by the Study Director and/or the Study Monitor.

Body Weights:

Preweaning Period:

Days 1 (birth) and 5 postpartum.

Sacrifice:

Terminal weight.

Feed Consumption Values (recorded and tabulated):

Preweaning Period:

Not recorded.

#### **METHOD OF SACRIFICE - F1 GENERATION PUPS:**

F1 generation pups will be sacrificed by carbon dioxide asphyxiation.

#### **NECROPSY - F1 GENERATION:**

Gross lesions will be retained in neutral buffered 10% formalin for possible future evaluation. Unless specifically cited below, all other tissues will be discarded.

#### Pups Found Dead on Day 1 Postpartum:

Pups that die before examination of the litter for pup viability will be evaluated for vital status at birth. The lungs will be removed and immersed in water. Pups with lungs that sink will be identified as stillborn; pups with lungs that float will be identified as liveborn, and to have died shortly after birth. Pups with gross lesions will be preserved in Bouin's solution for possible future evaluation.

# Pups Found Dead or Moribund on Days 2 to 4 Postpartum:

Pups found dead or sacrificed because of moribundity will be examined for gross lesions and for the cause of death or the moribund condition. Pups with gross lesions will be preserved in Bouin's solution for possible future evaluation.

#### Scheduled Sacrifice:

On day 5 postpartum, pups will be will be sacrificed and examined for gross lesions; gross lesions will be preserved in neutral buffered 10% formalin. Necropsy will include a single cross-section of the head at the level of the frontal-parietal suture and examination of the cross-sectioned brain for apparent hydrocephaly.

# PROPOSED STATISTICAL TESTS:

When possible results will be evaluated by appropriate and acceptable statistical methods. Because of the limited dimensions of the study, statistical analysis in the form of tests for significance are of limited value for many endpoints, particularly reproductive and neurological endpoints. Some of the most widely used methods, especially parametric tests for measures of central tendency, are inappropriate. If statistical analyses are to be conducted, the methods selected will be appropriate for the distribution of the variable examined and added to the protocol prior to finalization or by amendment.

# **DATA ACQUISITION, VERIFICATION AND STORAGE:**

Data generated during the course of this study will be recorded either by hand or using the Argus Automated Data Collection and Management System, the Vivarium Temperature and Relative Humidity Monitoring System, the Coulbourn Instruments Passive Infrared Motor Activity System, the Coulbourn Instruments Auditory Startle System, the Coulbourn Instruments Spatial Delayed Alternation System, and/or the passive avoidance software. All data will be tabulated, summarized and/or statistically analyzed using the Argus Automated Data Collection and Management System, the Vivarium Temperature and Relative Humidity Monitoring System, Microsoft Excel [part of Microsoft Office 97 (version SR-2)] and/or The SAS System (version 6.12).

Records will be reviewed by the Study Director and/or appropriate management personnel within 21 days after generation. All original records will be stored in the archives of the Testing Facility. All original data will be bound and indexed. A copy of all raw data will be supplied to the Sponsor upon request. Preserved tissues will be stored at the Testing Facility at no charge for one year after mailing of the draft final report, after which time the Sponsor will be contacted to determine the disposition of these materials.

#### **KEY PERSONNEL:**

Executive Director of Research: Mildred S. Christian, Ph.D., Fellow, ATS

Director of Research: Alan M. Hoberman, Ph.D., DABT

Associate Director of Research and Study Director: Raymond G. York, Ph.D., DABT

Director of Operations and Compliance: Barbara J. Patterson, B.A.

Director of Laboratory Operations: John F. Barnett, B.S. Director of Study Management: Valerie A. Sharper, M.S. Manager of Animal Operations: Dena C. Lebo, V.M.D.

Chairperson, Institutional Animal Care and Use Committee: Douglas B. Learn, Ph.D.

Consultant, Veterinary Pathology: W. Ray Brown, D.V.M., Ph.D., ACVP

# **RECORDS TO BE MAINTAINED:**

Protocol and Amendments.

Test Substance, Vehicle and/or Reagent Receipt, Preparation and Use.

Animal Acquisition.

Randomization Schedules.

Mating History.

Treatment (if prescribed by Staff Veterinarian).

General Comments.

Clinical Observations and/or General Appearance.

Body Weights.

Feed Consumption Values.

Natural Delivery Observations.

FOB and Motor Activity Observations.

Blood Sample Collection, Processing and Shipment.

Gross Necropsy Observations.

Organ Weights.

Photographs (if required).

Study Maintenance (room and environmental records).

Feed and Water Analyses.

Packing and/or Shipment Lists.

#### FINAL REPORT:

The Study Director will provide periodic updates of study progress to the Sponsor. Draft summary tables of unaudited computer-recorded data may accompany these updates. Statistical analyses will not be performed on these interim data.

A comprehensive draft final report will be prepared on completion of the study and will be finalized following consultation with the Sponsor. The report will include the following:

Summary and Conclusion.

Experimental Design and Method.

Evaluation of Test Results.

Appendices: Figures, Summary and Individual Tables Summarizing the Above Data, Protocol and Associated Amendments and Deviations, Study Director's GLP Compliance Statement, Reports of Supporting Data (if appropriate) and QAU Statement.

The Sponsor will receive one copy of the draft report and two copies of the final report. Data will be hand- and/or computer-recorded. Records will be reviewed by the Study Director and/or appropriate management personnel within 21 days after generation. All original records will be stored in the archives of the Testing Facility. All original data will be bound and indexed. A copy of all raw data will be supplied to the Sponsor upon request. Preserved tissues will be stored at the Testing Facility at no charge for one year after mailing of the draft final report, after which time the Sponsor will be contacted to determine the disposition of these materials.

# **INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE STATEMENT:**

The procedures described in this protocol have been reviewed by the Testing Facility's Institutional Animal Care and Use Committee. All procedures described in this protocol that involve study animals will be conducted in a manner to avoid or minimize discomfort, distress or pain to the animals.

The Sponsor's signature below documents the fact that information concerning the necessity for conducting this study and the fact that this is not an unnecessarily duplicative study may be obtained from the Sponsor. No alternative (*in vitro*) procedures were available for meeting the stated purposes of the study.

# REFERENCES:

- Christian, M.S. and Voytek, P.E. (1982). In Vivo Reproductive and Mutagenicity Tests.
   Environmental Protection Agency, Washington, D.C. National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.
- 2. Christian, M.S. (1984). Reproductive toxicity and teratology evaluations of naltrexone (Proceedings of Naltrexone Symposium, New York Academy of Sciences, November 7, 1983), J. Clin. Psychiat. 45(9):7-10.
- 3. Lang, P.L. (1988). Embryo and Fetal Developmental Toxicity (Teratology) Control Data in the Charles River Crl: CD®BR Rat. Charles River Laboratories, Inc., Wilmington, MA 01887-0630. (Data base provided by Argus Research Laboratories, Inc.)
- 4. Institute of Laboratory Animal Resources (1996). Guide for the Care and Use of Laboratory Animals. National Academy Press, Washington, D.C.
- 5. Haggerty, G.C. (1989). Development of Tier I neurobehavioral testing capabilities for incorporation into pivotal rodent safety assessment studies. J. Amer. Col. Toxicol. 8:53-70.
- 6. Irwin, S. (1968). Comprehensive observational assessment: Ia. A systemic quantitative procedure for assessing the behavioral and physiologic state of the mouse. Psychopharmacologia (Berlin) 13:222-257.
- 7. Moser, V.C. (1989). Screening approaches to neurotoxicity: A functional observational battery. J. Amer. Col. Toxicol. 8:85-94.
- 8. O'Donoghue, J.L. (1989). Screening for neurotoxicity using a neurologically based examination and neuropathology. J. Amer. Col. Toxicol. 8:97-116.

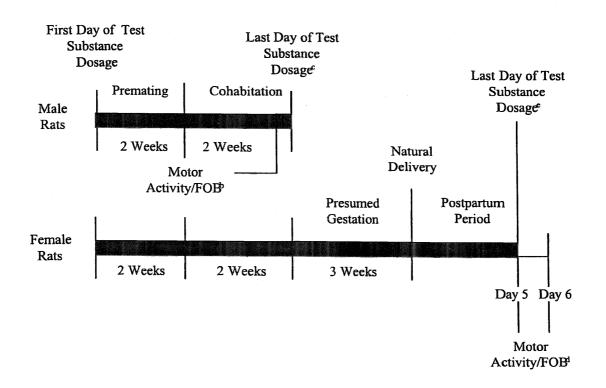
# PROTOCOL APPROVAL:

FOR THE TESTING FACILITY	
Alan M. Hoberman, Ph.D., DABT Director of Research	Date
Raymond G. York, Ph.D. DABT Associate Director of Research Study Director	15 FEB 2002 Date
Rebecca Altmann-Reilly, M.S.  Member, Institutional Animal Care and Use Committee	15 Feb. 2002 Date
FOR THE SPONSOR	19 Feb 2002
Paul H. Lieder, Ph.D., DABT Study Monitor and Sponsor's Representative	Date

# ATTACHMENT 1 SCHEMATIC OF STUDY DESIGN AND STUDY SCHEDULE

# **STUDY SCHEMATIC**

# COMBINED REPEAT DOSE AND REPRODUCTIVE/DEVELOPMENTAL TOXICITY SCREEN<sup>a</sup>



# Dosage Period

- a. For additional details see "Tests, Analyses and Measurements" section of the protocol.
- b. FOB and motor activity evaluations conducted on five males per group.
- c. Male rats sacrificed after completion of at least 28 days of dosage; necropsy and retention of male reproductive organs. Hematology and clinical biochemistry samples (five male and five female rats per group) and histological samples (ten male and ten female rats per group) collected.
- d. Five female rats per group assigned to FOB evaluation on day 5 postpartum and motor activity evaluation on day 6 postpartum.
- e. Last day of dosage for female rats is day 5 postpartum. Pups sacrificed on day 5 postpartum. Female rats sacrificed on day 6 postpartum; necropsy and retention of female reproductive organs. Hematology, clinical biochemistry and histological samples collected.

#### SCHEDULE<sup>a</sup>

12 FEB 02

Animal Receipt - Acclimation Begins.

18 FEB 02

Start of Dosage Period - Male Rats (14 days before cohabitation and through a 14-day cohabitation period until the of sacrifice after at least 28 days of

dosage).

18 FEB 02 - 16 APR 02

Dosage Period - Female Rats (14 days before cohabitation through Day 4 or Day 5 of lactation).

19 FEB 02 - 04 MAR 02

Dosage Period Estrous Cycle Evaluation.

•

04 MAR 02 PM - 11 MAR 02 AM 11 MAR 02 PM - 18 MAR 02 AM Cohabitation Period (Maximum of 14 days). Male 1 (7 days)

Male 2 (7 days)

05 MAR 02 18 MAR 02 First Possible Day 0 of Presumed Gestation. Last Possible Day 0 of Presumed Gestation.

19 MAR 02 - 22 MAR 02

FOB and Motor Activity Evaluation - Five Male

Rats per Group

25 MAR 02

Scheduled Sacrifice - Male Rats (Earliest possible date). Hematology, Clinical Biochemistry and

Histological Sample Collection.

a. The start date of the study is the day the Study Director signs the protocol.

b. Throughout this schedule, the day of birth is designated day 1 postpartum (day 1 of lactation) and all subsequent ages of the F1 generation rats and days of the lactation period will be determined and cited accordingly, as described above the protocol section, "Day Numbering System."

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26 MAR 02	First Possible Delivery (Day 21 of presumed gestation).
12 APR 02	Last Possible Delivery (Day 25 of presumed gestation).
30 MAR 02	First Possible Day 25 of Presumed Gestation Female Sacrifice.
12 APR 02	Last Possible Day 25 of Presumed Gestation Female Sacrifice.
30 MAR 02 - 16 APR 02	FOB Evaluation - Five Female Rats per Group.
30 MAR 02 - 16 APR 02	Day 5 Postpartum - Pups Sacrificed.
31 MAR 02 - 17 APR 02	Motor Activity Evaluation - Five Female Rats per Group.
31 MAR 02 - 17 APR 02	Day 6 Postpartum - Sacrifice of Female Rats. Hematology, Clinical Biochemistry and Histological Sample Collection.
01 AUG 02	Draft Final Report

# ATTACHMENT 2 TEST SUBSTANCE PREPARATION PROCEDURE

**ATTACHMENT 2** 

Protocol 418-027

Version: 418-027(14 FEB 02)

Page 1 of 2

#### TEST SUBSTANCE PREPARATION PROCEDURE

Test Substance: T 7559.7

Vehicle:

Aqueous 0.5% CMC (medium viscosity)

#### A. Purpose:

The purpose of this procedure is to provide a method for the preparation of dosage suspensions of T 7559.7 for oral (gavage) administration to rats on Argus Research Study number 418-027.

All suspension containers will be labeled and color-coded. Each label will specify the protocol number, test substance identification, Argus batch

#### B. General Information:

1.

	number, concentration, dosage level, preparation date, expiration date and storage conditions.			
2.	Suspensions will be prepared:  Daily _X_ Weekly For_ days of use Approximately every ten days By Sponsor			
3.	Suspensions will be administered at a final dosage volume of 10 mL/kg.			
4.	Safety:  X Gloves, uniform/lab coat, goggles or safety glasses with side shields  X Dust-mist/HEPA-filtered Mask Half-Face Respirator if not used in a chemical fume hood Full-Face Respirator/Positive Pressure Hood Tyvek Suit or tyvek apron and sleeves			
5.	Dosage suspensions adjusted for % Activity/Purity or Correction Factor:  Yes X No (Calculations based on 100%) % Activity % Purity Correction Factor			
6.	Sampling requirements: Cited in protocol			
7.	Storage: Cited in protocol			

**ATTACHMENT 2** 

Protocol 418-027 Version: 418-027(14 FEB 02)

Page 2 of 2

#### TEST SUBSTANCE PREPARATION PROCEDURE

NOTE:

Prior to test substance preparation accurately measure the required amount of the appropriate vehicle (R.O. deionized water should be used for calibration purposes) in a graduated cylinder, pour the required amount of vehicle into a beaker. Carefully mark each beaker at the meniscus. This mark will be used during the preparation to bring the test substance slurry up to volume.

#### C. Dosage Suspension Preparation:

- 1. Weigh the required amount of test substance on a piece of weigh paper or into an appropriately sized mortar (see PREPARATION CALCULATIONS).
- 2. If weigh paper is used, transfer the test substance to an appropriately sized mortar. If necessary, grind the test substance into a fine powder. Slowly add a small amount of vehicle and grind. Continue to add vehicle slowly and grind the vehicle and the test substance together to form a fine slurry. Transfer the vehicle/test substance slurry to a marked beaker.
- 3. Rinse the mortar and pestle with additional vehicle to remove any remaining test substance. Transfer rinse to beaker.
- 4. Add additional vehicle to the beaker to bring volume up to the mark. Place on magnetic stir plate and agitate prior to and during aliquotting, administration and/or sampling.
- 5. Repeat steps (1) through (4) for each concentration.

Written By:

Approved by

Date: 15 FEB 2002

Clarification: X No

Yes [see attached clarification form]

Initial/Date:  $\underline{\varsigma} < 13.(9.03)$ 

#### **ATTACHMENT 3**

TISSUES TO BE WEIGHED, RETAINED AND EXAMINED HISTOLOGICALLY

### TISSUES TO WEIGHED AND RETAINED FOR POSSIBLE EXAMINATION FROM TEN RATS PER SEX PER GROUP

Ten rats per sex per group not assigned to functional observational battery and motor activity tests will be assigned to histological evaluations.

#### Tissues to be Weighed:

The following organs will be excised, trimmed and individually weighed as soon as possible after excision to avoid drying.

liver spleen
kidneys brain
adrenals heart
thymus ovaries
testes uterus (with cervix)

epididymides

#### Tissues to be Retained:

The following tissues or representative samples will be retained in neutral buffered 10% formalin.

brain (representative regions including cerebrum, cerebellum, pons)

small and large intestines (including Peyer's patches)

lungs (perfused with neutral buffered 10% formalin)

lymph nodes (submandibular and mediastinal)

peripheral nerve (sciatic)

gross lesions spinal cord (cervical, thoracic and lumbar)

stomach liver kidneys adrenals spleen heart

thymus thyroid/parathyroid

trachea uterus

urinary bladder bone marrow testes\* ovaries

epididymides uterus seminal vesicles (with coagulating gland) vagina

prostate mammary gland (female rats only)

\* Testes will be fixed in Bouin's solution for 48 to 96 hours before being retained in neutral buffered 10% formalin.

#### Histological Examination:

Histological examination of retained tissues, including reproductive organs, will be conducted for the assigned ten rats per sex from the control and high dosage groups. If lesions attributed to the test substance are observed in the rats exposed to the high test substance dosage, the same tissues will be examined from the assigned five rats per sex exposed to the lower test substance dosages. Should results warrant examination of the lower dosage groups and conduct of quantitative evaluation, scheduled report date and prices will be adjusted accordingly.

#### **Shipping Instructions:**

Tissues to be examined histologically will be shipped (ambient conditions) to:

Principal Investigator: W. Ray Brown, D.V.M., Ph.D., ACVP Veterinary Pathologist
Research Pathology Services, Inc.
438 E. Butler Avenue
New Britain, Pennsylvania 18901
Telephone: (215) 345-7070

The recipient will be notified in advance of sample shipment.

905 Sheehy Drive, Bldg. A Horsham, PA 19044 Telephone: (215) 443-8710 Telefax: (215) 443-8587



#### **PROTOCOL 418-027**

## ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST

SPONSOR'S STUDY NUMBER: T-7599

Amendment 1 - 15 March 2002

#### 1. Purpose (page 1 of the protocol):

[Effective Date: 1 March 2002] The purpose of this study is to provide information on the possible health hazards that may result from repeated exposure of Crl:CD®(SD)IGS BR VAF/Plus® male and female rats to a test substance beginning before cohabitation, through mating and continuing for at least 28 days (male rats), or through parturition until day 5, rather than day 4 or 5, of lactation (female rats).

#### Reason for Change:

This change corrects the protocol and is consistent with the method and frequency of administration to female rats on page 10 of the protocol.

#### 2. <u>Vehicle</u> (page 3 of the protocol):

[Effective Date: 22 February 2002] The vehicle will be aqueous 1.0% carboxymethylcellulose (CMC) (medium viscosity), rather than aqueous 0.5% carboxymethlycellulose.

#### Reason for Change:

This change was made because the test substance is precipitating out of suspension during shipment for analysis and cannot be analyzed.

#### 3. <u>Safety Precautions</u> (page 3 of the protocol):

[Effective Date: 18 February 2002] A half-face respirator will be worn when the bulk test substance is not being used in a chemical fume hood.

#### Reason for Change:

This addition was made so that safety precautions are consistent with the MSDS.

#### 4. <u>Storage</u> (page 4 of the protocol):

[Effective Date: 18 February 2002] The prepared test substance and vehicle formulations will be stored refrigerated, protected from light, rather than at room temperature, protected from light.

#### Reason for Change:

This change was made at the request of the Sponsor based on the stability of the test substance.

#### 5. Analyses (page 4 of the protocol):

Additional analyses for concentration and homogeneity and stability will be performed on samples taken from the second test substance preparation using 1.0% carboxymethlycellulose. These samples will be taken and analyzed as described in the protocol.

#### Reason for Change:

This change was made to provide an analysis of samples prepared using 1.0% carboxymethylcellulose as the vehicle.

#### 6. <u>Bulk Test Substance Sampling</u> (page 5 of the protocol)

[Effective Date: 25 February 2002] The 1 g sample of the test substance taken on the last day of treatment will be sent directly to Southern Research Institute at the address in the protocol, rather than to the Sponsor, for analysis.

#### Reason for Change:

This change corrects the protocol to indicate that the sample will be sent to Southern Research Institute, rather than to the Sponsor.

Protocol 418-027 Amendment 1 Page 3

#### 7. <u>Bulk Test Substance Sampling</u> (page 5 of the protocol)

[Effective Date: 25 February 2002] A sample (approximately 5 g) of the test substance will be taken and sent (ambient conditions, protected from light) for use in the preparation of analytical standards and for possible spectrophotometric analysis. The sample will be sent to:

Principal Investigator, Gregory S. Gorman, Ph.D. Staff Chemist
Bioanalytical Chemistry Group
Southern Research Institute
2000 Ninth Avenue South
Birmingham, Alabama 35255-5305

Telephone:

(205) 581-2725

Telefax

(205) 581-2044

Email:

gorman@sri.org

#### 8. <u>Shipping Instructions</u> (page 6 of the protocol):

[Effective Date: 18 February 2002] The samples to be analyzed will be shipped refrigerated, protected from light, rather than at ambient conditions.

#### Reason for Change:

This change was made at the request of the Sponsor based on the stability of the test substance.

#### 9. Schedule (Page 2 of Attachment 1 to the protocol):

[Effective Date: 25 February 2002] The dosage period for female rats will be 14 days before cohabitation through Day 5 of lactation, rather than through Day 4 or 5 of lactation.

#### Reason for Change:

This change corrects the protocol and is consistent with the method and frequency of administration to female rats on page 10 of the protocol.

#### 10. Safety (Page 1 of Attachment 2 to the protocol):

[Effective Date: 18 February 2002] There should be an "X" before "Half-Face Respirator if not used in a chemical fume hood" to indicate an additional safety precaution.

Protocol 418-027 Amendment 1 Page 4

Date

#### Reason for Change:

This addition was made so that safety precautions are consistent with the MSDS.

Date

Date

Alan M. Hoberman, Ph.D., DABT

Director of Research

Raymond G. York, Ph.D., DABT Date

Associate Director of Research

**Study Director** 

Rebecca Altmann-Reilly, M.S.

Member, Institutional Animal Care

and Use Committee

Paul H. Lieder, Ph.D., DABT

**Study Monitor** 

Sponsor's Representative

905 Sheehy Drive, Bldg. A Horsham, PA 19044 Telephone: (215) 443-8710 Telefax: (215) 443-8587



#### **PROTOCOL 418-027**

# ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL TOXICITY SCREENING TEST

SPONSOR'S STUDY NUMBER: T-7599

Amendment 2 - 5 September 2002

#### 1. <u>Proposed Statistical Tests</u> (page 19 of the protocol):

[Effective Date: 25 June 2002]: Attachment 1 to this amendment describes the proposed statistical methods.

Body weight data, feed consumption values and organ weights will be analyzed as described under the Parametric heading of the schematic. Bartlett's Test of Homogeneity of Variances<sup>(9)</sup> will be used to estimate the probability that the groups had different variances. A nonsignificant result (p>0.001) will indicate that an assumption of homogeneity of variance is not inappropriate, and the data will be compared using the Analysis of Variance Test<sup>(10)</sup>. If that test is significant ( $p\le0.05$ ), the groups exposed to the test substance will be compared with the control group using Dunnett's Test<sup>(11)</sup>. If Bartlett's Test is significant ( $p\le0.001$ ), the Analysis of Variance Test is not appropriate, and the data will be analyzed as described under the Nonparametric heading of the schematic. When 75% or fewer of the scores in all the groups are tied, the Kruskal-Wallis Test<sup>(12)</sup> will be used to analyze the data, and in the event of a significant result ( $p\le0.05$ ), Dunn's Test<sup>(13)</sup> will be used to compare the groups exposed to the test substance with the control group. When more than 75% of the scores in any group are tied, Fisher's Exact Test<sup>(14)</sup> will be used to compare the proportion of ties in the groups.

Data from the motor activity test, with repeated measurements within a session, will be analyzed using an Analysis of Variance with Repeated Measures<sup>(15)</sup>, as described under that heading in the schematic. A significant effect ( $p \le 0.05$ ) in that test can appear as effect of Concentration (a difference between groups in the total across all measurements in a session) or as an interaction between

Concentration and Block (a difference between groups at specific measurement periods). If the Concentration effect is significant, the totals for the control group and the groups given the test substance will be compared using Dunnett's Test. If the Concentration x Block interaction is significant, an Analysis of Variance Test will be used to evaluate the data at each measurement period, and a significant result ( $p \le 0.05$ ) will be followed by a comparison of the groups using Dunnett's Test.

Test items in the FOB having graded or count scores will be analyzed using the procedures described under the <u>Nonparametric</u> heading of the schematic.

Clinical observation incidence data will be analyzed as contingency tables using the Variance Test for Homogeneity of the Binomial Distribution<sup>(16)</sup>.

Alternate or additional statistical evaluations may be performed if deemed necessary or appropriate.

#### Reason for Change:

The statistical methods were to be added by amendment.

2. <u>References</u> (page 22 of the protocol):

[Effective Date: 25 June 2002]: The following references are added to the protocol.

- 9. Sokal, R.R. and Rohlf, F.J. (1969). Bartlett's test of homogeneity of variances. *Biometry*, W.H. Freeman and Co., San Francisco, pp. 370-371.
- 10. Snedecor, G.W. and Cochran, W.G. (1967). Analysis of Variance. Statistical Methods, 6th Edition, Iowa State University Press, Ames, pp. 258-275.11. Dunnett, C.W. (1955). A multiple comparison procedure for comparing several treatments with a control. J. Amer. Stat. Assoc. 50:1096-1121.
- 11. Dunnett, C.W. (1955). A multiple comparison procedure for comparing several treatments with a control. J. Amer. Stat. Assoc. 50:1096-1129.
- 12. Sokal, R.R. and Rohlf, F.J. (1969). Kruskal-Wallis Test. *Biometry*, W.H. Freeman and Co., San Francisco, pp. 388-389.

Protocol 418-027 Amendment 2 Page 3

- 13. Dunn, O.J. (1964). Multiple comparisons using rank sums. Technometrics 6(3):241-252.
- 14. Siegel, S. (1956). Nonparametric Statistics for the Behavioral Sciences, McGraw-Hill, New York, pp. 96-105.
- 15. SAS Institute, Inc. (1988). Repeated measures analysis of variance. SAS/STAT<sup>TM</sup> User's Guide, Release 6.03 Edition, Cary, NC, pp. 602-609.
- 16. Snedecor, G.W. and Cochran, W.G. (1967). Variance test for homogeneity of the binomial distribution. *Statistical Methods*, 6th Edition, Iowa State University Press, Ames, pp. 240-241.

#### Reason for Change:

The proposed statistical tests cite these references.

3. <u>Histological Examination</u> (page 2 of Attachment 3 of the protocol):

[Effective Date: 4 June 2002]: If lesions attributed to the test substance are observed in the rats exposed to the high test substance dosage, the same tissues will be examined from the assigned ten rats, rather than five rats, per sex exposed to the lower test substance dosages.

#### Reason for Change:

This change was made to correct the protocol. The Randomization and cohabitation section of the protocol, page 9, states that histological evaluations will be performed on the last ten rats per sex in each group exposed to the lower test substance dosages.

4. <u>Histological Examination</u> (page 2 of Attachment 3 of the protocol):

[Effective Date: 4 June 2002]: Histological evaluations will be performed on the livers of ten male and ten female rats, the thymuses of ten female rats and the stomachs of ten male rats exposed to each of the lower test substance dosages.

Protocol 418-027 Amendment 2 Page 4

#### Reason for Change:

This change was made to clarify that additional histological evaluation would be performed because lesions of the livers, thymuses and stomachs were found in male and/or female rats assigned to the 250 mg/kg/day dosage group.

Alan M. Hoberman, Ph.D., DABT

Date

Raymond G. York, Ph.D., DABT Date

Associate Director of Research

Study Director

Rebecca Altmann-Reilly, M.S.O

Date

Paul H. Lieder, Ph.D., DABT

Date

Member, Institutional Animal Care

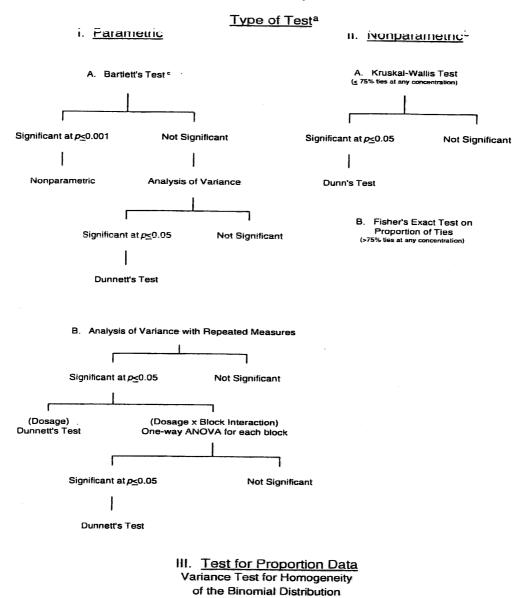
and Use Committee

Director of Research

**Study Monitor** Sponsor's Representative

### PROPOSED STATISTICAL TESTS (9-16):

The following schematic represents statistical analyses of the data.



a. Statistically significant probabilities are reported as either  $p \le 0.05$  or  $p \le 0.001$ .

b. Proportion data are not included in this category.

c. Test for homogeneity of variance.

#### APPENDIX E

DEVIATIONS FROM THE PROTOCOL AND THE STANDARD OPERATING PROCEDURES OF THE TESTING FACILTY

## DEVIATIONS FROM THE PROTOCOL AND THE STANDARD OPERATING PROCEDURES OF THE TESTING FACILITY

- 1. On 25 March 2002, day 36 of study (DS 36), male rat 17632 in the 10 mg/kg/day dosage group refluxed approximately 1 mL of the 4.9 mL test substance that was administered. This deviation did not adversely affect the outcome or interpretation of the study because the rat was administered most of the dosage.
- 2. On 3 March 2002, DS 14, and on 26 March 2002, day 19 of presumed gestation (DG 19), the postdosage observations for female rats 17716 in the 0 (Vehicle) mg/kg/day dosage group and 17683 in the 250 mg/kg/day dosage group were performed one minute early from the range of 60 ± 10 minutes. These deviations did not adversely affect the outcome or interpretation of the study because the extent of the deviation was minimal.
- 3. On 3 March 2002, DS 14, the postdosage observation for male rat 17630 in the 0 (Vehicle) mg/kg/day dosage group was not performed. This deviation did not adversely affect the outcome or interpretation of the study because sufficient data were available for evaluation of this parameter and it was a single event.
- 4. On 30 March 2002, DG 25, ovaries of female rat 17686 in the 250 mg/kg/day dosage group were not retained after necropsy. This deviation did not adversely affect the outcome or interpretation of the study because sufficient tissues were saved from other rats in this dosage group to evaluate ovaries.
- 5. On 4 April 2002, plasma and serum samples from the following rats were processed and immediately frozen on dry ice. On 5 April 2002, these samples were found in a styrofoam box after they had thawed because of insufficient dry ice to keep the samples frozen. Samples were immediately refrozen and transferred to a -70° C chest freezer for storage.

	Dosage		
Dosage Group	(mg/kg/day)	Rat Number	Sample Type
I	0	17715	Serum
II	10	17684	Serum and Plasma
		17707	Serum
		17710	Serum
III	50	17687	Serum and Plasma
		17706	Serum
		17720	Serum
IV	250	17678	Serum

This deviation did not adversely affect the outcome or interpretation of the study because sufficient samples were available for evaluation.

All deviations are documented in the raw data.

Raymond G. York, Ph.D., DABT

Date

Associate Director of Research

Study Director

# APPENDIX F CERTIFICATE OF ANALYSIS

### Certificate of Analysis

### N-MeFBSE $[C_4F_9SO_2N(CH_3)CH_2CH_2OH]$ 41-2601-1878-5 Lot 6

30 January 2002

Gibbes Bailie

Sample purity - 95.55%.

This sample was analyzed using GC, GC/MS, LC/MS, <sup>1</sup>H-NMR, and <sup>19</sup>F-NMR analyses techniques. The results of these tests show the sample to contain the following composition:

$C_4F_9SO_2N(CH_3)_2$	0.009 %
C <sub>4</sub> F <sub>9</sub> SO <sub>2</sub> N(CH <sub>3</sub> )H	0.63 %
$C_4F_9SO_2N(CH_3)C_2H_4OC_4F_8H$	0.14 %
C <sub>4</sub> F <sub>9</sub> SO <sub>2</sub> N(CH <sub>3</sub> )CH <sub>2</sub> CH <sub>2</sub> OH	95.55 %
$C_4F_9SO_2N(CH_3)C_2H_4N(CH_3)_2$	0.002 %
$C_4F_9SO_2N(CH_3)C_2H_4N(CH_3)H$	0.17 %
C <sub>4</sub> F <sub>8</sub> HSO <sub>2</sub> N(CH <sub>3</sub> )CH <sub>2</sub> CH <sub>2</sub> OH	1.80 %
C <sub>4</sub> F <sub>9</sub> SO <sub>2</sub> N(CH <sub>3</sub> )CH <sub>2</sub> CH <sub>2</sub> OCH <sub>2</sub> CH <sub>2</sub> OH	1.71 %
$C_3F_7C(O)N(CH_3)H$	0.0004 %
C <sub>3</sub> F <sub>7</sub> CO <sub>2</sub> -	< 30 ppm
C₄F <sub>9</sub> SO <sub>3</sub> -	< 7 ppm
C <sub>4</sub> F <sub>8</sub> HSO <sub>3</sub> -	10 ppm

Additionally, the isomer distribution of the C4 alcohol ( $C_4F_9SO_2N(Me)-CH_2CH_2OH$ ) was determined using <sup>19</sup>F-NMR techniques and found to contain the following relative composition:

CF <sub>3</sub> CF <sub>2</sub> CF <sub>2</sub> CF <sub>2</sub> SO <sub>2</sub> N(CH <sub>3</sub> )CH <sub>2</sub> CH <sub>2</sub> OH [linear]	98.8 %
(CF <sub>3</sub> ) <sub>2</sub> CFCF <sub>2</sub> SO <sub>2</sub> N(CH <sub>3</sub> )CH <sub>2</sub> CH <sub>2</sub> OH [iso-	0.97 %
branch]	
CF <sub>3</sub> CF <sub>2</sub> CF(CF <sub>3</sub> )SO <sub>2</sub> N(CH <sub>3</sub> )CH <sub>2</sub> CH <sub>2</sub> OH [alpha-	0.20 %
branch]	

Gibbes Bailie

# $\label{eq:appendix} \mbox{APPENDIX G}$ $\mbox{ANALYTICAL REPORT}$

#### FINAL REPORT

ANALYSIS OF DOSING SOLUTIONS USED AT ARGUS RESEARCH LABORATORY FOR SPONSOR'S STUDY NUMBER T-7599.7 (ARGUS RESEARCH LABORATORY PROTOCOL NUMBER: 418-027), SOUTHERN RESEARCH INSTITUTE STUDY A536.2

**STUDY ID: A536.2** 

SPONSOR STUDY NO. T-7599.7 (ARGUS RESEARCH LABORATORY PROTOCOL NUMBER: 418-027)

Southern Research Institute 2000 Ninth Avenue South P.O. Box 55305 Birmingham, AL 35255-5305

Study Initiation Date: 3/15/02 Study Completion Date: 2/12/2003 Experimental Initiation Date: 3/11/02 Experimental Completion Date: 6/14/02

#### **SUMMARY**

All samples were analyzed according to analytical method BACG-3592. A total of 8 formulated dose samples including vehicles ranging in concentration from 0 to 25 mg/mL were analyzed to determine the 10 day stability of 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-n-(2hvdroxyethyl)-N-methyl (T-7599.7) in the formulated mixture. A total of 8 formulated dose samples including vehicles ranging in concentration from 0 to 25 mg/ml were analyzed to determine concentration of T-7599.7 in the formulated mixture. To test for homogeneity of dose formulation a total of 24 formulated dose samples including vehicles ranging in concentration from 0 to 25 mg/ml were analyzed to determine concentration of T-7599.7 in the top, middle and bottom of the formulated mixture. Samples were stored refrigerated as per sponsor's shipping recommendations. For the 10-day stability, study samples were found to be within  $\pm$  11% of the day 1 values except for the 5 mg/mL samples which were within ± 15% of the expected dose concentration but twice (204% and 196% of Day 1 values) that found on day 1. For the dose analysis, 1 mg/ml dose formulation samples were found to be within ± 15% of the reported concentrations but the 5 and 25 mg/mL samples were lower than expected, ranging from 55% to 69% of the expected value. For the homogeneity samples the 1 mg/mL and 5 mg/mL samples were lower than their expected concentrations ranging from 55% to 70%, but values between top, middle, and bottom samples differed by less than  $\pm$  16%. The 25 mg/mL dose samples were within ± 16% of expected values for both concentration and homogeneity between top, middle, and bottom samples.

#### **KEY PERSONNEL**

Raymond G. York, Ph.D., D.A.B.T. Study Director Argus Research Laboratories

Gregory S. Gorman, Ph.D. Manager Bioanalytical Chemistry Group

Lara Cook, M.S. Research Associate II Bioanalytical Chemistry Group

#### 1.0 Objective

The objective of this study was to determine the stability, dose concentration, and homogeneity of dose formulations (top, middle and bottom samples) of 1-Butanesulfonamide, 1,1,2,2,3,3,4,4,4-nonafluoro-n-(2-hydroxyethyl)-N-methyl (T-7599.7) in the supplied dosing solutions received from the sponsor and to confirm the identity of the test solution.

#### 2.0 Safety

All necessary procedures to ensure safety of the analysts were based on information contained in the Material Safety and Data Sheets, provided by the producer of the test article and the study director.

#### 3.0 Compliance

The study described in this final report was conducted in accordance with the FDA Good Laboratory Practice Standards (21 CFR Part 58), OECD Principles of Good Laboratory Practices [C(97)186/Final], and Japanese Ministry of Health and Welfare (MHW Ordinance Number 21, March 26, 1997). The final report accurately reflects the raw data obtained during the performance of the study. There were no adverse circumstances that affected the quality or integrity of the study.

#### 4.0 Experimental

#### 4.1 Analytical Procedures

The sample preparation and analysis procedures as described in the analytical method BACG-3592 were employed for all analyses. For the stability study each sample was allowed to warm to room temperature, was sonicated for about 15 minutes and was then vortexed well before being sampled. An aliquot was taken from each and diluted as described in the method. For samples that were analyzed for the dose analysis and homogeneity studies, samples were allowed to come to room temperature and sonicated for 15 minutes, but would not go into solution. Samples were then run under hot water and sonicated further but would not go into solution and remained instead a suspension. These samples were quantitatively transferred and diluted as described in the chemical analysis sheets. Multiple calibration curves were prepared over a concentration range of 500 to 10,000 ng/mL and analyzed along with the samples as described in the method. The correlation coefficient for each curve was equal to or greater than 0.9991.

#### 4.2 Results

The results of the identity testing confirmed that the found spectra (LC/MS, FT-IR and <sup>13</sup>C NMR results) were consistent with the submitted substance, T-7599.7. The results of the formulation analyses are presented (Tables I - VII) corresponding to the sponsor's study number at the end of the report.

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#### 4.3 Calculations

Calculations were performed using TurboQuan (Version 1.0). The amount of analyte in the diluted dose formulation samples (ng/mL) was back calculated using a calibration curve generated from a set of calibration standards containing the equivalent amount of carboxy methyl cellulose (CMC) as in the diluted samples. The calibration curve was generated by a regression analysis to determine the best fit curve (e.g., linear, quadratic, etc.) and amount of weighting. A quadratic fit with 1/X weighting was determined to be the best fit:

$$y = ax^2 + bx + c$$

where:

y =Peak area response of test article

x =Concentration of the test article in standards.

a, b, c = Constants derived from the regression analysis.

#### 5.0 Storage

A copy of the final report and all raw data will be stored in the Southern Research Institute archives.

#### 6.0 Conclusion

A total of 40 T-7599.7 dose formulation samples ranging in concentration from 0 to 25 mg/mL were analyzed using method BACG-3592. For the 10-day stability study, samples were found to be within  $\pm$  11% of the Day 1 values except for the 5 mg/mL samples which were within  $\pm$  15% of the expected dose concentration but twice (204% and 196% of Day 1 values) that found on Day 1. This may have been due to the low values found for the 5 mg/mL samples on Day 1 (52% of expected concentration). For the dose analysis, the 1 mg/ml dose formulation samples were found to be within  $\pm$  15% of the reported concentrations but the 5 and 25 mg/mL samples were lower than expected, ranging from 55% to 69% of the expected value. For the homogeneity samples the 1 mg/mL and 5 mg/mL samples were lower than their expected concentrations, ranging from 55% to 70% but values between top, middle, and bottom samples differed by less than  $\pm$  15%. The 25 mg/mL dose samples were within  $\pm$  16% of expected values for both concentration and homogeneity between top, middle, and bottom samples. The variation in expected concentrations may have been due to the fact that samples were in a suspension rather than in solution and instead of assisting in solubility the presence of the 1% CMC made the samples very viscous and quantitative transfer difficult to perform.

Data presented in Tables I through VII are based on non-truncated numbers and may not be reproducible based on rounded numbers displayed. Values for each measured concentration are based on the average of two replicates per sample.

Table I

Day 1 of the 10-Day Stability Study for a Dose Formulation Containing T-7599.7 1% CMC Sponsor Study Number T-7599.7 (Argus Research Laboratory Protocol Number: 418-027)

Day 1

			T**	
Nominal	Target	Measured	Dose	
Dose	Dilution	Conc.	Conc.(mg/mL)	% of
concentration	(ug/mL)	(ug/mL)		Theoretical
(mg/mL) &				
Sample #				
0 (1 of 4)	NA	Not detected	date one operage	
0 (2 of 4)	NA	Not detected		
1 (1 of 4)	3.0	2.3	0.8	78
1 (2 of 4)	3.0	2.5	0.8	83
5 (1 of 4)	3.0	1.7	2.8	55
5 (2 of 4)	3.0	1.5	2.6	51
25 (1 of 4)	3.0	3.0	25.2	101
25 (2 of 4)	3.0	2.8	23.1	93

#### Table II

Day 10 of the 10-Day Stability Study for a Dose Formulation Containing T-7599.7 1% CMC Sponsor Study Number T-7599.7 (Argus Research Laboratory Protocol Number: 418-027)

Day 10

Nominal	Target	Measured	Dose		
Dose concentration (mg/mL) & Sample #	Dilution (ug/mL)	Conc. (ug/mL)	Conc.(mg/mL)	% of Theoretical	% of Day 1
0 (1 of 4)	NA	Not detected	gas, par cort con que tam		
0 (2 of 4)	NA	Not detected	******		
1 (1 of 4)	3.0	2.3	0.8	76	98
1 (2 of 4)	3.0	2.2	0.7	75	89
5 (1 of 4)	3.0	3.4	5.6	113	204
5 (2 of 4)	3.0	3.0	5.0	101	196
25 (1 of 4)	3.0	2.9	24.4	98	97
25 (2 of 4)	3.0	3.0	24.7	99	107

Table III

Dose Formulation Analysis of T-7599.7 in 1% CMC

Sponsor Study Number T-7599.7 (Argus Research Laboratory Protocol Number: 418-027)

Nominal	Target	Measured	Dose	
Dose concentration (mg/mL) & Sample I.D.	Dilution (ug/mL)	Concentration (ug/mL)	Concentration (mg/mL)	% of Theoretical
0 (1 of 4)	NA	not detected	~~~~	
0 (2 of 4)	NA	not detected		
1 (1 of 4)	2.8	2.8	1.0	98
1 (2 of 4)	2.9	3.3	1.1	114
5 (1 of 4)	3.0	2.1	3.4	69
5 (2 of 4)	3.0	2.1	3.4	69
25 (1 of 4)	3.0	1.8	14.9	60
25 (2 of 4)	3.0	1.7	13.7	55

#### Tables IV, V, VI and VII

Homogeneity Dose Formulation Analysis of T-7599.7 in 1% CMC Sponsor Study Number T-7599.7 (Argus Research Laboratory Protocol Number: 418-027) (In the sample ID, T = top, M = middle, and B = bottom)

Table IV Controls (0 mg/ml)

Nominal	Target	Measured	Dose		
Dose concentration (mg/mL) & Sample I.D.	Dilution (ug/mL)	Concentration (ug/mL)	Concentration (mg/mL)	% of Theoretical	
0 (1 of 12T)	NA	not detected			
0 (2 of 12T)	NA	not detected			
0 (5 of 12M)	NA	not detected			
0 (6 of 12M)	NA	not detected			
0 (9 of 12B)	NA	not detected		***	
0 (10 of 12B)	NA	not detected			

Table V 1 mg/ml

		0		
Nominal	Target	Measured	Dose	
Dose concentration (mg/mL) & Sample I.D.	Dilution (ug/mL)	Concentration (ug/mL)	Concentration (mg/mL)	% of Theoretical
1 (1 of 12T)	3.0	2.0	0.7	65
1 (2 of 12T)	3.0	1.8	0.6	61
1 (5 of 12M)	3.0	1.7	0.6	55
1 (6 of 12M)	3.0	1.8	0.6	59
1 (9 of 12B)	3.0	2.1	0.7	69
1 (10 of 12B)	3.0	2.1	0.7	70

Table VI 5 mg/ml

Nominal	Target	Measured	Dose	
Dose concentration (mg/mL) & Sample I.D.	Dilution (ug/mL)	Concentration (ug/mL)	Concentration (mg/mL)	% of Theoretical
5 (1 of 12T)	2.9	1.7	2.8	56
5 (2 of 12T)	3.0	1.7	2.8	56
5 (5 of 12M)	3.0	1.8	2.9	58
5 (6 of 12M)	3.0	1.9	3.2	63
5 (9 of 12B)	3.0	2.0	3.4	67
5 (10 of 12B)	3.0	1.9	3.2	64

Table VII 25 mg/ml

Nominal	Target	Measured	Dose	
Dose	Dilution	Concentration	Concentration	% of
concentration (mg/mL) &	(ug/mL)	(ug/mL)	(mg/mL)	Theoretical
Sample I.D.				
25 (1 of 12T)	3.0	3.0	24,6	98
25 (2 of 12T)	3.0	3.1	25.6	103
25 (5 of 12M)	2.9	3.4	28.9	116
25 (6 of 12M)	3.0	2.7	22.5	90
25 (9 of 12B)	3.0	2.9	23.9	96
25 (10 of 12B)	3.0	3.0	25.7	103
L			I .	1

Calculated values are based upon non-truncated numbers and may not be reproducible based on rounded numbers displayed in tables I through VII.

### 7.0 Approvals

- Gara Cook	2-11-03
Lara Cook, M.S.	Date
Research Associate II	
Bioanalytical Chemistry Group	
Gregory S. Gorman, Ph.D.  Manager  Bioanalytical Chemistry Group	2/11/03 Date
Charle D. Flebers	2-11-03
Charles D. Hébert, Ph.D., D.A.B.T.	Date
Director	
Safety Assessment Department	
Raymond G. York, Ph.D., D.A.B.T.	/2-FEB - 2003 Date
Study Director Argus Research Laboratories	
Aruis Research Laboratories	

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Ipitials/Date	PAC	2/13/03

### **QUALITY ASSURANCE STATEMENT**

Final Report On:

Analysis of Dosing Solutions Used at Argus Research Laboratory For Sponsor's Study Number T-7599.7 (Argus Research Laboratory Protocol Number: 418-027), SRI Study A536.2

**Study No.: A536.2** 

Listed below are the phases and/or procedures performed by Southern Research Institute that were inspected and audited by the Quality Assurance Unit during the study described in the report. Findings were reported to the study director and management periodically.

Phases/Procedures	Inspection/ Date Managen Audit Date Notified		Date Study Director Notified	
Test Substance Characterization: Liquid Chromatography/Mass Spectrometry	6/18/02	1/23/03	1/24/03	
Final (Draft) Report Review And Data Audit	1/7/03-1/9/03; 1/13/03; 1/21/03	1/23/03	1/24/03	
Final Report Review	2/11/03	2/11/03	2/11/03	

The results presented in this final report accurately reflect the raw data.

Kelly K. Crick, Assistant Manager, Quality Assurance

Date

# APPENDIX H TEMPERATURE AND RELATIVE HUMIDITY REPORT

#### **ARGUS**

## Temperature and Relative Humidity Report Location: Room 01

**Protocol Number: 418-027** 

Range of Dates: 12-Feb-2002 13:35 to 13-Apr-2002 09:59

			T	
Target Range: Species: Rat		<b>erature</b> to 77°F		Humidity to 70%
Total Number of Days: Total Number of Hours: Total Number of Data Points:	61 1436.0 1436		61 1436.0 1436	
Mean (± SD):	70.6	(± 1.1)	54.5	(± 4.4)
Maximum: Median: Minimum:	73.3 70.8 66.6		66.9 55.0 35.3	
Number of Points in Range (%): Number of Points High (%): Number of Points Low (%):	1436 0 0	(100.0) (0.0) (0.0)	1436 0 0	(100.0) (0.0) (0.0)

Report Generated: 24-Jun-2002 at 14:03

COMMENTS:		
REVIEWED BY: Parymer I The	DATE:	6/25/02
	1	,

# APPENDIX I POSITIVE CONTROL DATA

#### **Historical Control Data**

This Functional Observation Battery Standard Operating Procedure and Studies conducted to document the training and competency of the technical staff and Motor Activity Negative Control Data and Positive Control Data are available at the Testing Facility.

Summary Information for Functional Observation Battery

	In-Life	Test	Dosage Information		
Study Number – Title	Start	Substance	mg/kg	mL/kg	Number of Dosages
012-006 – Validation of Functional Observational Battery and Motor Activity Measure Using Positive Test Substances	12/89	acrylamide	50	. 1	7
		physostigmine	0.75	1.5	1
		DDT	75	1	1
012-014 – Neurotoxicity Evaluation of Positive Control Substances in					
Crl:CD®BR VAF/Plus® Rats	9/91	acrylamide	40	1	9
		IDPN	200	1	3
		carbaryl	75	5	1
		DDT	75	5	1
		triadimefon	200	5	1
012-015 – Neurotoxicity Evaluation of DDT in Crl:CD®BR VAF/Plus® Rats	3/92	DDT	75	1	1
012-017 – Neurotoxicity Evaluation of Positive Control Substances in Crl:CD®BR VAF/Plus® Rats	5/92	acrylamide	40	1	9
		IDPN	200	1	3
		carbaryl	40	5	1
		DDT	75	1	1
		d-amphetamine	4.0	1	1
012-022 - Neurotoxicity Evaluation of Carbaryl in Crl:CD®BR VAF/Plus® Rats	10/92	carbaryl	40, 200	5	1
012-031 - Neurotoxicity Evaluation of Positive Control Substances in	7/02		45		10
Crl:CD®BR VAF/Plus® Rats	7/93	acrylamide	45	1	10
		IDPN	250	1	4
		carbaryl	40	5	1
		DDT	75	1	1
		d-amphetamine	4	1	1

			**********************		NAMES OF TAXABLE PARTY OF TAXABLE PARTY OF TAXABLE PARTY.
012-056 – Neurotoxicity Evaluation of Positive Control Substances in Crl:CD®BR VAF/Plus® Rats	11/95	acrylamide	45	1	10
		IDPN	250	1	5
		carbaryl	40	1	1
		DDT	75	1	1
		d-amphetamine	4.0	1	1
012-075 – Neurotoxicity Evaluation of Positive Control Substances in					
Crl:CD®BR VAF/Plus® Rats	3/98	acrylamide	30	1	17
		trimethyltin	8	1	1
		MK-801	0.3	1	1
		carbaryl	100	4	1
		DDT	100	2	1
012-081 – Neurotoxicity Evaluation of Positive Control Substances in					
Crl:CD®BR VAF/Plus® Rats	11/01	acrylamide	30	1	10
		IDPN	250	1	1
		d-amphetamine	40	1	1
		carbaryl	100	4	1
		DDT	100	2	5

Summary Information for Motor Activity

	In-Life	Test	Dos	age Inforn	nation Number of
Study – Title	Start	Substance	mg/kg	mL/kg	Dosages
012-011 – The Assessment of Motor Activity in Neonatal and Adult Rodents using Passive Infrared Sensors	dult Rodents		0.75, 1.5, 4	1	1
		d-amphetamine chlorpromazine	1, 2, 4	1	1
012-014 – Neurotoxicity Evaluation of Positive Control Substances in		emorpromazme	1, 2, 4		I
Crl:CD®BR VAF/Plus® Rats	9/91	acrylamide	40	1	9
		IDPN	200	1	3
		carbaryl	75	5	1
		DDT	75	5	1
		triadimefon	200	5	1
012-016 – Motor Activity Evaluation in Crl:CD®BR VAF/Plus® Rats Administered Chlorpromazine and d- Amphetamine (Positive Control Study)		d-amphetamine	0.5, 1, 4	1	1
		chlorpromazine	1, 2, 4	1	1
012-058 – Neurotoxicity Evaluation of Positive Control Substances in					
Crl:CD®BR VAF/Plus® Rats	4/96	acrylamide	45	1	10
		d-amphetamine	0.75	1	1
		trimethyltin	8	1	1
		MK-801	10	1	1

## APPENDIX J HISTOPATHOLOGY REPORT

### RESEARCH PATHOLOGY SERVICES, INC.

438 East Butler Avenue, New Britain, PA 18901 Phone: 215-345-7070 • Fax: 215-345-4326

ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY STUDY
OF T 7599.7 WITH THE REPRODUCTION/DEVELOPMENTAL
TOXICITY SCEENING TEST
PROTOCOL 418-027
SPONSOR'S STUDY NUMBER T-7599
HISTOPATHOLOGY REPORT

SUBMITTED TO: Raymond G. York, Ph.D., D.A.B.T. Argus Research 905 Sheehy Drive Horsham, PA 19044

SUBMITTED BY:

W. Ray Brown, D.V.M., Ph.D.

February 25, 2003

### HISTOPATHOLOGY REPORT

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#### HISTOPATHOLOGY REPORT

#### **METHOD**

Microscopic examination was made of the specified tissues from 40 male and 40 female Crl:CD®(SD)IGS BR VAF/Plus® rats in an oral (gavage) combined repeated dose toxicity study of T 7599.7 with the reproduction/developmental toxicity screening test. A brief outline of the study design showing the dose group identification, dosage levels of the test and control substances and number of male and female rats examined group are shown below.

DOSAGE GROUP	NUMBER OF RATS PER SEX	DOSAGE (mg/kg/day)	CONCENTRATION (mg/mL)	DOSE VOLUME (mL/kg)
ı	10	0 (Vehicle)	0	10
11	10	10	1	10
III	. 10	50	5	10
IV	10	250	25	10

The test substance was considered to be 100% active for the purpose of dosage calculations.

The rats were given the test substance and/or vehicle beginning before cohabitation, through mating and continued for at least 28 days (male rats), or through parturition until Day 5 of lactation (female rats). Dosages were adjusted daily for body weight changes and given at approximately the same time each day. Scheduled sacrifice of male rats was on the day following the last dosage administration, after a minimum of 28 days of dosage. Scheduled sacrifice of female rats was on Day 6 of lactation.

All rats were necropsied and the specified tissues were collected and placed in 10% neutral buffered formalin for fixation. The testes were fixed in Bouin's solution for 48 to 96 hours and then retained in 10% neutral buffered formalin. The in-life portion of the study, necropsies, and recording of the gross necropsy observations were performed by the staff of Argus Research, Horsham, PA. The tissue processing, microscopic slide preparation and histopathologic evaluation were performed by Research Pathology Services, Inc.

### HISTOPATHOLOGY REPORT

The tissues specified for microscopic evaluation from the male and female rats of Groups I and IV included: brain, duodenum, jejunum, ileum, cecum, colon, rectum, Peyer's patch, lung, submandibular and mediastinal lymph nodes, sciatic nerve, stomach, kidneys, spleen, thymus, trachea, urinary bladder, testes, epididymides, seminal vesicles, coagulating gland, prostate, spinal cord (cervical, lumbar and thoracic), liver, adrenal glands, heart, thyroid, parathyroid, uterus, bone marrow (sternum), ovaries, uterus, vagina, mammary gland (female rats) and all other tissues with gross changes. In addition, the liver of male and female rats, stomach of male rats and thymus of female rats were examined from the intermediate dosage groups. Representative samples of these tissues were routinely processed, embedded in paraffin, sectioned, and stained with hematoxylin and eosin for microscopic evaluation.

Upon completion of the project, all raw data (remaining wet tissue, paraffin blocks, microscopic slides and histology records) will be returned to Argus Research for archiving.

#### HISTOPATHOLOGY REPORT

#### RESULTS

The type, incidence and degree of severity of the histomorphologic changes in the specified tissues for the male and female rats are presented in Table 1. The microscopic observations in each rat are summarized in tabular form in Appendix I (Tables I-1 to I-8). A key to the histomorphologic observations precedes Table I-1. The gross necropsy observations, detailed descriptions of the microscopic observations, and a correlation of the microscopic findings with the gross changes in these rats, when applicable, are contained in Appendix II.

No treatment-related microscopic changes were observed in any of the male rats given 10 mg/kg/day or in female rats given 10 or 50 mg/kg/day of the test substance.

Treatment-related microscopic changes were observed in the liver of male rats of the 50 and 250 mg/kg/day dosage groups and female rats of the 250 mg/kg/day dosage group, thymus of female rats of the 250 mg/kg/day dosage group and stomach of the male rats of the 250 mg/kg/day dosage group.

The treatment-related microscopic change in the liver consisted of minimal or mild enlargement (hypertrophy) of centrilobular hepatocytes in most male and female rats of the 250 mg/kg/day dosage group and in 4/10 male rats of the 50 mg/kg/day dosage group. The enlargement was due to an increased amount of finely granular, dense eosinophilic cytoplasm. The incidence and severity of the change occurred in a dose-related manner. Also, in three of the affected high dose male rats, necrosis of individual enlarged hepatocytes was seen in centrilobular areas (Table 1).

The treatment-related effect in the thymus consisted of an increased incidence and severity of atrophy of the thymic lobules in female rats of the 250 mg/kg/day dosage group. Single incidences of thymic atrophy occurred in female rats of the control and lower dosage groups, but the increased incidence and severity of this effect in the high dosage group was considered to be treatment-related.

Microscopic examination of the stomach revealed focal erosions in the pyloric glandular mucosa of two high dose male rats. Although the incidence was low, this

#### HISTOPATHOLOGY REPORT

change may be treatment-related. Other changes observed in the stomach which occurred at a somewhat varied and sporadic incidence in the control and compound-treated male rats included edema with or without inflammation (infiltrations of polymorphonuclear inflammatory cells) in the submucosa of the glandular and nonglandular (forestomach) areas. The very slight increased incidence and severity (Table 1) of these changes in these areas of the stomach of the high dose male rats may also be treatment-related. However, these changes were not clearly associated with the erosions.

All other microscopic changes were considered to have occurred spontaneously and to be incidental and unrelated to compound administration. The type, incidence and severity of these changes were not influenced by compound administration. These changes also are listed in the attached histomorphology tables.

One high dosage group male rat had early lymphosarcoma in the spleen only. There was no evidence of disseminated involvement. Although this is a Group IV rat, it is still considered to have been incidental and a spontaneously-occurring effect.

#### HISTOPATHOLOGY REPORT

#### SUMMARY

Microscopic examination was made of the specified tissues from four groups of 10 male and 10 female Crl:CD<sup>®</sup>(SD)IGS BR VAF/Plus<sup>®</sup> rats used in an oral (gavage) combined repeated dose toxicity study of T 7599.7 with the reproduction/developmental toxicity screening test. The four groups of rats had been given 0 (vehicle), or 10, 50 or 250 mg/kg/day of T 7599.7, orally by gavage, once daily for the protocol-specified number of days.

No treatment-related microscopic changes were observed in the male rats given 10 mg/kg/day or female rats given 10 or 50 mg/kg/day of the test substance.

Treatment-related microscopic changes were observed in the liver of male rats of the 50 and 250 mg/kg/day dosage groups and female rats of the 250 mg/kg/day dosage group, thymus of female rats given 250 mg/kg/day and stomach of male rats given 250 mg/kg/day of the test substance.

The treatment-related effect in the liver consisted of minimal to mild hypertrophy of centrilobular hepatocytes in the mid and high dosage group male rats and in the high dosage group female rats. A low incidence of high dose male rats had individual-cell necrosis of affected centrilobular hepatocytes.

The treatment-related change in the thymus was an increased incidence and severity of atrophy of the thymic lobules in female rats of the high dosage group. There were single incidences of atrophy in each of the control and lower dosage groups, but this increased incidence in the 250 mg/kg/day dosage group was considered to be treatment-related.

The treatment-related change in the stomach in male rats of the high dosage group consisted of a low incidence of focal erosions of the pyloric glandular mucosa. A varied incidence of edema and inflammation of the submucosa of the nonglandular and glandular areas also was observed in a few rats at a slightly higher incidence and severity in Group 4 and this may also be related to compound-related.

All other changes were considered to be spontaneous in origin and not treatment-related. The type, incidence or severity of these changes were not considered to be influenced by administration of T 7599.7.

#### HISTOPATHOLOGY REPORT

#### **QUALITY ASSURANCE UNIT STATEMENT**

All aspects of the tissue processing, microscopic slide preparation, histo-pathologic evaluation and report preparation for the study listed above have been performed according to the Standard Operating Procedures of Research Pathology Services, Inc. and were audited in accordance with the procedures established by the Quality Assurance Unit of Research Pathology Services, Inc. in compliance with the regulations as specified in the protocol.

Quality Assurance inspections were performed on 04/08/02, 04/12/02, 04/18/02, 04/19/02, 04/23/02, 04/24/02, 05/22/02, 06/05/02, 06/07/02, 07/10/02, 07/11/02, 07/12/02, and 02/25/03 and findings were reported to management on 04/30/02, 05/31/02, 06/28/02 and 02/25/03. There were no deviations from the protocol, Standard Operating Procedures and/or appropriate Good Laboratory Practice regulations noted during the conduct of the study that had an impact on study integrity. The summary report of QA inspections is included in the final report submitted to the Study Director on February 25, 2003.

Karen W. Harkins, BS
Quality Assurance Unit

02-25-03

Date

### 

Page Group.									
Dose Group: Sex:	I M	II M	III M	IV M	I F	II F	III F	IV F	-
Number of Animals/Group:	10	10	10	10	10	10	10	10	
ADRENAL GLANDS:									
NO. EXAMINED	10	0	0	10	10	0	0	10	
NO. NORMAL	8	0	0	6	9	0	0	10	
-infiltration, mononuclear-cell, multifocal	1 [0]	[0]	[0]	[0]	[1]	[0]	[0]	[0]	
minimal	0	0	0	0	1	0	0	0	
-vacuolation, cortex	[2]	[0]	[0]	[3]	[0]	[0]	[0]	[0]	
minimal	1	0	0	3	0	0	0	0	
mild	1	0	0	0	0	0	0	0	
BONE MARROW (STERNUM):									
NO. EXAMINED NO. NORMAL	10	0	0	10	10	0	0	10	
NO. NORMAL	10	0	0	10	10	0	0	10	
BRAIN:									
NO. EXAMINED NO. NORMAL	10 10	0	0	10 10	10	0	0	10	
	10	U	U	10	10	0	0	10	
CECUM: NO. EXAMINED	10								
NO. NORMAL	10 9	0 0	0	10 10	10 10	0	0	10 10	
		-				U	U	10	
-inflammation, mucosa, chronic mild	[1] 1	[0]	[0]	[0]	[0]	[0]	[0]	[0]	
	1	0	0	0	0	0	0	0	
COAGULATING GLAND: NO. EXAMINED	4.0		_						
NO. NORMAL	10 10	0	0 0	10 10					
201.01		·	·	10					
<u>COLON:</u> NO. EXAMINED	10	0	0	10	1.0	^	^	1.0	
NO. NORMAL	10	0	0	10	10 10	0	0	10 10	
DUODENUM:						-	•		
NO. EXAMINED	10	0	0	10	10	0	0	10	
NO. NORMAL	10	Ö	Ö	10	10	Ö	0	10	
EPIDIDYMIDES:									
O. EXAMINED	10	0	0	10					
NO. NORMAL	8	0	0	9					
infiltration, mononuclear-cell, focal	[2]	[0]	[0]	[1]					
minimal	2	0	0	1					
EXTREMITIES:									
IO. EXAMINED	0	0	0	1	0	0	0	0	
O. NORMAL	0	0	0	0	Ö	Ö	Ö	Ö	
dermatitis, ulcerative, focal	[0]	[0]	[0]	[1]	[0]	[0]	[0]	[0]	
mild	0	0	0	1	0	0	0	0	
EART:									
O. EXAMINED	10	0	0	10	10	0	0	10	
O. NORMAL	9	0	0	9	9	0	0	9	

<sup>[] =</sup> Total incidence of specified lesion, all grades.

TABLE 1 (Continued)

Dose Group: Sex: Number of Animals/Group:	I M 10	II M 10	III M 10	I V M 10		I F 10	II F 10	III F 10	IV F 10
HEART (Continued):					and Management of the Comment of the	10		10	10
-inflammation, subacute, focal/multifocal minimal mild	[1] 0 1	[0] 0 0	[0] 0 0	[1] 1 0		[0] 0 0	[0] 0 0	[0] 0 0	[1] 1 0
<pre>-pericarditis, chronic, focal minimal</pre>	[0] 0	[0] 0	[0] 0	[0] 0		[1] 1	[0] 0	[0] 0	[0] 0
ILEUM: NO. EXAMINED NO. NORMAL	10 10	0 0	0	10 10		10 10	0	0	10 10
<u>JEJUNUM:</u> NO. EXAMINED NO. NORMAL	10 10	0	0	10 10		10 10	0 0	0	10 10
KIDNEYS: NO. EXAMINED NO. NORMAL	10 7	0	0	10 6		10 8	0	0	10 6
-cyst(s), medulla	0	0	0	2		0	0	0	0
-dilatation, pelvis mild	[1] 1	[0] 0	[0] 0	[0] 0		[0] 0	[0] 0	[0] 0	[0] 0
-edema, papillary minimal	[1] 1	[0] 0	[0] 0	[0] 0		[0] 0	[0] 0	[0]	[0] 0
<pre>-infiltration, mononuclear-cell, focal   minimal</pre>	[1] 1	[0] 0	[0] 0	[0] 0		[0] 0	[0] 0	[0]	[0]
-mineralization, multifocal minimal	[0] 0	[0] 0	[0] 0	[1]		[2] 2	[0] 0	[0] 0	[2] 2
-nephritis, chronic, focal minimal	[0] 0	[0]	[0] 0	[1] 1		[0] 0	[0] 0	[0] 0	[0] 0
-pyelitis, chronic minimal	[0] 0	[0] 0	[0] 0	[0] 0		[0] 0	[0] 0	[0] <b>0</b>	[1] 1
-vacuolation, cortical tubular epithelium mild	[0] 0	[0] 0	[0] 0	[0] 0		[0] 0	[0] 0	[0] 0	[1] 1
LIVER: NO. EXAMINED NO. NORMAL	10 3	10 1	10	10		10 5	10 8	10 3	10 1
-hematopoiesis, extramedullary, multifocal minimal	[0]	[0] 0	[0] 0	[0] 0		[0] 0	[0] 0	[1] 1	[0] 0

<sup>[] =</sup> Total incidence of specified lesion, all grades.

### TABLE 1 (Continued)

### $\label{localization} Incidence \ \ and \ \ Degree \ \ of \ \ Severity \ \ of \ \ Histomorphologic \ \ Observations$

Dose Group: Sex: Number of Animals/Group:	I M	II M	III M	IV M	The state of the s	I F	I I F	III F	IV F
LIVER (Continued):	10	10	10	10		10	10	10	10
-hypertrophy, hepatocellular, centrilobular minimal mild	[0] 0 0	[0] 0 0	[4] 4 0	[10] 2 8		[0] 0 0	[0] 0 0	[0] 0 0	[8] 6 2
-inflammation, chronic, focal/multifocal minimal mild	[7] 6 1	[7] 5 2	[6] 6 0	[4] 3 1		[3] 3 0	[2] 2 0	[6] 6 0	[5] 5 0
-lipidosis, tension, focal	0	1	0	1		0	0	0	1
-necrosis, focal minimal	[0] 0	[0] 0	[0] 0	[1] 1		[1] 1	[1] 1	[0] 0	[0] 0
-necrosis, individual hepatocytes minimal mild	[0] 0 0	[0] 0 0	[0] 0 0	[3] 2 1		[0] 0 0	[0] 0 0	[0] 0 0	[0] 0 0
-vacuolation, hepatocellular, multifocal minimal	[0] 0	[0] 0	[0] 0	[0] 0		[1] 1	[0] 0	[0] 0	[0] 0
-vacuolation, hepatocellular, periportal minimal	[1] 1	[2] 2	[0] 0	[0] 0		[0] 0	[0] 0	[0] 0	[1] 1
LUNG: NO. EXAMINED NO. NORMAL	10 9	0	0	10 9		10 8	0	0	10 10
-inflammation, interstitial, multifocal minimal	[1] 1	[0] 0	[0] 0	[1] 1		[1] 1	[0] 0	[0] 0	[0] 0
-macrophages, alveoli, focal minimal	[0] 0	[0] 0	[0] 0	[1] 1		[1] 1	[0] 0	[0] 0	[0] 0
LYMPH NODE, MEDIASTINAL: NO. EXAMINED NO. NORMAL	9	0	0	10 8		9 7	0	0	9 7
-congestion/erythrophagocytosis minimal mild	[1] 1 0	[0] 0 0	[0] 0 0	[2] 1 1		[1] 1 0	[0] 0 0	[0] 0 0	[2] 0 2
<pre>-hyperplasia, lymphocytic/plasmacytic minimal</pre>	[0] 0	[0] 0	[0] 0	[0] 0		[1] 1	[0] 0	[0]	[0] 0
-macrophages, pigmented minimal	[0] 0	[0] 0	[0] 0	[0] 0		[2] 2	[0] 0	[0] 0	[0] 0
LYMPH NODE, SUBMANDIBULAR: NO. EXAMINED NO. NORMAL	10 5	0	0	10 4		10 1	0	0	10

<sup>[] =</sup> Total incidence of specified lesion, all grades.

#### TABLE 1 (Continued)

Dose Group: Sex:	I M	I I M	III M	IV M	I F	II F	III F	IV F
Number of Animals/Group:  LYMPH NODE, SUBMANDIBULAR (Continued):	10	10	10	10	10	10	10	10
-hyperplasia, lymphocytic/plasmacytic minimal mild moderate	[5] 3 2 0	[0] 0 0 0	[0] 0 0 0	[6] 4 1 1	[9] 4 3 2	[0] 0 0 0	[0] 0 0 0	[8] 1 3 4
MAMMARY GLAND: NO. EXAMINED NO. NORMAL					10 0	0	0 0	10 0
-hyperplasia, physiological					10	0	0	10
-inflammation, subacute mild					[1] 1	[0] 0	[0] 0	[0] 0
NERVE, SCIATIC: NO. EXAMINED NO. NORMAL	10 10	0	0	10 10	10 10	0	0	10 10
OVARIES: NO. EXAMINED NO. NORMAL					10 10	0	0	9 9
PARATHYROID: NO. EXAMINED NO. NORMAL	10 10	0 0	0	8 8	10 10	0	0	10 10
PEYER'S PATCH: NO. EXAMINED NO. NORMAL	10 10	0	0	10 9	10 10	0	0	10 10
-mineralization minimal	[0] 0	[0] 0	[0] 0	[1] 1	[0] 0	[0] 0	[0] 0	[0] 0
PROSTATE: NO. EXAMINED NO. NORMAL	10 8	0	0	10 6				
-atrophy, focal minimal	[1] 1	[0] 0	[0] 0	[1] 1				
-inflammation, chronic, multifocal minimal	[1] 1	[0] 0	[0] 0	[2] 2				
-prostatitis, suppurative marked	[0] 0	[0] 0	[0] 0	[1] 1				
RECTUM: NO. EXAMINED NO. NORMAL	10 9	0	0 0	10 8	10 10	0 0	0	10 10

<sup>[] =</sup> Total incidence of specified lesion, all grades.

### TABLE 1 (Continued)

Dose Group: Sex: Number of Animals/Group:	I M 10	II M 10	III M 10	IV M 10	I F 10	I I F 10	III F 10	IV F 10
RECTUM (Continued):								
<pre>-edema/inflammation, submucosa moderate</pre>	[1] 1	[0] 0	[0] 0	[0] 0	[0] 0	[0] 0	[0] 0	[0] 0
-parasite(s)	0	0	0	2	0	0	0	0
SEMINAL VESICLES: NO. EXAMINED NO. NORMAL	10 10	0 0	0 0	10 10				
SPINAL CORD, CERVICAL: NO. EXAMINED NO. NORMAL	10 10	0 0	0 0	10 10	10 10	0	0	10 10
SPINAL CORD, LUMBAR: NO. EXAMINED NO. NORMAL	10 10	0	0	10 10	10 10	0	0	10 10
SPINAL CORD, THORACIC: NO. EXAMINED NO. NORMAL	10 10	0	0	10 10	10 10	0	0	10 10
SPLEEN: NO. EXAMINED NO. NORMAL	10 10	0	0	10 8	10 6	0	0	10 6
-atrophy mild	[0] 0	[0] 0	[0] 0	[0] 0	[0] 0	[0] 0	[0] 0	[1] 1
-hematopoiesis, extramedullary, increased minimal mild	[0] 0 0	[0] 0 0	[0] 0 0	[1] 1 0	[4] 1 3	[0] 0 0	[0] 0 0	[3] 3 0
-lymphosarcoma	0	0	0	1	0	0	0	0
STOMACH: NO. EXAMINED NO. NORMAL	10 6	10 7	10 8	10 3	10 9	0	0	10 10
-dilatation, mucosal glands minimal mild	[3] 3 0	[2] 1 1	[2] 2 0	[3] 2 1	[1] 1 0	[0] 0 0	[0] 0 0	[0] 0 0
-edema/inflammation, submucosa, glandular area minimal mild moderate	[2] 1 1 0	[0] 0 0 0	[2] 2 0 0	[3] 0 1 2	[0] 0 0 0	[0] 0 0 0	[0] 0 0	[0] 0 0 0

<sup>[] =</sup> Total incidence of specified lesion, all grades.

#### TABLE 1 (Continued)

Dose Group:	I	II	III	I۷	Ī	ΙΙ	III	IV
Sex: Number of Animals/Group:	M 10	M 10	M 10	M 10	F 10	F 10	F 10	F 10
STOMACH (Continued):								
-edema/inflammation, submucosa, nonglandula area minimal mild moderate	ar [1] 1 0 0	[1] 0 0 1	[0] 0 0 0	[4] 2 1 1	[0] 0 0 0	[0] 0 0 0	[0] 0 0 0	[0] 0 0 0
-erosion(s), glandular mucosa minimal mild	[0] 0 0	[0] 0 0	[0] 0 0	[2] 1 1	[0] 0 0	[0] 0 0	[0] 0 0	[0] 0 0
TAIL: NO. EXAMINED NO. NORMAL	0 0	0	0 0	0	0	0	0 0	1
TESTES: NO. EXAMINED NO. NORMAL	10 10	0 0	0	10 10				
THYMUS: NO. EXAMINED NO. NORMAL	10 10	0	0	10 10	10 9	10 9	10 9	9
-atrophy minimal mild moderate	[0] 0 0 0	[0] 0 0 0	[0] 0 0 0	[0] 0 0 0	[1] 1 0 0	[1] 1 0 0	[1] 1 0 0	[5] 2 2 1
THYROID: NO. EXAMINED NO. NORMAL	10 7	0	0	10 7	10 7	0	0	10 5
-hypertrophy, follicular epithelium mild	[1] 1	[0] 0	[0] 0	[0] 0	[0] 0	[0] 0	[0] <b>0</b>	[0] 0
-ultimobranchial body/cyst	3	0	0	3	3	0	0	5
<u>TRACHEA:</u> NO. EXAMINED NO. NORMAL	10 9	0 0	0	10 10	10 10	0	0	10 10
-inflammation, chronic, focal minimal	[1] 1	[0] 0						
<u>URINARY BLADDER:</u> NO. EXAMINED NO. NORMAL	10 10	0	0	10 10	10 10	0	0	10 10
<u>JTERUS:</u> NO. EXAMINED NO. NORMAL					10 2	0	0	10 1

<sup>[] =</sup> Total incidence of specified lesion, all grades.

#### TABLE 1 (Continued)

Dose Group: Sex: Number of Animals/Group:	I M 10	II M 10	III M 10	IV M 10	 ] F 1	0	II F 10	III F 10	IV F 10
<pre>UTERUS (Continued):</pre>									
-distention, lumen minimal moderate					[1 1 0		[0] 0 0	[0] 0 0	[1] 0 1
-hemorrhage, endometrium mild					[0 0		[0] 0	[0] 0	[1] 1
-inflammation, endometrium, diffuse mild					[0 0		[0] 0	[0] 0	[1] 1
-macrophages, pigmented minimal mild moderate					[8 1 0 7		[0] 0 0 0	[0] 0 0 0	[9] 2 2 5
-thrombus					2		0	0	1
VAGINA: NO. EXAMINED NO. NORMAL					1 8		0	0	10 8
-inflammation, acute moderate					[0] 0		[0] 0	[0] 0	[1] 1
-mucification moderate marked					[2] 2 0		[0] 0 0	[0] 0 0	[2] 1 1

<sup>[] =</sup> Total incidence of specified lesion, all grades.

### HISTOPATHOLOGY REPORT

#### APPENDIX I

HISTOMORPHOLOGIC OBSERVATIONS

### HISTOPATHOLOGY REPORT

### KEY TO HISTOMORPHOLOGIC OBSERVATIONS

-	=	No change (not remarkable, within normal histologic limits or indicated change not present).
*	=	Tissue not available (specified tissue missing, insufficient tissue in plane of section, artifact precludes evaluation, or specified tissue not present in section).
<>	=	Microscopic finding(s) in tissue(s) with gross observation(s).
<->	=	Within normal limits [no microscopic change(s) to correlate with the gross observation(s)].
XM	=	Primary malignant neoplasm present.
Р	=	Indicated change or lesion present
1	=	Minimal degree or amount of indicated change or lesion.
2	=	Mild degree or amount of indicated change or lesion.
3	=	Moderate degree or amount of indicated change or lesion.
4	=	Marked degree or amount of indicated change or lesion.

SS

= Scheduled Sacrifice

### TABLE I-1 $\\ {\tt Histomorphologic~Observations}$

Dose Group: Animal Number:	I 17608	I 17618	I 17630	I 17631	I 17639	I 17648	I 17652	I 17656	I 17658	I 17660
Sex: <u>Death Type:</u>	M SS	M SS	M SS	M SS	M SS	M SS	M SS	M SS	M SS	M SS
ADRENAL GLANDS: -vacuolation, cortex	2	_	1	_	_	-	-	_	_	_
BONE MARROW (STERNUM):	-	-	_	-	-	_	-	_	_	_
BRAIN:	-	-	-	-	-	_	-	-	-	-
CECUM: -inflammation, mucosa, chronic	- -	2	_	-	-	_	_	_	_	_
COAGULATING GLAND:	· <del>-</del>	-	-	_	-	-	_	-	-	-
COLON:	. <b>-</b>	-	-	-	-	-	-	_	-	_
DUODENUM:	-	_	-	-	-	-	_	-	_	-
<pre>EPIDIDYMIDES: -infiltration, mononuclear-cell, focal</pre>	-	-	_	-	1	-	-	1	_	_
<u>HEART:</u> -inflammation, subacute, focal/multifocal	<u>-</u>	-	-	-	-	2	-	-	_	_
ILEUM:	-	-	-	-	-	-	-	-	_	-
JEJUNUM:	=	-	-	-	-	-	-	-	_	-
KIDNEYS: -dilatation, pelvis -edema, papillary	- - -	_	_	2	<u>-</u>	<u>-</u>	_ _	- 1	<u>-</u>	- -
-infiltration, mononuclear-cell, focal	-	_	-	-	-	1	-	-	-	-
<u>LIVER:</u> -inflammation, chronic, focal/multifocal -vacuolation, hepatocellular, periportal	1 -	2	1	1 1	- -		1	- -	<del>-</del>	1
<u>LUNG:</u> -inflammation, interstitial, multifocal	1	-		_	_	_	_		_	_
LYMPH NODE, MEDIASTINAL: -congestion/erythrophagocytosis	_	_	*	-	1	_	_	_	_	-
LYMPH NODE, SUBMANDIBULAR: -hyperplasia, lymphocytic/plasmacytic	_	-	-	2	1	2	-	1	_	1
NERVE, SCIATIC:	-	_	-	_	_	_	_	_	_	-
PARATHYROID:	-	-	-	-	_	_	-		-	-
PEYER'S PATCH:	· _	_	-	-	-	_	_	_	-	-
PROSTATE: -atrophy, focal	-	-		1	-		_		_	<del>-</del>

#### TABLE I-1 (Continued)

Dose Group: Animal Number:	I 17608	I 17618	I 17630	I 17621	I 17639	I 17649	I 17652	I 17656	I	I
Sex:	M	M	M	M	M	17040 M	M M	M W	M W	1/660
Death Type:	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS
<pre>PROSTATE (Continued): -inflammation, chronic, multifocal</pre>	-	_	-	_	_	***	_	1	_	_
RECTUM: -edema/inflammation, submucosa	_	-	-	-	_	_	3	_	_	_
SEMINAL VESICLES:	-	-	-	_	-	_	_	-	-	_
SPINAL CORD, CERVICAL:	-	-	-	-	-	_	-	_	_	-
SPINAL CORD, LUMBAR:	-	-	-	-	-	-	_	-	_	_
SPINAL CORD, THORACIC:	-	-	-	_	-	_	-	-	_	_
SPLEEN:	-	_	-	-	-	_	_	_	_	_
STOMACH: -dilatation, mucosal glands -edema/inflammation, submucosa, glandular	-	1	1	-	-	1	-	_	-	-
area -edema/inflammation, submucosa,	-	1	-	-	-	<del>-</del> .	2	_	-	-
nonglandular area	-	-	1	-	-	-		-	_	-
TESTES:	-	-	-	-	-	_	-	_	_	_
THYMUS:	_	÷	-	-	-	<u> -</u>	_	_	_	-
THYROID: -hypertrophy, follicular epithelium -ultimobranchial body/cyst	- Р	- -	- -	2 P	- -	_	<del>-</del>	<u>-</u>	_ P	- -
TRACHEA: -inflammation, chronic, focal	1	_	-	_	_	-	_	_	-	_
URINARY BLADDER:	_	_	-	-	_	_	_	_	_	_

#### TABLE I-2

Dose Group: Animal Number: Sex: Death Type:	II 17634 M SS	II 17635 M SS	II 17638 M SS	II 17642 M SS	II 17643 M SS	II 17645 M SS	II 17649 M SS	II 17651 M SS	II 17653 M SS	II 17655 M SS
<u>LIVER:</u> -inflammation, chronic, focal/multifocal -lipidosis, tension, focal -vacuolation, hepatocellular, periportal	1 -	1 - 1	- Р -	2 -	2 -	1 -	1 -	- - -	- - 1	1 -
STOMACH: -dilatation, mucosal glands -edema/inflammation, submucosa, nonglandular area	- - <u>-</u>	1 _	<u>-</u>	-	2	-	-	-	-	-

#### TABLE I-3

Dose Group: Animal Number: Sex: Death Type:	III 17620 M SS	III 17623 M SS	III 17627 M SS	III 17628 M SS	III 17633 M SS	III 17640 M SS	III 17646 M SS	III 17650 M SS	III 17657 M SS	III 17659 M SS
LIVER: -hypertrophy, hepatocellular, centrilobular -inflammation, chronic, focal/multifocal	1	- 1	1	<u>-</u>	1	-	_ 1	1	- 1	<u> </u>
STOMACH: -dilatation, mucosal glands -edema/inflammation, submucosa, glandular	1	-	-	<u></u>	-	-	-	1	<u>-</u>	-
area	1	_	_	-	_	_	_	1	_	_

#### TABLE I-4

Dose Group: Animal Number: Sex: Death Type:	IV 17621 M SS	IV 17622 M SS	IV 17625 M SS	IV 17629 M SS	IV 17636 M SS	IV 17637 M SS	IV 17641 M SS	IV 17644 M SS	IV 17647 M SS	IV 17654 M SS
ADRENAL GLANDS: -vacuolation, cortex	1	-	_	_	1	_	_	1	_	_
BONE MARROW (STERNUM):	-	-	_	-		-	_	_	_	_
BRAIN:	_	_	-	-	-	_	-	_	_	-
CECUM:	-	-	-	-	-	-	-		_	_
COAGULATING GLAND:	-	-	-	-	_	-	-	-	-	_
COLON:	_	-	-	_	-	-	-	-	-	-
DUODENUM:	-	-	-	-	-	<u>-</u>	-	_	_	-
<pre>EPIDIDYMIDES: -infiltration, mononuclear-cell, focal</pre>		_	-	-	_	-	_	_	1	_
EXTREMITIES: -dermatitis, ulcerative, focal		<2>								
<u>HEART:</u> -inflammation, subacute, focal/multifocal	_	_	-	_	_	_	_	_	_	1
ILEUM:	-	-	_	_	_	_	_	_	_	_
JEJUNUM:	-	-	_	-	_	_	-	_	_	_
<pre>KIDNEYS: -cyst(s), medulla -mineralization, multifocal -nephritis, chronic, focal</pre>	- - -	- - -	- - -	P - -	P 	_ _ _	_ 1 _	- - -	_ _ _	- - 1
LIVER: -hypertrophy, hepatocellular, centrilobular -inflammation, chronic, focal/multifocal -lipidosis, tension, focal -necrosis, focal -necrosis, individual hepatocytes	2 2	2	2 - 1 - 1 -	2 - - -	1 1	- - -	-	2 - - - 2	2	1 1 P
<u>LUNG:</u> -inflammation, interstitial, multifocal -macrophages, alveoli, focal	- -	<u>-</u>		1	<del>-</del> -	<u>-</u>	<u>-</u>	- -	- -	- -
<u>LYMPH NODE</u> , <u>MEDIASTINAL</u> : -congestion/erythrophagocytosis	-	-	-	-	2	-	1	_	_	_
<u>LYMPH NODE, SUBMANDIBULAR:</u> -hyperplasia, lymphocytic/plasmacytic	1	3	1	2	-	_	1	1	-	-
NERVE, SCIATIC:	-	-	-	-	_	-	-	-	-	<del>-</del>

#### TABLE I-4 (Continued)

### Histomorphologic Observations

Dose Group: Animal Number: Sex: Death Type:	IV 17621 M SS	IV 17622 M SS	IV 17625 M SS	IV 17629 M SS	IV 17636 M SS	IV 17637 M SS	IV 17641 M SS	IV 17644 M SS	IV 17647 M SS	IV 17654 M SS
PARATHYROID:	_	_	-	-	*	-	_	*	•••	-
PEYER'S PATCH: -mineralization	<del>-</del>	-	_	_	_	1	_	_	_	_
PROSTATE: -atrophy, focal -inflammation, chronic, multifocal -prostatitis, suppurative	- - -	1 -	- - -	1	- - <4>	- , -	- - -	1 -	- - -	- - -
RECTUM: -parasite(s)	Р	_	_	_	Р	_	_	_	_	_
SEMINAL VESICLES:	-	-	_	-	_	-	-	_	_	_
SPINAL CORD, CERVICAL:	-	-	-	_	_	-	_	_	_	_
SPINAL CORD, LUMBAR:	-	-	_	-	-	-	-	_	_	_
SPINAL CORD, THORACIC:	_	-	_	-	-	-	_	-	_	<u>-</u>
<u>SPLEEN:</u> -hematopoiesis, extramedullary, increased -lymphosarcoma	- <xm></xm>	<del>-</del>	- -	- -	-1. -	_	- -	1	<u>-</u>	<u>-</u>
STOMACH: -dilatation, mucosal glands -edema/inflammation, submucosa, glandular	-	-	_	1	_	1	2	<b>-</b> -	-	-
area -edema/inflammation, submucosa,	-	-	-	-	3	2	-	-	3	-
nonglandular area -erosion(s), glandular mucosa	- 1	- 2	- -	1_	2	1_	-	<u>-</u>	3	-
TESTES:	-	-	-	_	_	_	_	-	_	_
THYMUS:	· -	-	-	-	-	_	_	-	-	_
THYROID: -ultimobranchial body/cyst	_	-	_	Р	Р	P	-	-	-	-
TRACHEA:	-	-	-	-	-	_		_	-	_
URINARY BLADDER:	-	_	-	-	-	-	-	_	_	-

#### TABLE I-5

Dose Group: Animal Number: Sex:	I 17681 F	I 17690 F	I 17694	I 17695 F	I 17703 F	I 17713			I 17717	
Death Type:	SS	SS	F SS	SS	SS	F SS	F SS	F SS	F SS	F 
ADRENAL GLANDS: -infiltration, mononuclear-cell, multifocal	-	_	-	_	_	_	1	_	_	_
BONE MARROW (STERNUM):	<u>.</u> .	-	_	-	-	-	-	-	_	_
BRAIN:	-	-	-	-	-	-	_	-	-	-
CECUM:	_	-	-	-	-	-	-	-	-	-
COLON:	-	-	-	-	-	-	-	-	-	-
DUODENUM:	-	-	-	-	-	-	-	-	-	-
<u>HEART:</u> -pericarditis, chronic, focal	-	-	_	_	_	1	_	_	_	-
ILEUM:	_	-	-	-	-	-	-	-	-	-
JEJUNUM:	_	-	-	-	-		-	_	-	-
<u>KIDNEYS:</u> -mineralization, multifocal	1	_	-	_	1	-	-	-	_	_
LIVER: -inflammation, chronic, focal/multifocal -necrosis, focal -vacuolation, hepatocellular, multifocal	-	1 -	- -	- -	1 -	- - 1	1 -	_ 1 _	<del>-</del> -	_
LUNG: -inflammation, interstitial, multifocal -macrophages, alveoli, focal	- -	- -	- 1	- -	- -	<u>-</u>	<u>-</u>	<u>-</u>	1	- -
LYMPH NODE, MEDIASTINAL: -congestion/erythrophagocytosis -hyperplasia, lymphocytic/plasmacytic -macrophages, pigmented	- - -			- 1 1	- -	- - -	- -	- - -	-	* *
<u>LYMPH NODE, SUBMANDIBULAR:</u> -hyperplasia, lymphocytic/plasmacytic	3	1	2	-	3	1	2	1	2	1
MAMMARY GLAND: -hyperplasia, physiological -inflammation, subacute	P -	P -	P -	P -	P -			P -		P 2
NERVE, SCIATIC:	-	-	-	-	-	-	-	_	_	-
OVARIES:	-	-	-	_	-	-	-	-		-
PARATHYROID:	_	_	-		-	-	-	-	_	_
PEYER'S PATCH:	-	_	-	-	-	-	-	-		-

#### TABLE I-5 (Continued)

Dose Group: Animal Number: Sex:	I 17681 F	I 17690 F	I 17694 F	I 17695 F	I 17703 F	I 17713 F	I 17715 F	I 17716 F	I 17717 F	I 17719 F
Death Type:	SS	SS	SS	'SS	<u>'ss</u>	SS	SS	SS	SS	SS
RECTUM:	-	-	-	-	-	-	-	-	-	-
SPINAL CORD, CERVICAL:	-	_	-	_	-	-	-	-	-	-
SPINAL CORD, LUMBAR:	-	-	-	-	_	-	-	-	-	<del>-</del> .
SPINAL CORD, THORACIC:	-	-	-	-	-	-	-	-	-	-
<u>SPLEEN:</u> -hematopoiesis, extramedullary, increased	2	-	-	2	2	-	1	_	-	_
STOMACH: -dilatation, mucosal glands	_	1	_	_	_	_	_	-	_	-
THYMUS: -atrophy	_	_	_	_	-	_	_	_		1
THYROID: -ultimobranchial body/cyst	Р	_	-	<del>-</del>	Р	-	-	_	Р	_
TRACHEA:	-	-	-	-	_	-	-	-	_	_
URINARY BLADDER:	-	-	_	-	-	_	_	<u>-</u>	_	_
UTERUS: -distention, lumen -macrophages, pigmented -thrombus	- - -	- - -	- 1 P	- 3 -	- 3 -	1 3 -	- 3 P	- 3 -	- 3 -	- 3 -
VAGINA: -mucification	3	3	_	_	_	_	_	_	_	_

#### TABLE I-6

Dose Group: Animal Number: Sex:	I I 17675 F	II 17679 F	II 17684 F	II 17688 F	II 17698 F	II 17702 F	II 17704	II 17707	II 17708 F	II 17710
Death Type:	SS	SS	SS	SS	SS	SS	SS	ss	ss	<u>ss</u>
<u>LIVER:</u> -inflammation, chronic, focal/multifocal -necrosis, focal	-	- -	- -	- -	<u>-</u>	<u>-</u>	1 -	1	<u>-</u>	_
THYMUS: -atrophy	_	_	_	_	1	_	_	_	_	_

#### TABLE I-7

Dose Group: Animal Number: Sex:	III 17687 F	III 17693 F	III 17697 F	III 17700 F	III 17701 F	III 17705 F	III 17706 F	III 17709 F	III 17718 F	III 17720 F
Death Type:	SS									
<u>LIVER:</u> -inflammation, chronic, focal/multifocal	-	1	-	1	1	1	1	-	-	1
THYMUS: -atrophy	_	_	1	_	_	_	_	_	_	_

#### TABLE I-8

Dose Group: Animal Number:									IV 17712	
Sex: <u>Death Type:</u>	F SS	F SS	F SS	F SS	F SS	F SS	F SS	F SS	F SS	F SS
ADRENAL GLANDS:	_	-	-	-	-	-	-	-	-	-
BONE MARROW (STERNUM):	-	-	_	-	-	-	-	_	-	-
BRAIN:	-	-	-	-	-	-	-	-	-	_
CECUM:	_	-	-	-	_	-	-	-	-	-
COLON:	-	-	-	_	-	-	-	-	-	-
DUODENUM:	<del>.</del>	-	-	-	-	-	-	-	-	-
<u>HEART:</u> -inflammation, subacute, focal/multifocal	-	-	<del>-</del>	-	-	1	-	-	-	_
ILEUM:	-	-	-	-	_	-	-	-	-	-
JEJUNUM:	-	-	-	-	-	-	-	-	-	-
<u>KIDNEYS:</u> -mineralization, multifocal -pyelitis, chronic -vacuolation, cortical tubular epithelium	1	- - -	<u>-</u> -	- -	1 -	- - -	1 -	- - 2	- - -	- - -
LIVER: -hypertrophy, hepatocellular, centrilobular -inflammation, chronic, focal/multifocal -lipidosis, tension, focal -vacuolation, hepatocellular, periportal	1 - P -	- 1 - -	1 1	1 1 -	1 · · · · · · · · · · · · · · · · · · ·	- - - -	1 1	2 - 1	1 1 -	2
LUNG:		-	-	-	-	_	-	-	-	-
<u>LYMPH NODE, MEDIASTINAL:</u> -congestion/erythrophagocytosis	-	-	2	-	2	_	_	_	_	*
<u>LYMPH NODE, SUBMANDIBULAR:</u> -hyperplasia, lymphocytic/plasmacytic	3	3	2	1	3	2	3	-	2	-
MAMMARY GLAND: -hyperplasia, physiological	P <sup>.</sup>	Р	Р	Р	P	P	Р	Р	Р	Р
NERVE, SCIATIC:	-	-	-	-	_	-	-	-	-	-
OVARIES:	-	*	-	-	-	-	-	-	-	-
PARATHYROID:	-	-	-	-	-	-	-	-	-	_
PEYER'S PATCH:	-	-	-	-	-	-	-	-	-	-
RECTUM:	<del>-</del>	-	-	-	-	_	-	-	-	
SPINAL CORD, CERVICAL:	-	-	-	-	-	_	-	-	-	-

#### TABLE I-8 (Continued)

Dose Group: Animal Number:	IV 17685	IV 17686	IV 17689	IV 17691	IV 17692	IV 17696	IV 17699	IV 17711	IV 17712	IV 17714
Sex: Death Type:	F	F	F	F	F	F	F	F	F	F
Death Type:	SS	SS	SS	SS	SS	SS	SS	SS	SS	SS
SPINAL CORD, LUMBAR:	-	-	-	-	-	-	-		-	-
SPINAL CORD, THORACIC:	-	-	-	-	-	-	-	-	-	-
SPLEEN:										
-atrophy -hematopoiesis, extramedullary, increased	-	_	1	_	_	-	1	2	_	1
STOMACH:	_	_	_	_	_	_	_	_	_	_
TAIL:									<->	
THYMUS:										
-atrophy	-	-	-		2	< <b>*</b> >	1	3	1	2
THYROID: -ultimobranchial body/cyst	_	Р	_	Р	-	Р	Р	_	_	P
TRACHEA:	_	-	_	_	-	_	_	_	-	_
URINARY BLADDER:	_	-	_	-	_	-	-	-	_	-
UTERUS:										
-distention, lumen	-	-	-	-	-	3	-	-		-
-hemorrhage, endometrium -inflammation, endometrium, diffuse	-	_	_	_	_	2	_	2	_	_
-macrophages, pigmented	1	1	2	3	_	3	3	3	2	3
-thrombus	-	-	-	-	-	-	-	-	-	P
VAGINA:								_		
-inflammation, acute -mucification	_	3	_	_	-	-	_	3 4	-	_

### HISTOPATHOLOGY REPORT

#### APPENDIX II

INDIVIDUAL ANIMAL GROSS AND HISTOMORPHOLOGY DATA

#### Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17608

GROSS OBSERVATION(S):

DOSE GROUP:

DEATH TYPE:

Sacrifice-Scheduled

SEX: М \_\_\_\_\_\_

HISTOMORPHOLOGIC OBSERVATION(S):

**GENERAL:** No gross changes.

Not applicable

**HISTOMORPHOLOGIC OBSERVATIONS:** 

ADRENAL GLANDS:

LIVER:

vacuolation, cortex (mild)

LUNG: THYROID: inflammation, chronic, focal/multifocal (minimal) inflammation, interstitial, multifocal (minimal)

ultimobranchial body/cyst

TRACHEA:

inflammation, chronic, focal (minimal)

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

BONE MARROW (STERNUM)

COLON

**TESTES** 

BRAIN DUODENUM

JEJUNUM

CECUM **EPIDIDYMIDES** KIDNEYS

COAGULATING GLAND HEART LYMPH NODE, MEDIASTINAL

**ILEUM** LYMPH NODE, SUBMANDIBULAR NERVE, SCIATIC

RECTUM

PARATHYROID SEMINAL VESICLES

PEYER'S PATCH SPINAL CORD, CERVICAL

PROSTATE SPINAL CORD, LUMBAR

SPINAL CORD, THORACIC THYMUS

SPLEEN

STOMACH

URINARY BLADDER

Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17618 SEX:

М

DOSE GROUP:

DEATH TYPE:

Sacrifice-Scheduled

GROSS OBSERVATION(S):

HISTOMORPHOLOGIC OBSERVATION(S):

**GENERAL:** No gross changes.

Not applicable

**HISTOMORPHOLOGIC OBSERVATIONS:** 

CECUM:

LIVER: STOMACH: inflammation, mucosa, chronic (mild)

inflammation, chronic, focal/multifocal (mild)

dilatation, mucosal glands (minimal)

edema/inflammation, submucosa, glandular area (minimal)

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

ADRENAL GLANDS

COLON **ILEUM** 

LYMPH NODE, MEDIASTINAL PEYER'S PATCH SPINAL CORD, CERVICAL

**TESTES** 

URINARY BLADDER

BONE MARROW (STERNUM)

DUODENUM **JEJUNUM** 

**THYMUS** 

LYMPH NODE, SUBMANDIBULAR NERVE, SCIATIC PROSTATE RECTUM SPINAL CORD, LUMBAR

BRAIN **EPIDIDYMIDES KIDNEYS** 

> SPINAL CORD, THORACIC THYROID

COAGULATING GLAND

HEART LUNG

PARATHYROID SEMINAL VESICLES

SPLEEN TRACHEA

#### Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17630

DOSE GROUP:

: I

SEX:

DEATH TYPE:

Sacrifice-Scheduled

GROSS OBSERVATION(S):

HISTOMORPHOLOGIC OBSERVATION(S):

**GENERAL:** No gross changes.

Not applicable

HISTOMORPHOLOGIC OBSERVATIONS:

ADRENAL GLANDS:

LIVER: STOMACH: vacuolation, cortex (minimal)

inflammation, chronic, focal/multifocal (minimal)

dilatation, mucosal glands (minimal)

edema/inflammation, submucosa, nonglandular area (minimal)

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

BONE MARROW (STERNUM)

COLON ILEUM

**PROSTATE** 

BRAIN DUODENUM

JEJUNUM

LYMPH NODE, SUBMANDIBULAR NERVE, SCIATIC

RECTUM

SPINAL CORD, LUMBAR THYMUS

SPINAL CORD, THORACIC THYROID

KIDNEYS PARATHYROID

CECUM

SEMINAL VESICLES

SPLEEN TRACHEA

**EPIDIDYMIDES** 

COAGULATING GLAND

HEART LUNG

PEYER'S PATCH

SPINAL CORD, CERVICAL

TESTES

URINARY BLADDER

TISSUE(S) NOT AVAILABLE FOR EVALUATION:

LYMPH NODE, MEDIASTINAL

#### Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17631

DOSE GROUP:

SEX: М DEATH TYPE:

Sacrifice-Scheduled 

GROSS OBSERVATION(S):

HISTOMORPHOLOGIC OBSERVATION(S):

**GENERAL:** No gross changes.

Not applicable

HISTOMORPHOLOGIC OBSERVATIONS:

KIDNEYS:

LIVER:

dilatation, pelvis (mild)

vacuolation, hepatocellular, periportal (minimal) inflammation, chronic, focal/multifocal (minimal)

hyperplasia, lymphocytic/plasmacytic (mild)

LYMPH NODE, SUBMANDIBULAR: PROSTATE:

THYROID:

atrophy, focal (minimal) ultimobranchial body/cyst

hypertrophy, follicular epithelium (mild)

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

ADRENAL GLANDS

COAGULATING GLAND

**HEART** LYMPH NODE, MEDIASTINAL

RECTUM

SPINAL CORD, THORACIC

THYMUS

BONE MARROW (STERNUM) COLON

ILEUM

NERVE, SCIATIC SEMINAL VESICLES

SPLEEN TRACHEA BRAIN DUODENUM **JEJUNUM** 

PARATHYROID SPINAL CORD, CERVICAL

STOMACH

URINARY BLADDER

CECUM

**EPIDIDYMIDES** LUNG

PEYER'S PATCH SPINAL CORD, LUMBAR

**TESTES** 

#### Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17639

DOSE GROUP:

DEATH TYPE:

Sacrifice-Scheduled

GROSS OBSERVATION(S):

HISTOMORPHOLOGIC OBSERVATION(S):

**GENERAL:** No gross changes.

Not applicable

**HISTOMORPHOLOGIC OBSERVATIONS:** 

**EPIDIDYMIDES:** 

SEX:

LYMPH NODE, MEDIASTINAL:

LYMPH NODE, SUBMANDIBULAR:

infiltration, mononuclear-cell, focal (minimal)
congestion/erythrophagocytosis (minimal)
hyperplasia, lymphocytic/plasmacytic (minimal)

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

ADRENAL GLANDS

COAGULATING GLAND ILEUM

LUNG **PROSTATE** 

SPINAL CORD, LUMBAR **TESTES** 

URINARY BLADDER

BONE MARROW (STERNUM)

COLON **JEJUNUM** 

NERVE, SCIATIC RECTUM

SPINAL CORD, THORACIC **THYMUS** 

BRAIN DUODENUM **KIDNEYS** 

PARATHYROID SEMINAL VESICLES

SPLEEN THYROID CECUM **HEART** LIVER

PEYER'S PATCH

SPINAL CORD, CERVICAL

STOMACH **TRACHEA** 

#### Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17648 DOSE GROUP:

SEX: DEATH TYPE: Sacrifice-Scheduled 

GROSS OBSERVATION(S): HISTOMORPHOLOGIC OBSERVATION(S):

<u>GENERAL</u>: No gross changes. Not applicable

**HISTOMORPHOLOGIC OBSERVATIONS:** 

**HEART:** inflammation, subacute, focal/multifocal (mild) infiltration, mononuclear-cell, focal (minimal) inflammation, chronic, focal/multifocal (minimal) hyperplasia, lymphocytic/plasmacytic (mild) KIDNEYS: LIVER:

LYMPH NODE, SUBMANDIBULAR:

STOMACH: dilatation, mucosal glands (minimal)

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

ADRENAL GLANDS BONE MARROW (STERNUM) BRAIN CECUM COAGULATING GLAND COLON DUODENUM **EPIDIDYMIDES** ILEUM **JEJUNUM** LUNG LYMPH NODE, MEDIASTINAL NERVE, SCIATIC PARATHYROID PEYER'S PATCH **PROSTATE** 

RECTUM SEMINAL VESICLES SPINAL CORD, CERVICAL SPINAL CORD, LUMBAR SPINAL CORD, THORACIC **SPLEEN TESTES THYMUS** 

THYROID TRACHEA URINARY BLADDER

#### Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17652 SEX:

DOSE GROUP: DEATH TYPE:

Sacrifice-Scheduled

===========

GROSS OBSERVATION(S):

HISTOMORPHOLOGIC OBSERVATION(S):

**GENERAL:** No gross changes.

Not applicable

**HISTOMORPHOLOGIC OBSERVATIONS:** 

М

LIVER: RECTUM: inflammation, chronic, focal/multifocal (minimal)

edema/inflammation, submucosa (moderate)

STOMACH:

edema/inflammation, submucosa, glandular area (mild)

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

ADRENAL GLANDS

COAGULATING GLAND

HEART

LUNG

PARATHYROID

SPINAL CORD, CERVICAL **TESTES** 

URINARY BLADDER

BONE MARROW (STERNUM)

COLON ILEUM

LYMPH NODE, MEDIASTINAL

PEYER'S PATCH SPINAL CORD, LUMBAR

**THYMUS** 

BRAIN DUODENUM

**JEJUNUM** LYMPH NODE, SUBMANDIBULAR NERVE, SCIATIC PROSTATE SEMINAL VESICLES

SPINAL CORD, THORACIC

THYROID

CECUM

**EPIDIDYMIDES KIDNEYS** 

SPLEEN **TRACHEA** 

#### Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17656

DOSE GROUP:

DEATH TYPE:

Sacrifice-Scheduled

GROSS OBSERVATION(S):

HISTOMORPHOLOGIC OBSERVATION(S):

**GENERAL:** No gross changes.

Not applicable

**HISTOMORPHOLOGIC OBSERVATIONS:** 

М

**EPIDIDYMIDES:** 

KIDNEYS: LYMPH NODE, SUBMANDIBULAR:

PROSTATE:

SEX:

infiltration, mononuclear-cell, focal (minimal)

edema, papillary (minimal)

hyperplasia, lymphocytic/plasmacytic (minimal) inflammation, chronic, multifocal (minimal)

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

ADRENAL GLANDS

COAGULATING GLAND

**ILEUM** 

LYMPH NODE, MEDIASTINAL

**RECTUM** 

SPINAL CORD, THORACIC **THYMUS** 

COLON **JEJUNUM** 

NERVE, SCIATIC SEMINAL VESICLES

BONE MARROW (STERNUM)

SPLEEN

THYROID

BRAIN

DUODENUM LIVER PARATHYROID

SPINAL CORD, CERVICAL

STOMACH TRACHEA

CECUM

**HEART** LUNG

PEYER'S PATCH SPINAL CORD, LUMBAR

TESTES

URINARY BLADDER

#### Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17658

DOSE GROUP:

: I

SEX: M

DEATH TYPE:

TYPE: Sacrifice-Scheduled

GROSS OBSERVATION(S):

HISTOMORPHOLOGIC OBSERVATION(S):

**GENERAL:** No gross changes.

Not applicable

**HISTOMORPHOLOGIC OBSERVATIONS:** 

THYROID:

ultimobranchial body/cyst

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

ADRENAL GLANDS

COAGULATING GLAND

BONE MARROW (STERNUM) COLON

BRAIN DUODENUM CECUM

**TESTES** 

HEART

ILEUM LUNG

JEJUNUM LYMPH NODE, MEDIASTINAL EPIDIDYMIDES KIDNEYS

LIVER NERVE, SCIATIC

PARATHYROID SEMINAL VESICLES PEYER'S PATCH

LYMPH NODE, SUBMANDIBULAR PROSTATE

RECTUM SPINAL CORD, THORACIC

SPLEEN

SPINAL CORD, CERVICAL STOMACH

SPINAL CORD, LUMBAR

THYMUS TRACHEA URINARY BLADDER

#### Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17660

DOSE GROUP:

SEX: 

M

DEATH TYPE:

Sacrifice-Scheduled

GROSS OBSERVATION(S):

HISTOMORPHOLOGIC OBSERVATION(S):

**GENERAL:** No gross changes.

Not applicable

**HISTOMORPHOLOGIC OBSERVATIONS:** 

LIVER:

LYMPH NODE, SUBMANDIBULAR:

inflammation, chronic, focal/multifocal (minimal) hyperplasia, lymphocytic/plasmacytic (minimal)

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

ADRENAL GLANDS

COAGULATING GLAND **HEART** 

LUNG

PEYER'S PATCH

SPINAL CORD, CERVICAL

STOMACH **TRACHEA** 

SPINAL CORD, LUMBAR **TESTES** 

PROSTATE

COLON

ILEUM

URINARY BLADDER

BONE MARROW (STERNUM)

LYMPH NODE, MEDIASTINAL

BRAIN

DUODENUM **JEJUNUM** 

NERVE, SCIATIC RECTUM

SPINAL CORD, THORACIC

**THYMUS** 

CECUM **EPIDIDYMIDES** KIDNEYS PARATHYROID

SEMINAL VESICLES SPLEEN THYROID

#### Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17634 DOSE GROUP: Π SEX: М DEATH TYPE: Sacrifice-Scheduled GROSS OBSERVATION(S): HISTOMORPHOLOGIC OBSERVATION(S): **GENERAL:** No gross changes. Not applicable **HISTOMORPHOLOGIC OBSERVATIONS:** LIVER: inflammation, chronic, focal/multifocal (minimal) THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS: STOMACH End of Record- 17634

#### Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17635 SEX:

DOSE GROUP:

DEATH TYPE:

Sacrifice-Scheduled

GROSS OBSERVATION(S):

End of Record- 17635

HISTOMORPHOLOGIC OBSERVATION(S):

**GENERAL:** No gross changes.

Not applicable

**HISTOMORPHOLOGIC OBSERVATIONS:** 

М

LIVER:

vacuolation, hepatocellular, periportal (minimal) inflammation, chronic, focal/multifocal (minimal) dilatation, mucosal glands (minimal)

STOMACH:

#### Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17638

SEX: M DEATH TYPE: Sacrifice-Scheduled

GROSS OBSERVATION(S): HISTOMORPHOLOGIC OBSERVATION(S):

GENERAL: No gross changes. Not applicable

HISTOMORPHOLOGIC OBSERVATIONS:

LIVER: lipidosis, tension, focal

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

STOMACH

End of Record- 17638

### Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17642 SEX: M	DOSE GROUP: DEATH TYPE:	II Sacrifice-Scheduled			
GROSS OBSERVATION(S):	HISTOMORPHOLOG	GIC OBSERVATION(S):			
GENERAL: No gross changes.	Not applicable				
HISTOMORPHOLOGIC OBSERVATIONS:					
LIVER: inflammation	, chronic, focal	/multifocal (mild)			
THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:					
STOMACH					
End of Record- 17642					

#### Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17643

DOSE GROUP:

ΙI

SEX:

DEATH TYPE:

Sacrifice-Scheduled 

GROSS OBSERVATION(S):

HISTOMORPHOLOGIC OBSERVATION(S):

GENERAL: No gross changes.

Not applicable

**HISTOMORPHOLOGIC OBSERVATIONS:** 

LIVER: STOMACH:

inflammation, chronic, focal/multifocal (mild)

dilatation, mucosal glands (mild)

#### Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17645
SEX: M DEATH TYPE: Sacrifice-Scheduled

GROSS OBSERVATION(S): HISTOMORPHOLOGIC OBSERVATION(S):

GENERAL: No gross changes. Not applicable

HISTOMORPHOLOGIC OBSERVATIONS:

LIVER: inflammation, chronic, focal/multifocal (minimal)

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

STOMACH

End of Record- 17645

#### Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17649

DOSE GROUP:

SEX:

DEATH TYPE:

Sacrifice-Scheduled \_\_\_\_\_\_

GROSS OBSERVATION(S):

HISTOMORPHOLOGIC OBSERVATION(S):

<u>GENERAL:</u> No gross changes.

Not applicable

**HISTOMORPHOLOGIC OBSERVATIONS:** 

LIVER: STOMACH: inflammation, chronic, focal/multifocal (minimal)
edema/inflammation, submucosa, nonglandular area (moderate)

#### 

ANIMAL NUMBER: 17651
SEX: M
DEATH TYPE: Sacrifice-Scheduled

GROSS OBSERVATION(S):
HISTOMORPHOLOGIC OBSERVATION(S):

GENERAL: No gross changes.
Not applicable

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

LIVER STOMACH

### Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17653 SEX: M	DOSE GRO DEATH TY	UP: II PE: Sacrifice-Sc	cheduled	
GROSS OBSERVATION(S):	HISTOMOR	PHOLOGIC OBSERVATION	DN(S):	
GENERAL: No gross changes.	Not app	Not applicable		
HISTOMORPHOLOGIC OBSERVATIONS:				
LIVER:	vacuolation, hepatocel	lular, periportal (	minimal)	
THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:				
STOMACH				
End of Record- 17653				

#### Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17655 DOSE GROUP: ΙI DEATH TYPE: Sacrifice-Scheduled \_\_\_\_\_\_ GROSS OBSERVATION(S): HISTOMORPHOLOGIC OBSERVATION(S): <u>GENERAL:</u> No gross changes. Not applicable **HISTOMORPHOLOGIC OBSERVATIONS:** LIVER: inflammation, chronic, focal/multifocal (minimal) THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS: STOMACH End of Record- 17655

Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17620

DOSE GROUP:

III

SEX:

DEATH TYPE:

Sacrifice-Scheduled

GROSS OBSERVATION(S):

HISTOMORPHOLOGIC OBSERVATION(S):

GENERAL: No gross changes.

Not applicable

**HISTOMORPHOLOGIC OBSERVATIONS:** 

LIVER: STOMACH: hypertrophy, hepatocellular, centrilobular (minimal) edema/inflammation, submucosa, glandular area (minimal) dilatation, mucosal glands (minimal)

### Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17623 SEX: M	DOSE GROUP: DEATH TYPE:	III Sacrifice-Scheduled			
GROSS OBSERVATION(S):	HISTOMORPHOLOG	GIC OBSERVATION(S):			
GENERAL: No gross changes.	Not applicable				
HISTOMORPHOLOGIC OBSERVATIONS:					
LIVER: inflammation	n, chronic, focal	/multifocal (minimal)			
THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:					
STOMACH					
End of Record- 17623					

#### Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17627 DOSE GROUP: III SEX: DEATH TYPE: Sacrifice-Scheduled GROSS OBSERVATION(S): HISTOMORPHOLOGIC OBSERVATION(S): GENERAL: No gross changes. Not applicable **HISTOMORPHOLOGIC OBSERVATIONS:** LIVER: inflammation, chronic, focal/multifocal (minimal)
hypertrophy, hepatocellular, centrilobular (minimal) THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS: STOMACH End of Record- 17627

### Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17628

SEX: M

DEATH TYPE: Sacrifice-Scheduled

GROSS OBSERVATION(S):

GENERAL: No gross changes.

HISTOMORPHOLOGIC OBSERVATION(S):

HISTOMORPHOLOGIC OBSERVATION(S):

LIVER: inflammation, chronic, focal/multifocal (minimal)

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

STOMACH

End of Record- 17628

#### Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17633 DOSE GROUP: SEX: DEATH TYPE: Sacrifice-Scheduled ------------GROSS OBSERVATION(S): HISTOMORPHOLOGIC OBSERVATION(S): **GENERAL:** No gross changes. Not applicable **HISTOMORPHOLOGIC OBSERVATIONS:** LIVER: hypertrophy, hepatocellular, centrilobular (minimal) THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS: STOMACH End of Record- 17633

Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17640
SEX: M
DEATH TYPE: Sacrifice-Scheduled

GROSS OBSERVATION(S):
HISTOMORPHOLOGIC OBSERVATION(S):

GENERAL: No gross changes.
Not applicable

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

LIVER STOMACH

### Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17646 SEX: M		DOSE GROUP: DEATH TYPE:	III Sacrifice-Scheduled		
		==========			
<pre>GROSS OBSERVATION(S):</pre>		<u>HISTOMORPHOLOG</u>	IC OBSERVATION(S):		
GENERAL: No gross changes.		Not applicable			
HISTOMORPHOLOGIC OBSERVATIONS:					
LIVER:	inflammation,	chronic, focal	/multifocal (minimal)		
THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:					
STOMACH					
End of Record- 17646					

#### Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17650 DOSE GROUP: HI SEX: М DEATH TYPE: Sacrifice-Scheduled 

\_\_\_\_\_\_

GROSS OBSERVATION(S):

HISTOMORPHOLOGIC OBSERVATION(S):

<u>GENERAL:</u> No gross changes.

Not applicable

**HISTOMORPHOLOGIC OBSERVATIONS:** 

LIVER: STOMACH: hypertrophy, hepatocellular, centrilobular (minimal) dilatation, mucosal glands (minimal) edema/inflammation, submucosa, glandular area (minimal)

#### Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17657

SEX: M DEATH TYPE: Sacrifice-Scheduled

GROSS OBSERVATION(S): HISTOMORPHOLOGIC OBSERVATION(S):

GENERAL: No gross changes. Not applicable

HISTOMORPHOLOGIC OBSERVATIONS:

LIVER: inflammation, chronic, focal/multifocal (minimal)

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

STOMACH

End of Record- 17657

#### Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17659 DOSE GROUP: SEX: М DEATH TYPE: Sacrifice-Scheduled GROSS OBSERVATION(S): HISTOMORPHOLOGIC OBSERVATION(S): **GENERAL:** No gross changes. Not applicable **HISTOMORPHOLOGIC OBSERVATIONS:** LIVER: inflammation, chronic, focal/multifocal (minimal) THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS: STOMACH End of Record- 17659

#### Appendix II Individual Animal Gross and Histomorphology Data

ΤV

ANIMAL NUMBER: 17621 DOSE GROUP:

SEX: DEATH TYPE: Sacrifice-Scheduled 

GROSS OBSERVATION(S): HISTOMORPHOLOGIC OBSERVATION(S):

<u>SPLEEN:</u> Nodule, 0.3cm (trimming observation). 1 ymphosarcoma

**HISTOMORPHOLOGIC OBSERVATIONS:** 

ADRENAL GLANDS: vacuolation, cortex (minimal)

LIVER: inflammation, chronic, focal/multifocal (mild) hypertrophy, hepatocellular, centrilobular (mild)

LYMPH NODE, SUBMANDIBULAR: hyperplasia, lymphocytic/plasmacytic (minimal) RECTUM:

parasite(s) SPLEEN: lymphosarcoma, malignant

STOMACH: erosion(s), glandular mucosa (minimal)

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

BONE MARROW (STERNUM) BRAIN CECUM COAGULATING GLAND

COLON DUODENUM **EPIDIDYMIDES HEART** ILEUM JEJUNUM KIDNEYS LUNG NERVE, SCIATIC SEMINAL VESICLES LYMPH NODE, MEDIASTINAL PARATHYROID PEYER'S PATCH PROSTATE

SPINAL CORD, CERVICAL SPINAL CORD, LUMBAR SPINAL CORD, THORACIC TESTES **THYMUS** THYROID

TRACHEA URINARY BLADDER

**NEOPLASMS:** 

SPLEEN lymphosarcoma, malignant

# Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17622 DOSE GROUP: IV

SEX: M DEATH TYPE: Sacrifice-Scheduled

GROSS OBSERVATION(S): HISTOMORPHOLOGIC OBSERVATION(S):

EXTREMITIES: Right front leg- scab. dermatitis, ulcerative, focal

HISTOMORPHOLOGIC OBSERVATIONS:

EXTREMITIES: dermatitis, ulcerative, focal (mild)

LIVER: hypertrophy, hepatocellular, centrilobular (mild) hypertrophy, hepatocellular, centrilobular (mild) hyperplasia, lymphocytic/plasmacytic (moderate)

PROSTATE: atrophy, focal (minimal)

STOMACH: erosion(s), glandular mucosa (mild)

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

ADRENAL GLANDS BONE MARROW (STERNUM) BRAIN CECUM
COAGULATING GLAND COLON DUODENUM EPIDIDYMIDES
HEART ILEUM JEJUNUM KIDNEYS
LUNG LYMPH NODE, MEDIASTINAL NERVE SCIATIC PARATHYPOID

LUNG LYMPH NODE, MEDIASTINAL NERVE, SCIATIC PARATHYROID SEMINAL VESICLES SPINAL CORD, CERVICAL SPINAL CORD, LUMBAR SPINAL CORD, THORACIC SPLEEN TESTES

THYMUS THYROID TRACHEA URINARY BLADDER

#### Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17625

М

DOSE GROUP:

DEATH TYPE:

Sacrifice-Scheduled

GROSS OBSERVATION(S):

HISTOMORPHOLOGIC OBSERVATION(S):

I۷

**GENERAL:** No gross changes.

Not applicable

**HISTOMORPHOLOGIC OBSERVATIONS:** 

ADRENAL GLANDS:

LIVER:

SEX:

hypertrophy/vacuolation, zona glomerulosa (mild)

LYMPH NODE, SUBMANDIBULAR:

necrosis, focal (minimal) hypertrophy, hepatocellular, centrilobular (mild)

hyperplasia, lymphocytic/plasmacytic (minimal)

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

BONE MARROW (STERNUM)

COLON

ILEUM

LYMPH NODE, MEDIASTINAL

PROSTATE

SPINAL CORD, LUMBAR

URINARY BLADDER

**TESTES** 

BRAIN

DUODENUM JEJUNUM

NERVE, SCIATIC RECTUM

SPINAL CORD, THORACIC

THYMUS

CECUM

**EPIDIDYMIDES** KIDNEYS

PARATHYROID SEMINAL VESICLES

SPLEEN THYROID COAGULATING GLAND

**HEART** LUNG

PEYER'S PATCH

SPINAL CORD, CERVICAL

STOMACH **TRACHEA** 

#### Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17629 DOSE GROUP: I۷

SEX: DEATH TYPE: Sacrifice-Scheduled \_\_\_\_\_\_\_

GROSS OBSERVATION(S): HISTOMORPHOLOGIC OBSERVATION(S):

**GENERAL:** No gross changes. Not applicable

**HISTOMORPHOLOGIC OBSERVATIONS:** 

KIDNEYS: cyst(s), medulla

LIVER: hypertrophy, hepatocellular, centrilobular (mild) macrophages, alveoli, focal (minimal) inflammation, interstitial, multifocal (minimal)

LUNG:

LYMPH NODE, SUBMANDIBULAR: hyperplasia, lymphocytic/plasmacytic (mild)

PROSTATE: inflammation, chronic, multifocal (minimal) STOMACH:

edema/inflammation, submucosa, nonglandular area (minimal) dilatation, mucosal glands (minimal)

THYROID: ultimobranchial body/cyst

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

ADRENAL GLANDS BONE MARROW (STERNUM) BRAIN

COAGULATING GLAND COLON DUODENUM **EPIDIDYMIDES HEART** ILEUM JEJUNUM LYMPH NODE, MEDIASTINAL NERVE, SCIATIC SEMINAL VESICLES PARATHYROID PEYER'S PATCH RECTUM

SPINAL CORD, CERVICAL SPINAL CORD, LUMBAR SPINAL CORD, THORACIC SPLEEN **TESTES THYMUS** 

TRACHEA URINARY BLADDER

**COMMENTS:** 

**STOMACH** The edema/inflammation is most prominent at the limiting ridge.

#### Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17636

DOSE GROUP:

SEX:

М

DEATH TYPE:

Sacrifice-Scheduled

GROSS OBSERVATION(S):

HISTOMORPHOLOGIC OBSERVATION(S):

PROSTATE: Right hemisphere- firm, lobular mass. tan in color, measuring 2.8cm x 0.9cm x 0.7cm, cut surface reveals tan, smooth surface,

prostatitis, suppurative

ventral right side red in color.

**HISTOMORPHOLOGIC OBSERVATIONS:** 

LYMPH NODE, MEDIASTINAL:

ADRENAL GLANDS:

KIDNEYS:

LIVER:

PROSTATE:

RECTUM:

STOMACH:

THYROID:

vacuolation, cortex (minimal)

cyst(s), medulla

inflammation, chronic, focal/multifocal (minimal) hypertrophy, hepatocellular, centrilobular (minimal)

congestion/erythrophagocytosis (mild) prostatitis, suppurative (marked)

parasite(s)

edema/inflammation, submucosa, glandular area (moderate) edema/inflammation, submucosa, nonglandular area (mild)

ultimobranchial body/cyst

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

BONE MARROW (STERNUM)

COLON

ILEUM

NERVE, SCIATIC

SPINAL CORD, LUMBAR

THYMUS

BRAIN DUODENUM

JEJUNUM

PEYER'S PATCH SPINAL CORD, THORACIC

TRACHEA

CECUM **EPIDIDYMIDES** 

LUNG

SEMINAL VESICLES

SPLEEN

URINARY BLADDER

COAGULATING GLAND

HEART

LYMPH NODE, SUBMANDIBULAR SPINAL CORD, CERVICAL

**TESTES** 

TISSUE(S) NOT AVAILABLE FOR EVALUATION:

PARATHYROID

#### Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17637 DOSE GROUP:

SEX: DEATH TYPE: Sacrifice-Scheduled

GROSS\_OBSERVATION(S): HISTOMORPHOLOGIC OBSERVATION(S):

GENERAL: No gross changes. Not applicable

**HISTOMORPHOLOGIC OBSERVATIONS:** 

LIVER: necrosis, individual hepatocytes (minimal)

hypertrophy, hepatocellular, centrilobular (mild)

PEYER'S PATCH:

mineralization (minimal) edema/inflammation, submucosa, nonglandular area (minimal) STOMACH:

edema/inflammation, submucosa, glandular area (mild) dilatation, mucosal glands (minimal)

THYROID: ultimobranchial body/cyst

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

ADRENAL GLANDS BONE MARROW (STERNUM) BRAIN CECUM COAGULATING GLAND COLON DUODENUM **EPIDIDYMIDES** HEART ILEUM JEJUNUM KIDNEYS

LUNG LYMPH NODE, MEDIASTINAL LYMPH NODE, SUBMANDIBULAR NERVE, SCIATIC PARATHYROID PROSTATE RECTUM SEMINAL VESICLES SPINAL CORD, CERVICAL SPINAL CORD, LUMBAR

SPINAL CORD, THORACIC SPLEEN **TESTES THYMUS** TRACHEA URINARY BLADDER

#### Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17641

DOSE GROUP:

SEX: 

DEATH TYPE:

Sacrifice-Scheduled

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GROSS OBSERVATION(S):

HISTOMORPHOLOGIC OBSERVATION(S):

 $\underline{\text{GENERAL:}}$  No gross changes.

Not applicable

### **HISTOMORPHOLOGIC OBSERVATIONS:**

М

KIDNEYS:

LIVER:

mineralization, multifocal (minimal)

inflammation, chronic, focal/multifocal (minimal) hypertrophy, hepatocellular, centrilobular (mild)

necrosis, individual hepatocytes (minimal)

LYMPH NODE, MEDIASTINAL: LYMPH NODE, SUBMANDIBULAR: congestion/erythrophagocytosis (minimal)
hyperplasia, lymphocytic/plasmacytic (minimal)

dilatation, mucosal glands (mild)

STOMACH:

# THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

BRAIN

CECUM

ADRENAL GLANDS COAGULATING GLAND **HEART** 

BONE MARROW (STERNUM) COLON **ILEUM** 

DUODENUM JEJUNUM

**EPIDIDYMIDES** LUNG

NERVE, SCIATIC **RECTUM** SPINAL CORD, THORACIC

PARATHYROID SEMINAL VESICLES PEYER'S PATCH SPINAL CORD, CERVICAL **TESTES** 

PROSTATE SPINAL CORD, LUMBAR THYMUS

THYROID

SPLEEN TRACHEA

URINARY BLADDER

#### Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17644 SEX:

М

DOSE GROUP:

DEATH TYPE:

Sacrifice-Scheduled

GROSS OBSERVATION(S):

HISTOMORPHOLOGIC OBSERVATION(S):

TV

**GENERAL:** No gross changes.

Not applicable

**HISTOMORPHOLOGIC OBSERVATIONS:** 

ADRENAL GLANDS:

LIVER:

PROSTATE:

SPLEEN:

vacuolation, cortex (minimal)

hypertrophy, hepatocellular, centrilobular (mild)

necrosis, individual hepatocytes (mild)

hyperplasia, lymphocytic/plasmacytic (minimal) LYMPH NODE, SUBMANDIBULAR:

inflammation, chronic, multifocal (minimal)

hematopoiesis, extramedullary, increased (minimal)

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

BONE MARROW (STERNUM)

COLON ILEUM

LYMPH NODE, MEDIASTINAL SEMINAL VESICLES

STOMACH **TRACHEA**  BRAIN DUODENUM JEJUNUM NERVE, SCIATIC

SPINAL CORD, CERVICAL **TESTES** URINARY BLADDER

CECUM **EPIDIDYMIDES** KIDNEYS

PEYER'S PATCH SPINAL CORD, LUMBAR

THYMUS

COAGULATING GLAND

**HEART** LUNG RECTUM

SPINAL CORD, THORACIC

THYROID

TISSUE(S) NOT AVAILABLE FOR EVALUATION:

**PARATHYROID** 

#### Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17647 SEX:

DOSE GROUP: DEATH TYPE:

Sacrifice-Scheduled

GROSS OBSERVATION(S):

HISTOMORPHOLOGIC OBSERVATION(S):

**GENERAL:** No gross changes.

Not applicable

**HISTOMORPHOLOGIC OBSERVATIONS:** 

М

**EPIDIDYMIDES:** 

LIVER:

infiltration, mononuclear-cell, focal (minimal) hypertrophy, hepatocellular, centrilobular (mild)

STOMACH:

edema/inflammation, submucosa, nonglandular area (moderate)

edema/inflammation, submucosa, glandular area (moderate)

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

ADRENAL GLANDS

COAGULATING GLAND

ILEUM

LYMPH NODE, MEDIASTINAL

**TESTES** 

PEYER'S PATCH SPINAL CORD, CERVICAL

URINARY BLADDER

BONE MARROW (STERNUM)

COLON **JEJUNUM** 

LYMPH NODE, SUBMANDIBULAR NERVE, SCIATIC

**PROSTATE** SPINAL CORD, LUMBAR

**THYMUS** 

BRAIN DUODENUM

KIDNEYS

RECTUM SPINAL CORD, THORACIC THYROID

**CECUM HEART** 

LUNG PARATHYROID

SEMINAL VESICLES

SPLEEN **TRACHEA** 

#### Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17654 DOSE GROUP:

SEX: М DEATH TYPE: Sacrifice-Scheduled

GROSS OBSERVATION(S): HISTOMORPHOLOGIC OBSERVATION(S):

**GENERAL:** No gross changes. Not applicable

**HISTOMORPHOLOGIC OBSERVATIONS:** 

**HEART:** inflammation, subacute, focal/multifocal (minimal)

KIDNEYS:

nephritis, chronic, focal (minimal)
lipidosis, tension, focal
inflammation, chronic, focal/multifocal (minimal) LIVER:

hypertrophy, hepatocellular, centrilobular (minimal)

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

ADRENAL GLANDS BONE MARROW (STERNUM) BRAIN CECUM COAGULATING GLAND COLON DUODENUM **EPIDIDYMIDES** 

ILEUM **JEJUNUM** LYMPH NODE, MEDIASTINAL PEYER'S PATCH LUNG LYMPH NODE, SUBMANDIBULAR NERVE, SCIATIC PARATHYROID PROSTATE RECTUM SEMINAL VESICLES SPINAL CORD, CERVICAL

SPINAL CORD, LUMBAR SPINAL CORD, THORACIC SPLEEN STOMACH

TESTES **THYMUS** THYROID **TRACHEA** URINARY BLADDER

## Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17681

DOSE GROUP:

SEX:

DEATH TYPE:

Sacrifice-Scheduled 

GROSS OBSERVATION(S):

HISTOMORPHOLOGIC OBSERVATION(S):

GENERAL: No gross changes.

Not applicable

**HISTOMORPHOLOGIC OBSERVATIONS:** 

KIDNEYS:

LYMPH NODE, SUBMANDIBULAR:

SPLEEN:

MAMMARY GLAND:

THYROID: VAGINA:

mineralization, multifocal (minimal)

hyperplasia, lymphocytic/plasmacytic (moderate)

hyperplasia, physiological

hematopoiesis, extramedullary, increased (mild) ultimobranchial body/cyst

mucification (moderate)

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

ADRENAL GLANDS

COLON **JEJUNUM** 

NERVE, SCIATIC

RECTUM

STOMACH **UTERUS** 

BONE MARROW (STERNUM)

DUODENUM LIVER OVARIES

SPINAL CORD, CERVICAL **THYMUS** 

BRAIN HEART LUNG

TRACHEA

PARATHYROID SPINAL CORD, LUMBAR CECUM ILEUM

LYMPH NODE, MEDIASTINAL

PEYER'S PATCH

SPINAL CORD, THORACIC

URINARY BLADDER

## Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17690

DOSE GROUP:

SEX:

========

DEATH TYPE:

Sacrifice-Scheduled

GROSS OBSERVATION(S):

HISTOMORPHOLOGIC OBSERVATION(S):

 $\underline{\mathsf{GENERAL}}:$  No gross changes.

Not applicable

HISTOMORPHOLOGIC OBSERVATIONS:

LIVER:

LYMPH NODE, SUBMANDIBULAR:

MAMMARY GLAND:

STOMACH: VAGINA:

inflammation, chronic, focal/multifocal (minimal) hyperplasia, lymphocytic/plasmacytic (minimal) hyperplasia, physiological

dilatation, mucosal glands (minimal)

mucification (moderate)

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

ADRENAL GLANDS

NERVE, SCIATIC RECTUM

URINARY BLADDER

COLON **JEJUNUM** 

SPLEEN

BONE MARROW (STERNUM)

OVARIES

THYMUS

**UTERUS** 

DUODENUM **KIDNEYS** 

SPINAL CORD, CERVICAL

BRAIN HEART

CECUM ILEUM

LUNG LYMPH NODE, MEDIASTINAL PARATHYROID

SPINAL CORD, LUMBAR

THYROID

PEYER'S PATCH SPINAL CORD, THORACIC

TRACHEA

#### Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17694 SEX:

F

DOSE GROUP:

DEATH TYPE:

Sacrifice-Scheduled

GROSS OBSERVATION(S):

HISTOMORPHOLOGIC OBSERVATION(S):

**GENERAL:** No gross changes.

Not applicable

HISTOMORPHOLOGIC OBSERVATIONS:

LUNG:

LYMPH NODE, MEDIASTINAL:

macrophages, alveoli, focal (minimal)

macrophages, pigmented (minimal) congestion/erythrophagocytosis (minimal)

LYMPH NODE, SUBMANDIBULAR:

hyperplasia, lymphocytic/plasmacytic (mild) hyperplasia, physiological

MAMMARY GLAND:

UTERUS:

thrombus

macrophages, pigmented (minimal)

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

ADRENAL GLANDS

COLON **JEJUNUM** 

BONE MARROW (STERNUM) DUODENUM

**KIDNEYS** PARATHYROID

SPINAL CORD, LUMBAR

BRAIN HEART LIVER

PEYER'S PATCH

CECUM ILEUM NERVE, SCIATIC **RECTUM** 

OVARIES SPINAL CORD, CERVICAL

**STOMACH** URINARY BLADDER **THYMUS** VAGINA

SPINAL CORD, THORACIC THYROID

SPLEEN **TRACHEA** 

### Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17695

GROSS OBSERVATION(S):

DOSE GROUP:

DEATH TYPE:

Sacrifice-Scheduled

SEX: F

HISTOMORPHOLOGIC OBSERVATION(S):

 $\underline{\mathsf{GENERAL}}:$  No gross changes.

Not applicable

**HISTOMORPHOLOGIC OBSERVATIONS:** 

LYMPH NODE, MEDIASTINAL:

hyperplasia, lymphocytic/plasmacytic (minimal)

macrophages, pigmented (minimal)

MAMMARY GLAND:

hyperplasia, physiological

SPLEEN:

hematopoiesis, extramedullary, increased (mild)

UTERUS:

macrophages, pigmented (moderate)

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

ADRENAL GLANDS

BONE MARROW (STERNUM)

COLON

KIDNEYS

**HEART** ILEUM LIVER LUNG

**JEJUNUM** 

LYMPH NODE, SUBMANDIBULAR NERVE, SCIATIC

OVARIES

PARATHYROID

PEYER'S PATCH

RECTUM

DUODENUM

SPINAL CORD, CERVICAL **THYMUS** 

SPINAL CORD, LUMBAR

SPINAL CORD, THORACIC TRACHEA

STOMACH URINARY BLADDER

VAGINA

BRAIN

THYROID

CECUM

## Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17703

DOSE GROUP:

DEATH TYPE:

Sacrifice-Scheduled

\_\_\_\_\_\_

GROSS OBSERVATION(S):

HISTOMORPHOLOGIC OBSERVATION(S):

 $\underline{\mathsf{GENERAL}}:$  No gross changes.

Not applicable

**HISTOMORPHOLOGIC OBSERVATIONS:** 

KIDNEYS:

SEX:

LIVER:

LYMPH NODE, SUBMANDIBULAR:

MAMMARY GLAND:

SPLEEN:

THYROID: UTERUS:

mineralization, multifocal (minimal)

inflammation, chronic, focal/multifocal (minimal) hyperplasia, lymphocytic/plasmacytic (moderate)

hyperplasia, physiological

hematopoiesis, extramedullary, increased (mild) ultimobranchial body/cyst

macrophages, pigmented (moderate)

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

ADRENAL GLANDS

COLON **JEJUNUM** OVARIES

**THYMUS** 

BONE MARROW (STERNUM) DUODENUM

LUNG

TRACHEA

PARATHYROID SPINAL CORD, LUMBAR BRAIN

**HEART** LYMPH NODE, MEDIASTINAL

PEYER'S PATCH SPINAL CORD, THORACIC URINARY BLADDER

**CECUM** ILEUM

NERVE, SCIATIC RECTUM

STOMACH VAGINA

End of Record- 17703

SPINAL CORD, CERVICAL

## Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17713

DOSE GROUP:

DEATH TYPE:

Sacrifice-Scheduled 

GROSS OBSERVATION(S):

HISTOMORPHOLOGIC OBSERVATION(S):

 $\underline{\mathsf{GENERAL}}:$  No gross changes.

Not applicable

HISTOMORPHOLOGIC OBSERVATIONS:

**HEART:** 

SEX:

LIVER:

MAMMARY GLAND:

LYMPH NODE, SUBMANDIBULAR:

UTERUS:

pericarditis, chronic, focal (minimal)
vacuolation, hepatocellular, multifocal (minimal)

hyperplasia, lymphocytic/plasmacytic (minimal)

hyperplasia, physiological

macrophages, pigmented (moderate) distention, lumen (minimal)

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

ADRENAL GLANDS

COLON **KIDNEYS** OVARIES

SPINAL CORD, CERVICAL **STOMACH** 

URINARY BLADDER

BONE MARROW (STERNUM) DUODENUM

LUNG PARATHYROID

SPINAL CORD, LUMBAR **THYMUS** VAGINA

BRAIN ILEUM

LYMPH NODE, MEDIASTINAL PEYER'S PATCH SPINAL CORD, THORACIC THYROID

NERVE, SCIATIC RECTUM SPLEEN **TRACHEA** 

CECUM

**JEJUNUM** 

## Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17715 SEX:

DOSE GROUP: DEATH TYPE:

Sacrifice-Scheduled

GROSS OBSERVATION(S):

HISTOMORPHOLOGIC OBSERVATION(S):

infiltration, mononuclear-cell, multifocal (minimal)
inflammation, chronic, focal/multifocal (minimal)

**GENERAL:** No gross changes.

Not applicable

**HISTOMORPHOLOGIC OBSERVATIONS:** 

F

ADRENAL GLANDS:

LIVER:

SPLEEN: UTERUS:

LYMPH NODE, SUBMANDIBULAR: MAMMARY GLAND:

hyperplasia, lymphocytic/plasmacytic (mild) hyperplasia, physiological

hematopoiesis, extramedullary, increased (minimal)

thrombus

macrophages, pigmented (moderate)

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

BONE MARROW (STERNUM)

**DUODENUM** KIDNEYS

OVARIES

SPINAL CORD, CERVICAL

THYMUS VAGINA

BRAIN HEART

LUNG PARATHYROID SPINAL CORD, LUMBAR

THYROID

CECUM ILEUM

LYMPH NODE, MEDIASTINAL

PEYER'S PATCH SPINAL CORD, THORACIC

TRACHEA

COLON **JEJUNUM** 

NERVE, SCIATIC RECTUM

STOMACH URINARY BLADDER

## Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17716 SEX: F

DOSE GROUP:

DEATH TYPE:

Sacrifice-Scheduled

GROSS OBSERVATION(S):

HISTOMORPHOLOGIC OBSERVATION(S):

 $\underline{\mathsf{GENERAL}}:$  No gross changes.

Not applicable

HISTOMORPHOLOGIC OBSERVATIONS:

LIVER:

LYMPH NODE, SUBMANDIBULAR:

necrosis, focal (minimal)

hyperplasia, lymphocytic/plasmacytic (minimal)

MAMMARY GLAND:

UTERUS:

hyperplasia, physiological

macrophages, pigmented (moderate)

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

ADRENAL GLANDS

NERVE, SCIATIC

**JEJUNUM** 

RECTUM

SPLEEN

COLON

BONE MARROW (STERNUM)

STOMACH

DUODENUM **KIDNEYS** OVARIES

SPINAL CORD, CERVICAL

PARATHYROID SPINAL CORD, LUMBAR CECUM ILEUM

LYMPH NODE, MEDIASTINAL

PEYER'S PATCH

SPINAL CORD, THORACIC

THYROID

TRACHEA

URINARY BLADDER

**THYMUS** 

BRAIN

**HEART** 

LUNG

VAGINA

## Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17717 SEX:

DOSE GROUP:

DEATH TYPE:

Sacrifice-Scheduled

GROSS OBSERVATION(S):

HISTOMORPHOLOGIC OBSERVATION(S):

**GENERAL:** No gross changes.

Not applicable

**HISTOMORPHOLOGIC OBSERVATIONS:** 

LYMPH NODE, SUBMANDIBULAR:

MAMMARY GLAND:

THYROID:

inflammation, interstitial, multifocal (minimal)
hyperplasia, lymphocytic/plasmacytic (mild)

hyperplasia, physiological ultimobranchial body/cyst

macrophages, pigmented (moderate)

UTERUS:

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

ADRENAL GLANDS

COLON JEJUNUM

BONE MARROW (STERNUM) DUODENUM

**KIDNEYS** 

BRAIN **HEART** LIVER

CECUM ILEUM

NERVE, SCIATIC RECTUM

**OVARIES** SPINAL CORD, CERVICAL

PARATHYROID SPINAL CORD, LUMBAR LYMPH NODE, MEDIASTINAL PEYER'S PATCH

**THYMUS** 

SPINAL CORD, THORACIC TRACHEA

SPLEEN STOMACH

URINARY BLADDER

VAGINA

## Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17719

DOSE GROUP:

SEX: F

DEATH TYPE:

Sacrifice-Scheduled

\_\_\_\_\_\_

GROSS OBSERVATION(S):

HISTOMORPHOLOGIC OBSERVATION(S):

 $\underline{\mathsf{GENERAL}}:$  No gross changes.

Not applicable

**HISTOMORPHOLOGIC OBSERVATIONS:** 

LYMPH NODE, SUBMANDIBULAR: MAMMARY GLAND:

hyperplasia, lymphocytic/plasmacytic (minimal)

inflammation, subacute (mild) hyperplasia, physiological

THYMUS:

atrophy (minimal)

UTERUS:

macrophages, pigmented (moderate)

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

ADRENAL GLANDS

COLON

BONE MARROW (STERNUM) DUODENUM

BRAIN **HEART** 

CECUM

**JEJUNUM** 

**KIDNEYS** 

LIVER

ILEUM LUNG

NERVE, SCIATIC RECTUM

OVARIES

PARATHYROID

PEYER'S PATCH

SPINAL CORD, CERVICAL

SPINAL CORD, LUMBAR

SPINAL CORD, THORACIC

SPLEEN URINARY BLADDER

STOMACH VAGINA

THYROID

TRACHEA

TISSUE(S) NOT AVAILABLE FOR EVALUATION:

LYMPH NODE, MEDIASTINAL

## Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17675
SEX: F
DEATH TYPE: Sacrifice-Scheduled

GROSS OBSERVATION(S):

GENERAL: No gross changes.

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

LIVER
THYMUS

Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17679
SEX: F
DEATH TYPE: Sacrifice-Scheduled

GROSS OBSERVATION(S):
HISTOMORPHOLOGIC OBSERVATION(S):

GENERAL: No gross changes.
Not applicable

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:
LIVER THYMUS

## Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17684
SEX: F
DEATH TYPE: Sacrifice-Scheduled

GROSS OBSERVATION(S):
HISTOMORPHOLOGIC OBSERVATION(S):

GENERAL: No gross changes.
Not applicable

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

LIVER THYMUS

## Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17688 DOSE GROUP: II
SEX: F DEATH TYPE: Sacrifice-Scheduled

GROSS OBSERVATION(S):

HISTOMORPHOLOGIC OBSERVATION(S):

GENERAL: No gross changes. Not applicable

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

LIVER THYMUS

## Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: SEX:	17698 F	<u></u>	DOSE GROUP: DEATH TYPE:	II Sacrifice-Scheduled
GROSS OBSERVAT	ION(S):		HISTOMORPHOLOG	iC OBSERVATION(S):
GENERAL: No gro	oss changes.		Not applicable	· !
HISTOMORPHOLOG	IC OBSERVATIONS:			•
THYMUS:		atrophy (mini	mal)	
THE FOLLOWING 1	TISSUE(S) WERE WITHIN NORMA	L LIMITS:		
LIVER				
End of Record-	17698			

## Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17702
SEX: F
DOSE GROUP: II
DEATH TYPE: Sacrifice-Scheduled

GROSS OBSERVATION(S):
HISTOMORPHOLOGIC OBSERVATION(S):

GENERAL: No gross changes.
Not applicable

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:
LIVER THYMUS

## Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: SEX:	17704 F		DOSE GROUP: DEATH TYPE:	II Sacrifice-Scheduled	
GROSS OBSERVAT	[ON(S):		HISTOMORPHOLOG	IC OBSERVATION(S):	
<u>GENERAL:</u> No gross changes.			Not applicable		
HISTOMORPHOLOG	IC OBSERVATIONS:			<del></del>	
LIVER:		inflammation,	chronic, focal	/multifocal (minimal)	
THE FOLLOWING	FISSUE(S) WERE WITHIN NORMA	L LIMITS:			
THYMUS					
End of Record-	17704				

## 

ANIMAL NUMBER: 17707 SEX: F		DOSE GROUP: DEATH TYPE:	II Sacrifice-Scheduled
GROSS OBSERVATION(S):  GENERAL: No gross changes.		HISTOMORPHOLOG	BIC OBSERVATION(S):
HISTOMORPHOLOGIC OBSERVATIONS: LIVER:	necrosis, foca		/multifocal (minimal)
THE FOLLOWING TISSUE(S) WERE WITHIN NOR THYMUS			
End of Record- 17707			

## Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17708 DOSE GROUP: SEX: DEATH TYPE: Sacrifice-Scheduled GROSS OBSERVATION(S): HISTOMORPHOLOGIC OBSERVATION(S): **GENERAL:** No gross changes. Not applicable THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

**THYMUS** 

End of Record- 17708

LIVER

## $\begin{array}{c} {\rm Appendix\ II} \\ {\rm Individual\ Animal\ Gross\ and\ Histomorphology\ Data} \end{array}$

ANIMAL NUMBER: 17710
SEX: F
DEATH TYPE: Sacrifice-Scheduled

GROSS OBSERVATION(S):
HISTOMORPHOLOGIC OBSERVATION(S):

GENERAL: No gross changes.
Not applicable

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

LIVER
THYMUS

End of Record- 17710

## Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17687 SEX: F

DOSE GROUP: DEATH TYPE:

III

Sacrifice-Scheduled \_\_\_\_\_\_\_

GROSS OBSERVATION(S):

HISTOMORPHOLOGIC OBSERVATION(S):

**GENERAL:** No gross changes.

Not applicable

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

LIVER

THYMUS

## Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17693 SEX: F		III Sacrifice-Scheduled
GROSS OBSERVATION(S):	HISTOMORPHOLOG	GIC OBSERVATION(S):
GENERAL: No gross changes.	Not applicable	
HISTOMORPHOLOGIC OBSERVATIONS:		
LIVER: inflammation,	chronic, focal	/multifocal (minimal)
THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:		
THYMUS		
End of Record- 17693		

## Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 1 SEX: F	7697 ========		DOSE GROUP: DEATH TYPE:	III Sacrifice-Scheduled
GROSS OBSERVATIO	N(S):		HISTOMORPHOLOG	GIC OBSERVATION(S):
HISTOMORPHOLOGIC THYMUS:		atrophy (minim	nal)	
	SSUE(S) WERE WITHIN NORMA			
 End of Record- 1	 7697			

## 

ANIMAL NUMBER: 17700 SEX: F ====================================	DOSE GROUP: DEATH TYPE:	III Sacrifice-Scheduled
GROSS OBSERVATION(S):	HISTOMORPHOLOG	IC OBSERVATION(S):
GENERAL: No gross changes.	Not applicable	
HISTOMORPHOLOGIC OBSERVATIONS: LIVER: inflammation,	chronic focal	/multifocal (minimal)
THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:		
THYMUS		
End of Record- 17700		

## Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: SEX:	17701 F	=========	DOSE GROUP: DEATH TYPE:	III Sacrifice-Scheduled	
GROSS OBSERVAT	ION(S):		HISTOMORPHOLOG	IC OBSERVATION(S):	
GENERAL: No gro			Not applicable		
HISTOMORPHOLOG	IC OBSERVATIONS:		chronic, focal	/multifocal (minimal)	
THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:					
THYMUS					
End of Record-	17701				

## $\begin{array}{c} {\rm Appendix\ II} \\ {\rm Individual\ Animal\ Gross\ and\ Histomorphology\ Data} \end{array}$

ANIMAL NUMBER: 17705 SEX: F 	DEATH TYP	P: III E: Sacrifice-Sch	edul ed
GROSS OBSERVATION(S):	HISTOMORE	HOLOGIC OBSERVATION	(S):
GENERAL: No gross changes.	Not appli	Not applicable	
HISTOMORPHOLOGIC OBSERVATIONS:	flammation, chronic,		inimal)
THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL L	IMITS:		
THYMUS			

## Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17706 SEX: F	III Sacrifice-Scheduled		
GROSS OBSERVATION(S):	GIC OBSERVATION(S):		
GENERAL: No gross changes.	Not applicable		
HISTOMORPHOLOGIC OBSERVATIONS:	/multifocal (minimal)		
THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:			
THYMUS			
End of Record- 17706	 		

## Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17709
SEX: F
DOSE GROUP: III
DEATH TYPE: Sacrifice-Scheduled

GROSS OBSERVATION(S):
HISTOMORPHOLOGIC OBSERVATION(S):

GENERAL: No gross changes.
Not applicable

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

LIVER
THYMUS

## 

ANIMAL NUMBER: 17718 DOSE GROUP: IIISEX: DEATH TYPE: Sacrifice-Scheduled F GROSS OBSERVATION(S): HISTOMORPHOLOGIC OBSERVATION(S): GENERAL: No gross changes. Not applicable **HISTOMORPHOLOGIC OBSERVATIONS:** LIVER: hematopoiesis, extramedullary, multifocal (minimal) THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS: **THYMUS** End of Record- 17718

## 

ANIMAL NUMBER: 17720

SEX: F

DOSE GROUP: III

DEATH TYPE: Sacrifice-Scheduled

GROSS OBSERVATION(S):

HISTOMORPHOLOGIC OBSERVATION(S):

GENERAL: No gross changes.

Not applicable

HISTOMORPHOLOGIC OBSERVATIONS:

LIVER: inflammation, chronic, focal/multifocal (minimal)

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

THYMUS

End of Record- 17720

## Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17685

DOSE GROUP:

SEX: 

DEATH TYPE:

Sacrifice-Scheduled

GROSS OBSERVATION(S):

HISTOMORPHOLOGIC OBSERVATION(S):

**GENERAL:** No gross changes.

Not applicable

**HISTOMORPHOLOGIC OBSERVATIONS:** 

KIDNEYS:

LIVER:

pyelitis, chronic (minimal)

lipidosis, tension, focal

LYMPH NODE, SUBMANDIBULAR:

hypertrophy, hepatocellular, centrilobular (minimal)

hyperplasia, lymphocytic/plasmacytic (moderate)

MAMMARY GLAND: UTERUS:

hyperplasia, physiological

macrophages, pigmented (minimal)

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

ADRENAL GLANDS

BONE MARROW (STERNUM)

BRAIN

CECUM

COLON

DUODENUM

**HEART** 

ILEUM

**JEJUNUM** 

LUNG

LYMPH NODE, MEDIASTINAL

NERVE, SCIATIC

OVARIES SPINAL CORD, CERVICAL PARATHYROID SPINAL CORD, LUMBAR

PEYER'S PATCH SPINAL CORD, THORACIC RECTUM

STOMACH

THYMUS

SPLEEN **TRACHEA** 

URINARY BLADDER

VAGINA

THYROID

## Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17686

GROSS OBSERVATION(S):

DOSE GROUP: DEATH TYPE:

Sacrifice-Scheduled \_\_\_\_\_\_

SEX: 

HISTOMORPHOLOGIC OBSERVATION(S):

**GENERAL:** No gross changes.

Not applicable

**HISTOMORPHOLOGIC OBSERVATIONS:** 

MAMMARY GLAND:

THYROID:

UTERUS: VAGINA:

LIVER: LYMPH NODE, SUBMANDIBULAR:

inflammation, chronic, focal/multifocal (minimal) hyperplasia, lymphocytic/plasmacytic (moderate) hyperplasia, physiological

ultimobranchial body/cyst macrophages, pigmented (minimal) mucification (moderate)

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

ADRENAL GLANDS

COLON

**JEJUNUM** 

NERVE, SCIATIC SPINAL CORD, CERVICAL

DUODENUM KIDNEYS PARATHYROID

SPINAL CORD, LUMBAR

BONE MARROW (STERNUM)

BRAIN **HEART** LUNG

> PEYER'S PATCH SPINAL CORD, THORACIC

ILEUM

LYMPH NODE, MEDIASTINAL

RECTUM **SPLEEN** 

STOMACH THYMUS TRACHEA URINARY BLADDER

TISSUE(S) NOT AVAILABLE FOR EVALUATION:

OVARIES

## Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17689

DOSE GROUP:

SEX: 

DEATH TYPE:

Sacrifice-Scheduled

GROSS OBSERVATION(S):

HISTOMORPHOLOGIC OBSERVATION(S):

**GENERAL:** No gross changes.

Not applicable

**HISTOMORPHOLOGIC OBSERVATIONS:** 

LIVER:

inflammation, chronic, focal/multifocal (minimal) hypertrophy, hepatocellular, centrilobular (minimal)

LYMPH NODE, MEDIASTINAL: LYMPH NODE, SUBMANDIBULAR:

congestion/erythrophagocytosis (mild) hyperplasia, lymphocytic/plasmacytic (mild) hyperplasia, physiological

MAMMARY GLAND:

SPLEEN:

hematopoiesis, extramedullary, increased (minimal)

UTERUS:

macrophages, pigmented (mild)

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

ADRENAL GLANDS

COLON

BONE MARROW (STERNUM) DUODENUM

BRAIN **HEART** 

CECUM ILEUM

**JEJUNUM** OVARIES SPINAL CORD, CERVICAL

**KIDNEYS** PARATHYROID SPINAL CORD, LUMBAR

LUNG PEYER'S PATCH SPINAL CORD, THORACIC NERVE, SCIATIC RECTUM

**THYMUS** 

THYROID

TRACHEA

STOMACH

VAGINA

URINARY BLADDER

## Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17691

DOSE GROUP:

SEX:

DEATH TYPE:

Sacrifice-Scheduled

GROSS OBSERVATION(S):

HISTOMORPHOLOGIC OBSERVATION(S):

**GENERAL:** No gross changes.

Not applicable

**HISTOMORPHOLOGIC OBSERVATIONS:** 

LIVER:

inflammation, chronic, focal/multifocal (minimal) hypertrophy, hepatocellular, centrilobular (minimal) hyperplasia, lymphocytic/plasmacytic (minimal)

LYMPH NODE, SUBMANDIBULAR: MAMMARY GLAND:

hyperplasia, physiological ultimobranchial body/cyst

THYROID: UTERUS:

macrophages, pigmented (moderate)

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

ADRENAL GLANDS COLON

BONE MARROW (STERNUM)

BRAIN

CECUM

**JEJUNUM** 

DUODENUM

**HEART** 

ILEUM

NERVE, SCIATIC

KIDNEYS OVARIES

LUNG PARATHYROID LYMPH NODE, MEDIASTINAL PEYER'S PATCH

RECTUM

SPINAL CORD, CERVICAL

SPINAL CORD, LUMBAR

SPINAL CORD, THORACIC

**SPLEEN** URINARY BLADDER STOMACH VAGINA

**THYMUS** 

TRACHEA

#### Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17692 SEX:

DOSE GROUP:

I۷

DEATH TYPE:

Sacrifice-Scheduled

GROSS OBSERVATION(S):

HISTOMORPHOLOGIC OBSERVATION(S):

**GENERAL:** No gross changes.

Not applicable

**HISTOMORPHOLOGIC OBSERVATIONS:** 

F

KIDNEYS:

LIVER:

LYMPH NODE, MEDIASTINAL: LYMPH NODE, SUBMANDIBULAR:

MAMMARY GLAND:

THYMUS:

mineralization, multifocal (minimal)

hypertrophy, hepatocellular, centrilobular (minimal)

congestion/erythrophagocytosis (mild)

hyperplasia, lymphocytic/plasmacytic (moderate) hyperplasia, physiological

atrophy (mild)

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

\_\_\_\_\_\_

ADRENAL GLANDS

COLON

**JEJUNUM** 

PARATHYROID

SPINAL CORD, LUMBAR

THYROID VAGINA

BONE MARROW (STERNUM)

DUODENUM LUNG

PEYER'S PATCH

SPINAL CORD, THORACIC

TRACHEA

BRAIN HEART

NERVE, SCIATIC **RECTUM** 

**SPLEEN** URINARY BLADDER **CECUM** ILEUM

OVARIES SPINAL CORD, CERVICAL

STOMACH

**UTERUS** 

## Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17696 DOSE GROUP: SEX: DEATH TYPE: Sacrifice-Scheduled \_\_\_\_\_ GROSS OBSERVATION(S): HISTOMORPHOLOGIC OBSERVATION(S): THYMUS: Small. Tissue not available **HISTOMORPHOLOGIC OBSERVATIONS: HEART:** inflammation, subacute, focal/multifocal (minimal) LYMPH NODE, SUBMANDIBULAR: hyperplasia, lymphocytic/plasmacytic (mild) hyperplasia, physiological MAMMARY GLAND: THYROID: ultimobranchial body/cyst UTERUS: inflammation, endometrium, diffuse (mild) macrophages, pigmented (moderate) distention, lumen (moderate) THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS: ADRENAL GLANDS BONE MARROW (STERNUM) BRAIN CECUM COLON DUODENUM ILEUM **JEJUNUM KIDNEYS** LIVER LUNG LYMPH NODE, MEDIASTINAL NERVE, SCIATIC OVARIES PARATHYROID PEYER'S PATCH RECTUM SPINAL CORD, CERVICAL SPINAL CORD, LUMBAR SPINAL CORD, THORACIC SPLEEN STOMACH TRACHEA URINARY BLADDER VAGINA TISSUE(S) NOT AVAILABLE FOR EVALUATION:

#### Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17699

DOSE GROUP:

I۷

SEX:

DEATH TYPE:

Sacrifice-Scheduled

GROSS OBSERVATION(S):

HISTOMORPHOLOGIC OBSERVATION(S):

**GENERAL:** No gross changes.

Not applicable

HISTOMORPHOLOGIC OBSERVATIONS:

KIDNEYS:

LIVER:

mineralization, multifocal (minimal)

inflammation, chronic, focal/multifocal (minimal) hypertrophy, hepatocellular, centrilobular (minimal)

hyperplasia, lymphocytic/plasmacytic (moderate) hyperplasia, physiological

LYMPH NODE, SUBMANDIBULAR: MAMMARY GLAND:

SPLEEN:

hematopoiesis, extramedullary, increased (minimal)

THYMUS:

atrophy (minimal) ultimobranchial body/cyst

THYROID: UTERUS:

macrophages, pigmented (moderate)

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

ADRENAL GLANDS

COLON

**JEJUNUM** 

**OVARIES** 

SPINAL CORD, CERVICAL

TRACHEA

BONE MARROW (STERNUM)

DUODENUM LUNG

PARATHYROID SPINAL CORD, LUMBAR URINARY BLADDER

BRAIN **HEART** 

LYMPH NODE, MEDIASTINAL

PEYER'S PATCH SPINAL CORD, THORACIC VAGINA

**CECUM** ILEUM

NERVE, SCIATIC

RECTUM STOMACH

#### Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17711

DOSE GROUP:

I۷

SFX: F DEATH TYPE:

Sacrifice-Scheduled

\_\_\_\_\_

GROSS OBSERVATION(S):

HISTOMORPHOLOGIC OBSERVATION(S):

 $\underline{\text{GENERAL:}}$  No gross changes.

Not applicable

**HISTOMORPHOLOGIC OBSERVATIONS:** 

KIDNEYS: LIVER:

vacuolation, cortical tubular epithelium (mild) hypertrophy, hepatocellular, centrilobular (mild) vacuolation, hepatocellular, periportal (minimal)

MAMMARY GLAND:

hyperplasia, physiological

SPLEEN: THYMUS:

atrophy (mild) atrophy (moderate)

UTERUS:

hemorrhage, endometrium (mild) macrophages, pigmented (moderate) inflammation, acute (moderate)

VAGINA:

mucification (marked)

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

ADRENAL GLANDS

BONE MARROW (STERNUM) DUODENUM

BRAIN **HEART** LYMPH NODE, MEDIASTINAL

ILEUM LYMPH NODE, SUBMANDIBULAR

CECUM

**JEJUNUM** NERVE, SCIATIC

LUNG OVARIES

PARATHYROID

PEYER'S PATCH

RECTUM

SPINAL CORD, CERVICAL

SPINAL CORD, LUMBAR

SPINAL CORD, THORACIC

STOMACH

COLON

THYROID

TRACHEA

URINARY BLADDER

#### Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17712 SEX:

DOSE GROUP:

DEATH TYPE:

Sacrifice-Scheduled

GROSS OBSERVATION(S):

**HISTOMORPHOLOGIC OBSERVATION(S):** 

<u>TAIL:</u> Bent.

No microscopic change to correlate

**HISTOMORPHOLOGIC OBSERVATIONS:** 

LIVER:

inflammation, chronic, focal/multifocal (minimal)
hypertrophy, hepatocellular, centrilobular (minimal)

LYMPH NODE, SUBMANDIBULAR:

hyperplasia, lymphocytic/plasmacytic (mild) hyperplasia, physiological

MAMMARY GLAND:

No microscopic change to correlate

TAIL:

atrophy (minimal)

THYMUS: UTERUS:

macrophages, pigmented (mild)

BRAIN

**HEART** 

THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

ADRENAL GLANDS

COLON

DUODENUM

**JEJUNUM** NERVE, SCIATIC

RECTUM

**SPLEEN** TRACHEA BONE MARROW (STERNUM)

**KIDNEYS** OVARIES

SPINAL CORD, CERVICAL

**STOMACH** URINARY BLADDER

LUNG PARATHYROID SPINAL CORD, LUMBAR

TAIL VAGINA CECUM

ILEUM LYMPH NODE, MEDIASTINAL PEYER'S PATCH

SPINAL CORD, THORACIC

THYROID

#### Appendix II Individual Animal Gross and Histomorphology Data

ANIMAL NUMBER: 17714

DOSE GROUP:

I۷

SEX:

DEATH TYPE:

Sacrifice-Scheduled

GROSS OBSERVATION(S):

HISTOMORPHOLOGIC OBSERVATION(S):

GENERAL: No gross changes.

Not applicable

**HISTOMORPHOLOGIC OBSERVATIONS:** 

F

LIVER:

MAMMARY GLAND:

hypertrophy, hepatocellular, centrilobular (mild)

hyperplasia, physiological

SPLEEN: THYMUS:

hematopoiesis, extramedullary, increased (minimal) atrophy (mild)

ultimobranchial body/cyst

THYROID: UTERUS:

thrombus

macrophages, pigmented (moderate)

#### THE FOLLOWING TISSUE(S) WERE WITHIN NORMAL LIMITS:

ADRENAL GLANDS

COLON

BONE MARROW (STERNUM) DUODENUM

BRAIN **HEART**  CECUM ILEUM

**JEJUNUM** 

KIDNEYS

LUNG

NERVE, SCIATIC

OVARIES

TRACHEA

PARATHYROID

LYMPH NODE, SUBMANDIBULAR PEYER'S PATCH

RECTUM

SPINAL CORD, CERVICAL

SPINAL CORD, LUMBAR

SPINAL CORD, THORACIC

STOMACH

URINARY BLADDER

VAGINA

#### TISSUE(S) NOT AVAILABLE FOR EVALUATION:

LYMPH NODE, MEDIASTINAL

# APPENDIX K HEMATOLOGY AND CLINICAL CHEMISTRY REPORTS

# INDIVIDUAL ANIMAL REPORT BY GROUP PERIOD: TERMINAL

STUDY ID: ARGUS #418-027

STUDY NO: 060-063

Animal		RBC	HGB	нст	MCV	MCH	MCHC	PLT
	THSN/CU MM	MILL/CU MM	GRAMS/DL	%	CU MICRONS	PICO GRAMS	%	THSN/CU MM
GROUP:	1-M							
17608	13.5	7.61	15.7	43.5	57.1	20.6	36.1	1094
17618	10.9	8.24	16.3	46.8	56.8	19.8	34.8	1406
17630	12.6	7.67	15.7	43.3	56.5	20.5	36.3	1174
17631	16.6	7.34	15.8	42.4	57.7	21.5	37.3	1126
17639	20.0	6.89	15.7	42.4	61.6	22.8	<b>3</b> 7.0	1185
MEAN	14.7	7.55	15.8	43.7	57.9	21.0	36.3	1197
SD	3.61	0.493	0.26	1.82	2.09	1.15	0.97	122.5
N	5	5	5	5	5	5	5	5
GROUP:	 2-M							
17634	19.1	8.05	16.3	45.0	55.9	20.2	36.2	1174
17635	16.9	7.98	16.3	44.0	55.2	20.4	37.0	1237
17638	16.5	7.45	15.5	42.1	56.5	20.8	36.8	1096
17642	18.3	7.29	15.5	41.9	57.5	21.3	37.0	1204
17643	23.9	7.01	14.6	<b>39.</b> 5	56.3	20.8	37.0	1147
MEAN	18.9	7.56	15.6	42.5	56.3	20.7	36.8	1172
SD	2.96	0.448	0.71	2.12	0.84	0.42	0.35	54.0
N	5	5	5	5	5	5	5	5
GROUP:	3-M							
17620	13.6	7.17	15.6	40.5	56.5	21.8	38.5	1038
17623	20.7	7.74	15.6	43.3	55.9	20.2	36.0	1326
17627	13.1	7.21	14.9	41.6	57.7	20.7	35.8	1030
17628	16.5	6.95	14.9	41.6	59.8	21.4	35.8	1219
17633	12.7	7.30	14.8	39.9	54.7	20.3	37.1	1475
MEAN	15.3	7.27	15.2	41.4	56.9	20.9	36.6	1218
SD	3.36	0.291	0.40	1.30	1.94	0.70	1.17	190.7
N	5	5	5	5	5	5	5	5

### INDIVIDUAL ANIMAL REPORT BY GROUP PERIOD: TERMINAL

STUDY ID: ARGUS #418-027

STUDY NO	: 060-063							
Animal I	D WBC THSN/CU MM	RBC MILL/CU MM	HGB GRAMS/DL	<b>HCT</b> %	MCV CU MICRONS	MCH PICO GRAMS	<b>мс</b> нс %	PLT THSN/CU MM
GROUP: 4	 -M							
17621	17.2	7.54	16.1	43.5	57.7	21.4	37.0	1154
17622	11.0	6.87	14.7	38.6	56.2	21.4	38.1	1352
17625	14.5	7.24	14.5	41.0	56.6	20.0	35.4	1189
17629	22.3	7.25	14.9	39.4	54.3	20.6	37.8	1492
17636	31.3	6.94	15.5	40.2	57.9	22.3	38.6	1226
MEAN	19.3	7.17	15.1	40.5	56.5	21.1	37.4	1283
SD	7.90	0.270	0.65	1.88	1.44	0.88	1.25	138.9
N	5	-5	5	5	5	5	5	5

#### INDIVIDUAL ANIMAL REPORT BY GROUP PERIOD: TERMINAL

STUDY ID: ARGUS #418-027

Animal II	) WBC	RBC	HGB	нст	MCV	MCH	MCHC	PLT
	THSN/CU MM	MILL/CU MM	GRAMS/DL	% 	CU MICRONS	PICO GRAMS	% 	THSN/CU MM
GROUP: 1-	 -F							
17694	16.8	5.72	14.2	37.7	65.9	24.8	37.7	1575
17703	23.3	5.54	13.1	35.3	63.7	23.6	37.1	1648
17681	19.8	6.55	14.5	38.6	59.0	22.1	37.6	1583
17690	20.9	5.63	13.8	<b>3</b> 5.6	63.2	24.5	38.8	1329
17695	CL	CL	CL	CL	CL	CL	CL	CL
MEAN	20.2	5.86	13.9	36.8	63.0	23.8	37.8	1534
SD	2.70	0.466	0.61	1.61	2.88	1.21	0.72	140.4
N	4	4	4	4	4	4	4	4
GROUP: 2								
17675	16.9	6.10	14.1	37.8	61.9	23.1	37.3	1381
17679	13.3	6.32	14.7	39.3	62.2	23.3	37.4	1259
17688	14.5	5.72	14.7	39.2	68.5	25.7	37.5	128
17698	16.8	6.09	14.2	37.9	62.3	23.3	37.5	1273
17684	12.8	5.79	13.6	36.7	63.3	23.5	37.1	692
MEAN	14.9	6.00	14.3	38.2	63.6	23.8	37.4	947
SD	1.92	0.246	0.46	1.08	2.77	1.08	0.17	531.0
N	5	5	5	5	5	5	5	5
GROUP: 3	 5-F							
17693	24.0	5.26	13.4	34.1	64.8	25.5	39.3	2292
17697	16.3	5.71	13.2	35.3	61.8	23.1	37.4	1874
17700	18.0	6.80	14.9	41.1	60.4	21.9	36.3	1375
17701	21.2	5.81	13.6	36.0	62.0	23.4	37.8	1554
17687	21.2	5.19	12.7	33.2	64.0	24.5	38.3	1101
17709	20.6	5.85	14.2	38.0	65.0	24.3	37.4	1393
MEAN	20.2	5.77	13.7	36.3			37.8	
SD	2.71	0.578	0.78	2.88	1.87		1.01	423.9
N	6	6	6	6	6	6	6	6

### INDIVIDUAL ANIMAL REPORT BY GROUP PERIOD: TERMINAL

STUDY ID: ARGUS #418-027

nimal ID	WBC	RBC	HGB	нст	MCV	MCH	MCHC	PLT	
	THSN/CU MM	MILL/CU MM	GRAMS/DL	% 	CU MICRONS	PICO GRAMS	<b>%</b>	THSN/CU MM	
 GROUP: 4-	 F								
17685	21.6	5.91	13.2	35.3	59.8	22.3	37.4	1570	
17689	18.6	5.57	12.9	33.8	60.6	23.2	38.2	1803	
17692	25.4	5.37	12.5	30.8	57.4	23.3	40.6	1230	
17691	20.8	6.21	14.1	36.5	58.8	22.7	38.6	1584	
MEAN	21.6	5.76	13.2	34.1	59.2	22.9	38.7	1547	
SD	2.83	0.371	0.68	2.46	1.38	0.46	1.36	236.6	
N	4	4	4	4	4	4	4	4	

### INDIVIDUAL ANIMAL REPORT BY GROUP PERIOD: TERMINAL

STUDY ID: ARGUS #418-027

Animal ID	PT seconds	APTT seconds	MPV CU MICRONS	NRBC COUNT	Lymphocyte THSN/CU MM	Segmented THSN/CU MM	Bands THSN/CU MM	Monocytes THSN/CU MM
GROUP: 1-M								
17608	14.3	25.1	9.0	0	11.2	2.0	0.0	0.1
17618	14.3	26.6	9.0	0	8.8	1.9	0.0	0.1
17630	14.0	25.3	9.6	0	10.3	2.0	0.0	0.1
17631	15.5	27.5	9.5	0	14.9	1.5	0.0	0.2
17639	13.8	22.5	8.9	0	17.8	2.2	0.0	0.0
MEAN	14.4	25.4	9.2	0	12.6	1.9	0.0	0.1
SD	0.66	1.89	0.32	0.0	3.67	0.26	0.00	0.07
N	5	5	5	5	5	5	5	5
GROUP: 2-M								
17634	13.4	22.4	9.6	0	17.0	1.9	0.0	0.0
17635	14.3	27.9	9.5	0	12.7	4.1	0.0	0.2
17638	13.3	24.7	9.3	0	13.9	2.1	0.0	0.2
17642	13.7	27.0	9.1	0	14.6	2.9	0.0	0.5
17643	13.7	27.6	11.1	0	20.8	2.9	0.0	0.0
MEAN	13.7	25.9	9.7	0	15.8	2.8	0.0	0.2
SD	0.39	2.33	0.79	0.0	3.21	0.87	0.00	0.20
N	5	5	5	5	5	5	5	5
GROUP: 3-M								
17620	14.4	26.1	8.9	0	11.4	2.0	0.0	0.0
17623	14.1	27.9	11.0	0	18.2	2.3	0.0	0.0
17627	14.6	24.2	8.7	0	10.9	1.8	0.0	0.0
17628	14.4	28.8	8.7	0	15.0	1.2	0.0	0.2
17633	15.9	23.9	10.1	0	10.9	1.7	0.0	0.1
MEAN	14.7	26.2	9.5	0	13.3	1.8	0.0	0.1
SD	0.70	2.18	1.03	0.0	3.24	0.41	0.00	0.09
N	5	5	5	5	5	5	5	5

# INDIVIDUAL ANIMAL REPORT BY GROUP PERIOD: TERMINAL

STUDY ID: ARGUS #418-027

STUDY NO: 060-063

Animal ID	PT seconds	APTT seconds	MPV CU MICRONS	NRBC COUNT	Lymphocyte THSN/CU MM	Segmented THSN/CU MM	Bands THSN/CU MM	Monocytes THSN/CU MM
GROUP: 4-								
17621	16.0	30.7	9.5	0	15.8	1.0	0.0	0.3
17622	13.5	26.1	8.4	0	8.7	2.0	0.0	0.0
17625	14.9	27.3	9.5	0	13.1	1.5	0.0	0.0
17629	14.0	24.0	9.8	0	19.6	2.5	0.0	0.0
17636	14.4	25.6	8.4	. 0	13.1	18.2	0.0	0.0
MEAN	14.6	26.7	9.1	0	14.1	5.0	0.0	0.1
SD	0.96	2.51	0.67	0.0	4.01	7.38	0.00	0.13
N	5	5	5	5	5	5	5	5

# INDIVIDUAL ANIMAL REPORT BY GROUP PERIOD: TERMINAL

STUDY ID: ARGUS #418-027

STUDY NO: 060-063

Animal ID	PT seconds	APTT seconds	MPV CU MICRONS	NRBC COUNT	Lymphocyte THSN/CU MM	Segmented THSN/CU MM	Bands THSN/CU MM	Monocytes THSN/CU MM
GROUP: 1-F								
17694	12.8	18.2	7.0	0	13.6	2.7	0.0	0.3
17703	13.3	24.0	7.0	0	17.0	5.8	0.0	0.2
17681	13.9	22.2	7.9	0	15.2	3.8	0.0	0.8
17690	13.5	21.6	8.9	0	17.6	3.1	0.0	0.0
17695	13.2	19.3	CL	CL				
MEAN	13.3	21.1	7.7	0	15.9	3.9	0.0	0.3
SD	0.40	2.32	0.91	0.0	1.81	1.38	0.00	0.34
N	5	5	4	4	4	4	4	4
GROUP: 2-F								
17675	12.8	19.3	9.2	0	14.4	2.2	0.0	0.3
17679	13.6	15.5	7.8	0	10.6	2.7	0.0	0.0
17688	13.4	18.2	12.3	0	11.9	2.6	0.0	0.0
17698	13.2	19.9	7.5	0	15.6	0.8	0.0	0.3
17684	CL	. CL	7.3	0	10.6	1.9	0.0	0.3
MEAN	13.3	18.2	8.8	0	12.6	2.0	0.0	0.2
SD	0.34	1.95	2.08	0.0	2.28	0.76	0.00	0.16
N	4	4 -	5	5	5	5	5	5
GROUP: 3-F								
17693	13.3	21.5	6.8	0	17.8	5.5	0.0	0.7
17697	13.2	19.7	7.6	0	13.7	2.6	0.0	0.0
17700	13.2	23.6	8.4	0	12.2	5.4	0.0	0.0
17701	12.9	17.7	7.3	0	18.7	2.3	0.0	0.2
17687	13.3	27.3	8.2	0	16.1	5.1	0.0	0.0
17709	CL	CL	9.7	0	14.6	5.6	0.0	0.2
MEAN	13.2	22.0	8.0	0	15.5	4.4	0.0	0.2
SD	0.16	3.70	1.02	0.0	2.48	1.54	0.00	0.27
N	5	5	6	6	6	6	6	6

# INDIVIDUAL ANIMAL REPORT BY GROUP PERIOD: TERMINAL

STUDY ID: ARGUS #418-027

STUDY NO: 060-063

Animal ID	PT seconds	APTT seconds	MPV CU MICRONS	NRBC COUNT	Lymphocyte THSN/CU MM	Segmented THSN/CU MM	Bands THSN/CU MM	Monocytes THSN/CU MM
 GROUP: 4-F			. Maka dalah palan adah salah sagai gaya ayan pada dana dalah dalah dalah dalah dalah					
4-r 17685	13.0	25.3	9.0	0	13.0	6.9	0.2	1.3
17689	13.1	14.9	7.7	0	13.6	3.3	0.2	1.5
17692	13.5	20.8	7.9	0	22.1	2.5	0.0	0.5
17691	13.3	18.2	8.0	0	16.8	3.5	0.0	0.4
MEAN	13.2	19.8	8.2	0	16.4	4.1	0.1	0.9
SD	0.22	4.39	0.58	0.0	4.17	1.95	0.12	0.56
N	4	4	4	4	4	4	4	4

# INDIVIDUAL ANIMAL REPORT BY GROUP PERIOD: TERMINAL

STUDY ID: ARGUS #418-027

STUDY NO: 060-063

		Eosinophil THSN/CU MM	Basophils THSN/CU MM	Abnormal L THSN/CU MM	Other THSN/CU MM	
	GROUP: 1-M					
	17608	0.1	0.0	0.0	0.0	
	17618	0.1	0.0	0.0	0.0	
	17630	0.1	0.0	0.0	0.0	
	17631	0.0	0.0	0.0	0.0	
	17639	0.0	0.0	0.0	0.0	
	MEAN	0.1	0.0	0.0	0.0	
	SD	0.05	0.00	0.00	0.00	
	N	5	5	5	5	
	GROUP: 2-					
	17634	0.2	0.0	0.0	0.0	
	17635	0.0	0.0	0.0	0.0	
	17638	0.3	0.0	0.0	0.0	
	17642	0.2	0.0	0.0	0.0	
	17643	0.2	0.0	0.0	0.0	
	MEAN	0.2	0.0	0.0	0.0	
	SD	0.11	0.00	0.00	0.00	
	N	5	5	5	5	
	GROUP: 3-					
	17620	0.1	0.0	0.0	0.0	
	17623	0.2	0.0	0.0	0.0	
	17627	0.4	0.0	0.0	0.0	
	17628	0.2	0.0	0.0	0.0	
	17633	0.0	0.0	0.0	0.0	
	MEAN	0.2	0.0	0.0	0.0	
	SD	0.15	0.00	0.00	0.00	
•	N	5	5	5	5	

# INDIVIDUAL ANIMAL REPORT BY GROUP PERIOD: TERMINAL

STUDY ID: ARGUS #418-027

STUDY NO: 060-063

Animal ID	Eosinophil THSN/CU MM	Basophils THSN/CU MM	Abnormal L THSN/CU MM	Other THSN/CU MM	
GROUP: 4-	M				
17621	0.0	0.0	0.0	0.0	
17622	0.3	0.0	0.0	0.0	
17625	0.0	0.0	0.0	0.0	
17629	0.2	0.0	0.0	0.0	
17636	0.0	0.0	0.0	0.0	
MEAN	0.1	0.0	0.0	0.0	
SD	0.14	0.00	0.00	0.00	
N	5	5	5	5	

# INDIVIDUAL ANIMAL REPORT BY GROUP PERIOD: TERMINAL

STUDY ID: ARGUS #418-027

STUDY NO: 060-063

Animal I	D Eosinophil THSN/CU MM	Basophils THSN/CU MM	Abnormal L THSN/CU MM	Other THSN/CU MM	
 GROUP: 1	-F .				
17694	0.0	0.0	0.2	0.0	
17703	0.2	0.0	0.0	0.0	
17681	0.0	0.0	0.0	0.0	
17690	0.2	0.0	0.0	0.0	
17695					
MEAN	0.1	0.0	0.1	0.0	
SD	0.12	0.00	0.10	0.00	
N	4	4	4	4	
 GROUP: 2					
17675	0.0	0.0	0.0	0.0	
17679	0.0	0.0	0.0	0.0	
17688	0.0	0.0	0.0	0.0	
17698	0.0	0.0	0.0	0.0	
17684	0.0	0.0	0.0	0.0	
MEAN	0.0	0.0	0.0	0.0	
SD	0.00	0.00	0.00	0.00	
N	5	5	5	5	
 GROUP: 3	 5-F				
17693	0.0	0.0	0.0	0.0	
17697	0.0	0.0	0.0	0.0	
17700	0.4	0.0	0.0	0.0	
17701	0.0	0.0	0.0	0.0	
17687	0.0	0.0	0.0	0.0	
17709	0.2	0.0	0.0	0.0	
MEAN	0.1	0.0	0.0	0.0	
SD	0.17	0.00	0.00	0.00	
N	. 6	6	6	6	

# INDIVIDUAL ANIMAL REPORT BY GROUP PERIOD: TERMINAL

STUDY ID: ARGUS #418-027

STUDY NO: 060-063

 Animal ID	Eosinophil	Basophils	Abnormal L	Other	
	THSN/CU MM	THSN/CU MM	THSN/CU MM	THSN/CU MM	
 GROUP: 4-	<del></del>				
17685	0.0	0.0	0.2	0.0	
17689	0.0	0.0	0.0	0.0	
17692	0.0	0.0	0.3	0.0	
17691	0.0	0.0	0.0	0.0	
MEAN	0.0	0.0	0.1	0.0	
SD	0.00	0.00	0.15	0.00	
N	4	4	4	4	

# SUMMARY REPORT PERIOD: TERMINAL

STUDY ID: ARGUS #418-027

STUDY NO: 060-063

TEST(s):	WBC	RBC	HGB	HCT	MCV	MCH	MCHC	PLT	PT
UNITS:	THSN/CU MM M	ILL/CU MM	GRAMS/DL	% CU MICRONS PICO		CO GRAMS	% ТІ	HSN/CU MM	seconds
Group: 1-M									
MEAN	14.7	7.55	15.8	43.7	57.9	21.0	36.3	1197	14.4
SD	3.61	0.493	0.26	1.82	2.09	1.15	0.97	122.5	0.66
N	5	5	5	5	5	5	5	5	5
Group: 2-M									
MEAN	18.9	7.56	15.6	42.5	56.3	20.7	36.8	1172	13.7
SD	2.96	0.448	0.71	2.12	0.84	0.42	0.35	54.0	0.39
N	5	5	5	5	5	5	5	5	5
Group: 3-M									
MEAN	15.3	7.27	15.2	41.4	56.9	20.9	36.6	1218	14.7
SD	3.36	0.291	0.40	1.30	1.94	0.70	1.17	190.7	0.70
N	5	5	5	5	5	5	5	5	5
Group: 4-M									
MEAN	19.3	7.17	15.1	40.5	56.5	21.1	37.4	1283	14.6
SD	7.90	0.270	0.65	1.88	1.44	0.88	1.25	138.9	0.96
N	5	5	5	5	5	5	5	5	9

# SUMMARY REPORT PERIOD: TERMINAL

STUDY ID: ARGUS #418-027

STUDY NO: 060-063

TEST(s): UNITS:	APTT seconds	MPV CU MICRONS		Lymphocyte THSN/CU MM				Eosinophil THSN/CU MM	
Group: 1-M									
MEAN	25.4	9.2	0	12.6	1.9	0.0	0.1	0.1	0.0
SD	1.89	0.32	0.0	3.67	0.26	0.00	0.07	0.05	0.00
N	5	5	5	5	5	5	5	5	5
Group: 2-M									
MEAN	25.9	9.7	0	15.8	2.8	0.0	0.2	0.2	0.0
SD	2.33	0.79	0.0	3.21	0.87	0.00	0.20	0.11	0.00
N	5	5	5	5	5	5	5	5	5
Group: 3-M									
MEAN	26.2	9.5	0	13.3	1.8	0.0	0.1	0.2	0.0
SD	2.18	1.03	0.0	3.24	0.41	0.00	0.09	0.15	0.00
N	. 5	5	5	5	5	5	5	5 5	. 5
Group: 4-M									
MEAN	26.7	9.1	C	14.1	5.0	0.0	0.1	0.1	0.0
SD	2.51	0.67	0.0	4.01	7.38	0.00	0.13	0.14	0.00
N	5	5	5	5	5	5	, 5	5 5	;

# SUMMARY REPORT PERIOD: TERMINAL

STUDY ID: ARGUS #418-027

STUDY NO: 060-063

	Abnormal L THSN/CU MM		 
 Group: 1-M			
MEAN	0.0	0.0	
SD	0.00	0.00	
N	5	5	
Group: 2-M	0.0	0.0	
SD	0.00	0.00	
N	5	5	
Group: 3-M			
MEAN	0.0	0.0	
SD	0.00	0.00	
N	5	5	
Group: 4-M	I		
MEAN	0.0	0.0	
SD	0.00	0.00	
N	5	5	

# SUMMARY REPORT PERIOD: TERMINAL

STUDY ID: ARGUS #418-027

STUDY NO: 060-063

TEST(s):		RBC	HGB	нст		MCH	MCHC		PT
UNITS:	THSN/CU MM	m mill/cu mm	GRAMS/DL	% C	U MICRONS	PICO GRAMS	% THSN/CU MM		seconds
Group: 1-F									
MEAN	20.2	5.86	13.9	36.8	63.0	23.8	37.8	1534	13.3
SD	2.70	0.466	0.61	1.61	2.88	1.21	0.72	140.4	0.40
N	4	4	4	4	4	4	4	4	5
Group: 2-F									
MEAN	14.9	6.00	14.3	38.2	63.6	23.8	37.4	947	13.3
SD	1.92	0.246	0.46	1.08	2.77	1.08	0.17	531.0	0.34
N	5	5	5	5	5	5	5	5	4
Group: 3-F									
MEAN	20.2	5.77	13.7	36.3	63.0	23.8	37.8	1598	13.2
SD	2.71	0.578	0.78	2.88	1.87	1.26	1.01	423.9	0.16
N	6	6	6	6	6	6	6	6	5
Group: 4-F									
MEAN	21.6	5.76	13.2	34.1	59.2	22.9	38.7	1547	13.2
SD	2.83	0.371	0.68	2.46	1.38	0.46	1.36	236.6	0.22
N	4	4	4	4	4	. 4	4	4	4

#### SUMMARY REPORT PERIOD: TERMINAL

STUDY ID: ARGUS #418-027

TEST(s): UNITS:	APTT seconds C	MPV U MICRONS	COUNT	Lymphocyte THSN/CU MM	Segmented THSN/CU MM	Bands THSN/CU MM	Monocytes THSN/CU MM	Eosinophil THSN/CU MM	Basophils THSN/CU MM
 Group: 1-F									
MEAN	21.1	7.7	0	15.9	3.9				
SD	2.32	0.91	0.0	1.81	1.38	0.00	0.34		
N	5	4	4	4	4	4	4	4	4
Group: 2-F									
MEAN	18.2	8.8	0	12.6	2.0	0.0			
SD	1.95	2.08	0.0	2.28	0.76				
N	4	5	5	5	5	5	5	5	-
Group: 3-F									
MEAN	22.0	8.0	0	15.5	4.4	0.0			
SD	3.70	1.02	0.0	2.48	1.54	0.00	0.27	0.17	0.0
N	5	6		. 6	. 6	6	•	5 6	
Group: 4-F									_
MEAN	19.8	8.2	C	16.4					
SD	4.39	0.58	0.0	4.17					
N	4	4	4	. 4	, 4	4	4	4	4

# SUMMARY REPORT PERIOD: TERMINAL

STUDY ID: ARGUS #418-027

STUDY NO: 060-063

	Abnormal L	
UNITS:	THSN/CU MM	THSN/CU MM
Group: 1-F		
MEAN	0.1	0.0
SD	0.10	0.00
N	4	4
Group: 2-F		
MEAN	0.0	0.0
SD	0.00	
N	5	5
Group: 3-F		
MEAN	0.0	
SD	0.00	
N	6	6
S		
Group: 4-F	0.1	0.0
SD	0.15	
N N	4	
IN	-	-

#### WHITE DIFFERENTIAL DATA

STUDY ID: ARGUS #418-027

STUDY NO: 060-063 GROUP: 1-M SEX: MALE

TUDY NO: 060-063	·	GROUP: 1-M			SEX: MALE
	Animal ID		TERM	IINAL	
			CNT	ABS	
Are.	17608	Nucleated Red Cells	0		· · · · · · · · · · · · · · · · · · ·
		Lymphocytes	83	11.2	
		Segmented Neutrophils	15	2.0	
		Bands	0	0.0	
		Monocytes	1	0.1	
		Eosinophils	1	0.1	
		Basophils	0	0.0	
		Abnormal Lymphocytes	0	0.0	
		Other	0	0.0	
		WBC		13.5	
	17618	Nucleated Red Cells	0		
		Lymphocytes	81	8.8	
		Segmented Neutrophils	17	1.9	
		Bands	0	0.0	
		Monocytes	1	0.1	
		Eosinophils	1	0.1	
		Basophils	0	0.0	
		Abnormal Lymphocytes	0	0.0	
		Other	0	0.0	
		WBC		10.9	
	17630	Nucleated Red Cells	0		
		Lymphocytes	82	10.3	
		Segmented Neutrophils	16	2.0	
		Bands	0	0.0	
		Monocytes	1	0.1	
		Eosinophils	1	0.1	
		Basophils	0	0.0	
		Abnormal Lymphocytes	0	0.0	
		Other	0	0.0	
		WBC		12.6	

### WHITE DIFFERENTIAL DATA

STUDY ID: ARGUS #418-027

STUDY NO: 060-063

GROUP: 1-M

	Animal ID		TERM	INAL	
			CNT	ABS	
·	17631	Nucleated Red Cells	0		
		Lymphocytes	90	14.9	
		Segmented Neutrophils	9	1.5	
		Bands	0	0.0	
		Monocytes	1	0.2	
		Eosinophils	0	0.0	
		Basophils	0	0.0	
		Abnormal Lymphocytes	0	0.0	
		Other	0	0.0	
		WBC		16.6	
	17639	Nucleated Red Cells	0		
		Lymphocytes	89	17.8	
		Segmented Neutrophils	11	2.2	
		Bands	0	0.0	
		Monocytes	0	0.0	
		Eosinophils	0	0.0	
		Basophils	0	0.0	
		Abnormal Lymphocytes	. 0	0.0	
		Other	0	0.0	
		WBC		20.0	

#### WHITE DIFFERENTIAL DATA

STUDY ID: ARGUS #418-027

STUDY NO. 060-063

GROUP: 2-M

STUDY NO: 060-063		SE	X: MALE			
	Animal ID		TERN	INAL		
			CNT	ABS		
	17634	Nucleated Red Cells	0			
		Lymphocytes	89	17.0		
		Segmented Neutrophils	10	1.9		
		Bands	0	0.0		
		Monocytes	0	0.0		
		Eosinophils	1	0.2		
		Basophils	0	0.0		
		Abnormal Lymphocytes	0	0.0		
		Other	0	0.0		
		WBC		19.1		
	17635	Nucleated Red Cells	0			
		Lymphocytes	<b>7</b> 5	12.7		
		Segmented Neutrophils	24	4.1		
		Bands	0	0.0		
		Monocytes	1	0.2		
		Eosinophils	0	0.0		
		Basophils	0	0.0		
		Abnormal Lymphocytes	0	0.0		
		Other	0	0.0		
		WBC		16.9		
	17638	Nucleated Red Cells	0			
		Lymphocytes	84	13.9		
		Segmented Neutrophils	13	2.1		
		Bands	0	0.0		
		Monocytes	1	0.2		
		Eosinophils	2	0.3		
		Basophils	0	0.0		
		Abnormal Lymphocytes	0	0.0		
		Other	0	0.0		
		WBC		16.5		

### WHITE DIFFERENTIAL DATA

STUDY ID: ARGUS #418-027

STUDY NO: 060-063

GROUP: 2-M

Animal I	•	TERM	INAL		
		CNT	ABS	 	
1764	Nucleated Red Cells	0			
	Lymphocytes	80	14.6		
	Segmented Neutrophils	16	2.9		
	Bands	0	0.0		
	Monocytes	3	0.5		
	Eosinophils	1	0.2		
	Basophils	0	0.0		
	Abnormal Lymphocytes	0	0.0		
	Other	0	0.0		
	WBC		18.3		
1764	3 Nucleated Red Cells	0			
	Lymphocytes	87	20.8		
	Segmented Neutrophils	12	2.9		
	Bands	0	0.0		
	Monocytes	0	0.0		
	Eosinophils	1	0.2		
	Basophils	0	0.0		
	Abnormal Lymphocytes	0	0.0		
	Other	0	0.0		
	WBC		23.9		

#### WHITE DIFFERENTIAL DATA

STUDY ID: ARGUS #418-027

STUDY NO: 060-063

GROUP: 3-M

Animal ID		TERMINAL				
		CNT	ABS			
 17620	Nucleated Red Cells	0				
	Lymphocytes	84	11.4			
	Segmented Neutrophils	15	2.0			
	Bands	0	0.0			
	Monocytes	0	0.0			
	Eosinophils	1	0.1			
	Basophils	0	0.0			
	Abnormal Lymphocytes	0	0.0			
	Other	0	0.0			
	WBC		13.6			
17623	Nucleated Red Cells	0				
	Lymphocytes	88	18.2			
	Segmented Neutrophils	11	2.3			
	Bands	0	0.0			
	Monocytes	0	0.0			
	Eosinophils	1	0.2			
	Basophils	0	0.0			
	Abnormal Lymphocytes	0	0.0			
	Other	0	0.0			
	WBC		20.7			
17627	Nucleated Red Cells	0				
	Lymphocytes	83	10.9			
	Segmented Neutrophils	14	1.8			
	Bands	0	0.0			
	Monocytes	0	0.0			
	Eosinophils	3	0.4			
	Basophils	0	0.0			
	Abnormal Lymphocytes	0	0.0			
	Other	0	0.0			
	WBC		13.1			

#### WHITE DIFFERENTIAL DATA

STUDY ID: ARGUS #418-027

STUDY NO: 060-063

GROUP: 3-M

Animal ID		TERMI	NAL
	CN	T	ABS
17628 Nucleate	d Red Cells	0	
Lymphocy	tes	91	15.0
Segmente	d Neutrophils	7	1.2
Bands		0	0.0
Monocyte	·s	1	0.2
Eosinoph	ils	1	0.2
Basophil	s	0	0.0
Abnormal	Lymphocytes	0	0.0
Other		0	0.0
₩BC			16.5
17633 Nucleate	ed Red Cells	0	
Lymphocy	rtes	<b>8</b> 6	10.9
Segmente	ed Neutrophils	13	1.7
Bands		0	0.0
Monocyte	es	1	0.1
Eosinoph	nils	0	0.0
Basophi	.s	0	0.0
Abnorma	. Lymphocytes	0	0.0
Other		0	0.0
WBC			12.7

#### WHITE DIFFERENTIAL DATA

STUDY ID: ARGUS #418-027

STUDY NO: 060-063

GROUP: 4-M

Animal ID		TERM	INAL	
		CNT	ABS	• •• •• •• •• •• •• •• •• •• •• •• •• •
17621	Nucleated Red Cells	0		
	Lymphocytes	92	15.8	
	Segmented Neutrophils	6	1.0	
	Bands	0	0.0	
	Monocytes	2	0.3	
	Eosinophils	0	0.0	
	Basophils	0	0.0	
	Abnormal Lymphocytes	0	0.0	
	Other	0	0.0	
	WBC		17.2	
17622	Nucleated Red Cells	0		
	Lymphocytes	79	8.7	
	Segmented Neutrophils	18	2.0	
	Bands	0	0.0	
	Monocytes	0	0.0	
	Eosinophils	3	0.3	
	Basophils	0	0.0	
	Abnormal Lymphocytes	0	0.0	
	Other	0	0.0	
	WBC		11.0	
17625	Nucleated Red Cells	0		
	Lymphocytes	90	13.1	
	Segmented Neutrophils	10	1.5	
	Bands	0	0.0	
	Monocytes	0	0.0	
	Eosinophils	0	0.0	
	Basophils	0	0.0	
	Abnormal Lymphocytes	0	0.0	
	Other	0	0.0	
	WBC		14.5	

#### WHITE DIFFERENTIAL DATA

STUDY ID: ARGUS #418-027

STUDY NO: 060-063

GROUP: 4-M

Animal ID		TER	1INAL	
		CNT	ABS	
17629	Nucleated Red Cells	0		
	Lymphocytes	88	19.6	
24	Segmented Neutrophils	11	2.5	
	Bands	0	0.0	
	Monocytes	0	0.0	
	Eosinophils	1	0.2	
	Basophils	0	0.0	
	Abnormal Lymphocytes	0	0.0	
	Other	0	0.0	
	WBC		22.3	
17636	Nucleated Red Cells	0		
	Lymphocytes	42	13.1	
	Segmented Neutrophils	58	18.2	
	Bands	0	0.0	
	Monocytes	0	0.0	
	Eosinophils	0	0.0	
	Basophils	0	0.0	
	Abnormal Lymphocytes	0	0.0	
	Other	0	0.0	
	WBC		31.3	

#### WHITE DIFFERENTIAL DATA

STUDY ID: ARGUS #418-027

STUDY NO: 060-063

GROUP: 1-F

Animal ID		TERM	INAL	
		CNT	ABS	
 17694	Nucleated Red Cells	0		
	Lymphocytes	81	13.6	
	Segmented Neutrophils	16	2.7	
	Bands	0	0.0	
	Monocytes	2	0.3	
	Eosinophils	0	0.0	
	Basophils	0	0.0	
	Abnormal Lymphocytes	1	0.2	
	Other	0	0.0	
	WBC		16.8	
17703	Nucleated Red Cells	0		
	Lymphocytes	73	17.0	
	Segmented Neutrophils	<b>2</b> 5	5.8	
	Bands	0	0.0	
	Monocytes	1	0.2	
	Eosinophils	1	0.2	
	Basophils	0	0.0	
	Abnormal Lymphocytes	0	0.0	
	Other	0	0.0	
	WBC		23.3	
17681	Nucleated Red Cells	0		
	Lymphocytes	77	15.2	
	Segmented Neutrophils	19	3.8	
	Bands	0	0.0	
	Monocytes	4	0.8	
	Eosinophils	0	0.0	
	Basophils	0	0.0	
	Abnormal Lymphocytes	0	0.0	
	Other	0	0.0	
	WBC		19.8	

#### WHITE DIFFERENTIAL DATA

STUDY ID: ARGUS #418-027

STUDY NO: 060-063

GROUP: 1-F

STUDY NO: 060-063		GROUP: 1-1			
	Animal ID		TER	1INAL	
			CNT	ABS	
	 17690	Nucleated Red Cells	0		
		Lymphocytes	84	17.6	
		Segmented Neutrophils	15	3.1	
		Bands	0	0.0	
		Monocytes	0	0.0	
		Eosinophils	1	0.2	
		Basophils	0	0.0	
		Abnormal Lymphocytes	0	0.0	
		Other	0	0.0	
		WBC		20.9	
	17695	Nucleated Red Cells	0		
		Lymphocytes	0		
		Segmented Neutrophils	0		
		Bands	0		
		Monocytes	0		
		Eosinophils	0		
		Basophils	0		•
		Abnormal Lymphocytes	0		
		Other	0		
		WBC			

<sup>(--) -</sup> Data Unavailable

### WHITE DIFFERENTIAL DATA

STUDY ID: ARGUS #418-027

STUDY NO: 060-063

GROUP: 2-F

INAL	TERM		Animal ID
ABS	CNT		
	0	Nucleated Red Cells	17675
14.4	85	Lymphocytes	
2.2	13	Segmented Neutrophils	
0.0	. 0	Bands	
0.3	2	Monocytes	
0.0	0	Eosinophils	
0.0	0	Basophils	
0.0	0	Abnormal Lymphocytes	
0.0	0	Other	
16.9		WBC	
	0	Nucleated Red Cells	17679
10.6	80	Lymphocytes	
2.7	20	Segmented Neutrophils	
0.0	0	Bands	
0.0	0	Monocytes	
0.0	0	Eosinophils	
0.0	· o	Basophils	
0.0	0	Abnormal Lymphocytes	
0.0	0	Other	
13.3		WBC	
	. 0	Nucleated Red Cells	17688
11.9	82	Lymphocytes	
2.6	18	Segmented Neutrophils	
0.0	0	Bands	
0.0	0	Monocytes	
0.0	0	Eosinophils	
0.0	0	Basophils	
0.0	0	Abnormal Lymphocytes	
0.0	0	Other	
14.5		WBC	

#### WHITE DIFFERENTIAL DATA

STUDY ID: ARGUS #418-027

STUDY NO: 060-063

GROUP: 2-F

Animal ID		TERM	INAL	
		CNT	ABS	
17698	Nucleated Red Cells	0		
	Lymphocytes	93	15.6	
	Segmented Neutrophils	5	0.8	
	Bands	0	0.0	
	Monocytes	2	0.3	
	Eosinophils	0	0.0	
	Basophils	0	0.0	
	Abnormal Lymphocytes	0	0.0	
	Other	0	0.0	
	WBC		16.8	
17684	Nucleated Red Cells	0		
	Lymphocytes	83	10.6	
	Segmented Neutrophils	15	1.9	
	Bands	0	0.0	
	Monocytes	2	0.3	
	Eosinophils	0	0.0	
	Basophils	0	0.0	
	Abnormal Lymphocytes	0	0.0	
	Other	0	0.0	
	WBC		12.8	

#### WHITE DIFFERENTIAL DATA

STUDY ID: ARGUS #418-027

STUDY NO: 060-063

GROUP: 3-F

JCA. FEMALE				
	IINAL	TERM		Animal ID
	ABS	CNT		
		0	Nucleated Red Cells	17693
	17.8	74	Lymphocytes	
	5.5	23	Segmented Neutrophils	
	0.0	0	Bands	
	0.7	3	Monocytes	
	0.0	0	Eosinophils	
	0.0	0	Basophils	
	0.0	0	Abnormal Lymphocytes	
	0.0	0	Other	
	24.0		WBC	
		0	Nucleated Red Cells	17697
	13.7	84	Lymphocytes	
	2.6	16	Segmented Neutrophils	
	0.0	0	Bands	
	0.0	0	Monocytes	
	0.0	0	Eosinophils	
	0.0	0	Basophils	
	0.0	0	Abnormal Lymphocytes	
	0.0	0	Other	
	16.3		WBC	
		0	Nucleated Red Cells	17700
	12.2	68	Lymphocytes	
	5.4	30	Segmented Neutrophils	
	0.0	0	Bands	
	0.0	0	Monocytes	
	0.4	2	Eosinophils	
	0.0	0	Basophils	
	0.0	0	Abnormal Lymphocytes	
	0.0	0	Other	
	18.0		WBC	

#### WHITE DIFFERENTIAL DATA

STUDY ID: ARGUS #418-027

STUDY NO: 060-063

GROUP: 3-F

An	imal ID		TERM	IINAL	
			CNT	ABS	
	17701	Nucleated Red Cells	0		 
		Lymphocytes	88	18.7	
		Segmented Neutrophils	11	2.3	
		Bands	0	0.0	
		Monocytes	1	0.2	
		Eosinophils	0	0.0	
		Basophils	0	0.0	
		Abnormal Lymphocytes	0	0.0	
		Other	0	0.0	
		WBC		21.2	
	17687	Nucleated Red Cells	0		
		Lymphocytes	76	16.1	
		Segmented Neutrophils	24	5.1	
		Bands	0	0.0	
		Monocytes	0	0.0	
		Eosinophils	0	0.0	
		Basophils	0	0.0	
		Abnormal Lymphocytes	0	0.0	
		Other	0	0.0	
		WBC		21.2	
	17709	Nucleated Red Cells	0		
		Lymphocytes	71	14.6	
		Segmented Neutrophils	27	5.6	
		Bands	0	0.0	
		Monocytes	1	0.2	
		Eosinophils	1	0.2	
		Basophils	0	0.0	
		Abnormal Lymphocytes	0	0.0	
		Other	0	0.0	
		WBC		20.6	

### Study Report for Hematology

#### WHITE DIFFERENTIAL DATA

STUDY ID: ARGUS #418-027

STUDY NO: 060-063

GROUP: 4-F

Animal ID		TERM	INAL	
		CNT	ABS	
 17685	Nucleated Red Cells	0		
	Lymphocytes	60	13.0	
	Segmented Neutrophils	32	6.9	
	Bands	1	0.2	
	Monocytes	6	1.3	
	Eosinophils	0	0.0	
	Basophils	0	0.0	
	Abnormal Lymphocytes	1	0.2	
	Other	0	0.0	
	WBC		21.6	
17689	Nucleated Red Cells	0		
	Lymphocytes	73	13.6	
	Segmented Neutrophils	18	3.3	
	Bands	1	0.2	
	Monocytes	8	1.5	
	Eosinophils	0	0.0	
	Basophils	0	0.0	
	Abnormal Lymphocytes	0	0.0	
	Other	0	0.0	
	WBC		18.6	
17692	Nucleated Red Cells	0		
	Lymphocytes	87	22.1	
	Segmented Neutrophils	10	2.5	
	Bands	0	0.0	
	Monocytes	2	0.5	
	Eosinophils	0	0.0	
	Basophils	0	0.0	
	Abnormal Lymphocytes	1	0.3	
	Other	0	0.0	
	WBC		25.4	

### Study Report for Hematology

#### WHITE DIFFERENTIAL DATA

STUDY ID: ARGUS #418-027

STUDY NO: 060-063

GROUP: 4-F

Animal ID		TER	MINAL
		CNT	ABS
17691	Nucleated Red Cells	0	
	Lymphocytes	81	16.8
	Segmented Neutrophils	17	3.5
	Bands	0	0.0
	Monocytes	2	0.4
	Eosinophils	0	0.0
	Basophils	0	0.0
	Abnormal Lymphocytes	0	0.0
	Other	0	0.0
	WBC		20.8

## INDIVIDUAL ANIMAL REPORT BY GROUP PERIOD: TERMINAL

STUDY ID: ARGUS #418-027 SEX: MALE STUDY NO: 060-063 T-BIL BUN Animal ID ALB GLU CHOL CREAT ALT ΤP g/dL mg/dLmg/dLmg/dL mg/dL mg/dL U/L g/dL GROUP: 1-M 4.2 156 71 0.1 13 0.3 41 6.6 17608 0.1 3.9 143 62 10 0.3 38 5.9 17618 0.1 52 10 0.2 35 17630 6.5 4.1 163 17631 6.1 3.8 173 39 0.1 13 0.2 36 57 0.1 13 0.3 38 4.1 161 17639 6.2 6.3 4.0 159 56 0.1 12 0.3 38 MEAN 0.29 0.16 11.0 11.9 0.00 1.6 0.05 2.3 SD 5 5 5 5 5 5 5 5 N GROUP: 2-M 3.9 180 51 0.1 16 0.3 45 17634 6.2 6.7 4.1 188 61 0.1 11 0.3 42 17635 6.7 4.3 185 50 0.1 13 0.3 42 17638 51 0.1 12 0.2 42 4.0 150 6.0 17642 47 0.1 16 0.3 45 4.1 217 17643 6.1 52 0.1 14 0.3 43 MEAN 6.3 4.1 184 0.15 23.9 5.3 0.00 2.3 0.04 1.6 0.34 SD 5 5 5 5 5 5 5 5 N GROUP: 3-M 43 11 0.3 0.1 50 4.2 154 17620 6.1 0.4 45 6.4 4.1 178 47 0.1 12 17623 5.8 3.7 153 49 0.1 14 0.3 50 17627 14 0.3 48 4.2 145 48 0.1 17628 6.5 12 0.3 40 17633 151 58 0.1 6.0 4.1 6.2 4.1 156 49 0.1 13 0.3 47 MEAN 0.21 0.00 1.3 0.04 4.2 0.29 12.7 5.5 SD 5 5 5 5 5 5 N

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#### INDIVIDUAL ANIMAL REPORT BY GROUP PERIOD: TERMINAL

SEX: MALE STUDY ID: ARGUS #418-027 STUDY NO: 060-063 T-BIL BUN CREAT ALT GLU CHOL ALB Animal ID TP U/L mg/dL mg/dL mg/dL mg/dL g/dL mg/dL g/dL GROUP: 4-M 14 0.4 38 0.1 117 18 6.5 4.4 17621 16 0.4 51 4.3 90 32 0.1 6.1 17622 0.1 9 0.2 54 119 39 17625 6.2 4.4 0.4 0.1 21 45 33 106 6.4 4.3 17629 0.4 52 24 3.4 110 24 0.1 6.2 17636 17 0.4 48 29 0.1 6.3 4.2 108 MEAN 5.9 0.09 6.5 0.00 8.2 11.5 SD 0.16 0.43 5 5 5 5 5 5 5 5

N

#### INDIVIDUAL ANIMAL REPORT BY GROUP PERIOD: TERMINAL

STUDY ID: AF	RGUS #418-027 50-063	7						SEX: FEMAL
 Animal ID		ALB	 GLU	CHOL	T-BIL	 Bun	CREAT	ALT
	g/dL	g/dL	mg/dL	mg/dL	mg/dL	mg/dL	mg/dL	U/L
GROUP: 1-F								
17694	5.8	3.7	91	43	0.1	24	0.3	58
17695	6.5	4.3	130	48	0.1	16	0.4	48
17703	6.7	4.2	111	63	0.1	23	0.4	62
17681	7.0	4.5	164	66	0.2	17	0.4	68
17690	6.3	4.1	127	40	0.2	21	0.4	62
MEAN	6.5	4.2	125	52	0.1	20	0.4	60
SD	0.45	0.30	26.9	11.8	0.05	3.6	0.04	7.4
N	5	5	5	5	5	5	5	5
GROUP: 2-F								
17675	7.3	4.5	138	71	0.2	19	0.4	60
17679	6.3	4.2	135	58	0.1	17	0.2	43
17684	5.7	3.8	144	65	0.1	14	0.3	77
17688	6.4	4.1	129	51	0.1	23	0.4	49
17698	6.9	4.2	145	61	0.1	17	0.4	55
MEAN	6.5	4.2	138	61	0.1	18	0.3	57
SD	0.61	0.25	6.6	7.5	0.04	3.3	0.09	13.0
N	5	5	5	5	5	5	5	5
GROUP: 3-F								
17693	6.2	4.0	98	46	0.1	22	0.3	47
17687	6.5	4.3	. 162	72	0.1	13	0.3	83
17697	6.0	3.8	113	57	0.1	19	0.4	52
17700	6.9	4.5	145	73	0.1	18	0.3	70
17701	6.2	4.1	93	61	0.1	21	0.3	<b>5</b> 5
17709	5.6	3.6	135	36	0.1	21	0.3	63
MEAN	6.2	4.1	124	58	0.1	19	0.3	62
SD	0.44	0.33	27.4	14.5	0.00	3.3	0.04	13.3
N	6	6	6	6	6	6	6	6

## INDIVIDUAL ANIMAL REPORT BY GROUP PERIOD: TERMINAL

STUDY ID: ARGUS #418-027 SEX: FEMALE STUDY NO: 060-063

Animal ID	TP	ALB	GLU	CHOL	T-BIL	BUN	CREAT	ALT
	g/dL	g/dL	mg/dL	mg/dL	mg/dL	mg/dL	mg/dL	U/L
GROUP: 4-F								
17685	6.5	4.2	100	66	0.1	17	0.4	89
17689	6.7	4.2	<b>10</b> 5	69	0.2	22	0.4	<b>9</b> 9
17692	5.4	3.9	<del>9</del> 6	41	0.1	22	0.3	102
17691	6.5	4.1	156	53	0.1	22	0.5	87
MEAN	6.3	4.1	114	57	0.1	21	0.4	94
SD	0.59	0.14	28.1	12.9	0.05	2.5	0.08	7.4
N	4	4	4	4	4	4	4	4

#### INDIVIDUAL ANIMAL REPORT BY GROUP PERIOD: TERMINAL

STUDY ID: ARGUS #418-027

STUDY NO: 06	0-063							
 Animal ID	AST	ALP	CA	PHOS	TRIG	NA	κ	CL
	U/L	U/L	mg/dL	mg/dL	mg/dL	mmol/L	mmol/L	mmol/L
GROUP: 1-M								
17608	90	106	11.6	8.3	<b>6</b> 6	147	5.5	94
17618	92	63	10.6	7.7	45	150	6.0	98
17630	89	131	11.2	8.6	76	147	4.9	94
17631	83	129	11.2	9.9	106	148	5.9	96
17639	88	106	10.9	7.9	66	146	6.2	97
MEAN	88	107	11.1	8.5	72	148	5.7	96
SD	3.4	27.4	0.37	0.87	22.2	1.5	0.51	1.8
N	5	5	5	5	5	5	5	5
GROUP: 2-M								
17634	101	74	11.5	9.8	39	144	6.2	95
17635	86	88	11.0	8.2	69	147	5.0	96
17638	80	118	11.9	8.3	69	151	6.3	102
17642	89	113	11.0	8.2	66	148	5.9	100
17643	74	148	11.4	13.9	53	144	7.8	97
MEAN	86	108	11.4	9.7	59	147	6.2	98
SD	10.2	28.6	0.38	2.45	13.1	2.9	1.01	2.9
N	5	5	5	5	5	5	5	5
GROUP: 3-M								
17620	102	149	11.3	9.2	48	147	5.8	97
17623	88	96	11.8	8.0	68	147	6.7	100
17627	92	91	11.0	9.8	52	148	7.0	103
17628	100	122	11.4	10.3	56	149	6.9	101
17633	96	122	11.4	9.9	105	148	6.3	99
MEAN	96	116	11.4	9.4	66	148	6.5	100
SD	5.7	23.4	0.29	0.90	23.2	0.8	0.49	2.2
N	5	5	5	5	5	5	5	5

## INDIVIDUAL ANIMAL REPORT BY GROUP PERIOD: TERMINAL

STUDY ID: ARGUS #418-027

STUDY NO: 060-063

Animal ID AST U/L		ALP	CA	PHOS	TRIG	NA	K	CL
	U/L 	U/L	mg/dL 	mg/dL 	mg/dL	mmol/L 	mmol/L	mmol/L
GROUP: 4-M								
17621	89	117	11.5	9.3	24	151	5.9	100
17622	105	109	11.1	8.9	30	147	6.3	100
17625	109	104	11.3	9.8	47	150	6.3	103
17629	108	133	11.3	12.6	24	144	7.9	<b>9</b> 5
17636	98	153	11.3	9.2	28	147	6.1	98
MEAN	102	123	11.3	10.0	31	148	6.5	99
SD	8.3	20.0	0.14	1.51	9.5	2.8	0.80	2.9
N	5	5	5	5	5	5	5	5

# INDIVIDUAL ANIMAL REPORT BY GROUP PERIOD: TERMINAL

STUDY ID: ARGUS #418-027

STUDY ID: AR STUDY NO: 06	gus #418-027 0-063							SEA. FEMAI
 Animal ID	AST	ALP	CA	PHOS	TRIG	NA NA	K	CL.
	U/L	U/L	mg/dL	mg/dL	mg/dL	mmol/L	mmol/L	mmol/L
GROUP: 1-F								
17694	102	49	11.5	9.5	44	140	7.0	<del>9</del> 6
17695	92	59	11.5	9.4	51	141	7.0	101
17703	99	59	11.8	9.2	46	143	6.1	99
17681	114	51	12.4	9.2	66	145	6.8	93
17690	92	97	11.8	9.3	72	144	6.7	98
MEAN	100	63	11.8	9.3	56	143	6.7	97
SD	9.1	19.5	0.37	0.13	12.5	2.1	0.37	3.0
N	5	5	5	5	5	5	5	5
GROUP: 2-F								
17675	107	39	12.4	8.0	84	141	6.0	96
17679	82	43	11.8	9.3	27	141	7.4	98
17684	120	56	10.9	7.0	47	141	6.1	<b>9</b> 9
17688	75	61	11.6	8.5	72	143	5.5	98
17698	86	56	11.7	7.8	53	143	6.8	99
MEAN	94	51	11.7	8.1	57	142	6.4	98
SD	18.8	9.5	0.54	0.85	22.2	1.1	0.74	1.2
N	5	5	5	5	5	5	5	5
GROUP: 3-F								
17693	95	91	11.6	10.5	36	141	6.9	102
17687	107	48	11.4	9.1	91	143	6.2	100
17697	104	24	11.2	6.7	37	143	7.1	102
17700	114	68	12.1	10.6	36	143	6.7	98
17701	129	43	11.4	8.1	34	142	7.3	103
17709	150	49	11.5	7.9	52	144	6.0	100
MEAN	117	54	11.5	8.8	48	143	6.7	101
SD	20.0	23.0	0.31	1.54	22.2	1.0	0.51	1.8
N	6	6	6	6	6	6	6	6

# INDIVIDUAL ANIMAL REPORT BY GROUP PERIOD: TERMINAL

STUDY ID: ARGUS #418-027

SEX: FEMALE

STUDY NO: 060-063

Animal ID	AST	ALP	CA	PHOS	TRIG	NA	Κ	CL
	U/L	U/L	mg/dL	mg/dL	mg/dL	mmol/L	mmol/L	mmol/L
GROUP: 4-F								
17685	93	76	11.6	9.5	54	140	6.7	98
17689	147	68	12.2	10.0	69	140	6.8	98
17692	109	129	11.1	8.8	62	138	6.4	102
17691	131	73	12.6	9.6	79	143	6.9	95
MEAN	120	87	11.9	9.5	66	140	6.7	98
SD	23.8	28.5	0.66	0.50	10.6	2.1	0.22	2.9
N	4	4	4	4	4	4	4	4

# INDIVIDUAL ANIMAL REPORT BY GROUP PERIOD: TERMINAL

STUDY ID: ARGUS #418-027

STUDY NO: 060-063

Animal ID	GLOB	A/G	
	g/dL	none	
GROUP: 1-M			
17608	2.4	1.8	
17618	2.0	2.0	
17630	2.4	1.7	
17631	2.3	1.7	
17639	2.1	2.0	
MEAN	2.2	1.8	
SD	0.18	0.15	
N	5	5	
 GROUP: 2-M			
17634	2.3	1.7	
17635	2.6	1.6	
17638	2.4	1.8	
17642	2.0	2.0	
17643	2.0	2.1	
MEAN	2.3	1.8	
SD	0.26	0.21	
N	5	5	
GROUP: 3-M		**************************************	
17620	1.9	2.2	
17623	2.3	1.8	
17627	2.1	1.8	
17628	2.3	1.8	
17633	1.9	2.2	
MEAN	2.1	2.0	
SD	0.20	0.22	
N	5	5	

# INDIVIDUAL ANIMAL REPORT BY GROUP PERIOD: TERMINAL

STUDY ID: ARGUS #418-027

STUDY NO: 060-063

31001 110: 000 000				
	Animal ID	GLOB	A/G	
		g/dL	none	
	GROUP: 4-M			
	17621	2.1	2.1	
	17622	1.8	2.4	
	17625	1.8	2.4	
	17629	2.1	2.0	
	17636	2.8	1.2	
	MEAN	2.1	2.0	
	SD	0.41	0.49	
	N	5	5	

# INDIVIDUAL ANIMAL REPORT BY GROUP PERIOD: TERMINAL

STUDY ID: ARGUS #418-027

STUDY NO: 060-063				OZA: TENAL
	Animal ID	GLOB	A/G	
		g/dL	none	
	GROUP: 1-F			
	17694	2.1	1.8	
	17695	2.2	2.0	
•	17703	2.5	1.7	
	17681	2.5	1.8	
	17690	2.2	1.9	
	MEAN	2.3	1.8	
	SD	0.19	0.11	
	N	5	5	
	GROUP: 2-F			
	17675	2.8	1.6	
	17679	2.1	2.0	
	17684	1.9	2.0	
	17688	2.3	1.8	
	176 <del>9</del> 8	2.7	1.6	
	MEAN	2.4	1.8	
	SD	0.38	0.20	
	N	5	5	
	GROUP: 3-F			
	17693	2.2	1 Ω	
		2.2	1.8	
	17687	2.2	2.0	
	17697	2.2	1.7	
	17700	2.4	1.9	
	17701	2.1	2.0	
	17709	2.0	1.8	
	MEAN	2.2	1.9	
	SD	0.13	0.12	
	N	6	6	

# INDIVIDUAL ANIMAL REPORT BY GROUP PERIOD: TERMINAL

STUDY ID: ARGUS #418-027

STUDY NO: 060-063

3,05, 1101 101 111				
	Animal ID	GLOB	A/G	
		g/dL	none	
	GROUP: 4-F			
	17685	2.3	1.8	
	17689	2.5	1.7	
	17692	1.5	2.6	
	17691	2.4	1.7	
	MEAN	2.2	2.0	
	SD	0.46	0.44	
	N	4	4	

# SUMMARY REPORT PERIOD: TERMINAL

JDY ID: ARGUS #									SEX: MA
TEST(s):		ALB g/dL		CHOL mg/dL	T-BIL mg/dL		CREAT mg/dL		AST U/L
 Group: 1-M				· · · · · · · · · · · · · · · · · · ·					
MEAN	6.3	4.0	159	56	0.1	12	0.3	38	88
		0.16	11.0	11.9	0.00	1.6	0.05	2.3	3.4
N	5	5	5	5	5	5	5	5	. 5
Group: 2-M									
MEAN	6.3	4.1	184	52	0.1	14	0.3	43	86
SD	0.34	0.15	23.9	5.3	0.00	2.3	0.04	1.6	10.2
N	5	5	5	5	5	5	5	5	5
Group: 3-M									
MEAN	6.2	4.1	156	49	0.1	13	0.3	47	96
SD	0.29	0.21	12.7	5.5	0.00	1.3	0.04	4.2	5.7
N	5	5	5	5	5	5	5	5	5
Group: 4-M									
MEAN	6.3	4.2	108	29	0.1		0.4		102
SD	0.16	0.43	11.5	8.2	0.00	5.9	· 0.09	6.5	8.3
N	5	5	5	5	5	5	5	5	5

# SUMMARY REPORT PERIOD: TERMINAL

STUDY ID: ARGUS #418-027

JDY NO: 060-06	3								-2/11
TEST(s):	ALP	CA	PHOS	TRIG	NA	 К	CL	GLOB	A/G
UNITS:	U/L	mg/dL	mg/dL	mg/dL	mmol/L	mmol/L	mmol/L	g/dL	none
Group: 1-M									
MEAN	107	11.1	8.5	72	148	5.7	96	2.2	1.8
SD	27.4	0.37	0.87	22.2	1.5	0.51	1.8	0.18	0.15
N	5	5	5	5	5	5	5	5	5
Group: 2-M									
MEAN	108	11.4	9.7	59	147	6.2	98	2.3	1.8
SD	28.6	0.38	2.45	13.1	2.9	1.01	2.9	0.26	0.21
N	5	5	5	5	5	5	5	5	5
Group: 3-M									
MEAN	116	11.4	9.4	66	148	6.5	100	2.1	2.0
SD	23.4	0.29	0.90	23.2	0.8	0.49	2.2	0.20	0.22
N	5	5	5	5	5	5	5	5	5
Group: 4-M									
MEAN	123	11.3	10.0	31	148	6.5	99	2.1	2.0
SD	20.0	0.14	1.51	9.5	2.8	0.80	2.9	0.41	0.49
N	5	5	5	5	5	5	5	5	5

# SUMMARY REPORT PERIOD: TERMINAL

STUDY ID: ARGUS #418-027 SEX: FEMALE STUDY NO: 060-063

TEST(s):	TP	ALB	GLU	CHOL	T-BIL	BUN	CREAT	ALT	AST
UNITS:	g/dL	g/dL	mg/dL	mg/dL	mg/dL	mg/dL	mg/dL	U/L	U/L
Group: 1-F									
MEAN	6.5	4.2	125	52	0.1	20	0.4	60	100
SD	0.45	0.30	26.9	11.8	0.05	3.6	0.04	7.4	9.1
N	5	5	5	5	5	5	5	5	5
Group: 2-F									
MEAN	6.5	4.2	138	61	0.1	18	0.3	57	94
SD	0.61	0.25	6.6	7.5	0.04	3.3	0.09	13.0	18.8
N	5	5	5	5	5	5	5	5	
Group: 3-F									
MEAN	6.2	4.1	124	58	0.1	19	0.3	62	11
SD	0.44	0.33	27.4	14.5	0.00	3.3	0.04	13.3	20.
N	6	6	6	6	6	6	6	6	
Group: 4-F									
MEAN	6.3	4.1	114	57	0.1	21	0.4	94	12
SD	0.59	0.14	28.1	12.9	0.05	2.5	0.08	7.4	23.
N	4	4	4	4	4	4	4	4	

#### SUMMARY REPORT PERIOD: TERMINAL

STUDY ID: ARGUS #418-027

TEST(s):	ALP	CA	PHOS	TRIG	NA	K	CL	GLOB	A/G
UNITS: U/I	U/L	mg/dL	mg/dL	mg/dL		mmol/L	mmol/L	g/dL	none
Group: 1-F									
MEAN	63	11.8	9.3	56	143	6.7	97	2.3	1.8
SD	19.5	0.37	0.13	12.5	2.1	0.37	3.0		0.11
N .	5	5	5	5	5	. 5	5	5	5
Group: 2-F									
MEAN	51	11.7	8.1	57	142	6.4	98	2.4	1.8
SD	9.5	0.54	0.85	22.2	1.1	0.74			
N	5	5	5	5	5	5	5	5	5
Group: 3-F									
MEAN	54	11.5	8.8	48	143	6.7	101	2.2	1.9
SD	23.0	0.31	1.54	22.2	1.0	0.51	1.8		0.12
N	6	6	6	6	6	6	6	6	6
Group: 4-F									
MEAN	87	11.9	9.5	66	140	6.7	98	2.2	2.0
SD	28.5	0.66	0.50	10.6	2.1	0.22	2.9	0.46	0.44
N	4	4	4	4	4	4	4	4	4

#### **QUALITY ASSURANCE STATEMENT**

Study Number: 418-027 Redfield Study Number: 060-063

This study has been inspected and audited by the Quality Assurance Unit (QAU) as required by the Good Laboratory Practice (GLP) regulations promulgated by the U.S. Food and Drug Administration or U.S. Environmental Protection Agency or other international regulations, as required. The following is a record of the dates that audits/inspections were performed and reported by the QAU.

DATE OF AUDIT/INSPECTION	Type of Audit/Inspection	DATES REPORTED TO STUDY DIRECTOR AND MANAGEMENT
05/17/02, 05/20/02	Clinical Pathology	05/20/02

APPROVED BY:

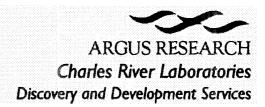
Jill Hardch, B.S.

Date

Quality Assurance Auditor Redfield Laboratories

# APPENDIX L STATEMENT OF THE STUDY DIRECTOR

905 Sheehy Drive, Bldg. A Horsham, PA 19044 Telephone: (215) 443-8710 Telefax: (215) 443-8587



PROTOCOL 418-027:

ORAL (GAVAGE) COMBINED REPEATED DOSE TOXICITY

Date

STUDY OF T 7599.7 WITH THE REPRODUCTION/ DEVELOPMENTAL TOXICITY SCREENING TEST

SPONSOR'S STUDY NUMBER: T-7599

#### STATEMENT OF THE STUDY DIRECTOR

This final report accurately reflects the raw data obtained during the performance of the study. No deviations from the U.S. Food and Drug Administration (FDA) Good Laboratory Practice Regulations; Final Rule<sup>a</sup>, the Japanese Ministry of Health and Welfare (MHW) Good Laboratory Practice Standard for Safety Studies on Drugs<sup>b</sup>, the Organisation for Economic Co-operation and Development (OECD), the Revised OECD Principles of Good Laboratory Practices<sup>c</sup> and the Organisation for Economic Co-operation and Development (OECD), The OECD Guideline for Testing of Chemicals<sup>d</sup> occurred that affected the quality or integrity of the study.

Raymond G. York, Ph.D, DABT

Associate Director of Research

Study Director Argus Research

a. U.S. Food and Drug Administration. Good Laboratory Practice Regulations; Final Rule. 21 CFR Part 58.

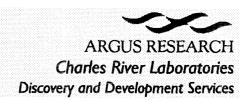
b. Japanese Ministry of Health and Welfare (1997). Good Laboratory Practice Standard for Safety Studies on Drugs, MHW Ordinance No. 21, March 26, 1997.

c. Organisation for Economic Co-operation and Development (1998). The Revised OECD Principles of Good Laboratory Practices [C(97)186/Final].

d. Organisation for Economic Co-operation and Development (1996). OECD Guideline for Testing of Chemicals. Section 4, No. 422: Combined Repeated Dose Toxicity Study with the Reproduction/Developmental Toxicity Screening Test, adopted 22 March 1996.

# APPENDIX M QUALITY ASSURANCE STATEMENT

905 Sheehy Drive, Bldg. A Horsham, PA 19044 Telephone: (215) 443-8710 Telefax: (215) 443-8587



#### **QUALITY ASSURANCE STATEMENT**

Argus Protocol: 418-027

Sponsor's Study Number: T-7599

Study Director: Raymond G. York, Ph.D., DABT

The protocol, critical phases, raw data and final report were inspected by the Quality Assurance Unit (QAU), to assure conformance with:

Organisation for Economic Co-operation and Development (1998). The Revised OECD Principles of Good Laboratory Practices [C(97)186/Final].

U.S. Food and Drug Administration. Good Laboratory Practice Regulations; Final Rule. 21 CFR Part 58.

Japanese Ministry of Health and Welfare (1997). *Good Laboratory Practice Standard for Safety Studies on Drugs*, MHW Ordinance Number 21, March 26, 1997.

The undersigned indicate that the report is an accurate representation of the raw data. Data provided by the Sponsor or a subcontractor were not audited by the Argus Research Quality Assurance Unit.

The QAU inspection and report audit dates are listed below:

		Date(s) Findings Submitted to Study	Date(s) Findings Submitted to
Inspection Phase	Inspection Date(s)	Director	Management
Protocol	12 FEB 02	12 FEB 02	12 FEB 02
11000001	15 FEB 02	15 FEB 02	15 FEB 02
TS Administration	22 FEB 02	22 FEB 02	22 FEB 02
TS Preparation	28 FEB 02	28 FEB 02	28 FEB 02
Motor Activity	20 MAR 02	20 MAR 02	20 MAR 02
FOB <sup>1</sup>	20 MAR 02	01 APR 02	01 APR 02
Natural Delivery/			
Litter Observations	27 MAR 02	27 MAR 02	27 MAR 02
<b>Blood Collection</b>	04 APR 02	19 APR 02	19 APR 02
Dam/Litter Sacrifice	04 APR 02	19 APR 02	19 APR 02
Male Sacrifice-			
Raw Data Check	01 AUG 02	01 AUG 02	01 AUG 02
In-Life Data	17-19,		
	22-24 JUL 02	24 JUL 02	24 JUL 02
Necropsy Data	18, 22 JUL 02	23 JUL 02	23 JUL 02
Formulations Data	03, 31 JUL 02	31 JUL 02	31 JUL 02
Report Tables	26-30 JUL 02	30 JUL 02	30 JUL 02
Report Text	25-26 JUL 02	26 JUL 02	26 JUL 02
	30 JUL 02	30 JUL 02	30 JUL 02
	01 AUG 02	01 AUG 02	01 AUG 02

<sup>1</sup>Functional Observational Battery

Centhia Miles Ch 25maros maurien OBrien 25 MAROS

Manager of Regulatory Compliance

Date

Maureen O'Brien, B.S.

Date

Quality Assurance Associate and

Principal Auditor