Study Title

Thirteen-Week Feeding Study with Transgenic Maize Grain (TC1507) in Rats

Volume 1 of 3

Laboratory Project ID: DuPont-10997

TEST GUIDELINES: U.S. EPA Health Effects Test Guidelines
OPPTS 870.3100 (1998)

OECD Guideline for Testing of Chemicals
Section 4: Health Effects, No. 408 (1997)

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STUDY COMPLETED ON: February 3, 2003

PERFORMING LABORATORY: E.I. du Pont de Nemours and Company
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WORK REQUEST NUMBER: 14161

SERVICE CODE NUMBER: 1026

SPONSOR STUDY NUMBER: PHI-2001-072

STATEMENT OF NO DATA CONFIDENTIALITY CLAIMS

Title: Thirteen-Week Feeding Study with Transgenic Maize Grain (TC1507) in Rats

No claim of confidentiality is made for any information contained in this study on the basis of its falling within the scope of FIFRA Section 10(d)(1)(A), (B), or (C). *

Company: Pioneer Hi-Bred International, Inc.

Company Agent: Angel Fuentes, Ph.D.

Title: Regulatory Scientist

Signature: _____

Date: _____

* In the United States, the above statement supersedes all other statements of confidentiality that may occur elsewhere in this report.

THESE DATA MAY BE CONSIDERED CONFIDENTIAL IN COUNTRIES OUTSIDE THE UNITED STATES.

GOOD LABORATORY PRACTICE COMPLIANCE STATEMENT

This study was conducted in compliance with U.S. EPA FIFRA (40 CFR part 160) Good Laboratory Practice Standards (GLP), which are consistent with the OECD Principles of Good Laboratory Practice (as revised in 1997) published in ENV/MC/CHEM(98)17 and MAFF Japan Good Laboratory Practice Standards (59 NohSan No. 3850) except for the items documented below. None of the items listed impact the validity of the study.

- The analyses for nutrient composition, contaminant levels, and biological activity of the transgenic trait were not conducted under GLP.
- Diet preparation was not conducted according to GLP
- Raw data of analyses for diet characterization, formulation, and contamination will be archived by the laboratory conducting the evaluations in a non-GLP archive.

These deviations are not expected to impact the validity of the study as the analyses will be conducted by experienced scientists using established microbiological and analytical methods. A copy of the original reports will be archived by Haskell Laboratory in a GLP archive. The original reports and a copy of the raw data will be archived by the sponsor in a GLP archive. Furthermore, an independent third-party audit of diet preparation was conducted at Purina Test Diet. Copies of raw data from the microbial evaluations will be archived by Haskell Laboratory under GLP.

Study Director: Susan A. MacKenzie 3-FEB-2003
Susan A. MacKenzie, V.M.D., Ph.D., D.A.B.T. Date
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QUALITY ASSURANCE STATEMENT

Haskell Sample Number(s):

254346, 25347, 25348, 25349, 25350

Dates of Inspections:

Protocol: June 19, 2002,

Conduct: June 7, 2002, August 6,7, 2002, September 17, 2002, October 2,7, 2002

Records, Reports: November 8,11,13,14,25-27, 2002, December 2-4, 2002, January 7,8,14,16,17,20,21, 2003

Dates Findings Reported to:

Study Director: June 20, 2002, August 22, 2002, September 17, 2002, October 2,8, 2002, November 14, 2002, December 4,6,9, 2002, January 8, 20,21, 2003

Management: September 17, 2002, August 22, 2002, October 2,8,2002, November 19, 2002, December 4,9,18, 2002, January 8,21, 2003, February 3, 2003

Reported by: Robert C. Rhea — 3-FEB-2003

Robert C. Rhea
Quality Assurance Auditor

Date

CERTIFICATION

We, the undersigned, declare that this report provides an accurate evaluation of data obtained from this study.

Clinical Pathology Evaluations by: Steven R. Frame for — 3-Feb-2003
Nancy E. Everds, D.V.M. — Date
Diplomate A.C.V.P.
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Anatomic Pathology Evaluations by: John Hansen — 3-Feb-2003
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Scott E. Loveless, Ph.D. — Date
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Pioneer Hi-Bred International, Inc.
Sponsor Representative

TABLE OF CONTENTS

Page

LIST OF TABLES

Page

LIST OF FIGURES

Page

LIST OF APPENDICES

Page

STUDY INFORMATION

Substance Tested: **Transgenic Maize Grain (TC1507)**

Synonyms/Codes:
- TC1507
- H-25346
- 50207 (Lot No.)

Haskell Number: 25346

Composition: Transgenic Maize Grain (TC1507) incorporated in rodent chow at 33% w/w. Rodent chow was prepared according to the formulation for PMI Certified Rodent Lab Diet #5002.

Physical Characteristics: Solid, meal

Substance Tested: **Near Isogenic Maize Grain (33P66)**

Synonyms/Codes:
- 33P66
- H-25347
- 50208 (Lot No.)

Haskell Number: 25347

Composition: Near Isogenic Maize Grain (33P66) incorporated in rodent chow at 33% w/w. Rodent chow was prepared according to the formulation for PMI Certified Rodent Lab Diet #5002.

Physical Characteristics: Solid, meal

STUDY INFORMATION (Continued)

Substance Tested: **Commercial Maize Grain (33J56)**

Synonyms/Codes:
- 33J56
- H-25348
- 50209 (Lot No.)

Haskell Number: 25348

Composition: Commercial Maize Grain (33J56) incorporated in rodent chow at 33% w/w. Rodent chow was prepared according to the formulation for PMI Certified Rodent Lab Diet #5002.

Physical Characteristics: Solid, meal

Substance Tested: **Transgenic Maize Grain (TC1507) and Commercial Maize Grain (33J56)**

Synonyms/Codes:
- TC1507 and 33J56
- H-25349
- 50210 (Lot No.)

Haskell Number: 25349

Composition: Transgenic Maize Grain (TC1507) and Commercial Maize Grain (33J56) incorporated in rodent chow at 11% w/w TC1507 and 22% w/w 33J56. Rodent chow was prepared according to the formulation for PMI Certified Rodent Lab Diet #5002.

Physical Characteristics: Solid, meal

STUDY INFORMATION (Continued)

Substance Tested: **Near Isogenic Maize Grain (33P66) and Commercial Maize Grain (33J56)**

Synonyms/Codes:
- 33P66 and 33J56
- H-25350
- 50211 (Lot No.)

Haskell Number: 25350

Composition: Near Isogenic Maize Grain (33P66) and Commercial Maize Grain (33J56) incorporated in rodent chow at 11% w/w 33P66 and 22% w/w 33J56. Rodent chow was prepared according to the formulation for PMI Certified Rodent Lab Diet #5002.

Physical Characteristics: Solid, meal

Sponsor: Pioneer Hi-Bred International, Inc.
7250 NW 62nd Avenue
P.O. Box 552
Johnston, IA 50131

Study Initiated/Completed: July 8, 2002 / (see report cover page)

In-Life Initiated/Completed: July 9, 2002 / October 11, 2002

STUDY PERSONNEL

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ABSTRACT

Five groups of young adult male and female Crl:CD®(SD)IGS BR rats (12/sex/group) were administered diets containing 33% TC1507 (H-25346), 33% 33P66 (H-25347), 33% 33J56 (H-25348), 11% TC1507 (H-25349), or 11% 33P66 (H-25350) for approximately 90 days. Body weights, food consumption, and clinical signs were evaluated weekly. Neurobehavioral and ophthalmological assessments were performed prior to the start of dietary exposure and near the end of the exposure period. Clinical pathology endpoints were also evaluated near the end of the exposure period. After approximately 90 days of dietary exposure, rats were sacrificed and given a gross and microscopic pathological examination.

All diets contained comparable levels of proximate analytes, fiber/energy, amino acids, minerals, vitamins, and heavy metals. The transgenic protein, Cry1F was only detected in the 33% and 11% TC1507 diets, using Cry1F ELISA and/or European corn borer (ECB) bioassay. Analysis of these diets near the beginning and end of the study demonstrated that Cry1F was stable over the course of the study.

All rats survived the exposure period. No biologically significant, diet-related differences in mean body weight, body weight gain, or food efficiency were observed among any male groups or any female groups and no effects on mean food consumption were observed in any female group. Statistically significantly higher food consumption was observed in male rats fed 33% TC1507, compared to those fed 33% 33P66. This was not considered toxicologically significant as there were no meaningful differences between these groups in either body weight, body weight gain, or food efficiency, but this may represent slightly greater palatability of the 33% TC1507 diet.

No toxicologically significant diet-related differences were observed among groups fed the different diets with respect to clinical signs of toxicity, ophthalmological observations, neurobehavioral assessments, clinical pathology (hematology, clinical chemistry, coagulation, or urinalysis parameters), organ weights, and gross or microscopic pathology.

Under the conditions of this study, exposure of male and female rats to diets containing a transgenic strain of maize (TC1507) produced no toxicologically significant differences, compared to rats fed diets containing a non-transgenic, near isogenic strain of maize (33P66) or a non-transgenic commercial strain of maize (33J56).

OBJECTIVE

The purpose of this study was to compare a diet containing grain derived from a transgenic corn line (TC1507) to (1) a diet containing grain from a near isogenic non-transgenic line (33P66) and (2) a diet containing grain from a commercial hybrid non-transgenic corn line (33J56). Transgenic maize grain and the near isogenic non-transgenic maize grain were incorporated into the diet at concentrations of 11% and 33% w/w. The commercial hybrid maize grain was incorporated into the diet at a concentration of 33% w/w. All diets were prepared according to the formulation for PMI Certified Rodent LabDiet #5002. Levels beyond 33% maize w/w could be problematic because of the possibility of nutritional artifact, in that the diets would be nutritionally unbalanced. Dietary levels of 33% maize w/w are normally added to PMI Certified Rodent LabDiet # 5002, which is considered nutritionally optimal. The 11% TC1507 and 11% 33P66 diets were included to evaluate a possible dose-response, if any diet-related effects were observed in the 33% diets. The oral route was selected because it is the relevant route of exposure to assess the wholesomeness of food.

TESTING FACILITY

The testing facility was the DuPont Haskell Laboratory for Health and Environmental Sciences, 1090 Elkton Road, Newark, Delaware 19714-0500, U.S.A., using Haskell Laboratory Standard Operating Procedures (SOP's) and animal facilities.

Diet formulation and preparation was performed by Purina Test Diet, 1050 Progress Drive, Richmond, IN 47374, USA.

Molecular analysis of maize grain test substances was performed by Regulatory Sciences and Registration, DuPont Agriculture and Nutrition, DuPont Experimental Station, PO Box 80402, Wilmington, DE 19880, USA.

Analysis for biological activity of the transgenic trait (ECB assay) and Enzyme-Linked-Immunosorbent Assay (ELISA) of diets to determine concentration and stability of the transgenic trait were performed by Pioneer Hi-Bred International, Inc., 7300 NW 62nd Avenue, Johnston, IA, 50131, USA.

Analysis of nutrient composition of diets was performed by Woodson-Tenant Laboratories, A Division of Eurofins Scientific, Inc., 345 Adams Avenue, Memphis, TN 38103, USA.

Analysis of diets for mycotoxins was performed by Romer Labs., Inc., 1301 Stylemaster Drive, Union, MO 63084, USA.

Analysis of diets for pesticide residues was performed by Exygen Research, 3058 Research Drive, State College, PA 16801, USA.

Analysis of diets for fungal and bacterial counts was performed by DuPont Environmental and Microbiological Sciences and Engineering (EMSE), Newark, Delaware, 19714, USA.

MATERIALS AND METHODS

.ATest Guidelines

study design was adapted from the following test guidelines:

- United States Environmental Protection Agency (EPA), Office of Prevention, Pesticides, and Toxic Substances (OPPTS) Health Effects Test Guidelines, OPPTS 870.3100 90-Day Oral Toxicity in Rodents (AUG-1998).
- Organisation for Economic Cooperation and Development. Guidelines for Testing of Chemicals, Section 4 (Part 408): Health Effects (1998).

.BTest Substance

The diets containing transgenic maize grain (TC1507), and the non-transgenic grains (near isogenic maize grain [33P66] and commercial hybrid maize grain [33J56]), were supplied by the sponsor. Purina Test Diet (Richmond, IN) formulated the maize at the targeted concentrations in rodent chow. Each test diet was assigned a unique Haskell laboratory number. Characterization (nutrient and contaminant content) of the maize grain and diets was performed by the sponsor or sponsor designated testing facilities identified under the TESTING FACILITY section.

.CTest Species

On 20-Jun-2002, 66 male and 66 female Crl:CD®(SD)IGS BR rats, with an assigned birth date of 20-May-2002, were received from Charles River Laboratories, Inc., Raleigh, North Carolina.

The rat was selected for this study because it is the recommended species specified in the guidelines. The Crl:CD®(SD)IGS BR strain was chosen because this species has been traditionally used to assess the safety and wholesomeness of food. Moreover, there is a historical database for the rat regarding the parameters that were measured.

.DAnimal Husbandry

.1 Animal Housing

All rats were housed in stainless steel, wire-mesh cages suspended above cage boards. Rats were housed individually, sexes separate.

.2 Cage Rack Positioning

Cage racks were relocated within the animal room and cages were repositioned on the racks every 2 weeks.

.3 Environmental Conditions

Animal rooms were maintained on a 12-hour light/dark cycle (fluorescent light) and at a temperature of 22 ± 3°C and a relative humidity of 50 ± 20%. Occasional excursions outside the accepted ranges were minor and did not affect the study.

.4 Feed and Water

All rats were provided tap water *ad libitum*. During the pretest period, all animals were fed PMI® Nutrition International, LLC Certified Rodent LabDiet® 5002 *ad libitum*. During the test period, animals were fed their respective diets as specified by the study design *ad libitum* (except when fasted).

.5 Identification

Each rat was assigned a unique 6-digit Haskell animal number and an individual cage identification number; both numbers were included on the cage label. The last 3 digits of the Haskell animal number was tattooed on the tail of each rat.

.6 Health Monitoring Program

As specified in the Haskell Laboratory animal health and environmental monitoring program, the following procedures are performed periodically to ensure that contaminant levels are below those that would be expected to impact the scientific integrity of the study:

- Water samples are analyzed for total bacterial counts, and the presence of coliforms, lead, and other contaminants.
- Feed samples are analyzed for total bacterial and fungal counts. These analyses were conducted by DuPont Environmental and Microbiological Sciences and Engineering (EMSE) Newark, Delaware for this study, rather than as part of the routine Haskell Laboratory animal health and environmental monitoring program. Samples were collected pretest and on approximately test day 90.
- Samples from freshly washed cages and cage racks are analyzed to ensure adequate sanitation by the cagewashers.

The animal health and environmental monitoring program is administered by the attending laboratory animal veterinarian designee. Evaluation of these data did not indicate any conditions that affected the validity of the study.

.EPretest Period

Upon arrival at Haskell Laboratory, the rats were quarantined for 6 days of the 19-day pretest period. The rats were observed daily for any clinically apparent signs of disease or injury, weighed 3 times, and given ophthalmology and neurobehavioral examinations.

On the bases of acceptable body weight gains and clinical signs, all rats were released from quarantine on test day -13 by the laboratory animal veterinarian.

.FStudy Design

Group		Number/Group			
Male	Female	Male	Female	Diet Concentrations[a]	Haskell Number
I	II	12	12	33% transgenic maize (33% TC1507)	25346
III	IV	12	12	33% near isogenic maize (33% 33P66)	25347
V	VI	12	12	33% commercial maize (33% 33J56)	25348
VII	VIII	12	12	11% transgenic maize (11% TC1507)[b]	25349
IX	X	12	12	11% near isogenic maize (11% 33P66)[b]	25350

a Weight of test maize/Total diet weight.
b These diets also contain 22% 33J56.

.GAssignment to Groups and Study Start

Rats were selected for study use on the bases of adequate body weight gain, freedom from any ophthalmological abnormalities or clinical signs of disease or injury, and a body weight within ± 20% of the mean within a sex. The selected rats were distributed by computerized, stratified randomization so that there were no statistically significant differences among group body weight means within a sex.

Administration of test diets began on test day 0 when the rats were approximately 50 days of age. On test day 0, prior to the administration of test diets, rats with body weights that were not within ± 20% of the mean within a sex were replaced when possible and discarded without gross or microscopic evaluations. Replacement rats were selected on the bases of freedom from any clinical signs of disease or injury and a body weight ± 20% of the mean within a sex.

.HTest Diet Composition and Administration

All animals were fed test diets that were modified from the PMI® Nutrition International, LLC Certified Rodent LabDiet® 5002 to incorporate transgenic or non-transgenic test maize grain at concentrations of 11% or 33% w/w. All diets contained a total of 33% maize grain. Diets formulated with 11% of transgenic or near isogenic maize (groups VII – X) also contained 22% commercial hybrid maize (33J56) for a final concentration of 33% maize. Diets formulated by Purina Test Diet (Richmond, IN) prior to study start were guaranteed to be stable for 6 months. Diets were stored refrigerated upon arrival until containers were opened for use on study. Once a container was opened, any remaining feed was stored at room temperature until used on study. Feed from an individual container was not available to rats more than 3 weeks after the container was open. Animals were fed the test diets for at least 90 days.

The sponsor provided documentation of formulation (batch records) of all test diets. The same lot of base ingredients was used to prepare all test diets. Diet preparation was not conducted under Good Laboratory Practices, however, an independent third-party audit of the diet preparation procedures was conducted at Purina Test Diet, Richmond, IN. Maize test and/or control substance identity, transgenic trait, nutrient (dry matter, proximate analytes, fiber/energy, amino acid, and minerals), anti-nutrient, secondary metabolite, mycotoxin and pesticide residue contents were determined by the Sponsor or Sponsor designated testing facilities prior to diet preparation. Diet nutrient content (vitamins and similar analyte categories as for test/control substances), transgenic trait, heavy metals, mycotoxin and pesticide residue contents were determined by the Sponsor or Sponsor designated testing facility prior to or shortly after the experimental start date for the study.

A sample of each diet was collected near the end of the study from feed jars to verify the presence or absence and, where applicable, stability of the transgenic trait. They were shipped to the Sponsor at room temperature for analysis.

.IBody Weights

All rats were weighed daily for the first week of the study then once each week for the remainder of the study. All rats were also weighed on the days of neurobehavioral evaluations.

.JFood Consumption and Food Efficiency

The amount of food consumed by each rat was determined by weighing each feeder at the beginning and end of the interval and subtracting the final weight and the amount of spillage from the feeder during the interval from the initial weight. Food consumption was determined daily during the first week of the study and weekly thereafter. From the food consumption and body weight data, the mean daily food efficiency was calculated.

.KDetailed Clinical Observations and Mortality

Cage-site examinations to detect moribund or dead rats and abnormal behavior and/or appearance among rats were conducted at least twice daily throughout the study.

Detailed clinical observations in a standardized arena were evaluated weekly for all rats except on test day 7 when clinical observations were inadvertently not recorded for a rat in Group II and a rat in Group IV. The detailed clinical observations included (but were not limited to) evaluation of fur, skin, eyes, mucous membranes, occurrence of secretions and excretions, autonomic nervous system activity (lacrimation, piloerection, and unusual respiratory pattern), changes in gait, posture, response to handling, presence of clonic, tonic, stereotypical, or bizarre behavior. Any abnormal clinical signs noted were recorded.

.LOphthalmological Evaluations

Ophthalmological examinations were conducted by a veterinary ophthalmologist. Both eyes were examined by focal illumination and indirect ophthalmoscopy. The examinations were conducted under subdued lighting after mydriasis had been produced with a 1% tropicamide solution.

On test day -6, the initial examination was performed on all rats received for the study, prior to selection and grouping. All surviving rats were examined on test day 87, prior to the scheduled sacrifice.

.MNeurobehavioral Evaluations

.1 Sensory Motor Function Evaluation

Prior to test substance administration and during week 13 of test diet administration, assessments of responses to approach/touch, sharp auditory stimulus, and tail pinch were made while the animal was in a standard arena. These assessments were conducted on the 12 animals per group.

Fore- and hindlimb grip strength were measured by a strain gauge device (Chatillon® Digital Force gauge). Pupillary constriction was measured immediately prior to removing the rats from the motor activity chambers (Section 2. below) because the darkened room in which the apparatus was located facilitated observing the response. The presence or absence of pupillary constriction was assessed after a beam of light was directed into each eye. For all these assessments, the experimenter was unaware of the group designation of the animal.

.2 Motor Activity Evaluation

Following the evaluation of grip strength and sensory function, assessment of motor activity (MA) was conducted. Rats were individually tested in 1 of 30 nominally identical, automated activity monitors (Coulbourn® Infrared Motor Activity System). Group and sex were counterbalanced across the monitors and time of day to the fullest extent possible. The infrared monitoring device enables measurement of 2 dependent variables: duration of movement and number of movements. A continuous movement was counted as 1 movement regardless of duration. Each test session was 60 minutes in duration, and the results were expressed for the total session as well as for 6 successive 10-minute blocks.

Presence of defecation and urination on the cageboards below the motor activity monitor were also recorded following each motor activity session.

.NClinical Pathology Evaluations

A clinical pathology evaluation was conducted on all rats approximately 13 weeks after initiation of the study. The day before collection of samples for the clinical pathology evaluation, the animals were placed in metabolism cages. These animals were fasted overnight (approximately

15-17 hours) and urine was collected from each animal. Blood samples for hematology and clinical chemistry measurements were collected from the orbital sinus of each animal while the animal was under light carbon dioxide anesthesia. Blood samples for coagulation parameters were collected at sacrifice from the abdominal *vena cava* of each animal while the animal was under carbon dioxide anesthesia. Additional blood collected from the *vena cava* was placed in a serum tube, processed to serum, and frozen at -80°C. This additional serum was discarded without analysis because further tests were not required to support experimental findings. Bone marrow smears were prepared at the final sacrifice from all surviving animals. Bone marrow smears were stained with Wright's stain, but analysis was not necessary to support experimental findings.

.1 Hematology and Coagulation

Blood samples were evaluated for quality by visual examination prior to analysis. Complete blood counts, including reticulocytes, were determined on a Bayer® Advia 120 hematology analyzer or determined from microscopic evaluation of the blood smear. Wright-stained blood smears from all animals were examined microscopically for confirmation of automated results and evaluation of cellular morphology. Blood smears, stained with new methylene blue, were prepared from each animal undergoing a hematology evaluation but were not needed for examination. Coagulation times were determined on a Sysmex® CA-1000 Coagulation Analyzer.

The following hematology and coagulation parameters were determined:

red blood cell count
hemoglobin
hematocrit
mean corpuscular volume
mean corpuscular hemoglobin
mean corpuscular hemoglobin concentration
red cell distribution width
absolute reticulocyte count
platelet count
white blood cell count
differential white blood cell count
microscopic blood smear examination

prothrombin time
activated partial thromboplastin time

.2 Clinical Chemistry

Serum clinical chemistry parameters were determined on a Roche Diagnostics (BMC)/Hitachi® 717 clinical chemistry analyzer.

The following clinical chemistry parameters were determined:

aspartate aminotransferase	glucose
alanine aminotransferase	total protein
sorbitol dehydrogenase	albumin
alkaline phosphatase	globulin
total bilirubin	calcium
urea nitrogen	inorganic phosphorus
creatinine	sodium
cholesterol	potassium
triglycerides	chloride

.3 Urinalysis

Urine volume and appearance (quality, color, and clarity) were measured and evaluated visually, respectively. Urine constituents were semi-quantitatively measured on a Bayer Clinitek® Atlas™ Automated Urine Chemistry analyzer. Urine protein was measured on a Roche Diagnostics (BMC)/Hitachi® 717 clinical chemistry analyzer. Urine osmolality was determined using an Advanced Osmometer 3900. Sediments from all urine specimens were evaluated microscopically.

The following urinalysis parameters were determined:

quality	ketone
color	bilirubin
clarity	blood
volume	urobilinogen
osmolality	
pH	protein
glucose	microscopic urine sediment examination

.OAnatomic Pathology Evaluations

After approximately 13 weeks on study all surviving rats were sacrificed and necropsied. Rats sacrificed by design were euthanatized by carbon dioxide anesthesia and exsanguination.

The following organs were weighed from rats sacrificed by design: liver, kidneys, heart, spleen, brain, adrenal glands, thymus, testes and epididymides (males), or ovaries and uterus (females). Paired organs were weighed together. Final body weights determined just prior to necropsy were used in the assessment of organ weight changes, and relative organ weights (percent of final body weight and ratio to brain weight) were calculated.

Representative sections of the following organs and tissues were saved at necropsy:

Digestive System	Cardiovascular System	Musculoskeletal System
liver	heart	skeletal muscle
esophagus	aorta	femur/knee joint
stomach		sternum
duodenum	Hematopoietic System	
jejunum	spleen	Reproductive System
ileum	thymus	Male
cecum	mandibular lymph node	testes
colon	mesenteric lymph node	epididymides
rectum	bone marrow[a]	prostate
salivary glands		seminal vesicles
pancreas	Endocrine System	Female
	pituitary gland	ovaries
Urinary System	thyroid gland	uterus
kidneys	parathyroid glands	mammary glands
urinary bladder	adrenal glands	vagina
Respiratory System	Nervous System	Miscellaneous
lungs	brain (including cerebrum,	skin
trachea	cerebellum, medulla/pons)	eyes (including retina and
nose	spinal cord (cervical,	optic nerve)
larynx	mid-thoracic, lumbar)	gross observations[b]
pharynx	sciatic nerve	

a Bone marrow was collected with the femur and sternum.

b Gross observations made at necropsy for which histopathology is not appropriate (e.g., fluid, ruffled fur, and missing anatomic parts) were generally not collected.

Testes, epididymides, and eyes were fixed in Bouin's solution. All other tissues from rats sacrificed by design were fixed in 10% neutral buffered formalin. Processed tissues were embedded in paraffin, cut at a nominal thickness of 5 micrometers, and stained with hematoxylin and eosin (H&E).

All collected tissues from all male and female animals from the 33% TC1507 and from the 33% 33P66 groups were processed and received a full histopathological examination. Tissues from other groups did not receive histopathological evaluation since no target tissues were identified when rats fed diets containing 33% TC1507 and 33% 33P66 were compared. The lesion grading system used in this study is described in the Individual Animal Gross and Microscopic Observations appendix.

.PStatistical Analyses

Groups I and II (H-25346; 33% TC1507) were compared to Groups III and IV (H-25347; 33% 33P66), respectively. If significant differences were observed, Groups I and II were also compared to Groups V and VI (H-25348; 33% 33J56), respectively. Except for Bartlett's test at $p < 0.005$, significance was judged at $p < 0.05$. Males and females were analyzed separately.

		Method of Statistical Analysis	
Parameter	Preliminary Test	If preliminary test is not significant	If preliminary test is significant
Body Weight Body Weight Gain Food Consumption Food Efficiency Organ Weight Clinical Pathology[a]	Levene's test for homogeneity() and Shapiro-Wilk test() for normality	One-way analysis of variance() followed by linear contrasts()	Dunn's Type 1 test for linear contrasts()
Grip Strength	Bartlett's test() or Levene's test for() for homogeneity of variances	One-way analysis of variance() followed with Dunnett's test()	Log transformation of the data followed by one-way analysis of variance() with Dunnett's test()
Motor Activity[b]	Levene's test for homogeneity() and Shapiro-Wilk test() for normality	Repeated measures analysis of variance() followed by contrasts()	Modified Dunn's Multiple Comparison()
Survival Incidence of Clinical Observations Incidence of Ophthalmological Observations Incidence of FOB Descriptive Parameters	None	Fisher's Exact test()	
Incidence of Microscopic Lesions	None	None	

a When an individual observation was recorded as being less than a certain value, calculations were performed on half the recorded value. For example, if bilirubin was reported as <0.1, 0.05 was used for any calculations performed with that bilirubin data.

b Test day and block (10-minute intervals) were used as repeated-measure factors

RESULTS AND DISCUSSION

Diet Analyses
(Appendices M-O)

Diets were analyzed for nutrient content, transgenic trait level and bioactivity, and contaminant levels (mycotoxins, pesticide residues, fungal and bacterial contaminants). All diets contained comparable levels of proximate analytes, fiber/energy, amino acids, minerals, and vitamins. All diets contained comparable levels of contaminants, and all contaminants were present at concentrations that did not exceed guidance/action levels established by the US FDA/USDA for animal diets. The transgenic protein, Cry1F, was detected in the diets containing TC1507, and was stable over the course of the study, based on both bioassay (ECB assay) and ELISA results. It was not detected in the diets containing only the near isogenic (33P66) or commercial (33J56) strains of maize.

In-Life Toxicology

.AMean Body Weights and Body Weight Gain
(Tables 1-4, Figures 1-2, Appendix A)

No biologically significant, diet-related differences in mean body weight or body weight gain were observed among any male groups or any female groups.

Mean body weight gain in male rats fed diets containing 33% 33P66 (H-25347) was less than that of male rats fed 33% TC1507 (H-25346) on most test days, but mean body weight gains were similar over individual test day intervals. All observed differences in mean body weight and body weight gain were small, were not statistically significant, and were not considered biologically significant. Final (test day 91) mean body weight and overall (test day 0-91) mean body weight gain in rats fed 33% 33P66 were 95% and 90%, respectively, compared to those of rats fed 33% TC1507. Neither difference was statistically significant.

Mean body weight and body weight gain in other male groups were similar to that of groups fed 33% TC1507 or 33P66. Mean final body weight in male rats fed 33% 33J56 (H-25348), 11% TC1507 (H-25349), and 11% 33P66 (H-25350) was 96%, 97%, and 98%, respectively, of rats fed 33% TC1507. Mean overall body weight gain in groups fed 33% 33J56, 11% TC1507, and 11% 33P66 was 93%, 93%, and 97%, respectively, compared to that of rats fed 33% TC1507. None of these differences was considered to be biologically significant.

Mean body weight in female rats fed diets containing 33% 33P66 was less than that of female rats fed 33% TC1507 on most test days, but mean body weight gains were similar over individual test day intervals. All observed differences in mean body weight and body weight gain were

small, were not statistically significant, and were not considered biologically significant. Final mean body weight and overall mean body weight gain in female rats fed 33% 33P66 were 98% and 96%, respectively, of rats fed 33% TC1507. Neither difference was statistically significant.

Mean body weight and body weight gain in other female groups were similar to that of groups fed 33% TC1507 or 33P66. Mean final body weight in female rats fed 33% 33J56, 11% TC1507, and 11% 33P66 was 98%, 99%, and 98%, respectively, of rats fed 33% TC1507. Mean overall body weight gain in groups fed 33% 33J56, 11% TC1507, and 11% 33P66 was 96%, 98%, and 98%, respectively, of rats fed 33% TC1507. None of these differences was considered to be biologically significant.

.BFood Consumption and Food Efficiency
(Tables 5-8, Appendix B)

No diet-related differences in mean food consumption were observed among any female groups and no diet-related differences in mean food efficiency were observed among any male or female groups.

Mean daily food consumption in male rats fed 33% 33P66 was less than that of rats fed 33% TC1507 over most individual intervals and overall (test days 0-91) mean food consumption in rats fed 33% 33P66 was 93% of rats fed 33% TC1507. These differences were statistically significant over all weekly intervals after test day 21 (except test days 63-70) and for overall mean food consumption. However, mean daily food consumption in the 33% 33J56 group was not statistically significantly different than in the 33% TC1507 group over all intervals, except one weekly interval (test day 56-63). Overall mean daily food consumption in the 33% 33J56 group was 97% of the 33% TC1507 group (not statistically significant). Mean daily food consumption in groups fed 11% TC1507 and 11% 33P66 was comparable to the 33% TC1507 group over the course of the study and overall mean food consumption in these groups was 100% and 99%, respectively, compared to that of the 33% TC1507 group.

Mean daily food consumption was similar in female rats fed 33% TC1507 and 33% 33P66 over individual intervals (none statistically significant), and overall mean food consumption in the 33% 33P66 rats was 98% of the 33% TC1507 rats (not statistically significant). Mean daily food consumption in groups fed 33% 33J56, 11% TC1507, and 11% 33P66 was comparable to the 33% TC1507 group over the course of the study and overall mean food consumption in groups fed 33% 33J56, 11% TC1507, and 11% 33P66 was 98%, 101%, and 101%, respectively, compared to that of the 33% TC1507 group.

Mean daily food efficiency was similar in male rats fed 33% TC1507 and 33% 33P66 over most individual intervals and overall mean food efficiency in rats fed 33% 33P66 was 97% of rats fed 33% TC1507 (no statistically significant differences). Compared to rats fed 33% TC1507, there was a statistically significant lower mean daily food efficiency in rats fed 33% 33P66 or 33% 33J56 over test day 3-4. Neither difference was considered biologically significant, as overall food efficiency was not significantly different among these groups. Mean daily food efficiency in groups fed 33% 33J56, 11% TC1507, and 11% 33P66 was comparable to the 33% TC1507

group over the course of the study and overall mean food efficiency in groups fed 33% 33J56, 11% TC1507, and 11% 33P66 was 97%, 94%, and 98%, respectively, compared to that of the 33% TC1507 group.

Mean daily food efficiency was similar in female rats fed 33% TC1507 and 33% 33P66 over most individual intervals and overall mean food efficiency in rats fed 33% 33P66 was 98% of rats fed 33% TC1507 (not statistically significant). Compared to rats fed 33% TC1507, mean daily food efficiency in rats fed 33% 33P66 was significantly higher over test day 1-2. This difference was not considered biologically significant, as overall food efficiency was not significant between these groups. Mean daily food efficiency in groups fed 33% 33J56, 11% TC1507, and 11% 33P66 was comparable to the 33% TC1507 group over the course of the study and overall mean food efficiency in groups fed 33% 33J56, 11% TC1507, and 11% 33P66 was 100%, 97%, and 97%, respectively, compared to that of the 33% TC1507 group.

.CClinical Observations and Survival
(Tables 9-10, 13-14, Appendix C)

All rats survived to scheduled sacrifice. No diet-related clinical signs of toxicity were observed in any male or female group. All clinical observations were those typically observed as incidental findings in a subchronic toxicity study.

.DOphthalmological Evaluation
(Tables 11-12, Appendix D)

No ophthalmological lesions were observed in any rat in any male or female group.

.EIn-Life Toxicology Conclusions

Under the conditions of this study, exposure to test diets produced no biologically significant differences in mean body weight, body weight gain, food efficiency, clinical, or ophthalmological observations in male or female rats. No biological significant effects on food consumption were observed in any female group. Male rats fed 33% TC1507 had small but statistically significantly higher food consumption than male rats fed 33% 33P66 diet over most of the study; however, this higher food consumption did not result in a biologically or statistically significant difference in body weight gain or food efficiency. The difference in food consumption may represent slightly increased palatability of the 33% TC1507 diet.

Neurobehavioral Evaluations

.AForelimb Grip Strength
(Table 15-16, Figures 3-4, Appendix E)

There were no test substance-related effects on forelimb grip strength in males or females administered any type of diet. During the week 13 evaluation, females in the 33% 33P66 group had significantly increased forelimb grip strength compared to females in the 33% TC1507 group. However, there was no other evidence of neurological effects on any parameter or any clinical signs of neurotoxicity observed. In addition, the mean grip strength value for the females in the group administered 33% 33P66 was within the historical control range (0.63-1.27 kg) for females of this age. Therefore, the statistically increased grip strength value was not considered to be related to the administration of the test diet containing 33% 33P66. Mean values for all other groups were similar to the values for the 33% TC1507 groups in males and females.

.BHindlimb Grip Strength
(Table 15-16, Figures 5-6, Appendix E)

There were no statistically and/or toxicologically significant effects related to administration of the test diets in hindlimb grip strength for either males or females administered any type of diet. Mean values for all groups were similar to the values for the 33% TC1507 groups in males and females.

.CSensory Motor Function Observations
(Tables 17-18, Appendix F)

There were no statistically and/or toxicologically significant effects related to administration of the test diets in any sensory motor function parameter for either males or females administered any type of diet. The incidences for all groups were similar to the values for the 33% TC1507 groups in males and females.

.DMotor Activity
(Tables 19-22, Figures 7-10, Appendix G-H)

There were no effects related to administration of the test diets on duration of movement or number of movements for males or females. During the 13-week evaluation, males administered diet containing 33% 33P66 had significantly lower mean duration of movement during the 5th and 6th 10-minute intervals, and for total mean duration of movement over the 60-minute observation period compared to the males fed diet containing 33% TC1507. The significantly lower duration of movement for the 5th and 6th 10-minute intervals, and total duration of movement, appears to be due to 3 animals that demonstrated the expected acclimation more

rapidly compared to the remainder of the rats administered 33% 33P66 diet or compared to the rats in the other groups. This acclimation pattern was also evident in the same animals during the baseline evaluation. In addition, there were no differences in forelimb or hindlimb grip strength, or in any other neurobehavioral parameter for rats administered 33% 33P66, compared to rats administered 33% TC1507. Since the lower duration of movement was evident in these 3 rats during the baseline evaluation, and since there was no effect on the number of movements or any other neurobehavioral parameter, the statistically significant differences in duration of movement between males fed 33% 33P66 and 33% TC1507 diets were not considered to be test diet related.

There were no statistically and/or toxicologically significant differences for duration of movements or number of movements in females administered any type of diet.

.ENeurobehavioral Conclusions

Under the conditions of the study, none of the test diets had any effect on neurobehavioral parameters in either males or females.

Clinical Pathology Evaluations

.AHematology
(Tables 23-24, Appendix I)

There were no diet-related adverse effects on hematologic parameters.

The following statistically significant changes were considered to be non-adverse or not related to diet:

- Mean red cell count and hemoglobin concentration of females fed 33% TC1507 were minimally decreased to 97% of the mean values of females fed 33% 33P66. However, hemoglobin, the most biologically relevant indicator of red cell mass and function, was not statistically changed. Treatment-related changes in red cell mass generally are accompanied by perturbations of more sensitive red cell parameters; however, in this study, other correlative red cell parameters were unchanged, suggesting that these minimal changes were unrelated to treatment. In addition, there was no difference in red cell counts and hematocrits between rats fed 33% TC1507 and those fed 33% 33J56, or 11% of either TC1507 or 33P66. Therefore, these minimal changes were likely to be unrelated to treatment.

- Eosinophil counts were minimally decreased in females fed 33% TC1507 compared to females fed 33% 33P66 or 33% 33J56. This change was due to the lack of outliers in the 33% TC1507 group. Lack of increased eosinophils was likely to be unrelated to diet. Regardless, minimally decreased eosinophils are considered to be non-adverse because there are no adverse effects associated with this change.

.BCoagulation
(Tables 25-26, Appendix I)

There were no diet-related effects on coagulation parameters.

.CClinical Chemistry
(Tables 27-28, Appendix I)

There were no adverse effects of diet on clinical chemistry parameters. The following statistically significant change was considered to be non-adverse or not related to diet:

- Mean alkaline phosphatase activity in males fed 33% TC1507 was minimally decreased to 81% of the mean activity of males fed 33% 33P66. However, mean activities of males fed 33% 33J56 or 11% 33P66 were similar to that of males fed 33% TC1507. In addition, historical mean alkaline phosphatase activities of age-matched male control group rats on dietary studies at Haskell ranged from 66-109 U/L. The mean alkaline phosphatase activity for rats fed 33% TC1507 (91U/L) was well within this range, while the mean activity of rats fed 33% 33P66 was outside the upper limit of the range (112 U/L). Based on the distribution of the data and the historical range of means, this change was likely to be unrelated to diet. Regardless, minimal decreases in alkaline phosphatase activity have no adverse consequences and are therefore considered to be non-adverse.

.DUrinalysis
(Tables 29-30, Appendix I)

There were no diet-related effects on urinalysis parameters.

.EClinical Pathology Conclusions

In conclusion, there were no diet-related adverse effects for hematology, coagulation, clinical chemistry, or urinalysis parameters in male or female rats fed diets differing in maize content.

Anatomic Pathology Evaluations

.ACause of Death
(Appendix K)

There were no test substance-related deaths in the study.

.BOrgan Weight Data
(Tables 31-32, Appendix J)

There were no test substance-related and/or statistically significant organ weight changes in female rats.

The mean relative to body weights of the kidneys from male rats in the 33% 33P66 and in the 33% 33J56 groups were statistically significantly higher than in the 33% TC1507 group. These weight differences were attributed to the higher mean final body weight of the 33% TC1507 group. The differences were not considered toxicologically significant as they were of small magnitude (9-10%) and were not associated with statistically significant differences in absolute or relative (to brain) kidney weights nor with any kidney histopathology. There were no other toxicologically and/or statistically significant organ weight changes in any group.

.CGross Observations
(Tables 33-34, Appendix K)

There were no test substance-related gross observations.

.DMicroscopic Observations
(Tables 35-38, Appendix K-L)

All microscopic observations noted are known to occur spontaneously in rats of this strain and age and were not present in a dose response fashion in either incidence or severity. Thus, there were no test substance-related microscopic effects in any of the tissues examined.

.EAnatomic Pathology Conclusions

There were no biologically significant or adverse pathological differences in the parameters evaluated for any of the diets in this study. Thus, there were no adverse pathology effects for the 33% dietary concentration of TC1507.

CONCLUSIONS

Under the conditions of this study, exposure of male and female rats to diets containing a transgenic strain of maize (TC1507) produced no toxicologically significant differences, compared to rats fed diets containing a non-transgenic, near isogenic strain of maize (33P66) or a non-transgenic commercial strain of maize (33J56). Male rats fed diet containing 33% TC1507 had slightly greater food consumption compared to rats fed diet containing 33% 33P66, but this was not considered toxicologically significant as it was not associated with significant differences in body weight gain or food efficiency.

RECORDS AND SAMPLE STORAGE

Laboratory-specific or site-specific raw data, such as personnel files and equipment records will be retained by the facility where the work was done.

Test substance and diet characterization, diet formulation and transgenic trait ELISA and bioassay data will be archived by the Sponsor or Sponsor designee. A sample of each diet was collected for archive purposes and retained at Haskell Laboratory. Specimens (if applicable), other raw data, and the final report will be retained at Haskell Laboratory, Newark, Delaware, or at Iron Mountain Records Management, Wilmington, Delaware. Copies of the reports for the analyses for nutrient composition and contaminant levels, transgenic trait ELISA and bioassay, a copy of the diet preparation records and a copy of the records for microbial contamination will also be retained at Haskell Laboratory, Newark, Delaware, or at Iron Mountain Records Management, Wilmington, Delaware.

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TABLES

TABLES

EXPLANATORY NOTES

Study Design

Group		Number/Group			
Male	Female	Male	Female	Diet Concentrations[a]	Haskell Number
I	II	12	12	33% transgenic maize (33% TC1507)	25346
III	IV	12	12	33% near isogenic maize (33% 33P66)	25347
V	VI	12	12	33% commercial maize (33% 33J56)	25348
VII	VIII	12	12	11% transgenic maize (11% TC1507)[b]	25349
IX	X	12	12	11% near isogenic maize (11% 33P66)[b]	25350

a Weight of test maize/Total diet weight.
b These diets also contain 22% 33J56.

Groups I and II (high dose transgenic maize) were compared to Groups III and IV (high dose near isogenic maize), respectively. If significant differences were observed, Groups I and II were also compared to Groups V and VI (commercial maize), respectively. Groups VII through X were not compared statistically to their respective control group.

ABBREVIATIONS:

Summary of Hematology Values

RBC - red blood cell count
HGB - hemoglobin
HCT - hematocrit
MCV - mean corpuscular volume
MCH - mean corpuscular hemoglobin
MCHC - mean corpuscular hemoglobin concentration
RDW - red cell distribution width
ARET - absolute reticulocyte count
PLT - platelet count
WBC - white blood cell count
ANEU - absolute neutrophil (all forms)
ALYM - absolute lymphocyte
AMON - absolute monocyte
AEOS - absolute eosinophil
ABAS - absolute basophil
ALUC - absolute large unstained cell

Summary of Coagulation Values

PT - prothrombin time

APTT - activated partial thromboplastin time

TABLES

EXPLANATORY NOTES

ABBREVIATIONS: (Continued)

Summary of Clinical Chemistry Values

AST	-	aspartate aminotransferase
ALT	-	alanine aminotransferase
SDH	-	sorbitol dehydrogenase
ALKP	-	alkaline phosphatase
BILI	-	total bilirubin
BUN	-	urea nitrogen
CREA	-	creatinine
CHOL	-	cholesterol
TRIG	-	triglycerides
GLUC	-	glucose
TP	-	total protein
ALB	-	albumin
GLOB	-	globulin
CALC	-	calcium
IPHS	-	inorganic phosphorous
NA	-	sodium
K	-	potassium
CL	-	chloride

Summary of Urinalysis Values

VOL	-	volume
UOSM	-	urine osmolality
pH	-	the logarithm of the reciprocal of the hydrogen ion concentration
URO	-	urobilinogen
UMTP	-	urine protein

NOTES:

Summary of Hematology Values
Summary of Coagulation Values
Summary of Clinical Chemistry Values
Summary of Urinalysis Values
When an individual observation was recorded as being less than a certain value, calculations were performed on half the recorded value. For example, if bilirubin was reported as <0.1, 0.05 was used for any calculations performed with that bilirubin data.

TABLE 1

MEAN BODY WEIGHTS OF MALE RATS

GROUP:	I	III	V	VII	IX
HASKELL NUMBER:	H-25346	H-25347	H-25348	H-25349	H-25350
DAY0	253.7 15.6(12)	254.9 13.0(12)	252.6 12.5(12)	257.8 11.8(12)	252.1 18.4(12)
DAY1	255.6 16.4(12)	256.7 12.9(12)	255.6 15.2(12)	259.4 11.7(12)	253.0 18.1(12)
DAY2	264.6 18.2(12)	265.5 14.2(12)	263.7 14.7(12)	267.7 11.8(12)	261.6 18.5(12)
DAY3	270.8 17.3(12)	271.7 14.3(12)	270.3 14.9(12)	274.5 12.4(12)	269.2 18.4(12)
DAY4	278.0 17.6(12)	277.3 14.1(12)	274.8 14.0(12)	277.6 11.7(12)	274.3 18.2(12)
DAY5	280.9 18.8(12)	280.9 13.3(12)	279.3 13.6(12)	283.4 11.3(12)	278.6 18.4(12)
DAY6	291.6 19.4(12)	291.0 15.6(12)	287.8 14.4(12)	291.7 11.3(12)	288.1 18.9(12)
DAY7	295.1 20.6(12)	293.5 15.8(12)	291.3 14.9(12)	294.5 9.4(12)	290.5 18.2(12)
DAY14	339.6 24.8(12)	334.7 18.4(12)	334.3 16.7(12)	337.8 12.3(12)	334.7 20.6(12)
DAY21	374.6 27.5(12)	367.2 21.9(12)	366.2 18.5(12)	369.8 15.0(12)	371.1 22.5(12)
DAY28	405.0 28.7(12)	394.5 23.6(12)	393.1 20.9(12)	397.3 16.5(12)	400.4 25.1(12)
DAY35	430.5 34.7(12)	415.0 27.5(12)	415.9 22.6(12)	421.4 23.2(12)	424.3 26.8(12)

1 (CONTINUED)

MEAN BODY WEIGHTS OF MALE RATS

GROUP:	I	III	V	VII	IX
HASKELL NUMBER:	H-25346	H-25347	H-25348	H-25349	H-25350
DAY42	447.9 36.5(12)	431.6 28.9(12)	435.4 22.9(12)	437.6 23.1(12)	443.2 28.0(12)
DAY49	466.7 39.3(12)	447.4 32.7(12)	451.0 21.8(12)	455.2 25.1(12)	459.4 31.4(12)
DAY56	481.2 44.7(12)	460.0 33.1(12)	466.3 22.3(12)	473.7 27.5(12)	474.6 33.7(12)
DAY63	497.2 46.6(12)	476.1 34.8(12)	481.4 22.4(12)	486.0 28.7(12)	490.5 32.9(12)
DAY70	505.4 50.7(12)	481.2 34.8(12)	489.6 23.5(12)	498.3 29.6(12)	500.8 38.2(12)
DAY77	519.9 54.1(12)	495.8 36.4(12)	500.8 27.5(12)	509.9 33.5(12)	513.5 38.6(12)
DAY84	536.4 56.7(12)	509.0 36.7(12)	514.3 27.8(12)	521.9 32.2(12)	527.8 39.4(12)
DAY91	543.0 58.2(12)	515.7 40.6(12)	521.4 28.3(12)	526.7 34.0(12)	531.5 42.0(12)

Data summarized as: Mean
Standard Deviation (n)

There were no statistically significant differences at $p < 0.05$ between Group I and III.

TABLE 2

MEAN BODY WEIGHTS OF FEMALE RATS

GROUP:	II	IV	VI	VIII	X
HASKELL NUMBER:	H-25346	H-25347	H-25348	H-25349	H-25350
DAY0	190.4 14.8(12)	187.6 7.8(12)	189.1 11.4(12)	188.8 16.4(12)	186.1 11.3(12)
DAY1	192.6 13.7(12)	186.9 11.1(12)	189.1 12.7(12)	189.3 13.6(12)	186.9 10.9(12)
DAY2	191.1 12.8(12)	190.2 7.6(12)	191.5 12.4(12)	193.6 14.4(12)	188.8 12.4(12)
DAY3	198.6 13.2(12)	194.3 10.9(12)	194.7 12.0(12)	198.2 16.3(12)	194.3 13.2(12)
DAY4	198.7 11.8(12)	193.7 9.7(12)	199.1 10.3(12)	201.6 16.7(12)	198.7 12.8(12)
DAY5	203.5 15.5(12)	197.7 14.8(12)	201.0 10.9(12)	200.9 15.3(12)	198.0 12.5(12)
DAY6	207.2 15.9(12)	201.3 10.8(12)	202.1 14.7(12)	204.2 13.9(12)	200.9 13.6(12)
DAY7	208.4 15.2(12)	204.0 10.9(12)	205.3 13.1(12)	206.1 15.9(12)	203.3 13.3(12)
DAY14	229.9 17.0(12)	221.7 15.3(12)	225.6 15.5(12)	225.0 20.8(12)	220.9 17.4(12)
DAY21	249.2 19.6(12)	238.8 20.4(12)	246.0 17.4(12)	242.0 21.1(12)	239.8 17.1(12)
DAY28	260.1 19.3(12)	248.6 21.1(12)	254.2 15.8(12)	255.2 27.6(12)	253.8 21.6(12)
DAY35	272.6 24.3(12)	263.6 23.9(12)	263.9 16.6(12)	263.8 27.4(12)	259.3 24.1(12)

2 (CONTINUED)

MEAN BODY WEIGHTS OF FEMALE RATS (g)

GROUP:	II	IV	VI	VIII	X
HASKELL NUMBER:	H-25346	H-25347	H-25348	H-25349	H-25350
DAY42	279.8 23.9(12)	266.1 23.5(12)	271.1 17.2(12)	273.1 29.2(12)	265.2 26.6(12)
DAY49	285.5 27.5(12)	275.0 28.4(12)	277.4 15.7(12)	281.0 29.3(12)	272.7 27.0(12)
DAY56	290.5 25.9(12)	282.9 23.5(12)	283.3 16.6(12)	286.4 29.6(12)	283.0 30.0(12)
DAY63	298.5 31.1(12)	289.6 26.0(12)	291.4 19.7(12)	294.7 35.1(12)	286.2 28.7(12)
DAY70	300.1 29.5(12)	291.2 24.5(12)	295.0 18.7(12)	296.3 31.2(12)	290.2 31.7(12)
DAY77	304.1 31.5(12)	294.8 28.0(12)	300.4 18.7(12)	301.1 34.2(12)	297.3 32.1(12)
DAY84	311.0 32.4(12)	297.9 26.9(12)	305.9 21.9(12)	308.0 30.5(12)	306.5 36.0(12)
DAY91	310.4 30.3(12)	302.8 25.3(12)	304.8 20.3(12)	306.2 35.0(12)	303.9 34.3(12)

Data summarized as: Mean
Standard Deviation (n)

There were no statistically significant differences at $p < 0.05$ between Group II and IV.

TABLE 3

MEAN BODY WEIGHT GAINS OF MALE RATS (g)

GROUP:		I	III	V	VII	IX
HASKELL NUMBER:		H-25346	H-25347	H-25348	H-25349	H-25350
DAY0	-DAY1	1.8 5.8(12)	1.8 1.9(12)	3.0 5.4(12)	1.6 2.2(12)	0.9 3.6(12)
DAY1	-DAY2	9.0 4.1(12)	8.8 2.6(12)	8.1 2.8(12)	8.3 2.4(12)	8.6 2.2(12)
DAY2	-DAY3	6.2 1.9(12)	6.2 2.8(12)	6.6 1.7(12)	6.8 1.9(12)	7.6 2.5(12)
DAY3	-DAY4	7.2 1.8(12)	5.6 2.7(12)	4.5 2.3(12)	3.2 1.6(12)	5.1 1.9(12)
DAY4	-DAY5	2.9 2.1(12)	3.7 3.2(12)	4.5 2.8(12)	5.8 1.8(12)	4.3 2.6(12)
DAY5	-DAY6	10.7 2.6(12)	10.1 3.4(12)	8.5 3.0(12)	8.3 1.8(12)	9.6 2.3(12)
DAY6	-DAY7	3.5 3.7(12)	2.4 2.9(12)	3.5 2.4(12)	2.8 3.7(12)	2.3 3.7(12)
DAY7	-DAY14	44.5 5.2(12)	41.2 5.0(12)	43.0 4.6(12)	43.3 5.4(12)	44.2 5.0(12)
DAY14	-DAY21	35.0 4.0(12)	32.5 6.4(12)	31.8 3.6(12)	32.0 6.1(12)	36.4 6.9(12)
DAY21	-DAY28	30.4 4.0(12)	27.3 4.4(12)	26.9 3.3(12)	27.5 7.1(12)	29.3 5.2(12)
DAY28	-DAY35	25.5 7.9(12)	20.5 5.8(12)	22.8 3.9(12)	24.1 8.4(12)	23.9 3.3(12)
DAY35	-DAY42	17.5 6.6(12)	16.6 5.4(12)	19.5 3.0(12)	16.2 6.8(12)	18.8 4.9(12)

3 (CONTINUED)

MEAN BODY WEIGHT GAINS OF MALE RATS (g)

GROUP:		I	III	V	VII	IX
HASKELL NUMBER:		H-25346	H-25347	H-25348	H-25349	H-25350
DAY42	-DAY49	18.7 5.2(12)	15.7 5.6(12)	15.6 2.6(12)	17.6 7.0(12)	16.3 7.0(12)
DAY49	-DAY56	14.6 7.8(12)	12.6 3.0(12)	15.3 5.7(12)	18.5 5.4(12)	15.2 5.9(12)
DAY56	-DAY63	15.9 6.6(12)	16.2 3.8(12)	15.1 5.1(12)	12.4 5.1(12)	15.9 4.7(12)
DAY63	-DAY70	8.2 6.1(12)	5.0 2.8(12)	8.2 6.3(12)	12.2 3.0(12)	10.2 6.5(12)
DAY70	-DAY77	14.5 6.2(12)	14.7 4.7(12)	11.2 4.8(12)	11.6 6.2(12)	12.7 2.9(12)
DAY77	-DAY84	16.5 5.8(12)	13.2 6.2(12)	13.5 4.9(12)	12.0 5.2(12)	14.3 4.2(12)
DAY84	-DAY91	6.6 6.1(12)	6.7 5.7(12)	7.0 4.4(12)	4.8 5.6(12)	3.7 7.4(12)
DAY0	-DAY91	289.2 49.4(12)	260.8 31.9(12)	268.8 23.6(12)	268.9 33.8(12)	279.4 31.8(12)

Data summarized as: Mean
Standard Deviation (n)

There were no statistically significant differences at $p < 0.05$ between Group I and III.

TABLE 4

MEAN BODY WEIGHT GAINS OF FEMALE RATS (g)

GROUP:		II	IV	VI	VIII	X
HASKELL NUMBER:		H-25346	H-25347	H-25348	H-25349	H-25350
DAY0	-DAY1	2.2	-0.7	0.0	0.4	0.8
		4.4(12)	8.4(12)	4.4(12)	4.2(12)	6.6(12)
DAY1	-DAY2	-1.5	3.3	2.4	4.3	1.9
		6.0(12)	6.7(12)	6.4(12)	5.6(12)	5.1(12)
DAY2	-DAY3	7.5	4.1	3.2	4.6	5.5
		6.6(12)	6.9(12)	6.7(12)	6.1(12)	7.1(12)
DAY3	-DAY4	0.1	-0.6	4.4	3.4	4.5
		6.1(12)	5.9(12)	5.9(12)	6.8(12)	4.4(12)
DAY4	-DAY5	4.8	4.0	1.9	-0.6	-0.7
		5.9(12)	9.7(12)	4.8(12)	4.0(12)	2.3(12)
DAY5	-DAY6	3.7	3.6	1.1	3.2	2.9
		6.0(12)	7.8(12)	6.2(12)	6.6(12)	7.3(12)
DAY6	-DAY7	1.2	2.7	3.2	2.0	2.3
		5.7(12)	5.7(12)	7.6(12)	5.6(12)	7.2(12)
DAY7	-DAY14	21.5	17.7	20.3	18.8	17.6
		6.6(12)	8.8(12)	4.7(12)	7.8(12)	9.6(12)
DAY14	-DAY21	19.3	17.2	20.4	17.1	18.9
		9.6(12)	12.1(12)	6.9(12)	9.5(12)	9.1(12)
DAY21	-DAY28	10.9	9.8	8.2	13.1	14.0
		8.4(12)	9.4(12)	8.9(12)	10.3(12)	7.1(12)
DAY28	-DAY35	12.6	15.0	9.7	8.6	5.5
		11.7(12)	5.4(12)	5.4(12)	8.5(12)	6.7(12)
DAY35	-DAY42	7.2	2.5	7.1	9.3	5.9
		6.0(12)	6.2(12)	7.0(12)	8.6(12)	9.1(12)

4 (CONTINUED)

MEAN BODY WEIGHT GAINS OF FEMALE RATS (g)

GROUP:		II	IV	VI	VIII	X
HASKELL NUMBER:		H-25346	H-25347	H-25348	H-25349	H-25350
DAY42	-DAY49	5.7	8.9	6.4	7.9	7.5
		10.7(12)	8.9(12)	6.7(12)	5.1(12)	7.0(12)
DAY49	-DAY56	5.0	7.9	5.9	5.4	10.3
		8.6(12)	9.8(12)	7.3(12)	4.9(12)	6.8(12)
DAY56	-DAY63	8.1	6.7	8.1	8.3	3.1
		8.7(12)	6.5(12)	7.3(12)	7.5(12)	5.2(12)
DAY63	-DAY70	1.5	1.5	3.6	1.6	4.0
		9.5(12)	7.1(12)	8.4(12)	8.5(12)	6.7(12)
DAY70	-DAY77	4.0	3.6	5.4	4.7	7.1
		9.9(12)	6.9(12)	10.2(12)	7.6(12)	6.0(12)
DAY77	-DAY84	6.9	3.1	5.5	6.9	9.2
		9.9(12)	8.8(12)	9.0(12)	6.7(12)	8.4(12)
DAY84	-DAY91	-0.6	4.9	-1.1	-1.8	-2.6
		7.8(12)	8.3(12)	9.7(12)	8.3(12)	11.4(12)
DAY0	-DAY91	120.0	115.2	115.7	117.4	117.8
		20.1(12)	22.6(12)	18.8(12)	23.4(12)	27.7(12)

Data summarized as: Mean
Standard Deviation (n)

There were no statistically significant differences at $p < 0.05$ between Group II and IV.

TABLE 5

MEAN DAILY FOOD CONSUMPTION BY MALE RATS (g)

GROUP:		I	III	V	VII	IX
HASKELL NUMBER:		H-25346	H-25347	H-25348	H-25349	H-25350
DAY0	-DAY1	21.3 3.1(12)	22.8 2.5(12)	23.2 3.6(12)	23.4 2.3(12)	22.5 3.0(12)
DAY1	-DAY2	23.9 2.9(12)	23.7 1.9(12)	24.7 1.6(12)	23.8 1.3(12)	24.2 2.0(12)
DAY2	-DAY3	23.5 1.9(12)	23.6 2.1(12)	24.2 1.7(12)	24.9 1.5(12)	24.5 2.1(12)
DAY3	-DAY4	25.3 1.7(12)	25.5 2.7(12)	25.1 1.9(12)	25.1 1.5(12)	25.0 2.2(12)
DAY4	-DAY5	24.7 2.2(12)	23.7 1.8(12)	23.6 1.7(12)	24.4 1.2(12)	24.4 1.5(12)
DAY5	-DAY6	26.1 2.7(12)	25.6 2.8(12)	26.6 1.8(12)	26.3 2.0(12)	26.2 2.7(12)
DAY6	-DAY7	23.1 2.6(12)	21.7 1.4(12)	22.0 2.0(12)	23.3 1.3(12)	23.3 2.2(12)
DAY7	-DAY14	26.3 2.0(12)	25.6 1.4(12)	26.3 1.5(12)	27.1 1.5(12)	26.8 1.8(12)
DAY14	-DAY21	27.1 2.2(12)	26.0 3.0(12)	26.2 2.1(12)	28.6 2.0(12)	27.5 2.1(12)
DAY21	-DAY28	27.6 2.2(12)	25.9 * 1.9(12)	26.7 1.5(12)	27.7 1.7(12)	27.7 1.9(12)
DAY28	-DAY35	28.0 2.9(12)	25.7 * 2.1(12)	27.3 1.8(12)	27.7 1.9(12)	27.8 1.8(12)
DAY35	-DAY42	28.1 2.6(12)	25.9 * 1.8(12)	27.7 1.3(12)	28.1 1.8(12)	27.9 1.8(12)

5 (CONTINUED)

MEAN DAILY FOOD CONSUMPTION BY MALE RATS (g)

GROUP:		I	III	V	VII	IX
HASKELL NUMBER:		H-25346	H-25347	H-25348	H-25349	H-25350
DAY42	-DAY49	27.6 3.1(12)	25.6 * 1.9(12)	26.8 1.4(12)	27.6 2.3(12)	27.2 2.1(12)
DAY49	-DAY56	28.1 3.5(12)	26.0 * 1.7(12)	27.5 1.7(12)	28.4 2.0(12)	28.5 2.3(12)
DAY56	-DAY63	28.5 3.1(12)	26.2 * 2.1(12)	27.0 * 1.5(12)	27.3 1.5(12)	27.6 1.9(12)
DAY63	-DAY70	28.1 3.1(12)	26.5 2.0(12)	27.3 1.4(12)	28.6 1.9(12)	28.4 1.9(12)
DAY70	-DAY77	28.1 3.4(12)	25.7 * 2.3(12)	26.5 1.3(12)	27.6 2.2(12)	27.5 2.3(12)
DAY77	-DAY84	29.2 3.6(12)	26.0 * 2.2(12)	26.8 1.6(12)	27.8 1.8(12)	27.4 2.2(12)
DAY84	-DAY91	26.9 2.8(12)	24.6 * 2.2(12)	25.9 1.5(12)	25.8 1.9(12)	26.0 2.1(12)
DAY0	-DAY91	27.5 2.6(12)	25.7 * 1.7(12)	26.6 1.3(12)	27.5 1.5(12)	27.3 1.7(12)

Data summarized as: Mean
Standard Deviation (n)

* Statistically significant difference from Group I at $p < 0.05$ using one-way ANOVA and linear contrasts.

TABLE 6

MEAN DAILY FOOD CONSUMPTION BY FEMALE RATS (g)

	GROUP:	II	IV	VI	VIII	X
HASKELL	NUMBER:	H-25346	H-25347	H-25348	H-25349	H-25350
DAY0	-DAY1	17.9 2.5(12)	16.8 3.6(12)	17.1 2.8(12)	17.6 2.0(12)	18.2 3.5(12)
DAY1	-DAY2	16.0 2.6(12)	17.6 2.5(12)	18.2 3.0(12)	19.0 2.3(12)	17.3 3.0(12)
DAY2	-DAY3	18.6 2.5(12)	19.1 2.4(12)	18.2 3.3(12)	19.4 3.5(12)	19.0 3.6(12)
DAY3	-DAY4	18.1 2.7(12)	17.1 3.6(12)	19.6 2.3(12)	20.3 2.6(12)	21.9 3.0(12)
DAY4	-DAY5	20.5 3.3(12)	18.1 4.2(12)	17.7 2.3(12)	17.7 2.2(12)	18.2 2.4(12)
DAY5	-DAY6	17.8 3.3(12)	18.7 2.9(12)	17.6 3.3(12)	17.9 2.4(12)	18.7 3.8(12)
DAY6	-DAY7	17.3 2.5(12)	17.8 2.3(12)	16.8 3.0(12)	17.5 2.7(12)	18.1 3.7(12)
DAY7	-DAY14	19.6 1.1(12)	19.2 2.5(12)	19.0 1.2(12)	19.7 1.8(12)	19.9 1.9(12)
DAY14	-DAY21	20.5 2.1(12)	20.0 2.0(12)	20.0 1.9(12)	21.2 2.1(12)	20.5 1.4(12)
DAY21	-DAY28	20.1 1.7(12)	20.4 2.4(12)	19.2 1.6(12)	20.8 2.2(12)	20.6 2.5(12)
DAY28	-DAY35	21.3 2.5(12)	20.6 2.7(12)	20.7 1.4(12)	20.9 2.1(12)	20.8 2.1(12)
DAY35	-DAY42	20.8 2.3(12)	19.7 2.8(12)	20.3 1.8(12)	21.2 1.6(12)	20.0 2.1(12)

6 (CONTINUED)

MEAN DAILY FOOD CONSUMPTION BY FEMALE RATS (g)

GROUP:		II	IV	VI	VIII	X
HASKELL NUMBER:		H-25346	H-25347	H-25348	H-25349	H-25350
DAY42	-DAY49	20.2 2.2(12)	19.7 2.2(12)	19.8 1.9(12)	20.6 2.0(12)	20.7 1.2(12)
DAY49	-DAY56	20.6 2.4(12)	20.8 1.8(12)	20.0 2.2(12)	21.0 1.3(12)	21.4 2.3(12)
DAY56	-DAY63	20.9 2.5(12)	20.0 2.2(12)	19.9 2.5(12)	20.7 2.2(12)	20.6 2.1(12)
DAY63	-DAY70	20.9 3.0(12)	20.7 2.5(12)	21.8 3.5(12)	22.3 2.0(12)	22.5 3.2(12)
DAY70	-DAY77	20.5 3.1(12)	20.3 2.0(12)	20.0 1.9(12)	21.6 1.7(12)	21.7 2.2(12)
DAY77	-DAY84	21.6 3.2(12)	20.3 2.3(12)	21.2 2.6(12)	21.4 1.7(12)	22.6 3.1(12)
DAY84	-DAY91	19.8 3.0(12)	18.9 2.3(12)	19.0 1.7(12)	19.7 2.1(12)	18.6 2.8(12)
DAY0	-DAY91	20.4 2.0(12)	19.9 1.9(12)	19.9 1.3(12)	20.7 1.4(12)	20.7 1.6(12)

Data summarized as: Mean
Standard Deviation (n)

There were no statistically significant differences at $p < 0.05$ between Group II and IV.

TABLE 7

MEAN DAILY FOOD EFFICIENCY OF MALE RATS
(g body weight gain/g food consumed)

GROUP:		I	III	V	VII	IX
HASKELL NUMBER:		H-25346	H-25347	H-25348	H-25349	H-25350
DAY0	-DAY1	0.046 0.335(12)	0.076 0.082(12)	0.110 0.222(12)	0.067 0.096(12)	0.041 0.157(12)
DAY1	-DAY2	0.370 0.144(12)	0.368 0.103(12)	0.327 0.104(12)	0.345 0.091(12)	0.354 0.081(12)
DAY2	-DAY3	0.263 0.082(12)	0.259 0.096(12)	0.273 0.066(12)	0.270 0.062(12)	0.308 0.090(12)
DAY3	-DAY4	0.284 0.065(12)	0.215 * 0.090(12)	0.175 * 0.084(12)	0.129 0.069(12)	0.202 0.067(12)
DAY4	-DAY5	0.115 0.079(12)	0.151 0.126(12)	0.186 0.110(12)	0.238 0.077(12)	0.174 0.101(12)
DAY5	-DAY6	0.407 0.075(12)	0.387 0.104(12)	0.317 0.100(12)	0.315 0.060(12)	0.362 0.068(12)
DAY6	-DAY7	0.139 0.140(12)	0.107 0.133(12)	0.152 0.103(12)	0.118 0.161(12)	0.100 0.154(12)
DAY7	-DAY14	0.241 0.014(12)	0.230 0.024(12)	0.234 0.026(12)	0.228 0.022(12)	0.236 0.024(12)
DAY14	-DAY21	0.185 0.014(12)	0.178 0.027(12)	0.173 0.016(12)	0.159 0.025(12)	0.189 0.031(12)
DAY21	-DAY28	0.158 0.018(12)	0.150 0.020(12)	0.144 0.013(12)	0.141 0.035(12)	0.152 0.025(12)
DAY28	-DAY35	0.128 0.029(12)	0.113 0.030(12)	0.119 0.017(12)	0.123 0.036(12)	0.123 0.016(12)
DAY35	-DAY42	0.089	0.091	0.101	0.082	0.097

	0.030(12)	0.028(12)	0.015(12)	0.033(12)	0.025(12)

7 (CONTINUED)

MEAN DAILY FOOD EFFICIENCY OF MALE RATS
(g body weight gain/g food consumed)

GROUP:		I	III	V	VII	IX
HASKELL NUMBER:		H-25346	H-25347	H-25348	H-25349	H-25350
DAY42	-DAY49	0.096 0.017(12)	0.087 0.025(12)	0.083 0.013(12)	0.090 0.029(12)	0.084 0.032(12)
DAY49	-DAY56	0.072 0.027(12)	0.069 0.014(12)	0.079 0.028(12)	0.093 0.026(12)	0.075 0.025(12)
DAY56	-DAY63	0.079 0.029(12)	0.088 0.016(12)	0.080 0.026(12)	0.064 0.026(12)	0.083 0.027(12)
DAY63	-DAY70	0.040 0.027(12)	0.027 0.015(12)	0.043 0.033(12)	0.061 0.016(12)	0.051 0.031(12)
DAY70	-DAY77	0.072 0.028(12)	0.081 0.023(12)	0.060 0.025(12)	0.059 0.029(12)	0.066 0.015(12)
DAY77	-DAY84	0.080 0.024(12)	0.072 0.031(12)	0.072 0.025(12)	0.062 0.027(12)	0.074 0.020(12)
DAY84	-DAY91	0.034 0.030(12)	0.037 0.034(12)	0.039 0.024(12)	0.026 0.030(12)	0.019 0.043(12)
DAY0	-DAY91	0.115 0.010(12)	0.111 0.009(12)	0.111 0.009(12)	0.108 0.012(12)	0.113 0.012(12)

Data summarized as: Mean
Standard Deviation (n)

* Statistically significant difference from Group I at $p < 0.05$ using one-way ANOVA and linear contrasts.

TABLE 8

MEAN DAILY FOOD EFFICIENCY OF FEMALE RATS
(g body weight gain/g food consumed)

	GROUP:	II	IV	VI	VIII	X
HASKELL	NUMBER:	H-25346	H-25347	H-25348	H-25349	H-25350
DAY0	-DAY1	0.107	-0.131	-0.038	0.022	0.010
		0.242(12)	0.525(12)	0.321(12)	0.247(12)	0.324(12)
DAY1	-DAY2	-0.143	0.148 *	0.092	0.209	0.070
		0.399(12)	0.372(12)	0.350(12)	0.292(12)	0.320(12)
DAY2	-DAY3	0.369	0.179	0.123	0.190	0.229
		0.372(12)	0.360(12)	0.366(12)	0.320(12)	0.425(12)
DAY3	-DAY4	-0.032	-0.104	0.198	0.140	0.203
		0.358(12)	0.421(12)	0.311(12)	0.305(12)	0.191(12)
DAY4	-DAY5	0.205	0.099	0.079	-0.046	-0.043
		0.258(12)	0.611(12)	0.272(12)	0.228(12)	0.143(12)
DAY5	-DAY6	0.161	0.155	-0.003	0.142	0.104
		0.345(12)	0.400(12)	0.386(12)	0.354(12)	0.383(12)
DAY6	-DAY7	0.042	0.124	0.120	0.070	0.047
		0.332(12)	0.298(12)	0.494(12)	0.323(12)	0.505(12)
DAY7	-DAY14	0.155	0.127	0.152	0.135	0.126
		0.044(12)	0.057(12)	0.033(12)	0.052(12)	0.067(12)
DAY14	-DAY21	0.133	0.120	0.145	0.113	0.131
		0.062(12)	0.082(12)	0.042(12)	0.062(12)	0.063(12)
DAY21	-DAY28	0.076	0.066	0.057	0.087	0.094
		0.056(12)	0.064(12)	0.070(12)	0.063(12)	0.042(12)
DAY28	-DAY35	0.079	0.103	0.067	0.057	0.037
		0.075(12)	0.031(12)	0.038(12)	0.054(12)	0.043(12)
DAY35	-DAY42	0.049	0.019	0.049	0.061	0.039
		0.039(12)	0.045(12)	0.048(12)	0.057(12)	0.060(12)

8 (CONTINUED)

MEAN DAILY FOOD EFFICIENCY OF FEMALE RATS
(g body weight gain/g food consumed)

GROUP:		II	IV	VI	VIII	X
HASKELL NUMBER:		H-25346	H-25347	H-25348	H-25349	H-25350
DAY42	-DAY49	0.036	0.061	0.044	0.055	0.051
		0.071(12)	0.057(12)	0.045(12)	0.037(12)	0.049(12)
DAY49	-DAY56	0.034	0.054	0.041	0.036	0.067
		0.059(12)	0.067(12)	0.051(12)	0.033(12)	0.039(12)
DAY56	-DAY63	0.051	0.047	0.055	0.054	0.022
		0.059(12)	0.049(12)	0.047(12)	0.050(12)	0.037(12)
DAY63	-DAY70	0.010	0.011	0.022	0.011	0.022
		0.061(12)	0.052(12)	0.049(12)	0.055(12)	0.042(12)
DAY70	-DAY77	0.025	0.023	0.036	0.030	0.046
		0.060(12)	0.048(12)	0.069(12)	0.049(12)	0.037(12)
DAY77	-DAY84	0.044	0.020	0.036	0.048	0.055
		0.063(12)	0.064(12)	0.061(12)	0.047(12)	0.047(12)
DAY84	-DAY91	-0.005	0.036	-0.012	-0.017	-0.027
		0.058(12)	0.060(12)	0.070(12)	0.064(12)	0.096(12)
DAY0	-DAY91	0.064	0.063	0.064	0.062	0.062
		0.006(12)	0.008(12)	0.009(12)	0.010(12)	0.011(12)

Data summarized as: Mean
Standard Deviation (n)

* Statistically significant difference from Group II at $p < 0.05$ using one-way ANOVA and linear contrasts.

TABLE 9

SUMMARY OF CLINICAL OBSERVATIONS FOR MALE RATS

Treatment Group	I	III	V	VII	IX
Haskell Number	H-25346	H-25347	H-25348	H-25349	H-25350
Animal Count	12	12	12	12	12
General Teeth Observations					
Malocclusion					
Incidence	0	0	1 (8%)	1 (8%)	0
Mean onset (Days)			56	28	
Broken					
Incidence	0	0	0	1 (8%)	0
Mean onset (Days)				28	
Discharge					
Eye					
Incidence	1 (8%)	1 (8%)	1 (8%)	0	0
Mean onset (Days)	91	63	56		
Nose					
Incidence	0	1 (8%)	0	1 (8%)	0
Mean onset (Days)		56		28	
Hair Loss					
Incidence	2 (17%)	0	4 (33%)	1 (8%)	3 (25%)
Mean onset (Days)	41		32	14	35

9 (CONTINUED)

SUMMARY OF CLINICAL OBSERVATIONS FOR MALE RATS

Treatment Group	I	III	V	VII	IX
Haskell Number	H-25346	H-25347	H-25348	H-25349	H-25350
Animal Count	12	12	12	12	12
Wound					
Superficial					
Incidence	0	0	1 (8%)	1 (8%)	1 (8%)
Mean onset (Days)			56	28	14
Hyperreactive					
Incidence	0	2 (17%)	2 (17%)	1 (8%)	1 (8%)
Mean onset (Days)		39	56	70	63
Hyperactive					
Incidence	0	0	0	0	1 (8%)
Mean onset (Days)					63
Aggressive Behavior					
Incidence	0	2 (17%)	0	0	0
Mean onset (Days)		56			
Vocalization					
No Abnormality Detected					
Incidence	0	0	0	1 (8%)	0
Mean onset (Days)				35	

9 (CONTINUED)

SUMMARY OF CLINICAL OBSERVATIONS FOR MALE RATS

Treatment Group	I	III	V	VII	IX
Haskell Number	H-25346	H-25347	H-25348	H-25349	H-25350
Animal Count	12	12	12	12	12
Misshapen Observations					
Ear					
Incidence	0	1 (8%)	0	0	0
Mean onset (Days)		35			
Tail					
Incidence	0	0	0	0	1 (8%)
Mean onset (Days)					28
Stain Fur/Skin					
Incidence	1 (8%)	3 (25%)	2 (17%)	1 (8%)	2 (17%)
Mean onset (Days)	91	53	49	49	51

Incidence – The number of animals for which an observation was recorded.

Mean onset (Days) – The mean of the first test day an observation was recorded for that group.

There were no statistically significant differences at $p < 0.05$ between Groups I and III.

TABLE 10

SUMMARY OF CLINICAL OBSERVATIONS FOR FEMALE RATS

Treatment Group	II	IV	VI	VIII	X
Haskell Number	H-25346	H-25347	H-25348	H-25349	H-25350
Animal Count	12	12	12	12	12
Mass Thoracic					
Ventral					
Mass #1					
Not Ulcerated					
Incidence	0	0	1 (8%)	0	0
Mean onset (Days)			63		
Wet Fur					
Chin					
Incidence	0	1 (8%)	0	0	0
Mean onset (Days)		49			
General Teeth Observations					
Clipped					
Incidence	1 (8%)	0	0	0	0
Mean onset (Days)	77				
Discharge					
Eye					
Incidence	2 (17%)	0	1 (8%)	0	0
Mean onset (Days)	63		63		
Nose					
Incidence	1 (8%)	0	0	0	0
Mean onset (Days)	91				

10 (CONTINUED)

SUMMARY OF CLINICAL OBSERVATIONS FOR FEMALE RATS

Treatment Group	II	IV	VI	VIII	X
Haskell Number	H-25346	H-25347	H-25348	H-25349	H-25350
Animal Count	12	12	12	12	12
Hair Loss					
Incidence	3 (25%)	1 (8%)	2 (17%)	2 (17%)	2 (17%)
Mean onset (Days)	45	14	35	63	54
Wound Superficial					
Incidence	0	0	0	1 (8%)	0
Mean onset (Days)				14	
Arches back during handling					
Incidence	7 (58%)	2 (17%)	2 (17%)	6 (50%)	3 (25%)
Mean onset (Days)	39	32	46	34	37
Ear twitch Bilateral					
Incidence	4 (33%)	1 (8%)	3 (25%)	5 (42%)	2 (17%)
Mean onset (Days)	39	21	47	24	25
Hyperreactive					
Incidence	1 (8%)	0	1 (8%)	0	0
Mean onset (Days)	21		70		
Hyperactive					
Incidence	5 (42%)	2 (17%)	1 (8%)	4 (33%)	3 (25%)
Mean onset (Days)	41	53	42	35	51

10 (CONTINUED)

SUMMARY OF CLINICAL OBSERVATIONS FOR FEMALE RATS

Treatment Group	II	IV	VI	VIII	X
Haskell Number	H-25346	H-25347	H-25348	H-25349	H-25350
Animal Count	12	12	12	12	12
Misshapen Observations					
Ear					
Incidence	0	1 (8%)	0	0	0
Mean onset (Days)		35			
Stain Fur/Skin					
Incidence	4 (33%)	4 (33%)	5 (42%)	4 (33%)	3 (25%)
Mean onset (Days)	42	46	48	48	68

Incidence - The number of animals for which an observation was recorded.

Mean onset (Days) - The mean of the first test day an observation was recorded for that group.

There were no statistically significant differences at $p < 0.05$ between Groups II and IV.

TABLE 11

SUMMARY OF OPHTHALMOLOGY OBSERVATIONS FOR MALE RATS

Test Day 87

Treatment Group	I	III	V	VII	IX
Haskell Number	H-25346	H-25347	H-25348	H-25349	H-25350
Animal Count	12	12	12	12	12

There were no ophthalmological abnormalities detected for all rats examined.

TABLE 12

SUMMARY OF OPHTHALMOLOGY OBSERVATIONS FOR FEMALE RATS

Test Day 87

Treatment Group	II	IV	VI	VIII	X
Haskell Number	H-25346	H-25347	H-25348	H-25349	H-25350
Animal Count	12	12	12	12	12

There were no ophthalmological abnormalities detected for all rats examined.

TABLE 13

PERCENT SURVIVAL OF MALE RATS

Treatment Group:	I	III	V	VII	IX
Haskell Number	H-25346	H-25347	H-25348	H-25349	H-25350
Days on Test					
0	100	100	100	100	100
7	100	100	100	100	100
14	100	100	100	100	100
21	100	100	100	100	100
28	100	100	100	100	100
35	100	100	100	100	100
42	100	100	100	100	100
49	100	100	100	100	100
56	100	100	100	100	100
63	100	100	100	100	100
70	100	100	100	100	100
77	100	100	100	100	100
84	100	100	100	100	100
91	100	100	100	100	100
Number at study start	12	12	12	12	12
Sacrificed by design	12	12	12	12	12
Alive on test day 91	12	12	12	12	12

Percent Survival = (Number of rats alive/Number of rats at risk)*100
Number of rats at risk = Number at study start – number sacrificed by design.

There were no statistically significant decreases in survival.

TABLE 14

PERCENT SURVIVAL OF FEMALE RATS

Treatment Group:	II	IV	VI	VIII	X
Haskell Number	H-25346	H-25347	H-25348	H-25349	H-25350
Days on Test					
0	100	100	100	100	100
7	100	100	100	100	100
14	100	100	100	100	100
21	100	100	100	100	100
28	100	100	100	100	100
35	100	100	100	100	100
42	100	100	100	100	100
49	100	100	100	100	100
56	100	100	100	100	100
63	100	100	100	100	100
70	100	100	100	100	100
77	100	100	100	100	100
84	100	100	100	100	100
91	100	100	100	100	100
Number at study start	12	12	12	12	12
Sacrificed by design	12	12	12	12	12
Alive on test day 91	12	12	12	12	12

Percent Survival = (Number of rats alive/Number of rats at risk)*100
Number of rats at risk = Number at study start – number sacrificed by design.

There were no statistically significant decreases in survival.

TABLE 15

MEAN FORELIMB AND HINDLIMB GRIP STRENGTH FOR MALE RATS
(MEAN OF THREE TRIALS)

Assessment Period	Group	Haskell Number	Forelimb Grip Strength (kg)	Hindlimb Grip Strength (kg)
Baseline				
	I	H-25346	0.56 (0.08)	0.30 (0.06)
	III	H-25347	0.54 (0.08)	0.32 (0.06)
	V	H-25348	0.51 (0.06)	0.31 (0.07)
	VII	H-25349	0.55 (0.06)	0.31 (0.05)
	IX	H-25350	0.58 (0.11)	0.31 (0.07)
Week 13				
	I	H-25346	1.17 (0.30)	0.75 (0.28)
	III	H-25347	1.20 (0.25)	0.74 (0.11)
	V	H-25348	1.43 (0.29)	0.70 (0.12)
	VII	H-25349	1.36 (0.35)	0.70 (0.13)
	IX	H-25350	1.45 (0.36)	0.76 (0.11)

Data arranged as: Mean (Standard Deviation)

There were no statistically significant differences between Groups I and III at $p < 0.05$.

TABLE 16

MEAN FORELIMB AND HINDLIMB GRIP STRENGTH FOR FEMALE RATS
(MEAN OF THREE TRIALS)

Assessment Period	Group	Haskell Number	Forelimb Grip Strength (kg)	Hindlimb Grip Strength (kg)
Baseline				
	II	H-25346	0.50 (0.09)	0.29 (0.05)
	IV	H-25347	0.53 (0.08)	0.31 (0.05)
	VI	H-25348	0.52 (0.11)	0.31 (0.05)
	VIII	H-25349	0.49 (0.10)	0.32 (0.04)
	X	H-25350	0.50 (0.08)	0.32 (0.05)
Week 13				
	II	H-25346	1.02 (0.26)	0.60 (0.15)
	IV	H-25347	1.22 (0.18) *	0.65 (0.09)
	VI	H-25348	1.10 (0.20)	0.60 (0.12)
	VIII	H-25349	0.95 (0.31)	0.57 (0.13)
	X	H-25350	1.06 (0.18)	0.57 (0.10)

Data arranged as: Mean (Standard Deviation)

* Statistically significant differences for Group IV compared to Group II at $p < 0.05$ by Dunnett's test.

TABLE 17

SUMMARY OF FUNCTIONAL OBSERVATION BATTERY FINDINGS FOR MALE RATS

	BASELINE					WEEK 13				
Group	I	III	V	VII	IX	I	III	V	VII	IX
Haskell Number	H-25346	H-25347	H-25348	H-25349	H-25350	H-25346	H-25347	H-25348	H-25349	H-25350
Number examined:	12	12	12	12	12	12	12	12	12	12
MANUPULATIONS:										
APPROACH & TOUCH:										
no reaction	0	0	0	0	0	0	0	0	0	0
normal	12	12	12	12	12	12	12	12	12	12
increased reaction (jumps away or attacks)	0	0	0	0	0	0	0	0	0	0
AUDITORY STIMULUS:										
no reaction	0	0	0	0	0	0	0	0	0	0
normal reaction (rat flinches or flicks ear)	12	12	12	12	12	12	12	12	12	12
exaggerated reaction (rat jumps, flips)	0	0	0	0	0	0	0	0	0	0
TAIL PINCH:										
no response	0	0	0	0	0	0	0	0	0	0
normal (turns toward site)	12	12	12	12	12	11	11	10	9	12
exaggerated response	0	0	0	0	0	1	1	2	3	0

17(CONTINUED)

SUMMARY OF FUNCTIONAL OBSERVATION BATTERY FINDINGS FOR MALE RATS

	BASELINE					WEEK 13				
Group	I	III	V	VII	IX	I	III	V	VII	IX
Haskell Number)	H-25346	H-25347	H-25348	H-25349	H-25350	H-25346	H-25347	H-25348	H-25349	H-25350
Number examined:	12	12	12	12	12	12	12	12	12	12
IN MOTOR ACTIVITY MONITOR:										
PUPILLARY RESPONSE										
present	12	12	12	12	12	12	12	12	12	12
absent	0	0	0	0	0	0	0	0	0	0
DEFECATION										
present	9	11	9	9	8	7	9	10	8	8
absent	3	1	3	3	4	5	3	2	4	4
diarrhea	0	0	0	0	0	0	0	0	0	0
URINATION:										
present	8	12	9	10	12	9	11	10	10	11
absent	4	0	3	2	0	3	1	2	2	1
HYPERREACTIVE										
present	0	0	0	0	0	0	0	1	1	0
absent	12	12	12	12	12	12	12	11	11	12

There were no statistically significant differences between Groups I and III at $p < 0.05$.

TABLE 18

SUMMARY OF FUNCTIONAL OBSERVATION BATTERY FINDINGS FOR FEMALE RATS

	BASELINE					WEEK 13				
Group	II	IV	VI	VIII	X	II	IV	VI	VIII	X
Haskell Number	H-25346	H-25347	H-25348	H-25349	H-25350	H-25346	H-25347	H-25348	H-25349	H-25350
Number examined:	12	12	12	12	12	12	12	12	12	12
MANUPULATIONS:										
APPROACH & TOUCH:										
no reaction	0	0	0	0	0	0	0	0	0	0
normal	12	12	12	12	12	12	12	12	12	12
increased reaction (jumps away or attacks)	0	0	0	0	0	0	0	0	0	0
AUDITORY STIMULUS:										
no reaction	0	0	0	0	0	0	0	0	0	0
normal reaction (rat flinches or flicks ear)	12	12	12	12	12	12	12	12	12	12
exaggerated reaction (rat jumps, flips)	0	0	0	0	0	0	0	0	0	0
TAIL PINCH:										
no response	0	0	0	0	0	0	0	0	0	0
normal (turns toward site)	12	12	12	12	12	11	12	12	11	11
exaggerated response	0	0	0	0	0	1	0	0	1	1

18(CONTINUED)

SUMMARY OF FUNCTIONAL OBSERVATION BATTERY FINDINGS FOR FEMALE RATS

	BASELINE					WEEK 13				
Group	II	IV	VI	VIII	X	II	IV	VI	VIII	X
Haskell Number	H-25346	H-25347	H-25348	H-25349	H-25350	H-25346	H-25347	H-25348	H-25349	H-25350
Number examined:	12	12	12	12	12	12	12	12	12	12
IN MOTOR ACTIVITY MONITOR:										
PUPILLARY RESPONSE										
present	12	12	12	12	12	12	12	12	12	12
absent	0	0	0	0	0	0	0	0	0	0
DEFECATION										
present	6	8	7	7	7	5	9	4	8	8
absent	6	4	5	5	5	7	3	8	4	4
diarrhea	0	0	0	0	0	0	0	0	0	0
URINATION:										
present	11	7	10	10	8	9	8	10	11	11
absent	1	3	2	2	4	3	4	2	1	1
HYPERREACTIVE										
present	0	0	0	0	0	1	0	0	0	1
absent	12	12	12	12	12	11	12	12	12	11

There were no statistically significant differences between Groups II and IV at $p < 0.05$.

TABLE 19

MOTOR ACTIVITY ASSESSEMENT:
DURATION OF MOVEMENT FOR MALE RATS (sec)

ASSESSMENT PERIOD	GROUP	HASKELL NUMBER	SUCCESSIVE 10-MINUTE INTERVALS						
BASELINE			**1**	**2**	**3**	**4**	**5**	**6**	**TOTAL**
	I	H-25346	362(29)	270(58)	211(69)	155(106)	111(114)	72(109)	1180(345)
	III	H-25347	332(59)	256(35)	194(67)	120(106)	66(85)	46(64)	1014(319)
	V	H-25348	326(35)	253(56)	144(86)	136(107)	102(97)	90(105)	1050(398)
	VII	H-25349	384(38)	297(46)	214(73)	122(102)	59(84)	33(65)	1108(339)
	IX	H-25350	351(37)	292(38)	224(34)	189(71)	111(118)	76(115)	1242(298)
13-WEEK									
	I	H-25346	392(35)	298(42)	273(46)	260(52)	267(60)	217(91)	1706(244)
	III	H-25347	359(73)	291(66)	219(118)	170(105)	168(113) *	117(102) *	1325(482) #
	V	H-25348	389(37)	310(43)	272(87)	226(67)	202(103)	151(122)	1549(295)
	VII	H-25349	415(36)	340(55)	309(47)	292(64)	289(65)	234(117)	1879(304)
	IX	H-25350	379(62)	298(87)	273(53)	220(110)	231(90)	202(114)	1603(401)

Data arranged as: Mean (Standard Deviation).

* Statistically significant difference for Group III compared to Group I by repeated measures analysis of variance with linear contrasts at $p < 0.05$.
# Statistically significant difference for Group III compared to Group I by modified Dunn's Multiple Comparison at $p < 0.05$.

TABLE 20

MOTOR ACTIVITY ASSESSEMENT:
DURATION OF MOVEMENT FOR FEMALE RATS (sec)

ASSESSMENT PERIOD	GROUP	HASKELL NUMBER	SUCCESSIVE 10-MINUTE INTERVALS						
			1	**2**	**3**	**4**	**5**	**6**	**TOTAL**
BASELINE									
	II	H-25346	337(42)	243(56)	192(57)	180(83)	147(96)	103(93)	1201(317)
	IV	H-25347	334(57)	254(58)	226(56)	207(70)	171(89)	84(100)	1277(302)
	VI	H-25348	333(44)	249(60)	218(45)	196(81)	132(122)	107(90)	1234(325)
	VIII	H-25349	322(63)	243(64)	227(65)	157(95)	102(97)	84(94)	1136(375)
	X	H-25350	362(62)	291(80)	225(52)	196(96)	162(103)	144(116)	1380(408)
13-WEEK									
	II	H-25346	397(34)	299(50)	256(40)	210(49)	201(70)	212(98)	1575(286)
	IV	H-25347	386(62)	320(57)	287(49)	241(72)	205(84)	189(100)	1627(316)
	VI	H-25348	407(44)	318(86)	258(89)	240(87)	247(97)	201(88)	1670(412)
	VIII	H-25349	425(47)	345(65)	272(60)	234(71)	246(67)	222(55)	1744(242)
	X	H-25350	414(68)	327(66)	279(89)	237(76)	224(101)	229(85)	1710(367)

Data arranged as: Mean (Standard Deviation).

There were no statistically significant differences between Group II and Group IV at $p < 0.05$.

TABLE 21

MOTOR ACTIVITY ASSESSEMENT:
NUMBER OF MOVEMENTS FOR MALE RATS

ASSESSMENT PERIOD	GROUP	HASKELL NUMBER	SUCCESSIVE 10-MINUTE INTERVALS						
			1	**2**	**3**	**4**	**5**	**6**	**TOTAL**
BASELINE									
	I	H-25346	134(10)	140(14)	123(20)	95(55)	67(58)	47(57)	606(171)
	III	H-25347	136(15)	140(11)	124(25)	79(56)	51(61)	43(56)	573(153)
	V	H-25348	145(16)	140(30)	111(57)	90(68)	74(68)	63(64)	624(235)
	VII	H-25349	129(9)	130(14)	118(23)	70(47)	44(53)	26(45)	518(140)
	IX	H-25350	134(8)	136(11)	129(19)	120(42)	70(64)	49(62)	638(162)
13-WEEK									
	I	H-25346	135(13)	137(9)	134(14)	132(16)	126(18)	117(37)	781(64)
	III	H-25347	145(14)	142(19)	109(50)	98(56)	92(54)	73(55)	659(199)
	V	H-25348	142(14)	156(17)	141(43)	137(37)	113(54)	92(69)	780(170)
	VII	H-25349	131(17)	133(14)	139(13)	127(13)	125(17)	107(32)	761(52)
	IX	H-25350	129(19)	131(28)	131(19)	110(46)	118(40)	110(57)	729(155)

Data arranged as: Mean (Standard Deviation).

There were no statistically significant differences between Groups I and III at $p < 0.05$.

TABLE 22

MOTOR ACTIVITY ASSESSEMENT:
NUMBER OF MOVEMENTS FOR FEMALE RATS

ASSESSMENT PERIOD	GROUP	HASKELL NUMBER	SUCCESSIVE 10-MINUTE INTERVALS						
			1	**2**	**3**	**4**	**5**	**6**	**TOTAL**
BASELINE									
	II	H-25346	147(18)	142(20)	130(20)	123(47)	100(53)	82(66)	724(181)
	IV	H-25347	144(15)	140(14)	135(13)	120(29)	105(43)	61(61)	704(124)
	VI	H-25348	139(13)	140(16)	139(15)	114(29)	81(63)	77(57)	689(134)
	VIII	H-25349	130(8)	126(19)	128(17)	92(41)	65(55)	55(52)	595(127)
	X	H-25350	137(22)	134(15)	128(22)	114(44)	101(52)	86(65)	700(156)
13-WEEK									
	II	H-25346	139(17)	157(18)	155(24)	135(20)	129(33)	123(48)	838(103)
	IV	H-25347	133(14)	140(13) #	145(15)	134(15)	121(34)	105(44)	778(74)
	VI	H-25348	142(13)	148(20)	137(24)	142(20)	137(29)	124(46)	830(110)
	VIII	H-25349	130(13)	130(21)	133(22)	130(22)	124(15)	118(26)	764(74)
	X	H-25350	122(24)	134(16)	129(28)	130(31)	111(36)	127(32)	753(108)

Data arranged as: Mean (Standard Deviation).

Statistically significant differences for Group IV compared to Group II by modified Dunn's Multiple Comparison at $p < 0.05$.

TABLE 23

SUMMARY OF HEMATOLOGY VALUES FOR MALE RATS

	Group I H-25346	Group III H-25347	Group V H-25348	Group VII H-25349	Group IX H-25350
RBC ($x10^6/\mu L$)					
WEEK 13	8.56	8.40	8.43	8.31	8.24
	0.43(12)	0.45(12)	0.47(12)	0.44(12)	0.93(12)
HGB (g/dL)					
WEEK 13	15.9	15.5	15.8	15.4	15.5
	0.5(12)	0.7(12)	0.5(11)	0.9(12)	1.3(12)
HCT (%)					
WEEK 13	46.1	45.1	45.5	44.6	44.9
	1.6(12)	2.0(12)	1.5(11)	2.2(12)	3.1(12)
MCV (fl)					
WEEK 13	54.0	53.7	54.6	53.7	54.9
	1.9(12)	1.9(12)	1.5(11)	1.4(12)	4.2(12)
MCH (pg)					
WEEK 13	18.6	18.4	18.9	18.6	18.9
	0.7(12)	0.9(12)	0.6(11)	0.6(12)	1.0(12)
MCHC (g/dL)					
WEEK 13	34.5	34.3	34.6	34.5	34.4
	0.6(12)	0.7(12)	0.5(11)	0.7(12)	1.0(12)
RDW (%)					
WEEK 13	12.6	12.6	12.7	12.6	13.4
	0.7(12)	0.6(12)	0.4(11)	0.5(12)	2.6(12)
ARET ($x10^3/\mu L$)					
WEEK 13	186.0	172.6	190.1	154.7	235.4
	31.0(12)	34.0(12)	20.7(12)	14.5(12)	192.9(12)
PLT ($x10^3/\mu L$)					
WEEK 13	1116	1199	1018	1019	1175
	173(9)	224(6)	371(7)	152(8)	264(7)
WBC ($x10^3/\mu L$)					
WEEK 13	10.50	12.14	11.53	10.41	11.66
	2.08(12)	3.07(12)	3.00(11)	2.81(12)	1.70(12)
ANEU ($x10^3/\mu L$)					
WEEK 13	1.70	1.73	1.89	1.97	1.91
	0.53(12)	0.46(12)	0.56(11)	0.63(12)	0.51(12)

23 (CONTINUED)

SUMMARY OF HEMATOLOGY VALUES FOR MALE RATS

	Group I H-25346	Group III H-25347	Group V H-25348	Group VII H-25349	Group IX H-25350
ALYM ($x10^3/\mu L$)					
WEEK 13	8.29	9.86	9.03	7.94	9.20
	1.71(12)	2.90(12)	2.58(11)	2.40(12)	1.43(12)
AMON ($x10^3/\mu L$)					
WEEK 13	0.20	0.24	0.26	0.21	0.28
	0.07(12)	0.09(12)	0.27(11)	0.09(12)	0.08(12)
AEOS ($x10^3/\mu L$)					
WEEK 13	0.17	0.14	0.16	0.15	0.14
	0.09(12)	0.05(12)	0.06(11)	0.06(12)	0.07(12)
ABAS ($x10^3/\mu L$)					
WEEK 13	0.08	0.09	0.10	0.07	0.07
	0.04(12)	0.03(12)	0.08(11)	0.04(12)	0.03(12)
ALUC ($x10^3/\mu L$)					
WEEK 13	0.06	0.08	0.08	0.06	0.06
	0.03(12)	0.04(12)	0.04(11)	0.03(12)	0.03(12)

Data arranged as: Mean
Standard deviation (Number of values included in calculation)

There were no statistically significant differences between Groups I and III at $p < 0.05$.

TABLE 24

SUMMARY OF HEMATOLOGY VALUES FOR FEMALE RATS

	Group II H-25346	Group IV H-25347	Group VI H-25348	Group VIII H-25349	Group X H-25350
RBC ($x10^6/\mu L$)					
WEEK 13	8.17	8.46*	8.40	8.17	8.14
	0.26(12)	0.35(12)	0.41(12)	0.34(12)	0.33(12)
HGB (g/dL)					
WEEK 13	15.9	16.3	16.2	15.8	16.0
	0.4(12)	0.4(12)	0.6(12)	0.6(12)	0.6(12)
HCT (%)					
WEEK 13	45.4	46.8*	45.8	45.4	45.5
	1.0(12)	1.5(12)	1.5(12)	1.6(12)	1.5(12)
MCV (fl)					
WEEK 13	55.6	55.3	54.6	55.6	55.9
	1.3(12)	1.9(12)	1.6(12)	1.4(12)	1.6(12)
MCH (pg)					
WEEK 13	19.5	19.3	19.3	19.4	19.7
	0.5(12)	0.8(12)	0.5(12)	0.7(12)	0.4(12)
MCHC (g/dL)					
WEEK 13	35.0	34.8	35.3	34.8	35.2
	0.6(12)	0.7(12)	0.7(12)	0.8(12)	0.6(12)
RDW (%)					
WEEK 13	11.3	11.3	11.3	11.7	11.3
	0.4(12)	0.3(12)	0.4(12)	0.4(12)	0.4(12)
ARET ($x10^3/\mu L$)					
WEEK 13	163.1	172.8	157.1	175.3	160.2
	31.0(12)	34.9(12)	26.3(12)	32.9(12)	28.6(12)
PLT ($x10^3/\mu L$)					
WEEK 13	1103	1170	1185	1112	1002
	158(10)	83(6)	90(4)	232(8)	95(6)
WBC ($x10^3/\mu L$)					
WEEK 13	9.34	10.09	10.28	10.04	9.57
	1.54(12)	2.02(12)	2.61(12)	1.78(12)	2.81(12)
ANEU ($x10^3/\mu L$)					
WEEK 13	1.22	1.36	1.68	1.38	1.70
	0.32(12)	0.36(12)	0.50(12)	0.55(12)	0.88(12)

24 (CONTINUED)

SUMMARY OF HEMATOLOGY VALUES FOR FEMALE RATS

	Group II H-25346	Group IV H-25347	Group VI H-25348	Group VIII H-25349	Group X H-25350
ALYM ($x10^3/\mu L$)					
WEEK 13	7.72	8.26	8.08	8.22	7.43
	1.31(12)	1.67(12)	2.19(12)	1.81(12)	1.98(12)
AMON ($x10^3/\mu L$)					
WEEK 13	0.18	0.18	0.23	0.19	0.18
	0.12(12)	0.06(12)	0.11(12)	0.09(12)	0.09(12)
AEOS ($x10^3/\mu L$)					
WEEK 13	0.11	0.16@	0.16@	0.13	0.13
	0.03(12)	0.07(12)	0.07(12)	0.07(12)	0.06(12)
ABAS ($x10^3/\mu L$)					
WEEK 13	0.06	0.08	0.05	0.06	0.07
	0.03(12)	0.03(12)	0.02(12)	0.03(12)	0.03(12)
ALUC ($x10^3/\mu L$)					
WEEK 13	0.06	0.06	0.07	0.07	0.06
	0.01(12)	0.02(12)	0.04(12)	0.03(12)	0.03(12)

Data arranged as: Mean
Standard deviation (Number of values included in calculation)

* Statistically significant difference from Group II at $p < 0.05$ by Linear Contrasts test.
@ Statistically significant difference from Group II at $p < 0.05$ by Dunn's Type I test.

TABLE 25

SUMMARY OF COAGULATION VALUES FOR MALE RATS

	Group I H-25346	Group III H-25347	Group V H-25348	Group VII H-25349	Group IX H-25350
PT (seconds)					
WEEK 13	16.1	15.8	15.6	15.6	15.8
	1.0(12)	0.7(12)	0.6(12)	0.7(12)	0.9(12)
APTT (seconds)					
WEEK 13	22.2	22.6	21.2	21.9	22.2
	2.7(12)	2.1(12)	1.5(12)	3.3(12)	1.9(12)

Data arranged as: Mean
Standard deviation (Number of values included in calculation)

There were no statistically significant differences between Groups I and III at $p < 0.05$.

TABLE 26

SUMMARY OF COAGULATION VALUES FOR FEMALE RATS

	Group II H-25346	Group IV H-25347	Group VI H-25348	Group VIII H-25349	Group X H-25350
PT (seconds)					
WEEK 13	15.0	15.0	15.1	14.7	14.9
	0.5(12)	0.9(12)	0.7(12)	0.5(11)	0.4(12)
APTT (seconds)					
WEEK 13	17.1	17.0	17.4	17.1	16.7
	2.1(12)	1.5(12)	1.6(12)	1.1(11)	1.0(12)

Data arranged as: Mean
Standard deviation (Number of values included in calculation)

There were no statistically significant differences between Groups II and IV at $p < 0.05$.

TABLE 27

SUMMARY OF CLINICAL CHEMISTRY VALUES FOR MALE RATS

	Group I H-25346	Group III H-25347	Group V H-25348	Group VII H-25349	Group IX H-25350
AST (U/L)					
WEEK 13	89	89	86	101	92
	21(12)	17(12)	12(12)	27(12)	27(12)
ALT (U/L)					
WEEK 13	37	45	43	60	44
	6(12)	16(12)	7(12)	32(12)	9(12)
SDH (U/L)					
WEEK 13	16.5	19.4	17.9	24.1	18.4
	5.3(12)	2.4(10)	3.6(12)	14.3(12)	5.2(12)
ALKP (U/L)					
WEEK 13	91	112*	91	110	98
	19(12)	25(12)	14(12)	21(12)	15(12)
BILI (mg/dL)					
WEEK 13	0.08	0.09	0.10	0.10	0.10
	0.03(12)	0.03(12)	0.04(12)	0.02(12)	0.03(12)
BUN (mg/dL)					
WEEK 13	17	17	16	17	17
	2(12)	2(12)	2(12)	2(12)	2(12)
CREA (mg/dL)					
WEEK 13	0.45	0.43	0.42	0.46	0.42
	0.05(12)	0.05(12)	0.06(12)	0.03(12)	0.05(12)
CHOL (mg/dL)					
WEEK 13	67	69	69	58	66
	16(12)	15(12)	7(12)	8(12)	10(12)
TRIG (mg/dL)					
WEEK 13	77	63	70	85	75
	32(12)	20(12)	24(12)	32(12)	24(12)
GLUC (mg/dL)					
WEEK 13	101	97	94	99	105
	8(12)	4(12)	8(12)	9(12)	9(12)
TP (g/dL)					
WEEK 13	7.0	7.0	7.1	7.0	7.0
	0.3(12)	0.2(12)	0.3(12)	0.3(12)	0.3(12)

27 (CONTINUED)

SUMMARY OF CLINICAL CHEMISTRY VALUES FOR MALE RATS

	Group I H-25346	Group III H-25347	Group V H-25348	Group VII H-25349	Group IX H-25350
ALB (g/dL)					
WEEK 13	4.3	4.2	4.3	4.2	4.3
	0.2(12)	0.2(12)	0.2(12)	0.3(12)	0.2(12)
GLOB (g/dL)					
WEEK 13	2.7	2.8	2.8	2.8	2.7
	0.2(12)	0.2(12)	0.2(12)	0.3(12)	0.2(12)
CALC (mg/dL)					
WEEK 13	10.6	10.7	10.7	10.7	10.8
	0.4(12)	0.3(12)	0.5(12)	0.3(12)	0.3(12)
IPHS (mg/dL)					
WEEK 13	7.4	7.6	7.2	7.8	7.8
	0.5(12)	0.9(12)	0.4(12)	0.8(12)	0.7(12)
NA (mmol/L)					
WEEK 13	149.6	149.2	149.3	149.7	149.0
	1.8(12)	1.6(12)	2.2(12)	1.5(12)	2.5(12)
K (mmol/L)					
WEEK 13	5.98	5.95	5.88	5.98	6.15
	0.42(12)	0.41(12)	0.43(12)	0.51(12)	0.54(12)
CL (mmol/L)					
WEEK 13	102.6	102.7	102.8	102.6	103.3
	1.6(12)	2.6(12)	1.8(12)	2.3(12)	1.9(12)

Data arranged as: Mean
Standard deviation (Number of values included in calculation)

* Statistically significant difference from Group I at $p < 0.05$ by Linear Contrasts test.

TABLE 28

SUMMARY OF CLINICAL CHEMISTRY VALUES FOR FEMALE RATS

	Group II H-25346	Group IV H-25347	Group VI H-25348	Group VIII H-25349	Group X H-25350
AST (U/L)					
WEEK 13	80	81	83	89	88
	9(12)	10(12)	23(12)	14(12)	9(12)
ALT (U/L)					
WEEK 13	37	38	42	38	39
	6(12)	7(12)	19(12)	8(12)	8(12)
SDH (U/L)					
WEEK 13	14.4	13.9	13.7	13.1	16.5
	3.2(12)	3.0(12)	5.2(12)	2.3(12)	2.5(12)
ALKP (U/L)					
WEEK 13	59	61	65	62	57
	21(12)	13(12)	26(12)	13(12)	19(12)
BILI (mg/dL)					
WEEK 13	0.15	0.14	0.15	0.13	0.14
	0.02(12)	0.03(12)	0.02(12)	0.03(12)	0.03(12)
BUN (mg/dL)					
WEEK 13	17	17	18	17	16
	2(12)	2(12)	3(12)	3(12)	1(12)
CREA (mg/dL)					
WEEK 13	0.54	0.53	0.54	0.52	0.54
	0.04(12)	0.07(12)	0.06(12)	0.05(12)	0.05(12)
CHOL (mg/dL)					
WEEK 13	83	87	91	96	85
	15(12)	16(12)	23(12)	17(12)	21(12)
TRIG (mg/dL)					
WEEK 13	60	42	60	54	51
	26(12)	9(12)	30(12)	11(12)	22(12)
GLUC (mg/dL)					
WEEK 13	98	91	104	101	106
	6(12)	7(12)	16(12)	8(12)	15(12)
TP (g/dL)					
WEEK 13	8.0	7.9	8.0	7.9	7.9
	0.4(12)	0.5(12)	0.6(12)	0.3(12)	0.4(12)

28 (CONTINUED)

SUMMARY OF CLINICAL CHEMISTRY VALUES FOR FEMALE RATS

	Group II H-25346	Group IV H-25347	Group VI H-25348	Group VIII H-25349	Group X H-25350
ALB (g/dL)					
WEEK 13	5.3	5.1	5.2	5.1	5.2
	0.4(12)	0.4(12)	0.5(12)	0.3(12)	0.3(12)
GLOB (g/dL)					
WEEK 13	2.7	2.8	2.8	2.8	2.7
	0.2(12)	0.2(12)	0.3(12)	0.2(12)	0.2(12)
CALC (mg/dL)					
WEEK 13	11.3	11.2	11.3	11.3	11.3
	0.6(12)	0.4(12)	0.5(12)	0.4(12)	0.4(12)
IPHS (mg/dL)					
WEEK 13	6.6	6.5	6.7	6.6	6.3
	0.6(12)	0.6(12)	0.8(12)	0.9(12)	1.4(12)
NA (mmol/L)					
WEEK 13	151.5	151.4	150.7	150.8	152.0
	2.2(12)	2.2(12)	1.7(12)	1.9(12)	3.2(12)
K (mmol/L)					
WEEK 13	5.63	5.86	5.78	5.72	5.79
	0.31(12)	0.39(12)	0.32(12)	0.31(12)	0.42(12)
CL (mmol/L)					
WEEK 13	104.2	105.4	104.8	105.6	106.6
	2.4(12)	2.1(12)	1.8(12)	1.7(12)	2.2(12)

Data arranged as: Mean
Standard deviation (Number of values included in calculation)

There were no statistically significant differences between Groups II and IV at $p < 0.05$.

TABLE 29

SUMMARY OF URINALYSIS VALUES FOR MALE RATS

	Group I H-25346	Group III H-25347	Group V H-25348	Group VII H-25349	Group IX H-25350
VOL (mL)					
WEEK 13	7.8	6.6	5.6	6.2	8.9
	6.3(12)	4.8(12)	4.6(12)	6.4(12)	7.0(12)
UOSM (mOsm)					
WEEK 13	1650	1583	1841	1939	1390
	1052(12)	760(12)	1042(12)	1422(12)	894(12)
pH					
WEEK 13	6.7	7.0	6.8	6.7	6.8
	0.3(12)	0.6(12)	0.3(12)	0.2(12)	0.4(12)
URO (EU/dL)					
WEEK 13	0.2	0.2	0.2	0.2	0.2
	0.0(12)	0.0(12)	0.0(12)	0.0(12)	0.0(12)
UMTP (mg/dL)					
WEEK 13	112	135	182	177	85
	63(12)	78(12)	162(12)	139(12)	49(12)

Data arranged as: Mean
Standard deviation (Number of values included in calculation)

There were no statistically significant differences between Groups I and III at $p < 0.05$.

TABLE 30

SUMMARY OF URINALYSIS VALUES FOR FEMALE RATS

	Group II H-25346	Group IV H-25347	Group VI H-25348	Group VIII H-25349	Group X H-25350
VOL (mL)					
WEEK 13	2.9	4.7	3.4	2.3	4.4
	3.0(12)	5.6(11)	3.4(12)	2.0(12)	5.3(12)
UOSM (mOsm)					
WEEK 13	2003	1670	1842	1669	2031
	1045(11)	1109(11)	1267(11)	712(11)	1292(12)
pH					
WEEK 13	6.3	6.4	6.6	6.5	6.5
	0.3(11)	0.4(11)	0.4(11)	0.4(11)	0.4(11)
URO (EU/dL)					
WEEK 13	0.2	0.2	0.2	0.2	0.2
	0.0(11)	0.0(11)	0.0(11)	0.0(11)	0.0(11)
UMTP (mg/dL)					
WEEK 13	64	57	51	49	51
	40(11)	59(11)	50(10)	27(11)	42(10)

Data arranged as: Mean
Standard deviation (Number of values included in calculation)

There were no statistically significant differences between Groups II and IV at $p < 0.05$.

TABLE 31

MEAN FINAL BODY AND ORGAN WEIGHTS FOR MALE RATS

ORGAN WEIGHTS (g)

Group:	I	III	V	VII	IX
Haskell Number	H25346	H25347	H25348	H25349	H25350
ADRENAL GLANDS	0.061	0.056	0.062	0.067	0.055
	0.011(12)	0.011(12)	0.013(12)	0.011(11)	0.013(12)
BRAIN	2.099	2.096	2.101	2.101	2.121
	0.137(12)	0.160(12)	0.088(12)	0.073(12)	0.098(12)
EPIDIDYMIDES	1.502	1.474	1.514	1.491	1.418
	0.172(12)	0.167(12)	0.262(12)	0.196(12)	0.310(12)
FINAL BODY WEIGHT	520.11667	491.09999	499.48334	503.79167	509.91666
	59.83947(12)	36.82877(12)	28.64713(12)	35.35252(12)	43.54493(12)
HEART	1.684	1.706	1.636	1.673	1.635
	0.232(12)	0.263(12)	0.146(12)	0.141(12)	0.139(12)
KIDNEYS	3.538	3.702	3.747	3.689	3.516
	0.325(12)	0.503(12)	0.325(12)	0.303(11)	0.387(12)
LIVER	14.482	13.565	13.848	14.761	14.234
	2.231(12)	1.691(12)	1.285(12)	1.972(12)	1.899(12)
SPLEEN	0.777	0.792	0.813	0.729	0.822
	0.093(12)	0.155(12)	0.130(12)	0.098(12)	0.200(12)
TESTES	3.313	3.294	3.297	3.226	3.261
	0.234(12)	0.524(12)	0.563(12)	0.448(12)	0.878(12)
THYMUS	0.444	0.389	0.375	0.366	0.352
	0.133(12)	0.132(12)	0.108(12)	0.084(12)	0.096(12)

31 (CONTINUED)

MEAN FINAL BODY AND ORGAN WEIGHTS FOR MALE RATS

ORGAN WEIGHT RELATIVE TO BRAIN

Group:	I	III	V	VII	IX
Haskell Number	H25346	H25347	H25348	H25349	H25350
ADRENAL GLANDS/ BRAIN * 100	2.909	2.659	2.929	3.165	2.583
	0.499(12)	0.422(12)	0.589(12)	0.588(11)	0.528(12)
EPIDIDYMIDES/ BRAIN * 100	71.645	70.458	71.895	70.932	66.490
	7.392(12)	7.174(12)	10.937(12)	8.822(12)	13.073(12)
HEART/ BRAIN * 100	80.459	81.189	77.797	79.818	77.290
	11.951(12)	8.739(12)	5.449(12)	8.121(12)	8.468(12)
KIDNEYS/ BRAIN * 100	168.996	176.061	178.420	175.155	165.879
	16.834(12)	14.278(12)	14.984(12)	15.978(11)	17.590(12)
LIVER/ BRAIN * 100	693.824	646.443	658.721	703.876	671.098
	127.811(12)	55.530(12)	49.902(12)	101.370(12)	84.156(12)
SPLEEN/ BRAIN * 100	37.099	37.555	38.685	34.721	38.771
	4.519(12)	5.117(12)	5.836(12)	4.701(12)	9.337(12)
TESTES/ BRAIN * 100	158.408	158.184	156.934	153.527	153.160
	14.699(12)	28.273(12)	26.590(12)	21.058(12)	40.406(12)
THYMUS/ BRAIN * 100	21.332	18.502	17.847	17.401	16.673
	6.891(12)	5.954(12)	5.018(12)	3.786(12)	4.901(12)

31 (CONTINUED)

MEAN FINAL BODY AND ORGAN WEIGHTS FOR MALE RATS

ORGAN WEIGHT RELATIVE TO BODY WEIGHT

Group: Haskell Number	I H25346	III H25347	V H25348	VII H25349	IX H25350
ADRENAL GLANDS/ FINAL BODY * 100	0.012 0.002(12)	0.011 0.002(12)	0.012 0.002(12)	0.013 0.002(11)	0.011 0.002(12)
BRAIN/ FINAL BODY * 100	0.408 0.048(12)	0.428 0.031(12)	0.421 0.020(12)	0.419 0.032(12)	0.418 0.034(12)
EPIDIDYMIDES/ FINAL BODY * 100	0.292 0.041(12)	0.301 0.038(12)	0.303 0.046(12)	0.298 0.045(12)	0.278 0.058(12)
HEART/ FINAL BODY * 100	0.325 0.038(12)	0.347 0.043(12)	0.328 0.024(12)	0.332 0.022(12)	0.322 0.028(12)
KIDNEYS/ FINAL BODY * 100	0.685 0.073(12)	0.753* 0.076(12)	0.750* 0.052(12)	0.734 0.040(11)	0.689 0.043(12)
LIVER/ FINAL BODY * 100	2.776 0.158(12)	2.759 0.238(12)	2.769 0.136(12)	2.922 0.232(12)	2.782 0.162(12)
SPLEEN/ FINAL BODY * 100	0.151 0.023(12)	0.160 0.023(12)	0.163 0.025(12)	0.145 0.020(12)	0.161 0.038(12)
TESTES/ FINAL BODY * 100	0.641 0.053(12)	0.674 0.117(12)	0.661 0.112(12)	0.646 0.116(12)	0.641 0.169(12)
THYMUS/ FINAL BODY * 100	0.085 0.023(12)	0.078 0.023(12)	0.075 0.021(12)	0.073 0.015(12)	0.069 0.019(12)

* Statistically significant difference from Group I at $p < 0.05$ using one-way ANOVA and linear contrasts.

TABLE 32

MEAN FINAL BODY AND ORGAN WEIGHTS FOR FEMALE RATS

	ORGAN WEIGHT (g)				
Group:	II	IV	VI	VIII	X
Haskell Number	H25346	H25347	H25348	H25349	H25350
ADRENAL GLANDS	0.083	0.073	0.072	0.081	0.071
	0.014(12)	0.011(12)	0.013(12)	0.023(12)	0.014(12)
BRAIN	2.034	1.986	1.985	1.971	1.947
	0.085(12)	0.101(12)	0.065(12)	0.105(12)	0.077(12)
FINAL BODY WEIGHT					
	294.25000	282.50000	289.05834	291.65000	290.28333
	29.70927(12)	25.38162(12)	17.82264(12)	33.95362(12)	33.67375(12)
HEART	1.092	1.102	1.105	1.185	1.092
	0.131(12)	0.126(12)	0.091(12)	0.122(12)	0.142(12)
KIDNEYS	2.257	2.189	2.098	2.296	2.225
	0.179(12)	0.209(12)	0.163(12)	0.341(12)	0.207(12)
LIVER	8.341	7.852	7.986	8.425	7.998
	0.623(12)	0.729(12)	0.807(12)	1.220(12)	0.886(12)
OVARIES	0.144	0.147	0.140	0.166	0.137
	0.027(12)	0.024(12)	0.035(12)	0.062(12)	0.042(12)
SPLEEN	0.591	0.585	0.577	0.562	0.554
	0.078(12)	0.078(12)	0.121(12)	0.114(12)	0.105(12)
THYMUS	0.310	0.281	0.319	0.324	0.318
	0.081(12)	0.061(12)	0.036(12)	0.110(12)	0.099(12)
UTERUS	0.756	0.707	0.691	0.673	0.819
	0.248(12)	0.227(12)	0.197(12)	0.209(12)	0.280(12)

32 (CONTINUED)

MEAN FINAL BODY AND ORGAN WEIGHTS FOR FEMALE RATS

ORGAN WEIGHT RELATIVE TO BRAIN

Group:	II	IV	VI	VIII	X
Haskell Number	H25346	H25347	H25348	H25349	H25350
ADRENAL GLANDS/ BRAIN * 100	4.066	3.651	3.622	4.092	3.628
	0.620(12)	0.413(12)	0.558(12)	1.145(12)	0.660(12)
HEART/ BRAIN * 100	53.645	55.548	55.689	60.199	56.184
	5.471(12)	6.167(12)	4.687(12)	6.349(12)	7.848(12)
KIDNEYS/ BRAIN * 100	110.936	110.178	105.677	116.669	114.475
	6.716(12)	8.383(12)	6.579(12)	18.476(12)	12.126(12)
LIVER/ BRAIN * 100	410.159	395.638	402.279	429.022	410.765
	25.313(12)	34.347(12)	37.271(12)	72.769(12)	43.313(12)
OVARIES/ BRAIN * 100	7.055	7.359	7.052	8.418	7.003
	1.254(12)	1.004(12)	1.632(12)	3.177(12)	1.990(12)
SPLEEN/ BRAIN * 100	29.008	29.397	29.000	28.513	28.478
	3.159(12)	3.102(12)	5.585(12)	5.946(12)	5.431(12)
THYMUS/ BRAIN * 100	15.296	14.135	16.111	16.445	16.261
	4.053(12)	3.097(12)	1.964(12)	5.740(12)	4.793(12)
UTERUS/ BRAIN * 100	37.369	35.734	34.911	34.079	42.060
	12.857(12)	11.544(12)	10.425(12)	10.096(12)	14.193(12)

32 (CONTINUED)

MEAN FINAL BODY AND ORGAN WEIGHTS FOR FEMALE RATS

ORGAN WEIGHT RELATIVE TO FINAL BODY WEIGHT

Group:	II	IV	VI	VIII	X
Haskell Number	H25346	H25347	H25348	H25349	H25350
ADRENAL GLANDS/					
FINAL BODY * 100	0.028	0.026	0.025	0.027	0.025
	0.005(12)	0.005(12)	0.004(12)	0.006(12)	0.005(12)
BRAIN/					
FINAL BODY * 100	0.696	0.709	0.689	0.683	0.679
	0.062(12)	0.077(12)	0.047(12)	0.075(12)	0.080(12)
HEART/					
FINAL BODY * 100	0.371	0.390	0.383	0.407	0.377
	0.019(12)	0.028(12)	0.031(12)	0.025(12)	0.029(12)
KIDNEYS/					
FINAL BODY * 100	0.771	0.780	0.727	0.786	0.772
	0.063(12)	0.101(12)	0.055(12)	0.049(12)	0.080(12)
LIVER/					
FINAL BODY * 100	2.846	2.786	2.764	2.883	2.762
	0.173(12)	0.208(12)	0.241(12)	0.132(12)	0.167(12)
OVARIES/					
FINAL BODY * 100	0.049	0.052	0.048	0.056	0.047
	0.008(12)	0.010(12)	0.011(12)	0.018(12)	0.010(12)
SPLEEN/					
FINAL BODY * 100	0.202	0.209	0.199	0.191	0.190
	0.028(12)	0.038(12)	0.036(12)	0.024(12)	0.025(12)
THYMUS/					
FINAL BODY * 100	0.106	0.099	0.111	0.109	0.108
	0.027(12)	0.020(12)	0.015(12)	0.025(12)	0.026(12)
UTERUS/					
FINAL BODY * 100	0.259	0.252	0.240	0.231	0.286
	0.090(12)	0.083(12)	0.072(12)	0.068(12)	0.102(12)

There were no statistically significant differences at $p < 0.05$ between Group II and IV.

TABLE 33

INCIDENCE OF GROSS OBSERVATIONS IN MALE RATS

LESIONS	TREATMENT	LESION INCIDENCE (Numeric) Males I H25346	III H25347	V H25348	VII H25349	IX H25350
LIVER		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
KIDNEYS		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		11	12	12	11	12
DEFORMITY, MISSING, RIGHT.					1	
DILATATION, LEFT, PELVIS.		1				
LUNGS		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
HEART		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
SKELETAL MUSCLE		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12

Figures in parentheses is the number of animals grossly examined for this tissue
The absence of a number indicates the finding specified was not identified

33 (CONTINUED)

INCIDENCES OF GROSS OBSERVATIONS IN MALE RATS

LESIONS	TREATMENT	LESION INCIDENCE (Numeric) Males I H25346	III H25347	V H25348	VII H25349	IX H25350
SPLEEN		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
AORTA		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
BRAIN		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
SPINAL CORD		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
STOMACH		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		11	12	12	12	12
DISCOLORATION, BLACK, FEW, GLANDULAR, < 5MM DIA..		1				

Figures in parentheses is the number of animals grossly examined for this tissue
The absence of a number indicates the finding specified was not identified

33 (CONTINUED)

INCIDENCES OF GROSS OBSERVATIONS IN MALE RATS

LESIONS	TREATMENT	LESION INCIDENCE (Numeric) Males I H25346	III H25347	V H25348	VII H25349	IX H25350
DUODENUM		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
JEJUNUM		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
ILEUM		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
PANCREAS		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
CECUM		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
COLON		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12

Figures in parentheses is the number of animals grossly examined for this tissue
The absence of a number indicates the finding specified was not identified

33 (CONTINUED)

INCIDENCES OF GROSS OBSERVATIONS IN MALE RATS

LESIONS	TREATMENT	LESION INCIDENCE (Numeric) Males I H25346	III H25347	V H25348	VII H25349	IX H25350
RECTUM		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
MESENTERIC LYMPH NODE		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
SALIVARY GLANDS		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
MANDIBULAR LYMPH NODE		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
THYMUS		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
ADRENAL GLANDS		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	11	12

Figures in parentheses is the number of animals grossly examined for this tissue
The absence of a number indicates the finding specified was not identified

33 (CONTINUED)

INCIDENCES OF GROSS OBSERVATIONS IN MALE RATS

LESIONS	TREATMENT	LESION INCIDENCE (Numeric) Males I H25346	III H25347	V H25348	VII H25349	IX H25350
ADRENAL GLANDS		(12)	(12)	(12)	(12)	(12)
DEFORMITY, MISSING RIGHT.					1	
SCIATIC NERVE		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
PITUITARY GLAND		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
THYROID GLAND		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
PARATHYROID GLANDS		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
TRACHEA		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12

Figures in parentheses is the number of animals grossly examined for this tissue
The absence of a number indicates the finding specified was not identified

33 (CONTINUED)

INCIDENCES OF GROSS OBSERVATIONS IN MALE RATS

LESIONS	TREATMENT	LESION INCIDENCE (Numeric) Males I H25346	III H25347	V H25348	VII H25349	IX H25350
ESOPHAGUS		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
PHARYNX/LARYNX		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
EYE(S) WITH OPTIC NERVE		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
SKIN		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
PROSTATE		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
SEMINAL VESICLES		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	11	12

Figures in parentheses is the number of animals grossly examined for this tissue
The absence of a number indicates the finding specified was not identified

33 (CONTINUED)

INCIDENCES OF GROSS OBSERVATIONS IN MALE RATS

LESIONS	TREATMENT	LESION INCIDENCE (Numeric) Males I H25346	III H25347	V H25348	VII H25349	IX H25350
SEMINAL VESICLES		(12)	(12)	(12)	(12)	(12)
DEFORMITY, MISSING RIGHT.					1	
URINARY BLADDER		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
TESTES		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	11	11	10	10
SMALL, SOFT, RIGHT.					1	
SMALL, BILATERAL.			1	1		1
SMALL, RIGHT.					1	
LARGE, LEFT.						1
EPIDIDYMIDES		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	11	11
SMALL, BILATERAL.						1
SMALL, RIGHT.					1	

Figures in parentheses is the number of animals grossly examined for this tissue
The absence of a number indicates the finding specified was not identified

33 (CONTINUED)

INCIDENCES OF GROSS OBSERVATIONS IN MALE RATS

LESIONS	TREATMENT	LESION INCIDENCE (Numeric) Males I H25346	III H25347	V H25348	VII H25349	IX H25350
FEMUR/KNEE JOINT		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
STERNUM		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
NOSE		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12

Figures in parentheses is the number of animals grossly examined for this tissue
The absence of a number indicates the finding specified was not identified

TABLE 34

INCIDENCE OF GROSS OBSERVATIONS IN FEMALE RATS

LESIONS	TREATMENT	LESION INCIDENCE (Numeric) Females II H25346	IV H25347	VI H25348	VIII H25349	X H25350
LIVER		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
KIDNEYS		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
LUNGS		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
HEART		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
SKELETAL MUSCLE		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
SPLEEN		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12

Figures in parentheses is the number of animals grossly examined for this tissue
The absence of a number indicates the finding specified was not identified

34 (CONTINUED)

INCIDENCE OF GROSS OBSERVATIONS IN FEMALE RATS

LESIONS	TREATMENT	LESION INCIDENCE (Numeric) Females II H25346	IV H25347	VI H25348	VIII H25349	X H25350
AORTA		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
BRAIN		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
SPINAL CORD		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
STOMACH		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
DUODENUM		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
JEJUNUM		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12

Figures in parentheses is the number of animals grossly examined for this tissue
The absence of a number indicates the finding specified was not identified

34 (CONTINUED)

INCIDENCE OF GROSS OBSERVATIONS IN FEMALE RATS

LESIONS	TREATMENT	LESION INCIDENCE (Numeric) Females II H25346	IV H25347	VI H25348	VIII H25349	X H25350
ILEUM		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
PANCREAS		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
CECUM		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
COLON		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
RECTUM		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
MESENTERIC LYMPH NODE		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12

Figures in parentheses is the number of animals grossly examined for this tissue
The absence of a number indicates the finding specified was not identified

34 (CONTINUED)

INCIDENCE OF GROSS OBSERVATIONS IN FEMALE RATS

LESIONS	TREATMENT	LESION INCIDENCE (Numeric) Females II H25346	IV H25347	VI H25348	VIII H25349	X H25350
SALIVARY GLANDS		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
MANDIBULAR LYMPH NODE		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
THYMUS		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
ADRENAL GLANDS		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
SCIATIC NERVE		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
PITUITARY GLAND		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12

Figures in parentheses is the number of animals grossly examined for this tissue
The absence of a number indicates the finding specified was not identified

34 (CONTINUED)

INCIDENCE OF GROSS OBSERVATIONS IN FEMALE RATS

LESIONS	TREATMENT	LESION INCIDENCE (Numeric) Females II H25346	IV H25347	VI H25348	VIII H25349	X H25350
THYROID GLAND		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
PARATHYROID GLANDS		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
TRACHEA		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
ESOPHAGUS		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
PHARYNX/LARYNX		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
EYE(S) WITH OPTIC NERVE		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12

Figures in parentheses is the number of animals grossly examined for this tissue
The absence of a number indicates the finding specified was not identified

34 (CONTINUED)

INCIDENCE OF GROSS OBSERVATIONS IN FEMALE RATS

LESIONS	TREATMENT	LESION INCIDENCE (Numeric) Females II H25346	IV H25347	VI H25348	VIII H25349	X H25350
SKIN		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		11	12	11	12	12
ALOPECIA, VENTRAL.		1				
MASS, TAN, FIRM, LEFT, AXILLA.				1		
MAMMARY GLAND (FEMALE)		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
OVARIES		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
UTERUS		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
VAGINA		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12

Figures in parentheses is the number of animals grossly examined for this tissue
The absence of a number indicates the finding specified was not identified

34 (CONTINUED)

INCIDENCE OF GROSS OBSERVATIONS IN FEMALE RATS

LESIONS	TREATMENT	LESION INCIDENCE (Numeric) Females II H25346	IV H25347	VI H25348	VIII H25349	X H25350
URINARY BLADDER		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
FEMUR/KNEE JOINT		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
STERNUM		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12
NOSE		(12)	(12)	(12)	(12)	(12)
NO ABNORMALITY DETECTED		12	12	12	12	12

Figures in parentheses is the number of animals grossly examined for this tissue
The absence of a number indicates the finding specified was not identified

TABLE 35

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
DIGESTIVE SYSTEM					
LIVER	(12)	(12)			
NO ABNORMALITY DETECTED	3	1			
INFLAMMATION, SUBACUTE/CHRONIC, FOCAL.	9	11			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

35 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
DIGESTIVE SYSTEM					
PANCREAS	(12)	(12)			
NO ABNORMALITY DETECTED	9	11			
ATROPHY.	2	1			
ALTERATION, BASOPHILIC, FOCAL.	1				

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

35 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
DIGESTIVE SYSTEM					
ESOPHAGUS	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

35 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
DIGESTIVE SYSTEM					
STOMACH	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

35 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
DIGESTIVE SYSTEM					
DUODENUM	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

35 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
DIGESTIVE SYSTEM					
JEJUNUM	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

35 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
DIGESTIVE SYSTEM					
ILEUM	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

35 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

LESIONS	LESION INCIDENCE (NUMERIC) Males				
	TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
DIGESTIVE SYSTEM						
CECUM		(12)	(12)			
NO ABNORMALITY DETECTED		12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

35 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

LESIONS	LESION INCIDENCE (NUMERIC) Males				
	TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
DIGESTIVE SYSTEM						
COLON	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

35 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

LESIONS	LESION INCIDENCE (NUMERIC) Males				
	TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
DIGESTIVE SYSTEM						
RECTUM		(12)	(12)			
NO ABNORMALITY DETECTED		12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

35 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

LESIONS	LESION INCIDENCE (NUMERIC) Males				
TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
DIGESTIVE SYSTEM					
SALIVARY GLANDS	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

35 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

LESIONS	LESION INCIDENCE (NUMERIC) Males				
	TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
URINARY SYSTEM						
KIDNEYS		(12)	(12)			
NO ABNORMALITY DETECTED		5	5			
CHRONIC PROGRESSIVE NEPHROPATHY.		7	7			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

35 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
URINARY SYSTEM					
URINARY BLADDER	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

35 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

LESIONS	LESION INCIDENCE (NUMERIC) Males				
	TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
RESPIRATORY SYSTEM						
LUNGS		(12)	(12)			
NO ABNORMALITY DETECTED		12	11			
HISTIOCYTOSIS, FOCAL.			1			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

35 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

LESIONS	LESION INCIDENCE (NUMERIC) Males				
	TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
RESPIRATORY SYSTEM						
TRACHEA		(12)	(12)			
NO ABNORMALITY DETECTED		12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

35 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
RESPIRATORY SYSTEM					
PHARYNX/LARYNX	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

35 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
RESPIRATORY SYSTEM					
NOSE	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

35 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

LESIONS	LESION INCIDENCE (NUMERIC) Males				
	TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
CARDIOVASCULAR SYSTEM						
HEART		(12)	(12)			
NO ABNORMALITY DETECTED		10	7			
CARDIOMYOPATHY.		2	5			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

35 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
CARDIOVASCULAR SYSTEM					
AORTA	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

35 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

LESIONS	LESION INCIDENCE (NUMERIC)				
	Males				
	TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
LYMPHATIC AND HEMATOPOIETIC SYSTEM						
SPLEEN	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

35 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
LYMPHATIC AND HEMATOPOIETIC SYSTEM					
THYMUS	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

35 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

LESIONS	LESION INCIDENCE (NUMERIC) Males				
	TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
LYMPHATIC AND HEMATOPOIETIC SYSTEM						
MANDIBULAR LYMPH NODE		(12)	(12)			
NO ABNORMALITY DETECTED		12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

35 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
LYMPHATIC AND HEMATOPOIETIC SYSTEM					
MESENTERIC LYMPH NODE	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

35 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
LYMPHATIC AND HEMATOPOIETIC SYSTEM					
BONE MARROW	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

35 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
ENDOCRINE SYSTEM					
PITUITARY GLAND	(11)	(11)			
NO ABNORMALITY DETECTED	11	11			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

35 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
ENDOCRINE SYSTEM					
THYROID GLAND	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

35 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
ENDOCRINE SYSTEM					
PARATHYROID GLANDS	(12)	(11)			
NO ABNORMALITY DETECTED	12	11			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

35 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
ENDOCRINE SYSTEM					
ADRENAL GLANDS	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

35 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
NERVOUS SYSTEM					
BRAIN	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

35 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
NERVOUS SYSTEM					
SPINAL CORD	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

35 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
NERVOUS SYSTEM					
SCIATIC NERVE	(12)	(11)			
NO ABNORMALITY DETECTED	12	11			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

35 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

LESIONS	LESION INCIDENCE (NUMERIC) Males				
TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
MUSCULAR AND SKELETAL SYSTEM					
SKELETAL MUSCLE	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

35 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
MUSCULAR AND SKELETAL SYSTEM					
FEMUR/KNEE JOINT	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

35 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

LESIONS	LESION INCIDENCE (NUMERIC) Males				
TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
MUSCULAR AND SKELETAL SYSTEM					
STERNUM	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

35 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

LESIONS	TREATMENT	LESION INCIDENCE (NUMERIC) Males I H25346	III H25347	V H25348	VII H25349	IX H25350
REPRODUCTIVE SYSTEM						
TESTES		(12)	(12)			
NO ABNORMALITY DETECTED		12	11			
DEGENERATION/ATROPHY, SEMINIFEROUS TUBULES, BILATERAL.			1			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

35 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
REPRODUCTIVE SYSTEM					
EPIDIDYMIDES	(11)	(12)			
NO ABNORMALITY DETECTED	11	11			
OLIGOSPERMIA/GERM CELL DEBRIS.		1			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

35 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

LESIONS	TREATMENT	LESION INCIDENCE (NUMERIC) Males I H25346	III H25347	V H25348	VII H25349	IX H25350
REPRODUCTIVE SYSTEM						
PROSTATE		(12)	(12)			
NO ABNORMALITY DETECTED		10	12			
INFLAMMATION, SUBACUTE/CHRONIC.		2				

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

35 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

LESIONS	LESION INCIDENCE (NUMERIC) Males				
	TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
REPRODUCTIVE SYSTEM						
SEMINAL VESICLES		(12)	(12)			
NO ABNORMALITY DETECTED		12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

35 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

LESIONS	LESION INCIDENCE (NUMERIC)				
	Males				
	TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
CUTANEOUS SYSTEM						
SKIN		(12)	(12)			
NO ABNORMALITY DETECTED		12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

35 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

LESIONS	TREATMENT	LESION INCIDENCE (NUMERIC) Males I H25346	III H25347	V H25348	VII H25349	IX H25350
SPECIAL SENSES SYSTEM						
EYE(S) WITH OPTIC NERVE		(12)	(12)			
NO ABNORMALITY DETECTED		11	12			
OPTIC NERVE NOT PRESENT.			1			
HEMORRHAGE/INFLAMMATION (BLEEDING PROCEDURE).		1				

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

TABLE 36

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
DIGESTIVE SYSTEM					
LIVER	(12)	(12)			
NO ABNORMALITY DETECTED	2	2			
INFLAMMATION, SUBACUTE/CHRONIC, FOCAL.	8	10			
FATTY CHANGE, MEDIAN CLEFT.	3	2			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

36 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
DIGESTIVE SYSTEM					
PANCREAS	(12)	(12)			
NO ABNORMALITY DETECTED	10	11			
INFLAMMATION, SUBACUTE/CHRONIC, FOCAL.	2	1			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

36 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
DIGESTIVE SYSTEM					
ESOPHAGUS	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

36 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
DIGESTIVE SYSTEM					
STOMACH	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

36 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
DIGESTIVE SYSTEM					
DUODENUM	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

36 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
DIGESTIVE SYSTEM					
JEJUNUM	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

36 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
DIGESTIVE SYSTEM					
ILEUM	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

36 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
DIGESTIVE SYSTEM					
CECUM	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

36 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
DIGESTIVE SYSTEM					
COLON	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

36 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
DIGESTIVE SYSTEM					
RECTUM	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

36 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
DIGESTIVE SYSTEM					
SALIVARY GLANDS	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

36 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
URINARY SYSTEM					
KIDNEYS	(12)	(12)			
NO ABNORMALITY DETECTED	10	8			
CHRONIC PROGRESSIVE NEPHROPATHY.	2	3			
INFARCT, FOCAL.		1			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

36 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
URINARY SYSTEM					
URINARY BLADDER	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

36 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
RESPIRATORY SYSTEM					
LUNGS	(12)	(12)			
NO ABNORMALITY DETECTED	11	12			
INFLAMMATION, SUBACUTE/CHRONIC, FOCAL.	1				

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

36 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
RESPIRATORY SYSTEM					
TRACHEA	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

36 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
RESPIRATORY SYSTEM					
PHARYNX/LARYNX	(12)	(12)			
NO ABNORMALITY DETECTED	11	12			
INFLAMMATION, SUBACUTE/CHRONIC, FOCAL.	1				

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

36 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

LESIONS	LESION INCIDENCE (NUMERIC) Females				
	TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
RESPIRATORY SYSTEM						
NOSE		(12)	(12)			
NO ABNORMALITY DETECTED		10	11			
ODONTODYSPLASIA.			1			
ODONTITIS/PERIODONTITIS.		2				

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

36 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
CARDIOVASCULAR SYSTEM					
HEART	(12)	(12)			
NO ABNORMALITY DETECTED	11	8			
CARDIOMYOPATHY.	1	4			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

36 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
CARDIOVASCULAR SYSTEM					
AORTA	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

36 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
LYMPHATIC AND HEMATOPOIETIC SYSTEM					
SPLEEN	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

36 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
LYMPHATIC AND HEMATOPOIETIC SYSTEM					
THYMUS	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

36 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
LYMPHATIC AND HEMATOPOIETIC SYSTEM					
MANDIBULAR LYMPH NODE	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

36 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
LYMPHATIC AND HEMATOPOIETIC SYSTEM					
MESENTERIC LYMPH NODE	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

36 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
LYMPHATIC AND HEMATOPOIETIC SYSTEM					
BONE MARROW	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

36 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
ENDOCRINE SYSTEM					
PITUITARY GLAND	(12)	(12)			
NO ABNORMALITY DETECTED	12	11			
CYST.		1			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

36 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
ENDOCRINE SYSTEM					
THYROID GLAND	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

36 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
ENDOCRINE SYSTEM					
PARATHYROID GLANDS	(10)	(12)			
NO ABNORMALITY DETECTED	10	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

36 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
ENDOCRINE SYSTEM					
ADRENAL GLANDS	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

36 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
NERVOUS SYSTEM					
BRAIN	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

36 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
NERVOUS SYSTEM					
SPINAL CORD	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

36 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
NERVOUS SYSTEM					
SCIATIC NERVE	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

36 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
MUSCULAR AND SKELETAL SYSTEM					
SKELETAL MUSCLE	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

36 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
MUSCULAR AND SKELETAL SYSTEM					
FEMUR/KNEE JOINT	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

36 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
MUSCULAR AND SKELETAL SYSTEM					
STERNUM	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

36 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
REPRODUCTIVE SYSTEM					
OVARIES	(12)	(12)			
NO ABNORMALITY DETECTED	11	12			
CYST.	1				

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

36 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
REPRODUCTIVE SYSTEM					
UTERUS	(12)	(12)			
NO ABNORMALITY DETECTED	11	12			
DILATATION, LUMEN.	1				

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

36 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
REPRODUCTIVE SYSTEM					
VAGINA	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

36 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
REPRODUCTIVE SYSTEM					
MAMMARY GLAND (FEMALE)	(12)	(11)			
NO ABNORMALITY DETECTED	12	11			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

36 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
CUTANEOUS SYSTEM					
SKIN	(12)	(11)			
NO ABNORMALITY DETECTED	11	11			
ALOPECIA/HYPOTRICHOSIS.	1				

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

36 (CONTINUED)

INCIDENCES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NEOPLASTIC AND NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
SPECIAL SENSES SYSTEM					
EYE(S) WITH OPTIC NERVE	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			
OPTIC NERVE NOT PRESENT.	1				

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

TABLE 37

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
LIVER	(12)	(12)			
NO ABNORMALITY DETECTED	3	1			
INFLAMMATION, SUBACUTE/CHRONIC, FOCAL.					
minimal	9	11			
total observations per lesion	9	11			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

37 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NON-NEOPLASTIC LESIONS

LESIONS	TREATMENT	LESION INCIDENCE (NUMERIC) Males I H25346	III H25347	V H25348	VII H25349	IX H25350
KIDNEYS		(12)	(12)			
NO ABNORMALITY DETECTED		5	5			
CHRONIC PROGRESSIVE NEPHROPATHY.						
minimal		7	7			
total observations per lesion		7	7			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

37 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NON-NEOPLASTIC LESIONS

LESIONS	TREATMENT	LESION INCIDENCE (NUMERIC) Males I H25346	III H25347	V H25348	VII H25349	IX H25350
LUNGS		(12)	(12)			
NO ABNORMALITY DETECTED		12	11			
HISTIOCYTOSIS, FOCAL.						
minimal			1			
total observations per lesion			1			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

37 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NON-NEOPLASTIC LESIONS

LESIONS	TREATMENT	LESION INCIDENCE (NUMERIC) Males I H25346	III H25347	V H25348	VII H25349	IX H25350
HEART		(12)	(12)			
NO ABNORMALITY DETECTED		10	7			
CARDIOMYOPATHY.						
minimal		2	5			
total observations per lesion		2	5			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

37 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
SKELETAL MUSCLE	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

37 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
SPLEEN	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

37 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
AORTA	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

37 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
BRAIN	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

37 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
SPINAL CORD	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

37 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NON-NEOPLASTIC LESIONS

		LESION INCIDENCE (NUMERIC)				
		Males				
LESIONS	TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
STOMACH		(12)	(12)			
NO ABNORMALITY DETECTED		12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

37 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
DUODENUM	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

37 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NON-NEOPLASTIC LESIONS

		LESION INCIDENCE (NUMERIC)				
		Males				
LESIONS	TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
JEJUNUM		(12)	(12)			
NO ABNORMALITY DETECTED		12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

37 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
ILEUM	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

37 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NON-NEOPLASTIC LESIONS

LESIONS	TREATMENT	LESION INCIDENCE (NUMERIC) Males I H25346	III H25347	V H25348	VII H25349	IX H25350
PANCREAS		(12)	(12)			
NO ABNORMALITY DETECTED		9	11			
ATROPHY.						
minimal		2	1			
total observations per lesion		2	1			
ALTERATION, BASOPHILIC, FOCAL.						
minimal		1				
total observations per lesion		1				

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

37 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NON-NEOPLASTIC LESIONS

		LESION INCIDENCE (NUMERIC)				
		Males				
LESIONS	TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
CECUM		(12)	(12)			
NO ABNORMALITY DETECTED		12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

37 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NON-NEOPLASTIC LESIONS

		LESION INCIDENCE (NUMERIC)				
		Males				
LESIONS	TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
COLON		(12)	(12)			
NO ABNORMALITY DETECTED		12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

37 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NON-NEOPLASTIC LESIONS

LESIONS	TREATMENT	LESION INCIDENCE (NUMERIC) Males I H25346	III H25347	V H25348	VII H25349	IX H25350
RECTUM		(12)	(12)			
NO ABNORMALITY DETECTED		12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

37 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NON-NEOPLASTIC LESIONS

LESIONS	TREATMENT	LESION INCIDENCE (NUMERIC) Males I H25346	III H25347	V H25348	VII H25349	IX H25350
MESENTERIC LYMPH NODE		(12)	(12)			
NO ABNORMALITY DETECTED		12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

37 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NON-NEOPLASTIC LESIONS

		LESION INCIDENCE (NUMERIC)				
		Males				
LESIONS	TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
SALIVARY GLANDS		(12)	(12)			
NO ABNORMALITY DETECTED		12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

37 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NON-NEOPLASTIC LESIONS

		LESION INCIDENCE (NUMERIC)				
		Males				
LESIONS	TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
MANDIBULAR LYMPH NODE		(12)	(12)			
NO ABNORMALITY DETECTED		12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

37 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
THYMUS	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

37 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
ADRENAL GLANDS	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

37 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NON-NEOPLASTIC LESIONS

		LESION INCIDENCE (NUMERIC)				
		Males				
LESIONS	TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
SCIATIC NERVE		(12)	(11)			
NO ABNORMALITY DETECTED		12	11			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

37 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
PITUITARY GLAND	(11)	(11)			
NO ABNORMALITY DETECTED	11	11			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

37 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NON-NEOPLASTIC LESIONS

		LESION INCIDENCE (NUMERIC)				
		Males				
LESIONS	TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
THYROID GLAND		(12)	(12)			
NO ABNORMALITY DETECTED		12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

37 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
PARATHYROID GLANDS	(12)	(11)			
NO ABNORMALITY DETECTED	12	11			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

37 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
TRACHEA	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

37 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
ESOPHAGUS	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

37 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
PHARYNX/LARYNX	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

37 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NON-NEOPLASTIC LESIONS

LESIONS	TREATMENT	LESION INCIDENCE (NUMERIC) Males I H25346	III H25347	V H25348	VII H25349	IX H25350
EYE(S) WITH OPTIC NERVE		(12)	(12)			
NO ABNORMALITY DETECTED		11	12			
OPTIC NERVE NOT PRESENT.			1			
HEMORRHAGE/INFLAMMATION (BLEEDING PROCEDURE).						
minimal		1				
total observations per lesion		1				

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

37 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
SKIN	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

37 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NON-NEOPLASTIC LESIONS

		LESION INCIDENCE (NUMERIC)				
		Males				
LESIONS	TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
PROSTATE		(12)	(12)			
NO ABNORMALITY DETECTED		10	12			
INFLAMMATION, SUBACUTE/CHRONIC.						
minimal		2				
total observations per lesion		2				

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

37 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
SEMINAL VESICLES	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

37 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
URINARY BLADDER	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

37 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
TESTES	(12)	(12)			
NO ABNORMALITY DETECTED	12	11			
DEGENERATION/ATROPHY, SEMINIFEROUS TUBULES, BILATERAL.					
moderate		1			
total observations per lesion		1			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

37 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
EPIDIDYMIDES	(11)	(12)			
NO ABNORMALITY DETECTED	11	11			
OLIGOSPERMIA/GERM CELL DEBRIS.					
moderate		1			
total observations per lesion		1			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

37 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
FEMUR/KNEE JOINT	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

37 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
STERNUM	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

37 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
BONE MARROW	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

37 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN MALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Males				
LESIONS / TREATMENT	I H25346	III H25347	V H25348	VII H25349	IX H25350
NOSE	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

TABLE 38

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NON-NEOPLASTIC LESIONS

LESIONS	TREATMENT	LESION INCIDENCE (NUMERIC) Females II H25346	IV H25347	VI H25348	VIII H25349	X H25350
DIGESTIVE SYSTEM						
LIVER		(12)	(12)			
NO ABNORMALITY DETECTED		2	2			
INFLAMMATION, SUBACUTE/CHRONIC, FOCAL.						
minimal		8	10			
total observations per lesion		8	10			
FATTY CHANGE, MEDIAN CLEFT.						
minimal		2	2			
mild		1				
total observations per lesion		3	2			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

38 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NON-NEOPLASTIC LESIONS

LESIONS	TREATMENT	LESION INCIDENCE (NUMERIC) Females II H25346	IV H25347	VI H25348	VIII H25349	X H25350
DIGESTIVE SYSTEM						
PANCREAS		(12)	(12)			
NO ABNORMALITY DETECTED		10	11			
INFLAMMATION, SUBACUTE/CHRONIC, FOCAL.						
minimal		2	1			
total observations per lesion		2	1			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

38 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NON-NEOPLASTIC LESIONS

LESIONS	TREATMENT	LESION INCIDENCE (NUMERIC) Females II H25346	IV H25347	VI H25348	VIII H25349	X H25350
DIGESTIVE SYSTEM						
ESOPHAGUS		(12)	(12)			
NO ABNORMALITY DETECTED		12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

38 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
DIGESTIVE SYSTEM					
STOMACH	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

38 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
DIGESTIVE SYSTEM					
DUODENUM	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

38 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
DIGESTIVE SYSTEM					
JEJUNUM	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

38 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
DIGESTIVE SYSTEM					
ILEUM	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

38 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
DIGESTIVE SYSTEM					
CECUM	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

38 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
DIGESTIVE SYSTEM					
COLON	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

38 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
DIGESTIVE SYSTEM					
RECTUM	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

38 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
DIGESTIVE SYSTEM					
SALIVARY GLANDS	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

38 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NON-NEOPLASTIC LESIONS

LESIONS	TREATMENT	LESION INCIDENCE (NUMERIC) Females II H25346	IV H25347	VI H25348	VIII H25349	X H25350
URINARY SYSTEM						
KIDNEYS		(12)	(12)			
NO ABNORMALITY DETECTED		10	8			
CHRONIC PROGRESSIVE NEPHROPATHY.						
minimal		2	3			
total observations per lesion		2	3			
INFARCT, FOCAL.						
mild			1			
total observations per lesion			1			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

38 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
URINARY SYSTEM					
URINARY BLADDER	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

38 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NON-NEOPLASTIC LESIONS

LESIONS	TREATMENT	LESION INCIDENCE (NUMERIC) Females II H25346	IV H25347	VI H25348	VIII H25349	X H25350
RESPIRATORY SYSTEM						
LUNGS		(12)	(12)			
NO ABNORMALITY DETECTED		11	12			
INFLAMMATION, SUBACUTE/CHRONIC, FOCAL.						
minimal		1				
total observations per lesion		1				

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

38 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
RESPIRATORY SYSTEM					
TRACHEA	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

38 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
RESPIRATORY SYSTEM					
PHARYNX/LARYNX	(12)	(12)			
NO ABNORMALITY DETECTED	11	12			
INFLAMMATION, SUBACUTE/CHRONIC, FOCAL.					
minimal	1				
total observations per lesion	1				

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

38 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NON-NEOPLASTIC LESIONS

LESIONS	TREATMENT	LESION INCIDENCE (NUMERIC) Females II H25346	IV H25347	VI H25348	VIII H25349	X H25350
RESPIRATORY SYSTEM						
NOSE		(12)	(12)			
NO ABNORMALITY DETECTED		10	11			
ODONTODYSPLASIA.						
mild			1			
total observations per lesion			1			
ODONTITIS/PERIODONTITIS.						
mild		1				
moderate		1				
total observations per lesion		2				

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

38 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NON-NEOPLASTIC LESIONS

LESIONS	TREATMENT	LESION INCIDENCE (NUMERIC) Females II H25346	IV H25347	VI H25348	VIII H25349	X H25350
CARDIOVASCULAR SYSTEM						
HEART		(12)	(12)			
NO ABNORMALITY DETECTED		11	8			
CARDIOMYOPATHY.						
minimal		1	4			
total observations per lesion		1	4			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

38 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
CARDIOVASCULAR SYSTEM					
AORTA	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

38 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NON-NEOPLASTIC LESIONS

LESIONS	TREATMENT	LESION INCIDENCE (NUMERIC) Females II H25346	IV H25347	VI H25348	VIII H25349	X H25350
LYMPHATIC AND HEMATOPOIETIC SYSTEM						
SPLEEN		(12)	(12)			
NO ABNORMALITY DETECTED		12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

38 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
LYMPHATIC AND HEMATOPOIETIC SYSTEM					
THYMUS	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

38 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
LYMPHATIC AND HEMATOPOIETIC SYSTEM					
MANDIBULAR LYMPH NODE	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

38 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
LYMPHATIC AND HEMATOPOIETIC SYSTEM					
MESENTERIC LYMPH NODE	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

38 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
LYMPHATIC AND HEMATOPOIETIC SYSTEM					
BONE MARROW	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

38 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NON-NEOPLASTIC LESIONS

LESIONS	TREATMENT	LESION INCIDENCE (NUMERIC) Females II H25346	IV H25347	VI H25348	VIII H25349	X H25350
ENDOCRINE SYSTEM						
PITUITARY GLAND		(12)	(12)			
NO ABNORMALITY DETECTED		12	11			
CYST.						
mild			1			
total observations per lesion			1			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

38 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
ENDOCRINE SYSTEM					
THYROID GLAND	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

38 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NON-NEOPLASTIC LESIONS

LESIONS	TREATMENT	LESION INCIDENCE (NUMERIC) Females II H25346	IV H25347	VI H25348	VIII H25349	X H25350
ENDOCRINE SYSTEM						
PARATHYROID GLANDS		(10)	(12)			
NO ABNORMALITY DETECTED		10	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

38 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NON-NEOPLASTIC LESIONS

LESIONS	LESION INCIDENCE (NUMERIC)				
	Females				
	TREATMENT	II	IV	VI	VIII	X
		H25346	H25347	H25348	H25349	H25350
ENDOCRINE SYSTEM						
ADRENAL GLANDS		(12)	(12)			
NO ABNORMALITY DETECTED		12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

38 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
NERVOUS SYSTEM					
BRAIN	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

38 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
NERVOUS SYSTEM					
SPINAL CORD	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

38 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
NERVOUS SYSTEM					
SCIATIC NERVE	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

38 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
MUSCULAR AND SKELETAL SYSTEM					
SKELETAL MUSCLE	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

38 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NON-NEOPLASTIC LESIONS

LESIONS	LESION INCIDENCE (NUMERIC)				
	Females				
	TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
MUSCULAR AND SKELETAL SYSTEM						
FEMUR/KNEE JOINT	(12)	(12)				
NO ABNORMALITY DETECTED	12	12				

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

38 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NON-NEOPLASTIC LESIONS

LESIONS	TREATMENT	LESION INCIDENCE (NUMERIC) Females II H25346	IV H25347	VI H25348	VIII H25349	X H25350
MUSCULAR AND SKELETAL SYSTEM						
STERNUM		(12)	(12)			
NO ABNORMALITY DETECTED		12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

38 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NON-NEOPLASTIC LESIONS

LESIONS	TREATMENT	LESION INCIDENCE (NUMERIC) Females II H25346	IV H25347	VI H25348	VIII H25349	X H25350
REPRODUCTIVE SYSTEM						
OVARIES		(12)	(12)			
NO ABNORMALITY DETECTED		11	12			
CYST.						
minimal		1				
total observations per lesion		1				

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

38 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NON-NEOPLASTIC LESIONS

LESIONS	TREATMENT	LESION INCIDENCE (NUMERIC) Females II H25346	IV H25347	VI H25348	VIII H25349	X H25350
REPRODUCTIVE SYSTEM						
UTERUS		(12)	(12)			
NO ABNORMALITY DETECTED		11	12			
DILATATION, LUMEN.						
mild		1				
total observations per lesion		1				

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

38 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
REPRODUCTIVE SYSTEM					
VAGINA	(12)	(12)			
NO ABNORMALITY DETECTED	12	12			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

38 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NON-NEOPLASTIC LESIONS

	LESION INCIDENCE (NUMERIC)				
	Females				
LESIONS / TREATMENT	II H25346	IV H25347	VI H25348	VIII H25349	X H25350
REPRODUCTIVE SYSTEM					
MAMMARY GLAND (FEMALE)	(12)	(11)			
NO ABNORMALITY DETECTED	12	11			

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

38 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NON-NEOPLASTIC LESIONS

LESIONS	TREATMENT	LESION INCIDENCE (NUMERIC) Females II H25346	IV H25347	VI H25348	VIII H25349	X H25350
CUTANEOUS SYSTEM						
SKIN		(12)	(11)			
NO ABNORMALITY DETECTED		11	11			
ALOPECIA/HYPOTRICHOSIS.						
mild		1				
total observations per lesion		1				

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

38 (CONTINUED)

INCIDENCES AND LESION GRADES OF MICROSCOPIC OBSERVATIONS IN FEMALE RATS
NON-NEOPLASTIC LESIONS

LESIONS	TREATMENT	LESION INCIDENCE (NUMERIC) Females II H25346	IV H25347	VI H25348	VIII H25349	X H25350
SPECIAL SENSES SYSTEM						
EYE(S) WITH OPTIC NERVE		(12)	(12)			
NO ABNORMALITY DETECTED		12	12			
OPTIC NERVE NOT PRESENT.		1				

Figure in parentheses is number of animals microscopically examined for this tissue
The absence of a number indicates the lesion specified was not identified

FIGURES

FIGURES

EXPLANATORY NOTES

Study Design

Group		Number/Group			
Male	Female	Male	Female	Diet Concentrations[a]	Haskell Number
I	II	12	12	33% transgenic maize (33% TC1507)	25346
III	IV	12	12	33% near isogenic maize (33% 33P66)	25347
V	VI	12	12	33% commercial maize (33% 33J56)	25348
VII	VIII	12	12	11% transgenic maize (11% TC1507)[b]	25349
IX	X	12	12	11% near isogenic maize (11% 33P66)[b]	25350

a Weight of test maize/Total diet weight.
b These diets also contain 22% 33J56.

FIGURE 1

MEAN BODY WEIGHTS OF MALE RATS

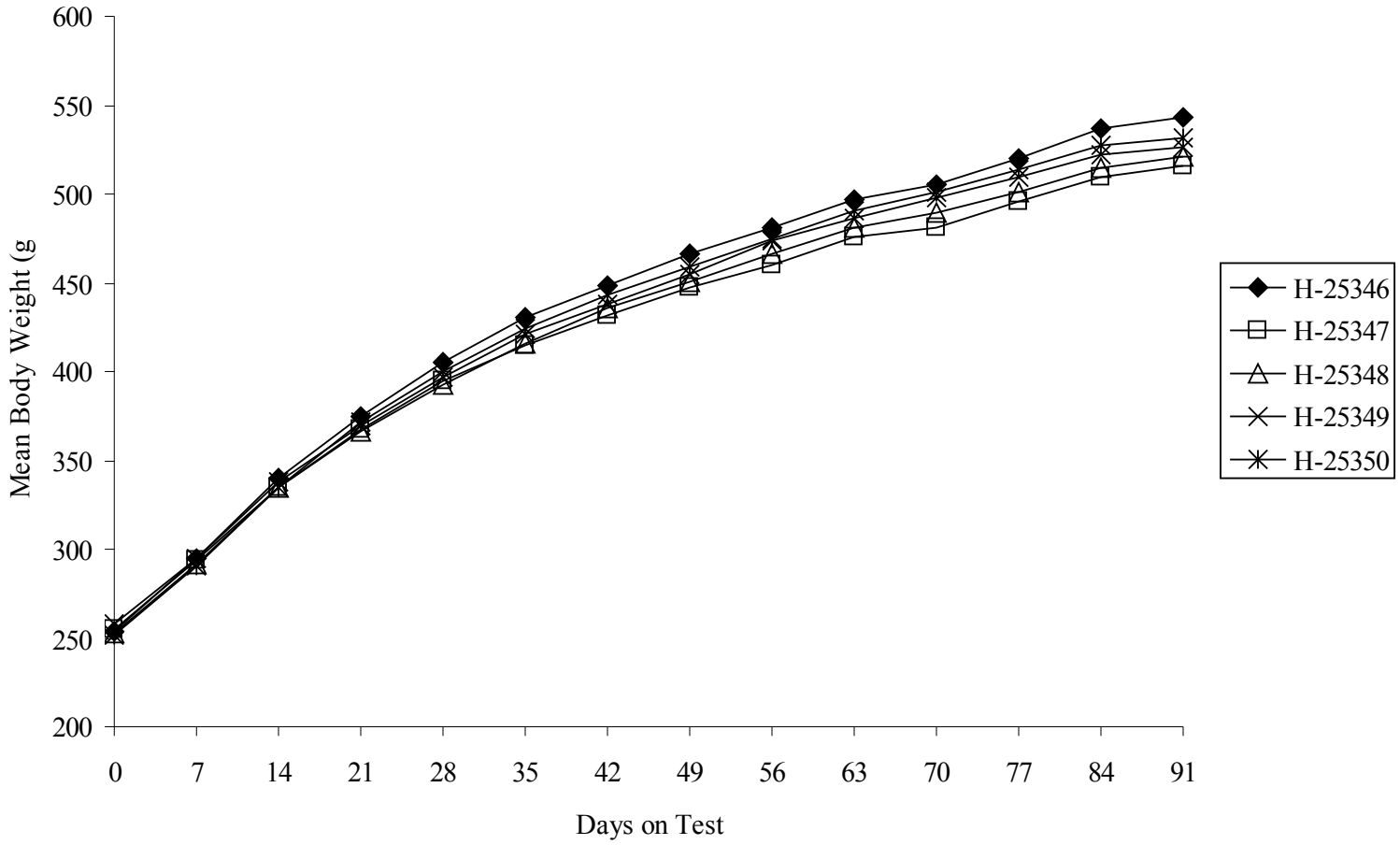


FIGURE 2

MEAN BODY WEIGHTS OF FEMALE RATS

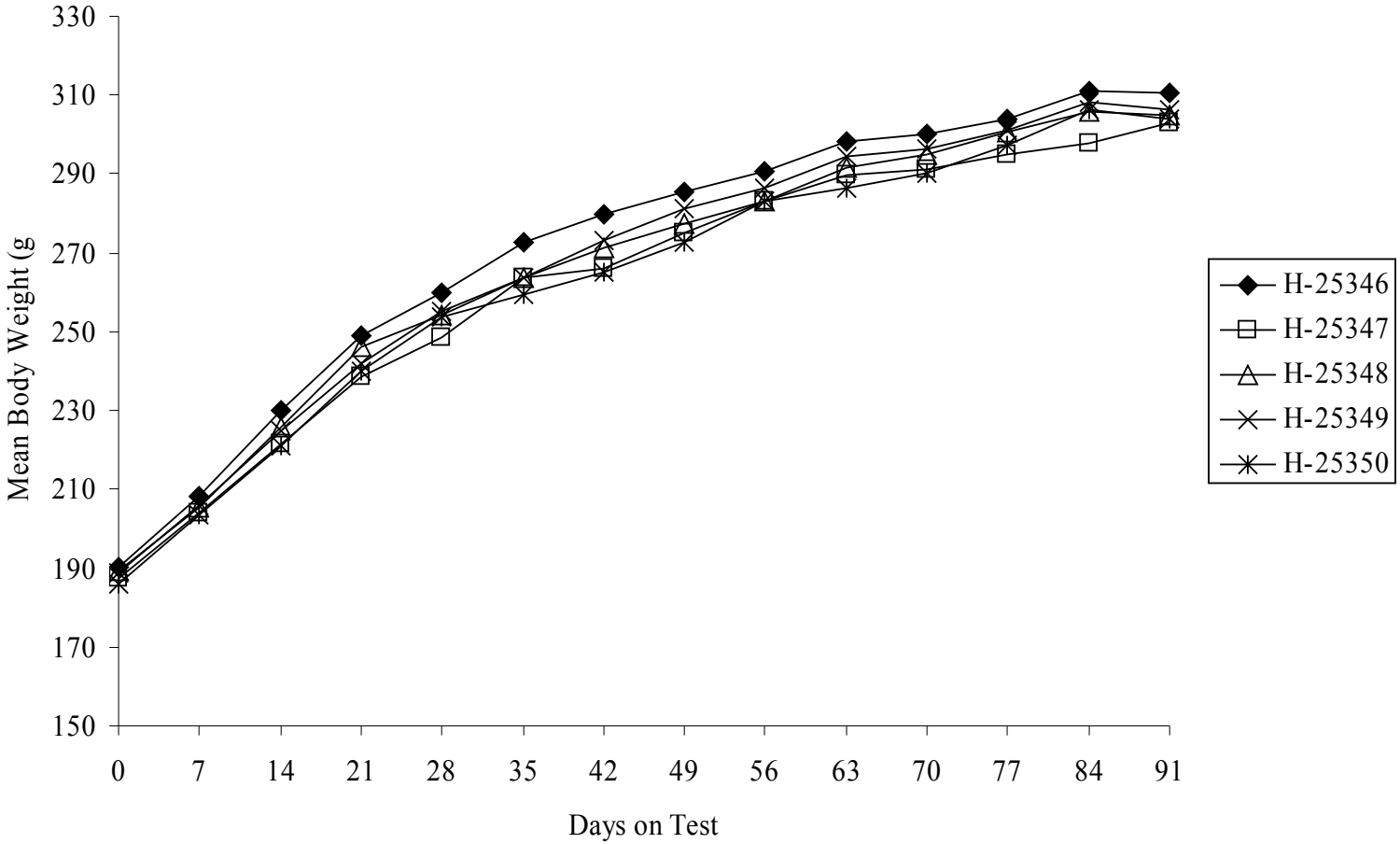
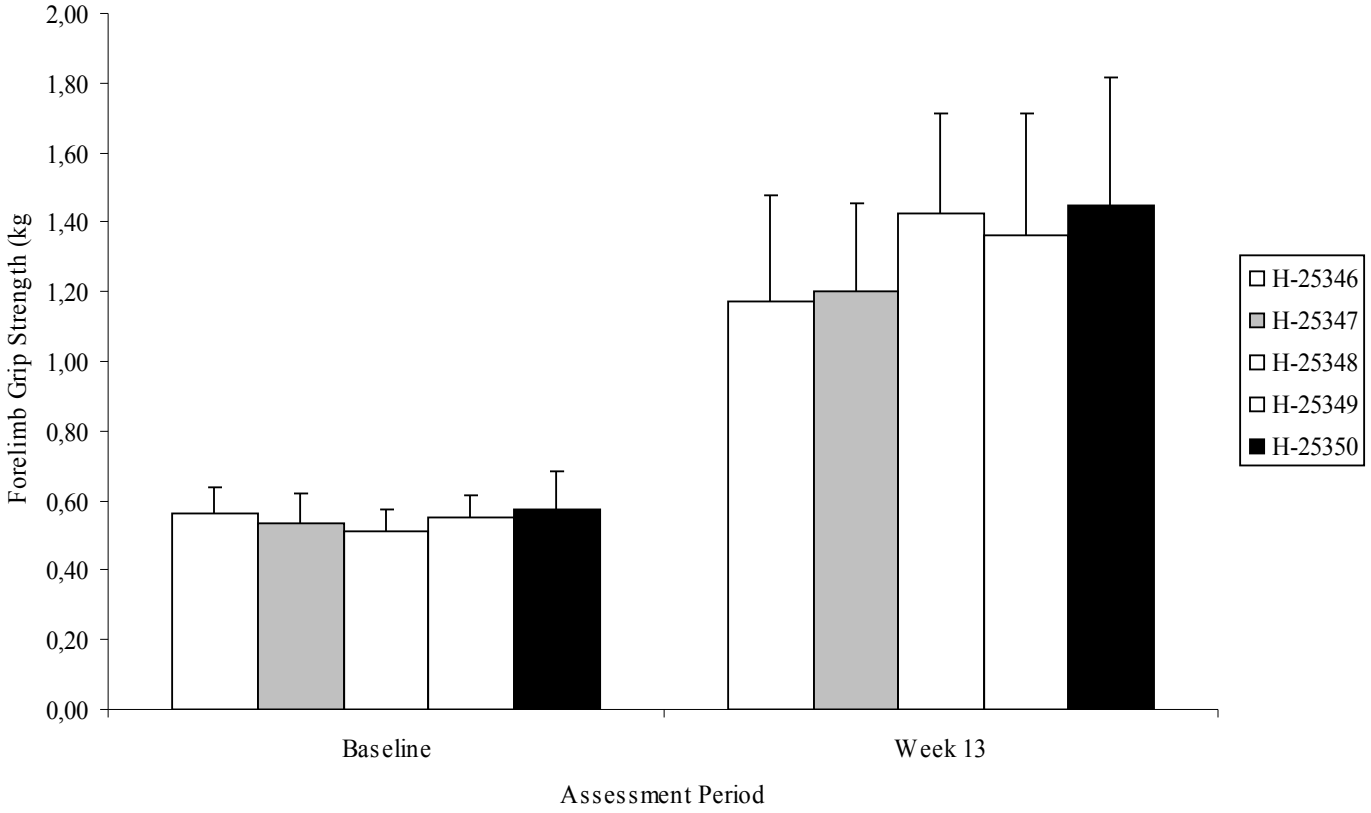


FIGURE 3

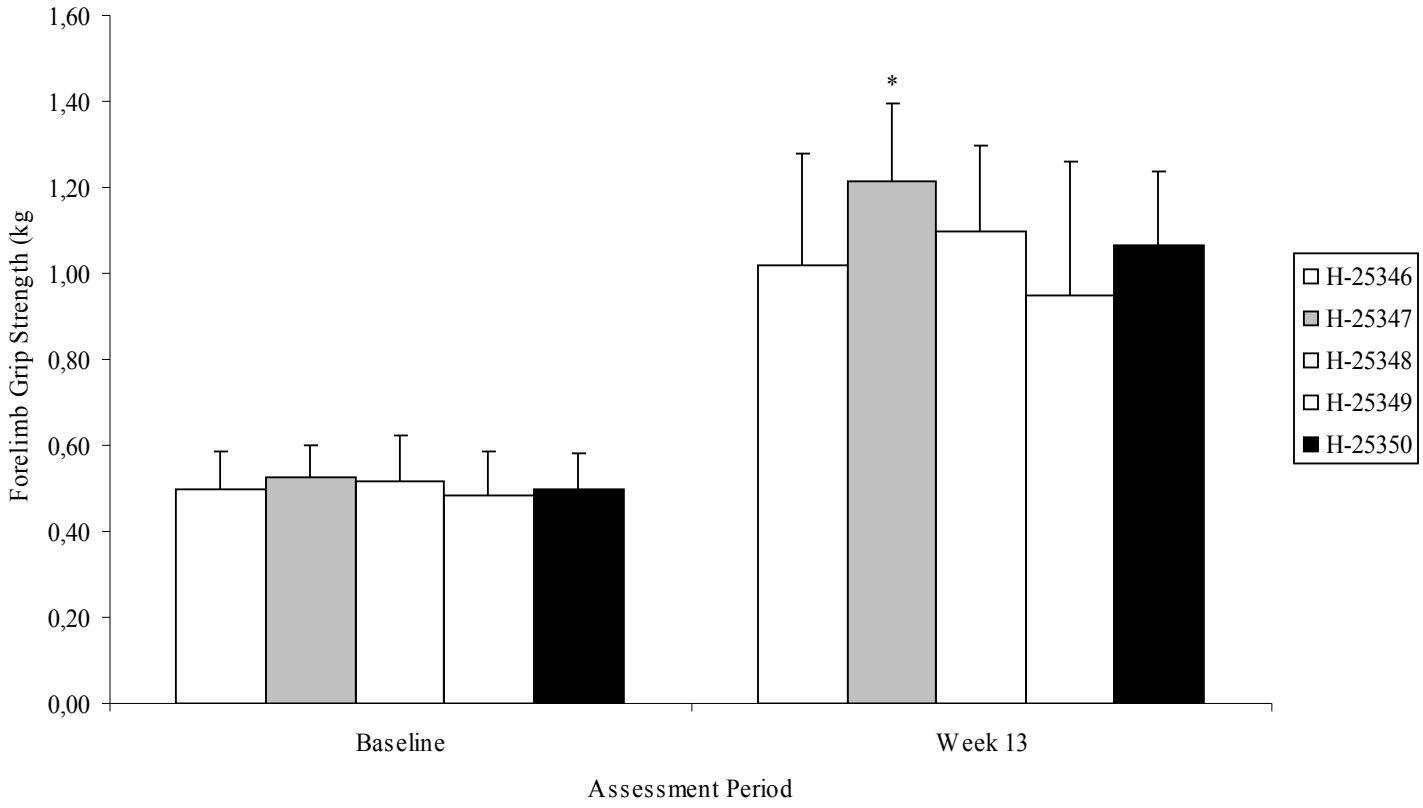
MEAN FORELIMB GRIP STRENGTH FOR MALE RATS



Error bars represent standard deviation
There were no statistically differences between Groups I and III at $p < 0.05$.

FIGURE 4

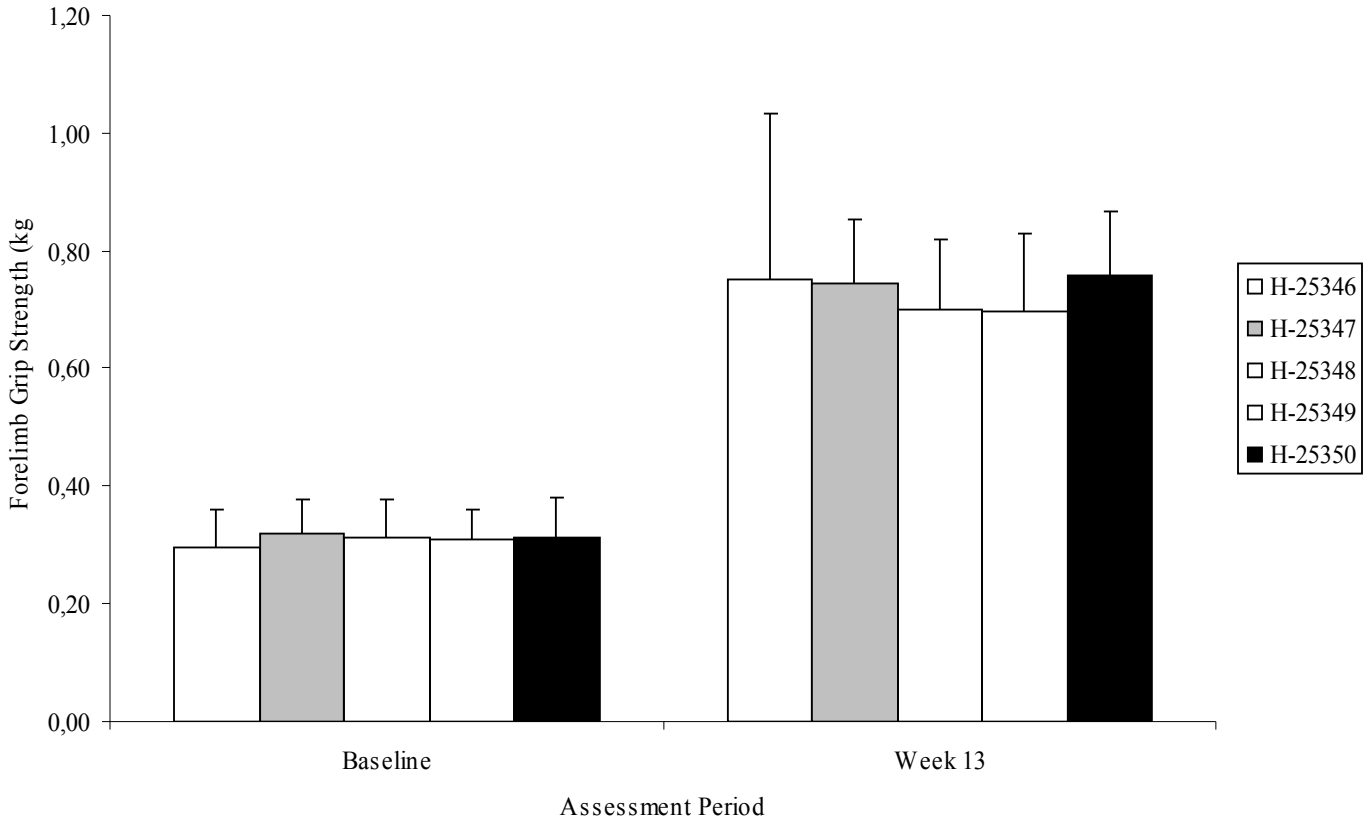
MEAN FORELIMB GRIP STRENGTH FOR FEMALE RATS



Error bars represent standard deviation.
* Statistically significant difference for Group IV compared to Group II at $p<0.05$ by Dunnett's test.

FIGURE 5

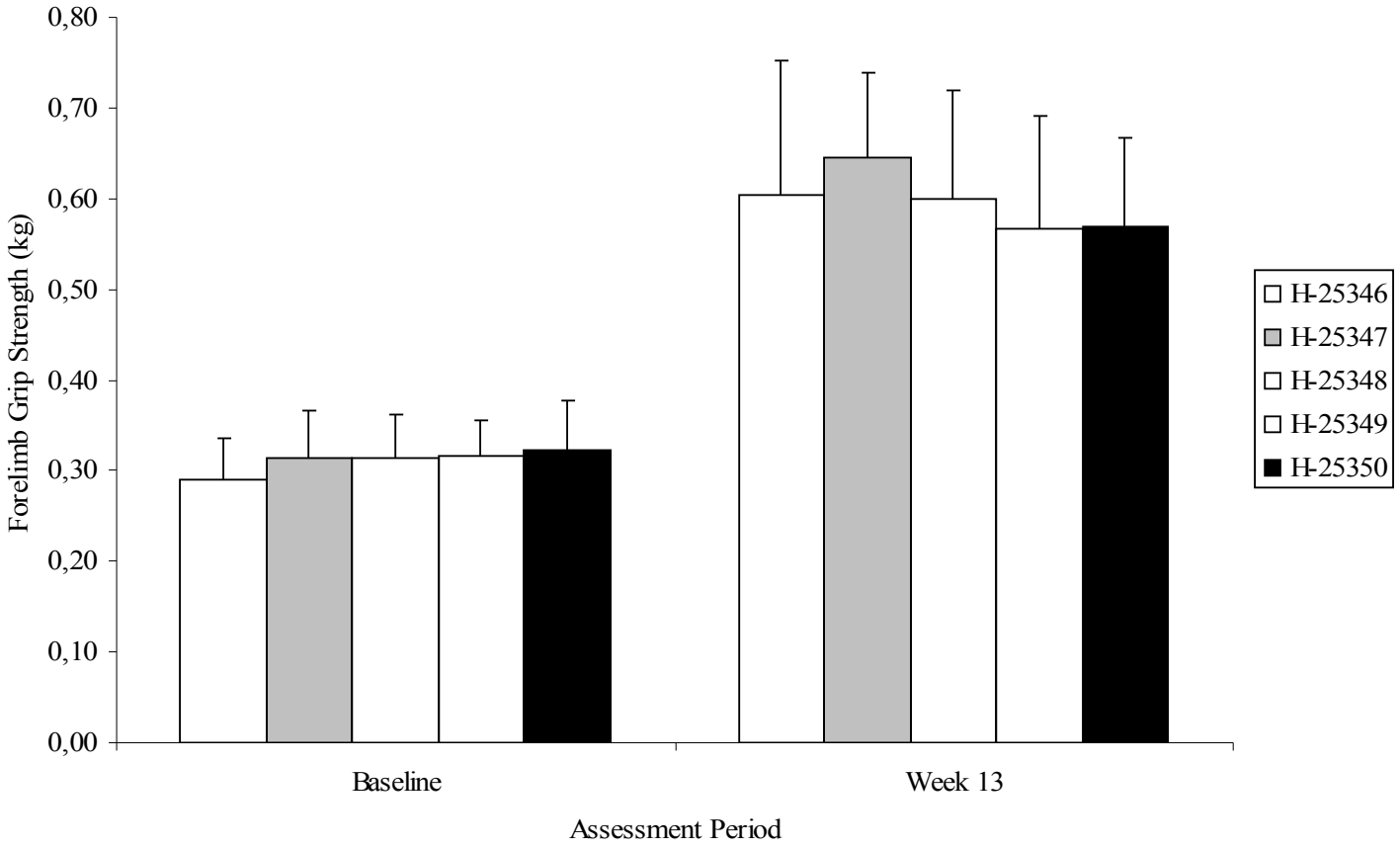
MEAN HINDLIMB GRIP STRENGTH FOR MALE RATS



Error bars represent standard deviation
There were no statistically differences between Groups I and III at $p < 0.05$.

FIGURE 6

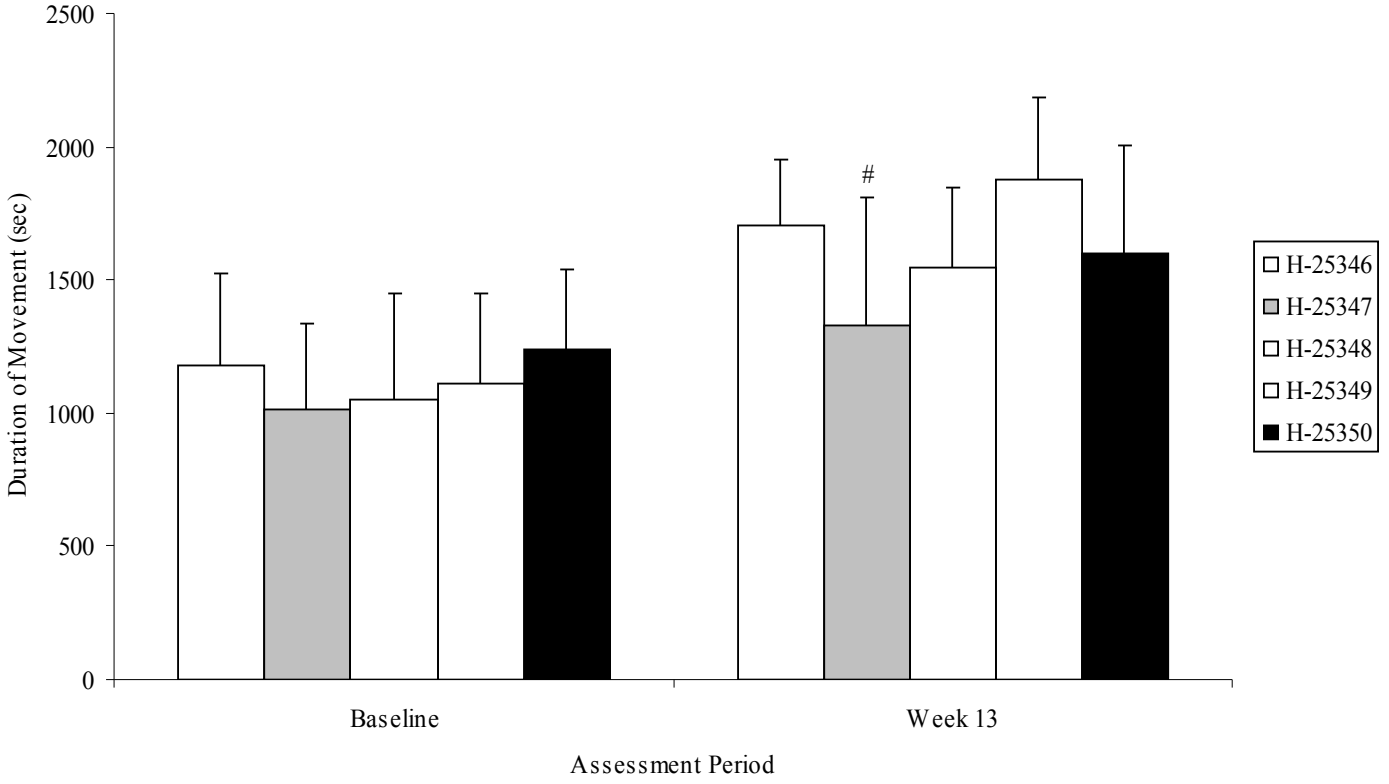
MEAN HINDLIMB GRIP STRENGTH FOR FEMALE RATS



Error bars represent standard deviation
There were no statistically differences between Groups II and IV at $p < 0.05$.

FIGURE 7

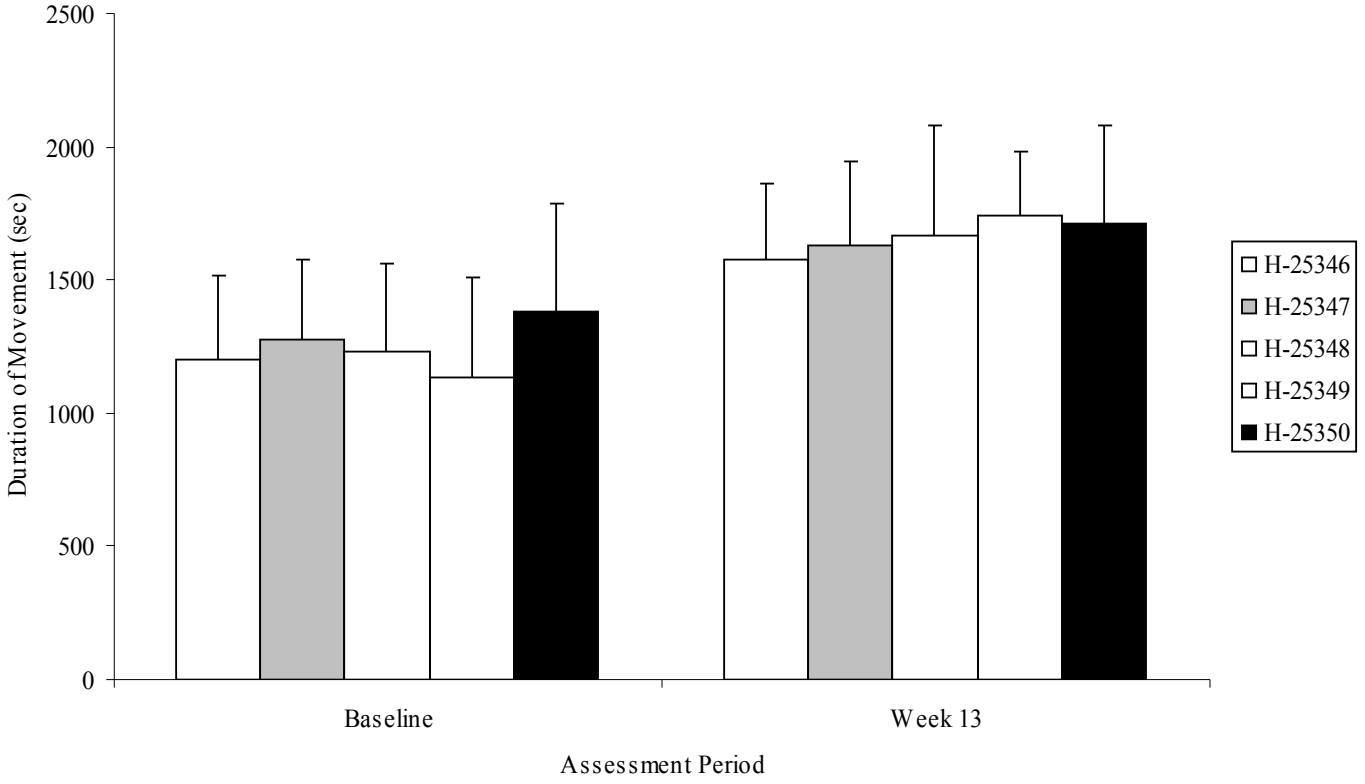
MEAN TOTAL DURATION OF MOVEMENT FOR MALE RATS



Error bars represent standard deviation
Statistically significant difference for Group III compared to group I by Modified Dunn's Multiple Comparison at $p < 0.05$.

FIGURE 8

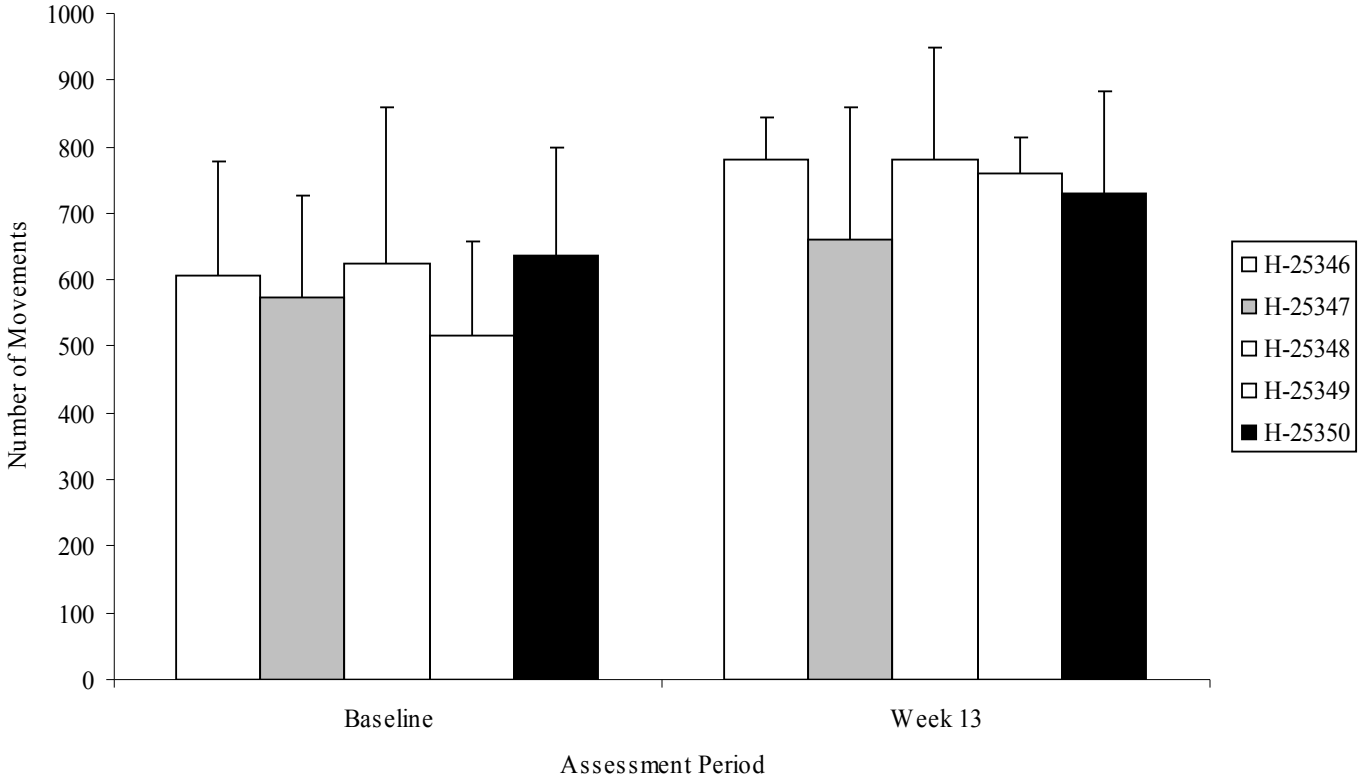
MEAN TOTAL DURATION OF MOVEMENT FOR FEMALE RATS



Error bars represent standard deviation
There were no statistically significant differences between Groups II and IV at $p < 0.05$.

FIGURE 9

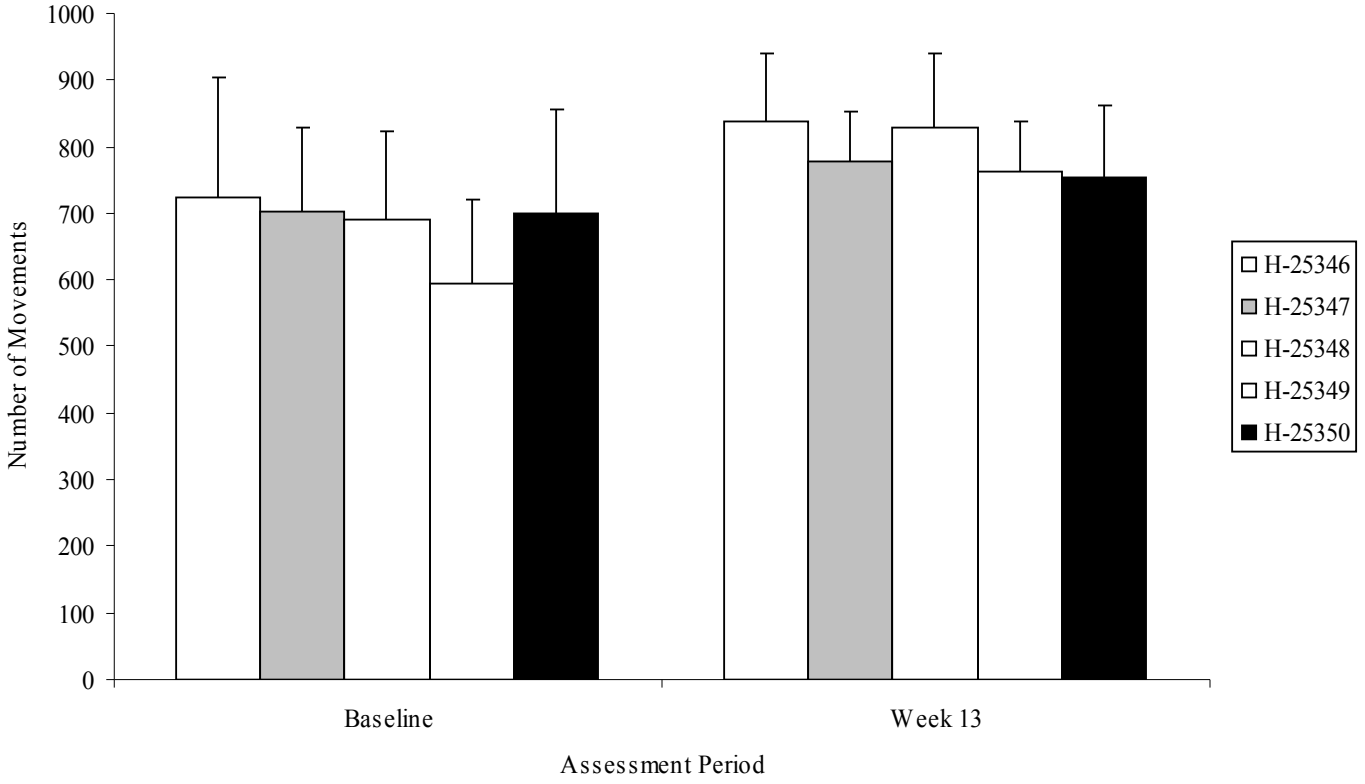
MEAN TOTAL NUMBER OF MOVEMENTS FOR MALE RATS



Error bars represent standard deviation.
There were no statistically differences between Groups I and III at $p < 0.05$.

FIGURE 10

MEAN TOTAL NUMBER OF MOVEMENTS FOR FEMALE RATS



Error bars represent standard deviation
There were no statistically differences between Groups II and IV at $p < 0.05$.