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Fourteen-Day Subacute Intravenous Toxicity Study of
Hypertonic Saline/Dextran 70[®] and its Constituents
in Beagle Dogs

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MAMMALIAN TOXICOLOGY BRANCH
DIVISION OF TOXICOLOGY

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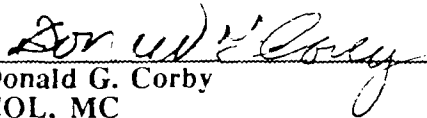
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The subacute toxicity following intravenous administration of a proposed resuscitation fluid, hypertonic saline/Dextran 70® (HSD), was evaluated in male and female beagle dogs. Animals received intravenous doses of HSD, at levels of 12, 16, and 20 ml/kg/day over a 5-minute period, daily for 14 days. Equal volumes of each HSD component, 7.5% hypertonic saline (HS) and 6% dextran 70® (D70) in normal saline, were also evaluated. Ringer's lactate (PL), dosed at 20 ml/kg/day, served as the control. Blood samples were collected for serum chemistry and hematologic analyses on Day 0 (baseline), days 1, 2, 3, and 7 before daily administration of the dosing solutions, and day 14 before necropsy. Observations were made daily before dosing, 1 hour after dosing, and in the afternoon. Water consumption was monitored over a 24-hour period weekly during quarantine, daily for the first week of the study, and on Day 11. Direct and indirect ophthalmic examinations were			
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performed on Days -1 and 13. The animals in each group were euthanized and submitted to necropsy on Day 14. Clinical signs were observed with increased frequency in the HSD- and HS-treated groups and included disorientation, inactivity, tremors, vomiting, excessive thirst, hunched posture, increased salivation, increased respiratory depth or rate, and panting. The D70-treated animals exhibited signs with incidence intermediate to HSD- or HS-treated animals, and those treated with RL. The incidence and severity of observed signs was greatest 1 hour after dosing, and declined over the following 24 hours until dosing was repeated the next day. Significantly increased water consumption was observed in the HSD- and HS-treated groups throughout the study period. D70- and HSD-treated animals exhibited statistically significant decreases in cholesterol (CHOL), albumin (ALB), albumin/globulin ratio (A-G), calcium (CAL), iron (IRON), magnesium (MAG), erythrocyte count (RBC), hemoglobin (HGB), hematocrit (HCT), total leukocyte count (WBC), and platelet count (PLT). Significant increases in aspartate aminotransferase (AST), alkaline phosphatase (ALK), prothrombin time (PT), and activated partial thromboplastin time (APTT) were observed following treatment with D70 or HSD, while increases in alanine aminotransferase (ALT) were observed following treatment with HS or HSD. Elevations of ALT exhibited a dose response, and after reaching maximal values by Day 2, gradually declined for the remainder of the study period. ALK reached maximal levels by Day 3 and gradually decreased at Days 7 and 14. The hematologic measurements of D70-treated animals were affected more severely than those treated with HSD, and the effects on CHOL, ALB, A-G, CAL, IRON, RBC, HGB, HCT, PT, and APTT became more pronounced as repeated daily dosing continued through the 14-day study period. A slight recovery of WBC and PLT was observed at Day 14. Hematologic measurements of HS-treated animals were unaffected by dosing. Body weights were unaffected by dosing, and, with the exception of mild hepatomegaly and splenomegaly observed in female dogs treated with HSD or D70, no gross or microscopic lesions could be attributed to HSD or its constituents. Since the proposed therapeutic dose of HSD is a single dose of 4 ml/kg, these findings indicate minimal adverse effects should be anticipated with the therapeutic administration of HSD.

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ABSTRACT

The subacute toxicity following intravenous administration of a proposed resuscitation fluid, hypertonic saline/Dextran 70® (HSD), was evaluated in male and female beagle dogs. Animals received intravenous doses of HSD, at levels of 12, 16, and 20 ml/kg/day over a 5-minute period, daily for 14 days. Equal volumes of each HSD component, 7.5% hypertonic saline (HS) and 6% Dextran 70® (D70) in normal saline, were also evaluated. Ringer's lactate (RL), dosed at 20 ml/kg/day, served as the control. Blood samples were collected for serum chemistry and hematologic analyses on Day 0 (baseline), Days 1, 2, 3, and 7 before daily administration of the dosing solutions, and Day 14 before necropsy. Observations were made daily before dosing, 1 hour after dosing, and in the afternoon. Water consumption was monitored over a 24-hour period weekly during quarantine, daily for the first week of the study, and on Day 14. Direct and indirect ophthalmic examinations were performed on Days -1 and 13. The animals in each group were euthanized and submitted to necropsy on Day 14. Clinical signs were observed with increased frequency in the HSD- and HS-treated groups and included disorientation, inactivity, tremors, vomiting, excessive thirst, hunched posture, increased salivation, increased respiratory depth or rate, and panting. The D70-treated animals exhibited signs with incidence intermediate to HSD- or HS-treated animals, and those treated with RL. The incidence and severity of observed signs was greatest 1 hour after dosing, and declined over the following 24 hours until dosing was repeated the next day. Significantly increased water consumption was observed in the HSD- and HS-treated groups throughout the study period. D70- and HSD-treated animals exhibited statistically significant decreases in cholesterol (CHOL), albumin (ALB), albumin/globulin ratio (A-G), calcium (CAL), iron (IRON), magnesium (MAG), erythrocyte count (RBC), hemoglobin (HGB), hematocrit (HCT), total leukocyte count (WBC), and platelet count (PLT). Significant increases in aspartate aminotransferase (AST), alkaline phosphatase (ALK), prothrombin time (PT), and activated partial thromboplastin time (APTT) were observed following treatment with D70 or HSD, while increases in alanine aminotransferase (ALT) were observed following treatment with HS or HSD. Elevations of ALT exhibited a dose response, and after reaching maximal values by Day 2, gradually declined for the remainder of the study period. ALK reached maximal levels by Day 3 and gradually decreased at Days 7 and 14. The hematologic measurements of D70-treated animals were affected more severely than those treated with HSD, and the effects on CHOL, ALB, A-G, CAL, IRON, RBC, HGB, HCT, PT, and APTT became

more pronounced as repeated daily dosing continued through the 14-day study period. A slight recovery of WBC and PLT was observed at Day 14. Hematologic measurements of HS-treated animals were unaffected by dosing. Body weights were unaffected by dosing, and, with the exception of mild hepatomegaly and splenomegaly observed in female dogs treated with HSD or D70, no gross or microscopic lesions could be attributed to HSD or its constituents. Since the proposed therapeutic dose of HSD is a single dose of only 4 ml/kg, these findings indicate minimal adverse effects should be anticipated with the therapeutic administration of HSD.

Key Words: Subacute Toxicity, Intravenous Administration, Hypertonic Saline/Dextran 70®, Hypertonic Saline, Dextran 70®, Ringer's Lactate, Resuscitation Fluid, Dog

PREFACE

TYPE REPORT: Subacute Toxicity GLP Study Report

TESTING FACILITY:

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Project Director: Charles Wade, PhD

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GLP STUDY NUMBER: 88008

STUDY DIRECTOR: Don W. Korte, Jr., PhD, LTC, MSC
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DATA MANAGER: Yvonne C. LeTellier, BS

REPORT AND DATA MANAGEMENT:

A copy of the final report, study protocols,
retired SOPs, raw data, analytical and stability
data, and an aliquot of the test compound will
be retained in the LAIR Archives.

TEST SUBSTANCE: Hypertonic Saline/Dextran 70®

INCLUSIVE STUDY DATES: 12 January 89 - 29 March 89

OBJECTIVE: The objective of this study was to determine
the subacute toxicity of hypertonic
saline/Dextran 70® following intravenous
administration in male and female beagle dogs.

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SIGNATURES OF PRINCIPAL SCIENTISTS AND MANAGERS
INVOLVED IN THE STUDY

We, the undersigned, declare that GLP study number 88008 was performed under our supervision, according to the procedures described herein, and that this report is an accurate record of the results obtained.

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DEPARTMENT OF THE ARMY

LETTERMAN ARMY INSTITUTE OF RESEARCH
PRESIDIO OF SAN FRANCISCO, CALIFORNIA 94129-6800

REPORT TO
ATTENTION OF

SGRD-ULZ-QA

11 October 1989

MEMORANDUM FOR RECORD

SUBJECT: GLP Compliance for GLP Study 88008

1. This is to certify that in relation to LAIR GLP Study 88008 the following inspections were made:

11 July 1988	- Protocol Review
17 January 1989	- Animal Receipt/Room Inspection
17 January 1989	- Weighing
18 January 1989	- Fecal Analysis
19 January 1989	- Measuring Water Bottles
24 January 1989	- Hematology
24 January 1989	- Serology
31 January 1989	- Dosing
31 January 1989	- Observations
14 February 1989	- Necropsy
27 February 1989	- Histology

2. The institute report entitled "Subacute Toxicity of HSD and its constituents in Beagle Dogs," Toxicology Series 249, was audited on 28 September 1989.

Carolyn M. Lewis

CAROLYN M. LEWIS
Diplomate, American Board of
Toxicology
Quality Assurance Auditor

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Fourteen-Day Subacute Intravenous Toxicity Study of Hypertonic Saline/Dextran 70® and its Constituents in Beagle Dogs -- Zaucha et al.

INTRODUCTION

During conventional land warfare, it has been estimated that 90% of the deaths occur either in the field or en route to a fixed medical treatment facility and that 50% of those deaths occur due to hemorrhage (1). Conventional treatment of hemorrhage has involved infusion of isotonic resuscitation fluids at volumes equivalent to two or three times the volume of blood lost (2). Supplying this volume of resuscitation fluid on the battlefield for treatment of multiple casualties is not feasible.

Hypertonic crystalloid solutions have been used for the past 70 years in the treatment of hemorrhage (3). However, the consensus has been that unless followed by replacement of the lost blood volume, the beneficial effects of treatment with hyperosmotic solutions are transient (4). Recently, the addition of a hyperoncotic colloid, 6% Dextran 70®, to the hypertonic crystalloid, 7.5% saline, has significantly extended 96-hour survival rates compared with those obtained with normal saline or 7.5% saline (5). Should the effectiveness of this hypertonic saline/Dextran therapy be verified by clinical trial, it would provide a significant advance in the treatment of blood loss due to traumatic injuries.

As with any new treatment regimen, there are potential risks. Low molecular weight dextran could cause bleeding abnormalities and phlebitis or possibly interfere with the cross-matching of blood (6). Hypertonic solutions could cause neurologic abnormalities induced by the rapid increases in osmolalities (7-9) or cardiac arrhythmias induced by the hypokalemia associated with the rapid expansion of extracellular space (2, 10). Consequently, the Division of Toxicology, Letterman Army Institute of Research, was tasked to provide an acute and subacute toxicity profile of the 7.5% hypertonic saline/6% Dextran 70® resuscitation fluid (HSD). This report describes the results of a 14-day subacute toxicity study of hypertonic saline/Dextran 70® following intravenous administration in male and female beagle dogs.

Objective of Study

The objective of this study was to determine the 14-day subacute toxicity of hypertonic saline/Dextran 70® following intravenous administration in male and female beagle dogs.

MATERIALS

Test Substance

Name: Hypertonic saline/Dextran 70® (HSD)

LAIR Code No.: TP96

Lot Number: OD 59331

Expiration Date: 31 October 1989

Composition per 100 ml:	Dextran 70®	6 g
	sodium chloride	7.5 g
	water for injection to 100 ml	

Source: Pharmacia LEO Pharmaceuticals
Uppsala, Sweden

Test Substance Constituents

Name: Hypertonic (7.5%) saline (HS)

LAIR Code No.: TP98

Lot Number: OD 59339

Expiration Date: 31 October 1989

Composition per 100 ml:	sodium chloride	7.5 g
	water for injection to 100 ml	

Source: Pharmacia LEO Pharmaceuticals
Uppsala, Sweden

Name: Dextran 70® (D70)

LAIR Code No.: TP95

Lot Numbers: NE 54941 and OD 59340

Expiration Dates: 31 May 1989 and 30 April 1990,
respectively

Composition per 100 ml: Dextran 70® 6 g
 sodium chloride 0.9 g
 water for injection to 100 ml

Source: Pharmacia LEO Pharmaceuticals
 Uppsala, Sweden

Control

Name: Ringer's lactate (RL)

LAIR Code No.: TP97

Lot Numbers: NC 54847 and OD 59336

Expiration Dates: September 1989 and 31 October 1989,
 respectively

Composition per 100 ml: sodium chloride 600 mg
 potassium chloride 30 mg
 calcium chloride
 dihydrate 20 mg
 sodium lactate 310 mg
 water for injection to 100 ml

Source: Pharmacia LEO Pharmaceuticals
 Uppsala, Sweden

Other test substance information is presented in
Appendix A.

Animal Data

Thirty-six male and 36 female beagle dogs (Hazleton-LRE, 6321 South 6th St., Kalamazoo, MI 49009) were assigned to this study. They were identified individually with the supplier's ear tattoos and corresponding LAIR animal identification numbers. Six male and 6 female dogs were utilized for a preliminary range-finding study and quality control necropsy. The animal weights on receipt (12 January and 22 February 89, Phase I and II, respectively) ranged from 8.72 to 14.35 kg (weights recorded 17 January and 23 February 89, Phase I and II, respectively). Additional animal data are presented in Appendix B.

Husbandry

Study animals were individually housed in stainless steel runs, which conformed to standards published by the United States Department of Agriculture [Animal Welfare Act

(public law 91-579) and DHEW publication No. (NIH) 85-23 (revised, 1985)]. The diet, fed *ad libitum*, consisted of Certified Purina® Canine Diet 5007 (Ralston Purina Company, St. Louis, MO); water, purified by reverse osmosis, was provided by continuous drip from individual, calibrated, 2-liter cylinders. The animal room temperature and humidity were monitored continuously by hygrothermograph. The temperature was maintained in a range from 15.6°C to 26.7°C. The relative humidity was maintained in a range from 10% to 65% with occasional extremes to 81% for limited periods of time. The photoperiod was 12 hours of light per day (0600-1800 hours).

METHODS

This study was conducted in accordance with FDA guidelines (11) and LAIR SOP-OP-STX-107 (12).

Group Assignment/Acclimation

The animals were randomized into ten groups of 3 male and 3 female animals each (Table 1). Allocation was accomplished using a computer-based, stratified, weight-biased method. The XYBION Path/Tox AESLCT Animal Allocation Program was used in conjunction with a VAX 750 Computer.

The study animals were acclimated for a minimum of 12 days before the day of dosing. During this period they were quarantined, examined, and had hematologic and serum chemistry analyses performed in accordance with LAIR SOP OP-ARG-36 (13). The animals were checked daily for signs of illness, and water consumption and body weights were measured weekly.

Dose Levels, Preparation, and Analysis

The maximum tolerated intravenous dose of HSD administered daily over a 5-minute period for 14 days was established at 20 ml/kg/day in preliminary pilot studies. This dose was chosen as the high dose level for HSD, HS, and D70. Intermediate (16 ml/kg/day) and low (12 ml/kg/day) dose levels for HSD, HS, and D70 were chosen as multiples of the proposed therapeutic dose (4 ml/kg). RL was administered to the controls at the high dose level only. Solutions were used as supplied by the manufacturer, Pharmacia LEO Pharmaceuticals. Analysis of the dosing solutions was provided by Pharmacia LEO Pharmaceuticals. Additional chemical data are presented in Appendix A.

TABLE 1
Dose Groups

Group	n (each sex)	Solution	Dose Level (ml/kg/day)
1	3	hypertonic saline/Dextran 70®	12
2	3	hypertonic saline/Dextran 70®	16
3	3	hypertonic saline/Dextran 70®	20
4	3	hypertonic saline	12
5	3	hypertonic saline	16
6	3	hypertonic saline	20
7	3	Dextran 70/normal saline	12
8	3	Dextran 70/normal saline	16
9	3	Dextran 70/normal saline	20
10	3	Ringer's lactate	20

Test Procedures

The subacute intravenous toxicity of hypertonic saline/Dextran 70® was evaluated in parallel with solutions of its major constituents, hypertonic (7.5%) saline and Dextran 70® (6%) in normal saline, with Ringer's lactate serving as the control. The study was conducted in 2 phases with animals of both sexes and all dose groups included in each phase. To facilitate distribution of the workload, animals of each phase were further divided into subgroups of 6-9 animals, and a staggered start date for initial dosing of each subgroup was used. Each subgroup consisted of animals of one sex with each dose group equally distributed among the subgroups. Dosing began 31 January, 1, 7, and 8 February for the four Phase I subgroups; and 7, 8, 14, and 15 March 1989 for the four Phase II subgroups. Individual doses for Days 0-6 were calculated using the Day -1 body weights. Doses for Days 7-13 were calculated using the Day 7 body weights. The study animals were fed at approximately 1300 daily during the observation period. The dosing solutions were administered

between 0800 and 1200 via the cephalic or saphenous veins. Each day, animals were dosed by subgroup, in order of group number within the subgroup; groups 1, 2, and 3, HSD being first; followed in sequence by groups 4, 5, and 6, HS; groups 7, 8, and 9, D70; and group 10 RL. When the dosing of one subgroup was completed, the next subgroup of 6-9 animals was dosed in order of group number until all animals were dosed each day. Each day, dosing of the female subgroups was completed before any males were dosed. Injections were made using 60 cc syringes (Becton Dickinson & Co., Rutherford, NJ, Lot No. 6E417) and butterfly catheters (Intravenous Injection Set, 19-gauge needle-pediatric, disposable type, size 3, Sherwood Medical Co., St. Joseph, MO, Lot No. 517600; and Miniset® Vein Infusion Set, 19-gauge x 22 cm, Travenol Laboratories, Inc., Deerfield, IL, Lot No. 2N1062M). Immediately following the injection, a pressure bandage was applied to control any bleeding from the injection site.

Observations

During the 14-day observation period, clinical observations were accomplished daily before dosing, 1 hour after dosing, and in the afternoon. Body weights were recorded upon receipt of the animals, weekly during the quarantine and observation periods, and at necropsy. Water consumption was monitored for a twenty-four hour period, weekly during quarantine, daily for the first week of the study, and at 14 days. Blood samples were collected for serum chemistry and hematologic analyses during the pre- and postquarantine physical examinations, on Day 0 (baseline), Days 1, 2, 3, and 7 before daily administration of the dosing solutions, and on Day 14 at necropsy. Samples for hematology and clotting time determinations were collected in EDTA and citrate tubes, respectively. All samples for serum chemistry and clotting time determinations were centrifuged within an hour after collection and the serum or plasma frozen at -14°C to -28°C without interruption for a week before analyses. Direct and indirect ophthalmic examinations of all study animals were performed on Days -1 and 13.

Necropsy

All animals were submitted for necropsy on Day 14 immediately after receiving a lethal dose of a barbiturate solution. Histopathologic examination was performed on the brain, including sections of the medulla/pons, cerebellar cortex, and cerebral cortex; spinal cord; eyes; thigh musculature/sciatic nerve; diaphragm; bone/bone marrow; pituitary; thyroid/parathyroids; trachea; tonsils; salivary gland; thymus; lungs; spleen; representative lymph node;

mammary gland/skin; kidneys/adrenals; pancreas; liver; gall bladder; gonads; uterus/prostate and epididymis; urinary bladder; ureter; heart; aorta; cephalic vein proximal and distal to injection site; esophagus; stomach; duodenum; jejunum; ileum; colon; cecum; and all gross lesions.

Statistical Analysis

The means and standard deviations for the body weight, water consumption, serum chemistry, and hematology data for each group were calculated. For the body weight data, an analysis of variance and the Bartlett's test for homogeneity were performed for each sex separately using the XYBION PATH/TOX software package. If the F-statistic was significant for an analysis of variance, differences from the control were evaluated using the Dunnett's t test for homogeneous data or the Modified T test for nonhomogeneous data. Water consumption, serum chemistry, and hematology data were analyzed using the BMDP statistical software package (14). To assure that no differences existed among the groups or sexes prior to dosing, the water consumption, serum chemistry, and hematology baseline (Day 0) data were subjected to a two-way analysis of variance (ANOVA) using sex and group as the factors of interest. If the F-statistic was significant for an analysis of variance for a particular measurement, differences among the sexes and groups were evaluated using the Student-Newman-Keuls multiple range test. To assure that changes across time were due to the administration of test solutions and not normal variation over time, the control group (RL) data was analyzed by a two-way ANOVA using sex and time as the factors of interest. If the F-statistic was significant for this analysis of variance, differences from baseline were evaluated using the Dunnett's t test. The remaining groups' data for Days 1 through 14 were then subjected to a four-way analysis of covariance using group, dose, sex, and time as the factors of interest, with each respective baseline serving as the covariate. Since the control group did not have 3 dose levels, it could not be included in the 4-way analysis. If no interactions were found between the sex factor and the dose or group factors in the four-way analysis, data for both sexes was combined and a three-way analysis of covariance was performed using group, dose, and time as the factors of interest. In either case, if the F-statistic was significant for an analysis of covariance for a particular measurement, differences among the groups and doses, and sexes, if applicable, were evaluated using the Student-Newman-Keuls multiple range test. If time was a significant factor, the Newman-Keuls was performed for each time point separately. In addition, the water consumption, serum chemistry, and

hematology data of each group were subjected to a separate analysis of variance to determine if significant differences from baseline (Day 0) values occurred. Since significant sex differences were not observed among the groups at baseline, the sexes were combined for this analysis. If the F-statistic was significant for this analysis of variance, each time period was compared to the group's baseline value using the Dunnett's t test. The preponderance of "0.0" values precluded the performance of a valid statistical analysis for bilirubin data. All statistical tests were performed at the 0.05 level of significance. Clinical signs and gross and microscopic pathology findings were described for each animal and tabulated by groups.

Duration of Study

Appendix C is a complete historical listing of study events.

Changes/Deviations

The protocol schedule refers to the first day of dosing as Day 0. Since XYBION programming refers to the first day of dosing as Day 1, a one-day discrepancy exists between the actual study day and the study day listed in the XYBION printouts for Appendix D: Individual Animal Histories, and Appendix I: Pathology.

It is believed that this change had no adverse effects on the results of this study.

Storage of Raw Data and Final Report

A copy of the final report, study protocol, raw data, retired SOPs, and an aliquot of the test compounds will be retained in the Letterman Army Institute of Research Archives.

RESULTS

Clinical Observations

The clinical signs observed were grouped into behavioral, general, gastrointestinal, respiratory, and ocular categories. With the exception of soft stool, which exhibited an equivalent incidence among all groups, all major clinical signs were observed with greatest incidence in animals receiving HSD or HS. The incidence of each individual sign was approximately the same among the HSD- and

HS-treated groups. The incidence of major signs in D70-treated groups was intermediate between the HSD- and HS-treated groups, and those treated with RL. Signs occurred only sporadically in RL-treated animals. With the exceptions of an increased incidence of excessive salivation in the middle and high-dose groups receiving HSD or HS, and an increased incidence of tremors in the middle and high-dose groups receiving HS or D70, the incidence of signs was not dose-related. No sex related differences were apparent in any of the clinical observations.

Behavioral signs was the most frequently observed category. Behavioral signs observed included disorientation (48 of 60 animals), inactivity (47 of 60), tremors (40 of 60), hyperactivity (6 of 60), pacing (5 of 60), circling (3 of 60), and staggering (2 of 60). Disorientation, inactivity, and tremors were observed with greatest incidence in HSD- and HS-treated animals. A moderate incidence of these three signs was observed in D70-treated animals, while the signs appeared only sporadically among those receiving RL. The incidence and severity of behavioral signs was greatest one hour after dosing each day. A gradual reduction in incidence and severity then occurred until most signs resolved within 24 hours after dosing. The signs reappeared after the next day's dosing, and repeated the cycle of resolution over the following 24 hours. Hyperactivity, pacing, circling, and staggering occurred sporadically throughout the study period, and were randomly distributed among the groups.

General signs observed included excessive thirst (32 of 60), hunched posture (31 of 60), increased salivation (29 of 60), decreased appetite (15 of 60), excessive bleeding from the injection site (2 of 60), swelling or edema of the injected leg (2 of 60), and bloody urine (1 of 60). Excessive thirst, hunched posture, and increased salivation were observed primarily in animals receiving HSD or HS. Increased salivation was the only sign that demonstrated a dose-response, and was observed primarily in the middle and high-dose groups treated with HSD or HS. Excessive salivation usually started before the dosing of an animal was completed. Many animals developed a conditioned response and would begin to salivate when removed from their run in preparation for dosing. The salivation generally subsided by the afternoon observation period. Excessive thirst, hunched posture, and increased salivation were observed with low incidence in animals treated with D70, and sporadically in those treated with RL. Decreased appetite was distributed equally among the groups. Excessive bleeding was observed only in D70-treated animals, and only during the second week of the study period. Swelling of the injected leg was

observed only in HSD- or HS-treated animals, and resolved within 48 hours in each case. Bloody urine occurred only once in 1 animal.

Gastrointestinal signs included vomiting (40 of 60), soft stool (37 of 60), and diarrhea (2 of 60). Vomiting was observed in all HSD- (18 of 18) and HS-treated (18 of 18) animals, and usually occurred within 1 hour after dosing. Vomiting occurred with a lower incidence in D70-treated animals (4 of 18), and was not observed at all in animals treated with RL. The frequency of vomiting decreased over the 14-day study period. The frequency of vomiting for week 2 was approximately 1/2 that of the first week. Soft stool was observed with relatively equal distribution among the groups and study days. Diarrhea was observed only in 2 HSD-treated animals, and resolved within 48 hours in each case.

Respiratory signs included increased respiratory depth (15 of 60), panting (12 of 60), increased respiratory rate (3 of 60), and congestion (3 of 60). Increased respiratory depth was observed with greatest incidence in animals treated with HSD (7 of 18), followed by those treated with HS (5 of 18) and D70 (3 of 18). Panting was most prevalent in animals receiving D70 (6 of 18), followed by HS (4 of 18), and HSD (2 of 18). Increased respiratory rate and congestion were sporadically observed among the groups. No respiratory signs were observed in animals receiving RL.

The ocular signs, squinting and ocular or nasal discharge, were each observed in only 1 animal of the HSD- or D70-treated groups.

Direct and indirect ophthalmic examinations revealed no visible lesions in any of the study animals on Days -1 or 13.

A summary of clinical observations is presented in Table 2. Individual animal histories are presented in Appendix D.

Body Weights

Animal body weights were not significantly affected by dosing. Group mean body weights are presented in Table 3. Individual animal body weights are presented in Appendix E.

Water Consumption

Group mean water consumption data are presented in Table 4. Individual animal water consumption data are presented in Appendix F. No statistically significant differences were detected among the groups (HSD, HS, and D70), dose levels

(12, 16, and 20 ml/kg/day), or sexes at baseline (Day 0). The four-way analysis of covariance for Days 1, 2, 3, 7, and 14 demonstrated that sex was not a significant interacting factor with group or dose for water consumption following the initiation of dosing. Therefore, the data were subjected to a three-way analysis of covariance, followed by the Student-Newman-Keuls multiple range test, with data from both sexes combined. Dose level was not found to be a significant factor affecting water consumption. Significant group effects, however, were observed. Animals receiving HSD and HS were shown to have statistically equivalent water consumption. The water consumption of HSD- and HS-treated animals was significantly greater than that of D70-treated animals at Days 1 through 7 and Day 14. HSD- and HS-treated animals consumed approximately 2.5 times as much water as those treated with RL or D70. When the mean values at each time point (Days 1, 2, 3, 4, 5, 6, 7, and 14) were compared to the baseline values (Day 0) for each respective group and dose level, significant increases in water consumption were observed at Days 1 through 7 and Day 14 for animals receiving low, middle, and high doses of HSD and HS. Animals treated with D70 exhibited slightly increased water consumption, but the change was not significant compared to baseline. The water consumption of RL-treated animals was unaffected by dosing.

Serum Chemistry

Group mean serum chemistry data are presented in Table 5. Individual serum chemistry data are presented in Appendix G. No statistically significant differences were detected among the groups (HSD, HS, and D70), dose levels (12, 16, and 20 ml/kg/day), or sexes at baseline (Day 0). After the initiation of dosing (Days 1, 2, 3, 7, and 14), the four-way analysis of covariance did detect significant group (HSD, HS, and D70) effects, with an interaction with the sex factor, for triglyceride (TRIG). Since sex was a significant interacting factor for this measurement, the sexes were kept separate for the subsequent Student-Newman-Keuls multiple range test. For the remaining serum chemistry measurements, sex was not a significant interacting factor with group or dose. Therefore, the data for the remaining measurements were subjected to a three-way analysis of covariance, followed by the Student-Newman-Keuls multiple range test, with data from both sexes combined.

Moderate increases in aspartate aminotransferase (AST) and alkaline phosphatase (ALK) were observed in animals treated with D70 or HSD. Elevated AST levels were observed by Day 1, and remained relatively constant through Day 14.

ALK levels progressively increased to peak at Day 3, and then decreased through Day 14. At Day 14, however, the ALK values were still elevated compared to baseline for HSD- and D70-treated animals. AST and ALK levels of HSD- and D70-treated animals were significantly greater than those of HS-treated animals at Days 1, 2, 3, 7, and 14. The AST levels of HSD-treated animals were also significantly greater than those of D70-treated animals at Days 1, 2, and 3. When the mean values at each time point (Days 1, 2, 3, 7, and 14) were compared to baseline values (Day 0) for each respective group and dose level, statistically significant increases in AST were observed in animals treated with low, middle, and high doses of D70, and low and high doses of HSD at Days 1, 2, 3, 7, and 14. Animals receiving middle-doses of HSD also exhibited increases in AST, but the differences from baseline were not statistically significant. The mean ALK values for all groups treated with D70 or HSD were significantly increased compared to baseline at Days 1, 2, 3, 7, and 14.

Following treatment with D70 or HSD, progressive decreases were observed for cholesterol (CHOL), albumin (ALB), albumin/globulin ratio (A-G), calcium (CAL), and iron (IRON). The mean ALB and IRON values for D70- and HSD-treated animals were statistically equivalent and significantly less than those of HS-treated animals at Days 1, 2, 3, 7, and 14. The mean CHOL, A-G, and CAL values for D70- and HSD-treated animals were also statistically equivalent and significantly less than those of HS-treated animals at Days 2, 3, 7, and 14. When compared to the respective baseline values, statistically significant decreases in CHOL were observed for animals treated with middle and high doses of HSD or D70 (Days 2, 3, 7, and 14); decreases in ALB were observed for animals treated with low (Days 2, 3, 7, and 14), middle (Days 1, 2, 3, 7, and 14), and high (Days 2, 3, 7, and 14) doses of HSD, and low (Days 2, 3, 7, and 14), middle (Days 1, 2, 3, 7, and 14), and high (Days 1, 2, 3, 7, and 14) doses of D70; decreases in A-G were observed for animals treated with middle (Days 2, 3, 7, and 14) and high (Days 1, 2, 3, 7, and 14) doses of HSD, and low (Days 2, 3, 7, and 14), middle (Days 2, 7, and 14), and high (Days 2, 3, 7, and 14) doses of D70; decreases in IRON were observed for animals treated with high doses of D70 (Days 1, 2, 3, 7, and 14); and decreases in CAL were observed for animals treated with high doses of HSD or D70 (Day 14).

The mean potassium (K) values of D70- and HSD-treated animals were significantly less than those of HS-treated animals at Days 2, 7, and 14. The K values of D70-treated animals were also significantly less than those of HS-treated animals at Day 3. The mean K values of HS-treated animals fluctuated either side of baseline, while those of D70- or

HSD-treated animals were consistently less than baseline. However, no statistically significant deviations from baseline were observed.

Following treatment with D70 or HSD, decreases were also observed for magnesium (MAG). Compared to baseline, the decreases were statistically significant only for animals treated with high doses of D70 at Days 2, 3, 7, and 14. The mean MAG values for HS-treated animals generally increased compared to baseline, but the changes were not statistically significant. The mean MAG levels of D70- and HSD-treated animals were significantly less than those of HS-treated animals at Days 2, 3, 7, and 14. At Day 14, the MAG levels of D70-treated animals were also significantly less than those of animals treated with HSD.

Following treatment with HS, statistically significant increases compared to baseline values were observed for lactate dehydrogenase (LDH), creatinine (CR), chloride (CL), alanine aminotransferase (ALT), and triglyceride (TRIG). The differences in LDH, CR, and CL, while statistically significant among treatment groups, were isolated or inconsistent, and fluctuated to either side of the respective baseline values. The mean NA values for HS-treated animals were significantly greater than those of D70- or HSD-treated animals at Days 7 and 14. The mean NA values for HS-treated animals were also significantly greater than those of D70-treated animals at Day 3. When compared to baseline values, the mean NA values for animals treated with middle and high doses of HS increased, while those of HSD- or D70-treated groups decreased. However, the differences from baseline were not statistically significant for any of the treatment groups. Moderate increases in ALT were observed for all groups treated with HSD or HS at Days 1, 2, 3, 7, and 14. The ALT levels peaked at Days 1 or 2, and then declined through Day 14. At Day 14, however, the values remained elevated compared to baseline. The mean ALT values of animals treated with HSD or HS were significantly greater than those treated with D70 at Days 1, 2, 3, 7, and 14. The greatest increases in ALT were observed for animals treated with HS, followed by those treated with HSD. When compared to baseline values, the increases were statistically significant for animals treated with middle and high doses of HSD (Days 1, 2, and 3), and middle doses of HS (Days 1 and 2). The ALT of D70-treated animals remained relatively unchanged compared to baseline. Dose level (low < middle < high) was also found to be a significant factor affecting ALT levels. The mean ALT values of the high-dose groups were significantly greater than those of the low and middle-dose groups at Days 1, 2, 3, 7, and 14. Dose level was not a significant factor affecting other serum chemistry

measurements. At Day 2, the TRIG of HSD- and HS-treated female animals were significantly greater than those of animals treated with D70. At Day 7, the mean TRIG values of HS-treated females were significantly greater than those of animals treated with HSD or D70. The mean TRIG values for female animals treated with HSD, HS, and D70 were significantly different from each other at Days 3 and 14 ($HS > HSD > D70$). For the males, HSD- and HS-treated groups exhibited TRIG values significantly greater than those treated with D70 at Day 3. At Days 7 and 14, the HS-treated males exhibited TRIG values significantly greater than those treated with HSD or D70. When compared to baseline values, statistically significant increases in TRIG were observed for male and female animals treated with low doses of HS (Days 2, 3, and 14), and middle and high doses of HS (Days 3, 7, and 14). Increases in TRIG were also observed for the male and female control groups, but the differences from baseline values were not statistically significant. Male animals treated with HSD or D70, and females treated with HSD exhibited variable TRIG values. Although not statistically significant, decreases in TRIG were observed for females treated with D70.

Other changes in serum chemistry measurements appeared to be random occurrences. Differences in glucose were detected among the treatment groups at Days 2, 7, and 14, but values did not differ significantly from respective baselines. At Day 1, the blood urea nitrogen of animals receiving high doses of HSD was significantly decreased compared to baseline. The only statistically significant changes observed in the serum chemistry measurements of control animals treated with RL were increases in uric acid at Days 7 and 14 for the males and females, respectively.

Hematology

Group mean hematology data are presented in Table 6. Individual hematology data are presented in Appendix H. No statistically significant differences were detected among the groups (HSD, HS, and D70), dose levels (12, 16, and 20 ml/kg/day), or sexes at baseline (Day 0). After the initiation of dosing (Days 1, 2, 3, 7, and 14), the four-way analysis of covariance did detect significant group (HSD, HS, and D70) or dose (low, middle, high) effects, with an interaction with the sex factor, for prothrombin time (PT), atypical lymphocytes (ATL), and immature neutrophils (BAN). Since sex was a significant interacting factor for these three measurements, the sexes were kept separate for the subsequent Student-Newman-Keuls multiple range test.

A significant dose effect (low, middle, high) was observed in the mean PT at Days 3 and 14 for the male study animals. The mean PT values of the high-dose groups were significantly greater than those of the middle-dose groups at Day 3, while the low-dose groups exhibited intermediate values. At Day 14, the high, middle, and low-dose groups were all significantly different from each other (high > middle > low). Dose level was not a significant factor affecting PT values for female study animals. Significant group effects (HSD, HS, and D70) were observed in the PT data of both sexes at Day 14. For the females, all three groups were significantly different from each other (D70 > HSD > HS). For the males, the HSD- and D70-treated groups were statistically equivalent, and exhibited PT values significantly greater than those of HS-treated groups. When the mean values at each time point (Days 1, 2, 3, 7, and 14) were compared to baseline values (Day 0) for each respective group and dose level, statistically significant increases in PT were observed in male animals treated with middle doses of HSD (Day 14) and high doses of D70 (Day 14).

At Day 3, male animals receiving middle-dose levels of HSD, HS, and D70 exhibited a mean ATL significantly greater than those of the low or high-dose groups. No dose effect was observed in ATL for the females. At Day 7 however, a significant group effect was evident in the ATL of female study animals. The HS-treated females exhibited a mean ATL significantly greater than those of the HSD- or D70-treated animals. A group effect was not observed in the ATL of male animals. When the mean values at each time point were compared to baseline values, significant changes in ATL were not detected.

At Day 7, male animals receiving middle-dose levels of HSD, HS, and D70 exhibited a mean BAN significantly greater than animals receiving low or high dose levels of the test solutions. No dose effect was observed in the females for BAN, and no group effects were observed in BAN for either sex. When the mean values at each time point were compared to baseline values, significant changes in BAN were not observed.

For the remaining hematology measurements, sex was not a significant interacting factor with group or dose. Therefore, the data for the remaining measurements were subjected to a three-way analysis of covariance, followed by the Student-Newman-Keuls multiple range test, with data from both sexes combined. Significant group effects (HSD, HS, and D70) were observed for the erythrocyte count (RBC), hemoglobin (HGB), and hematocrit (HCT) at Days 2, 3, 7, and 14. These three measurements exhibited identical group

effects. At Day 2, the mean RBC, HGB, and HCT values of D70- and HSD-treated animals were significantly less than those of HS-treated animals. At Day 3, the differences were statistically significant only between D70- and HS-treated groups. At Days 7 and 14, the D70-, HSD-, and HS-treated groups were all significantly different from each other. Dose level was not a significant factor in the differences. At Days 2, 3, 7, and 14, the lowest mean values for RBC, HGB, and HCT were exhibited by D70-treated animals; HSD-treated animals exhibited intermediate values; and those treated with HS exhibited the highest values. The differences among the groups became progressively greater at each successive time point. By Day 14, the RBC, HGB, and HCT values for D70-treated animals were borderline low normal compared to generally accepted normal limits. When the mean values at each time point were compared to baseline values for each respective group and dose level, significant decreases in RBC were observed in animals treated with low doses of D70 (Days 1, 2, 3, 7, and 14), middle and high doses of D70 (Days 2, 3, 7, and 14), low doses of HSD (Days 7 and 14), middle doses of HSD (Days 3, 7, and 14), and high doses of HS (Day 3 and 7). Significant decreases in HGB were observed in animals treated with low and middle doses of D70 (Days 1, 2, 3, 7, and 14), high doses of D70 (Days 2, 3, 7, and 14), low doses of HSD (Days 7 and 14), and middle doses of HS (Day 3). HCT was similarly affected with significant decreases observed in animals treated with low doses of D70 (Days 1, 2, 3, 7, and 14), middle and high doses of D70 (Days 2, 3, 7, and 14), low doses of HSD (Days 7 and 14), and high doses of HS (Days 1 and 3). At Day 14, significant increases in RBC were observed in animals treated with middle doses of HS, and significant increases were observed in HGB and HCT for animals treated with low and middle doses of HS.

Significant group effects were also observed in the platelet count (PLT), activated partial thromboplastin time (APTT), total leukocyte count (WBC), nucleated red blood cell count (NRBC), mean corpuscular volume (MCV), reticulocyte count (RET), and lymphocyte count (LYM). Dose level was not a significant factor affecting these measurements. As was observed for RBC, HGB, and HCT, the lowest mean values for PLT, WBC, NRBC, MCV, and RET were exhibited by D70-treated animals; HSD-treated animals exhibited intermediate values; and animals treated with HS exhibited the highest values. For APTT, the orders were reversed (D70 > HSD > HS). For LYM, animals treated with HS exhibited the highest values; D70-treated animals exhibited intermediate values; and the lowest values were exhibited by HSD-treated animals. At Day 2, the PLT of HSD-treated animals was significantly less than that of HS-treated animals. At Days 3, 7, and 14, the mean PLT values of D70- and HSD-treated animals were significantly

less than those of HS-treated animals. When the mean values at each time point were compared to baseline values for each respective group and dose level, significant decreases in PLT were observed for animals treated with low and high doses of D70 (Days 3, 7, and 14), middle doses of D70 (Days 2, 3, 7, and 14), low doses of HSD (Days 3 and 7), middle doses of HSD (Days 2, 3, 7, and 14), and high doses of HSD (Days 1, 2, 3, 7, and 14). The mean APTT of D70-treated animals was significantly greater than that of HSD- and HS-treated animals at Day 7. At Day 14, the mean APTT values of D70-, HSD-, and HS-treated animals were all significantly different from each other (D70 > HSD > HS). When the mean values at each time point were compared to baseline values, significant increases in APTT were observed at Days 7 and 14 for animals treated with middle doses of D70, and middle and high doses of HSD. Although not statistically significant, distinct increases in APTT were also observed at Days 7 and 14 for animals receiving low and high doses of D70, and at Day 14 for animals treated with low doses of HSD. Significant differences between D70- and HSD-treated animals, and those treated with HS, were observed in the WBC and NRBC at Day 7. When compared to baseline, significant decreases in WBC values were observed for animals treated with high doses of HSD (Days 3, 7, and 14) and high doses of D70 (Days 2, 7, and 14). The WBC values did, however, remain within generally accepted normal limits throughout the study period. Although not statistically significant, inspection of the data for Days 3, 7, and 14 revealed a dose-response in the WBC decrease experienced by HSD- and D70-treated animals. NRBC did not exhibit significant changes from baseline. At Day 14, significant differences between D70- and HSD-treated animals, and those treated with HS included NRBC, MCV, and RET. Comparison to baseline values demonstrated significant increases in RET at Day 14 for animals treated with RL, and low and high doses of HS. Compared to baseline, significant increases in MCV were observed at Day 14 for animals treated with RL, and middle and high doses of HS. The increases in RET and MCV at Day 14 were the only statistically significant changes observed in the control-group (RL) animals. Animals treated with high doses of D70 exhibited significantly decreased MCV at Days 3 and 7. At Day 14, a significant difference between HSD- and HS-treated animals was observed in the mean LYM. When compared to baseline, significant decreases in LYM values were observed for animals treated with low doses of HSD (Day 14) and middle doses of HSD (Days 3 and 14). The MCHC of animals treated with middle doses of HS was significantly decreased at Day 14, compared to baseline.

Necropsy Findings

Pilot study animals submitted as quality controls were free of disease; therefore, the shipment was deemed acceptable for the study. With the exception of mild hepatomegaly and splenomegaly in female dogs treated with HSD or D70, no gross pathological lesions attributable to the test compound or its constituents were reported. Microscopic lesions observed in the study animals were considered as incidental findings of little or no clinical significance, and no unique microscopic morphologic changes were associated with the increased liver or splenic weights. The Veterinary Pathologist's report is presented in Appendix I.

DISCUSSION

The subacute intravenous toxicity of HSD in dogs was evaluated by dosing groups of animals with 12, 16, or 20 ml/kg/day, over 5 minutes, daily for 14 days. Dose levels were selected based on multiples of the proposed therapeutic dose, 4 ml/kg (2), and the maximum tolerated dose of HSD which had been established in preliminary studies as 20 ml/kg administered over 5 minutes (15). In addition to dosing with HSD, groups of dogs were dosed with equal volumes of HS or D70. The control group was dosed with RL at the 20 ml/kg/day dosage. Since RL is an isotonic solution, it provided a basis to compare the effects of the volume administered, and served to demonstrate that changes occurring in HSD-, HS-, or D70-treated animals were in fact due to the solutions administered and not normal variation over time resulting from extraneous experimental factors. Therefore, differences between baseline measurements and measurements made after the initiation of dosing with HSD, HS, and D70 can be attributed to the effects of the latter test solutions.

The incidence of clinical signs was approximately the same among HSD- and HS-treated animals. D70-treated animals generally exhibited a lower incidence of signs compared to HSD- and HS-treated animals. Signs were observed with sporadic incidence among animals treated with RL. With the exceptions of increased salivation in HSD- and HS-treated animals, and tremors in HS- and D70-treated animals, a dose-response was not observed for clinical sign incidence. No differences due to sex and no mortalities were observed. The greatest incidence and severity of signs were observed 1 hour after dosing. Most clinical signs gradually resolved during the following 24 hours until dosing was repeated the next day. Signs observed with increased incidence in the HSD- and HS-treated groups included disorientation, inactivity,

tremors, vomiting, excessive thirst, hunched posture, increased salivation, increased respiratory depth or rate, and panting. The D70-treated animals also exhibited an increased incidence of disorientation, inactivity, tremors, panting, increased respiratory depth or rate, and vomiting when compared to the controls. The increased incidence of panting was most apparent during the second week of the study, and may have been a manifestation of the progressive decrease in erythrocyte count, hemoglobin, and hematocrit observed for HSD- and D70-treated animals, as well as the plasma volume expansion induced by HSD, HS, and D70. Two D70-treated animals also exhibited excessive bleeding from the injection site following dosing during the second week of the study period. The infusion of large doses of dextran and the prolonged infusion of dextran solutions have been associated with decreased platelet adhesiveness (5). In this study, animals treated with D70 or HSD exhibited significantly decreased platelet counts as well as prolonged clotting times. Each of these factors may have contributed to the excessive bleeding by the 2 D70-treated animals. The observation that the majority of behavioral, general, gastrointestinal, and respiratory signs occurred primarily in animals receiving HSD and HS suggests that the hypertonic saline component was responsible for inducing the signs. This is consistent with the observation that dextran is well tolerated when administered intravenously at doses up to 40 ml/kg in various animal models (G. Jonsson, Pharmacia Pharmaceuticals AB, personal communication). Signs were most likely due to the transient derangement of plasma-tissue osmotic balance. Rapid increases in serum sodium and chloride have been associated with neurologic abnormalities (6), which may explain the increased incidence of behavioral disturbances observed in HSD- and HS-treated animals. Vomiting and salivation may have been the result of stimulation of the chemoreceptor trigger zone or the vomiting center of the medulla. Increased respiratory depth and rate were most likely the result of hemodynamic changes induced primarily by the HS component.

Body weights were unaffected by dosing.

A significant increase in water consumption was observed on Days 1 through 7 and Day 14 in the HSD- and HS-treated animals. This is consistent with the increased water volume required for excretion of the excess NaCl component of these solutions.

Following the administration of HSD, moderate elevations of aspartate aminotransferase (AST), alkaline phosphatase (ALK), and alanine aminotransferase (ALT) were observed. Elevations of AST and ALK for D70-treated animals, and the

absence of such changes for those treated with HS, suggest that the dextran component of HSD was responsible for AST and ALK increases. While elevated AST levels remained relatively constant after Day 1, the mean ALK values progressively increased until peak values were reached by Day 3. Although still elevated above baseline, progressive decreases in ALK were observed at Days 7 and 14. Elevations of ALT for HS-treated animals, and the absence of such changes for those treated with D70, suggest that the saline component of HSD was responsible for the increases in ALT. Elevations of ALT were greatest in animals receiving HS, and a dose response (low < middle < high) was apparent. ALT reached maximal values by Day 2, and, although remaining elevated compared to baseline, gradually decreased for the remainder of the study period. The elevation of AST, ALK, and ALT suggests that both the saline and the dextran components of HSD have an effect on canine hepatocytes. Small increases in triglycerides observed for animals treated with HS are consistent with hepatic changes. The magnitude of the enzyme elevations, subsequent decreases in ALK and ALT levels, and the absence of morphologic changes in the liver indicate that any hepatic alterations were minor and transient, with no residual effect.

Progressive reductions in cholesterol (CHOL), albumin (ALB), albumin/globulin ratio (A-G), calcium (CAL), and iron (IRON) were observed for animals treated with HSD or D70. Magnesium (MAG) levels were also significantly decreased, and inspection of the data revealed consistent decreases in potassium (K) and sodium (NA) for these animals.

By Day 1, progressive decreases in the erythrocyte count (RBC), hemoglobin (HGB), hematocrit (HCT), and platelet count (PLT) had also begun in animals treated with HSD or D70. D70-treated animals were more severely affected than those treated with HSD. The changes in RBC, HGB, HCT, and PLT were unrelated to dose level or sex, and no consistent changes in these measurements were observed following dosing with HS or RL. Compared to respective baseline values, statistically significant decreases in the mean RBC, HGB, and HCT, for HSD- and D70-treated animals, were observed by Day 7. Decreases in the mean PLT of HSD- and D70-treated animals were statistically significant by Day 2. The decreases in PLT continued until the lowest values were reached at Day 7. At Day 14, although the PLT values were still significantly less than baseline, the mean PLT of the majority of HSD- and D70-treated groups increased, and animals receiving high doses of HSD and low doses of D70 experienced only a slight decrease in PLT from Day 7 to Day 14. The mean RBC, HGB, and HCT continued to decline for all groups treated with HSD or D70, until the lowest values were reached at Day 14. At this

time, the RBC, HGB, and HCT of D70-treated animals were borderline low normal compared to generally accepted normal limits. While significant increases in reticulocyte count (RET) and mean corpuscular volume (MCV) were observed for RL- and HS-treated animals at Day 14, animals treated with HSD or D70 apparently failed to respond to decreasing erythrocyte counts, and no significant increases were observed in their RET or MCV values. At Day 14, the MCV and RET of HSD- and D70-treated animals were significantly less than those of HS-treated animals.

Significant decreases in total leukocyte count (WBC) were also observed for HSD- and D70-treated animals. Inspection of the WBC data revealed a dose-response in this decrease. As observed for PLT, the decrease peaked at Day 7, with a slight recovery at Day 14. However, the mean WBC values for all groups and dose levels remained within generally accepted normal limits throughout the study period.

The progressive decreases in CHOL, ALB, A-G, CAL, IRON, MAG, K, NA, RBC, HGB, HCT, PLT, and WBC associated with the repeated daily administration of HSD or D70 may be attributed to the gradual accumulation of dextran in the serum, and subsequent progressive hemodilution. Data collected after the administration of a single dose of dextran at a dosage of 20 ml/kg in beagle dogs (15), indicated that at 24 hours after infusion, only 40% of the dextran had been removed from the serum (M. Dubick, Letterman Army Institute of Research, personal communication). M. Dubick has also observed that the half life of dextran is approximately 7.4 and 9.9 hours in the pig and rabbit, respectively. Twenty-four hours after dosing, dextran concentrations would still be elevated and detectable in the serum of dogs. Therefore, the repeated administration of dextran-containing solutions every 24 hours would result in gradually increasing serum dextran concentrations until a plateau is reached several days after the initiation of dosing. A progressive expansion of plasma volume may accompany the increasing serum dextran concentrations, resulting in hemodilution and relative decreases in the affected serum chemistry and hematologic measurements. Ultimate serum dextran concentrations, and the resulting degree of hemodilution, would be dependent upon dose level and the rate of clearance of dextran from the serum. HSD-treated animals may have been less severely affected than those treated with D70 due to the diuretic effect of the saline component of HSD. Increased urinary water loss necessary to excrete excess NaCl may have had an ameliorating effect on dextran-induced plasma expansion or may have altered the excretion of the dextran. Since the RL-treated control animals did not experience similar decreases in serum chemistry or hematologic measurements, it is

unlikely that blood loss due to sampling was a significant factor affecting these measurements for animals treated with HSD or D70. Splenic sequestration of erythrocytes and platelets, consistent with increased splenic weights for HSD- and D70-treated animals, may have contributed to decreased RBC, HGB, Hct, and PLT values. Increased removal of erythrocytes from the circulation by the reticuloendothelial system of the liver and spleen may also have contributed to the decline of RBC values. Since normal canine erythrocytes have a circulating lifespan of 100 to 120 days (16), decreased erythropoiesis is most likely not a significant factor contributing to the RBC decline.

Significant increases in prothrombin time and activated partial thromboplastin time (PT and APTT) were observed following the administration of HSD or D70. A significant dose-response was apparent in the PT of male study animals. The increases in PT and APTT were more severe in D70-treated animals than those treated with HSD, and became progressively greater with time. By Day 7, elevations in PT and APTT were statistically significant, and maximum values were observed at Day 14 for both measurements. A slight rise was observed in the APTT of RL- or HS-treated animals, but the change was minimal with no statistical significance. Most coagulation factors are synthesized by the liver, and prolongation of PT and APTT are not uncommon findings in severe, acute, hepatopathies in dogs (17). The increases in hepatic enzymes observed in HSD- and D70-treated animals are consistent with acute hepatocellular damage and subsequent reduction in the synthesis of coagulation factors. However, the absence of clinical signs referable to liver disease, and the lack of hepatic lesions on histopathological examination, suggest that the enzyme elevations may have been due to enzyme induction or hepatic proliferation rather than hepatocellular damage. Enzyme induction and hepatocellular proliferation would be more consistent with the lack of morphologic lesions and the increased liver weights observed at necropsy for animals treated with HSD or D70.

Other alterations in hematology measurements, although statistically significant among groups, were inconsistent, and did not vary from generally accepted normal limits.

The only significant treatment-related findings observed at necropsy were mild hepatomegaly and splenomegaly in female dogs treated with HSD or D70. The increased liver and splenic weights, however, were not associated with any morphologic alteration on histological examination. Possible explanations for increased liver weights include fluid expansion in a highly vascular organ, increased hepatocellular glycogen storage following repeated

administration of dextran-containing solutions, or congestion. Splenomegaly is usually associated with lymphoid hyperplasia, reticuloendothelial hyperplasia, smooth muscle hyperplasia, or congestion. None of these alterations were observed in the livers or spleens of affected animals. This suggests that if any morphological changes occurred due to the administration of the volume expanders, they were transient.

These data suggest that the clinical toxicity observed following HSD administration was attributable primarily to the HS component, and is an expected physiological response to large volumes of hypertonic saline. Significant decreases in cholesterol, albumin, serum electrolytes, erythrocyte counts, associated hematological measurements, total leukocyte counts, and platelet counts; and significant increases in blood clotting times, were attributable to the dextran component, and occurred only after repeated administration of the test solutions. Moderate increases in serum hepatic enzyme levels, attributable to both dextran (AST and ALK) and high doses of hypertonic saline (ALT), were associated with no residual functional or morphologic effects.

CONCLUSION

The repeated daily administration of HSD resulted in significant decreases in cholesterol, albumin, serum electrolytes, platelet, leukocyte, and erythrocyte counts, and associated hematological measurements. These alterations, as well as increased clotting times, are attributable to the dextran component of HSD. Other toxicity associated with HSD administration is consistent with the administration of large volumes of hypertonic saline and hepatic metabolism of dextran. Since the proposed therapeutic dose of HSD is a single dose of only 4 ml/kg, these findings indicate that there will be minimal adverse effects associated with the therapeutic administration of HSD.

TABLE 2
Clinical Observations Summary^a

Group/(ml/kg/day) Sex Observation	RL/20 M F		HSD/12 M F		HSD/16 M F		HSD/20 M F		HS/12 M F	
NORMAL THROUGHOUT	0	1	0	0	0	0	0	0	0	0
BEHAVIORAL										
DISORIENTED	0	1	3	3	3	3	2	3	3	3
INACTIVE	1	0	3	2	3	3	3	3	3	3
TREMORS	1	0	3	2	3	3	2	2	1	2
PACING	0	0	1	0	0	1	0	1	1	0
CIRCLING	0	0	0	1	0	0	0	0	0	0
HYPERACTIVE	0	0	0	0	0	0	1	0	1	1
STAGGERING	0	0	0	0	0	0	0	1	0	0
GENERAL										
INC. SALIVATION	0	0	1	2	3	3	3	3	0	1
HUNCHED POSTURE	0	0	2	3	3	1	1	3	2	2
EX. THIRST	1	0	3	1	3	2	3	2	3	2
DEC. APPETITE	1	0	1	1	2	0	2	0	1	0
EX. BLEEDING	0	0	0	0	0	0	0	0	0	0
FROM IV SITE										
SWOLLEN LEG/ EDEMA	0	0	0	0	0	0	0	1	0	0
BLOODY URINE	0	0	0	0	0	0	0	0	0	0
RESPIRATORY										
INC. RESP. DEPTH	0	0	0	2	1	0	2	2	0	0
INC. RESP. RATE	0	0	1	0	0	0	0	0	0	0
PANTING	0	0	0	1	0	0	1	0	1	1
CONGESTED	0	0	0	0	0	0	0	0	1	0
GASTROINTESTINAL										
VOMITING	0	0	3	3	3	3	3	3	3	3
SOFT STOOL	3	1	3	1	2	1	3	2	3	1
DIARRHEA	0	0	0	1	0	0	0	1	0	0
OCULAR										
SQUINTING	0	0	0	0	0	0	0	1	0	0
EYE/NASAL DISCHARGE	0	0	0	0	0	0	0	0	0	0

^a Data presented as number of animals exhibiting the sign with 3 animals of each sex per group.

TABLE 2 (cont.)
Clinical Observations Summary^a

Group/(ml/kg/day)	HS/16		HS/20		D70/12		D70/16		D70/20	
Sex	M	F	M	F	M	F	M	F	M	F
Observation										
NORMAL THROUGHOUT	0	0	0	0	0	1	0	0	0	0
BEHAVIORAL										
DISORIENTED	3	3	3	3	2	2	2	2	2	2
INACTIVE	3	3	3	3	2	2	1	2	2	2
TREMORS	3	2	3	3	1	1	1	2	2	3
PACING	0	0	0	0	0	0	0	0	1	0
CIRCLING	0	0	0	0	1	0	0	0	0	1
HYPERACTIVE	0	0	0	1	2	0	0	0	0	0
STAGGERING	0	1	0	0	0	0	0	0	0	0
GENERAL										
INC. SALIVATION	3	3	3	3	0	0	0	1	0	0
HUNCHED POSTURE	3	2	3	3	1	1	1	0	0	0
EX. THIRST	3	2	3	3	1	0	0	0	0	0
DEC. APPETITE	1	0	2	0	1	0	2	0	1	0
EX. BLEEDING	0	0	0	0	1	0	0	0	1	0
FROM IV SITE										
SWOLLEN LEG/	0	0	1	0	0	0	0	0	0	0
EDEMA										
BLOODY URINE	0	0	0	1	0	0	0	0	0	0
RESPIRATORY										
INC. RESP. DEPTH	2	1	1	1	1	0	0	0	1	1
INC. RESP. RATE	0	1	0	0	1	0	0	0	0	0
PANTING	0	1	0	1	2	0	1	1	2	0
CONGESTED	0	0	0	1	0	0	0	1	0	0
GASTROINTESTINAL										
VOMITING	3	3	3	3	1	0	2	0	0	1
SOFT STOOL	2	2	1	2	3	0	3	2	2	0
DIARRHEA	0	0	0	0	0	0	0	0	0	0
OCULAR										
SQUINTING	0	0	0	0	0	0	0	0	0	0
EYE/NASAL	0	0	0	0	0	0	0	1	0	0
DISCHARGE										

^a Data presented as number of animals exhibiting the sign with 3 animals of each sex per group.

TABLE 3

Group Mean Body Weight (kg)^a

Group/Dose (ml/kg/day)	Study Day					
	WK-3	WK-2	WK-1	0	7	14
Males						
RL / 20	11.45 ±0.25 (3)	11.58 0.37 (3)	11.45 0.60 (3)	11.33 0.52 (3)	11.95 0.71 (3)	11.92 0.52 (3)
HSD / 12	11.05 ±0.48 (3)	11.03 0.52 (3)	11.27 0.46 (3)	11.17 0.50 (3)	11.62 0.62 (3)	11.83 0.64 (3)
HSD / 16	11.62 ±0.72 (3)	11.55 0.88 (3)	11.88 0.94 (3)	11.60 0.76 (3)	11.83 0.71 (3)	11.97 0.61 (3)
HSD / 20	10.28 ±0.33 (3)	10.30 0.32 (3)	10.68 0.46 (3)	10.57 0.35 (3)	10.70 0.32 (3)	10.78 0.25 (3)
HS / 12	10.82 ±0.77 (3)	10.85 0.80 (3)	11.05 0.63 (3)	11.23 0.35 (3)	11.62 0.57 (3)	11.62 0.77 (3)
HS / 16	12.70 ±1.00 (3)	12.75 1.15 (3)	12.97 1.13 (3)	12.75 0.92 (3)	12.88 1.13 (3)	13.20 1.26 (3)
HS / 20	10.32 ±0.68 (3)	10.60 0.60 (3)	10.43 0.64 (3)	10.77 0.46 (3)	10.95 0.63 (3)	11.25 0.73 (3)
D70 / 12	10.93 ±0.81 (3)	11.38 0.81 (3)	11.90 0.12 (3)	11.95 0.20 (3)	11.95 0.93 (3)	12.92 1.13 (3)
D70 / 16	12.18 ±0.81 (3)	12.20 0.93 (3)	12.00 0.85 (3)	11.90 0.95 (3)	12.55 0.69 (3)	13.03 0.90 (3)
D70 / 20	11.17 ±0.55 (3)	11.32 0.49 (3)	10.67 0.47 (3)	10.60 0.46 (3)	11.70 0.55 (3)	12.02 0.59 (3)

^a Data are presented as mean ± standard error of the mean with the number of animals, n, in parentheses.

TABLE 3 (cont.)
Group Mean Body Weight (kg)^a

Group/Dose (ml/kg/day)	Study Day				
	WK-2	WK-1	0	7	14
Females					
RL / 20	9.59 ±0.57 (3)	9.77 0.49 (3)	10.18 0.74 (3)	9.70 0.32 (3)	9.58 0.45 (3)
HSD / 12	10.60 ±0.51 (3)	10.72 0.32 (3)	10.65 0.18 (3)	10.93 0.60 (3)	11.20 0.42 (3)
HSD / 16	11.17 ±1.07 (3)	11.05 0.90 (3)	11.08 0.78 (3)	11.15 0.87 (3)	11.33 1.01 (3)
HSD / 20	10.87 ±0.83 (3)	10.93 0.91 (3)	10.93 1.04 (3)	10.88 0.71 (3)	11.21 0.66 (3)
HS / 12	10.40 ±0.00 (3)	10.50 0.31 (3)	10.78 0.26 (3)	10.55 0.28 (3)	10.62 0.39 (3)
HS / 16	10.38 ±0.36 (3)	10.23 0.35 (3)	10.20 0.33 (3)	10.12 0.32 (3)	10.20 0.32 (3)
HS / 20	11.20 ±0.72 (3)	11.05 0.71 (3)	10.80 0.72 (3)	10.88 0.67 (3)	11.03 0.79 (3)
D70 / 12	10.52 ±0.48 (3)	10.22 0.36 (3)	10.10 0.30 (3)	10.23 0.42 (3)	10.28 0.50 (3)
D70 / 16	10.68 ±0.83 (3)	10.83 0.99 (3)	10.65 0.75 (3)	10.90 0.86 (3)	11.15 1.18 (3)
D70 / 20	10.70 ±0.63 (3)	10.35 0.56 (3)	10.27 0.56 (3)	10.57 0.58 (3)	10.55 0.48 (3)

^a Data are presented as mean ± standard error of the mean with the number of animals, n, in parentheses.

TABLE 4
Group Mean Water Consumption (ml/day)^a

Group/Dose (ml/kg/day)	WK-2	WK-1	Study Day								
			0	1	2	3	4	5	6	7	14
RL / 20	758	595	737	717	787	696	700	627	707	559	724
	±169 (5)	99 (6)	232 (6)	195 (6)	183 (6)	190 (6)	172 (6)	107 (6)	157 (6)	107 (6)	121 (6)
HSD / 12	725	684	580	1925 ^{bc}	1488 ^{bc}	2017 ^{bc}	1884 ^{bc}	2109 ^{bc}	2136 ^{bc}	2066 ^{bc}	1755 ^{bc}
	±64 (4)	92 (6)	208 (6)	224 (6)	268 (6)	227 (6)	181 (6)	200 (5)	246 (6)	311 (6)	140 (6)
HSD / 16	781	676	939	2136 ^{bc}	2476 ^{bc}	2495 ^{bc}	2120 ^{bc}	2147 ^{bc}	2461 ^{bc}	2173 ^{bc}	2064 ^{bc}
	±154 (5)	84 (6)	231 (6)	320 (6)	357 (5)	234 (6)	237 (6)	135 (6)	277 (6)	354 (5)	353 (6)
HSD / 20	602	613	731	1808 ^{bc}	2088 ^{bc}	2270 ^{bc}	1980 ^{bc}	2096 ^{bc}	2006 ^{bc}	2485 ^{bc}	2047 ^{bc}
	±87 (4)	67 (6)	241 (6)	121 (6)	114 (6)	196 (6)	133 (6)	136 (6)	165 (6)	211 (6)	148 (6)
HS / 12	628	63 ^b	628	1722 ^{bc}	1434 ^{bc}	1617 ^{bc}	1398 ^{bc}	1704 ^{bc}	1590 ^{bc}	1676 ^{bc}	1575 ^{bc}
	±89 (4)	121 (6)	204 (6)	156 (6)	172 (6)	146 (6)	94 (5)	198 (6)	123 (6)	133 (6)	119 (6)

^a Data are presented as mean ± standard error of the mean with the number of animals, n, in parentheses.

^b Value is significantly different from the group baseline (Day 0) at p = 0.05 using the Dunnett's test.

^c The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 D70 dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

TABLE 4 (cont.)

Group Mean Water Consumption (ml/day)^a

Group/Dose (ml/kg/day)	WK-2	WK-1	Study Day								
			0	1	2	3	4	5	6	7	14
HS / 16	828 ±263 (5)	665 91 (6)	575 103 (6)	2099 ^{bc} 324 (6)	1936 ^{bc} 242 (6)	2136 ^{bc} 295 (6)	2012 ^{bc} 306 (6)	1753 ^{bc} 224 (6)	1853 ^{bc} 269 (6)	2100 ^{bc} 335 (6)	1845 ^{bc} 218 (6)
	754 ±182 (4)	574 116 (6)	501 120 (5)	2099 ^{bc} 256 (6)	2379 ^{bc} 235 (6)	2288 ^{bc} 164 (6)	2335 ^{bc} 237 (6)	2277 ^{bc} 229 (6)	2368 ^{bc} 314 (6)	2365 ^{bc} 287 (6)	2320 ^{bc} 218 (6)
D70 / 12	705 ±93 (4)	652 135 (6)	682 158 (6)	813 ^{ac} 144 (6)	836 ^{de} 202 (6)	703 ^{de} 98 (6)	798 ^{ac} 123 (6)	849 ^{de} 134 (6)	763 ^{de} 112 (6)	768 ^{de} 123 (6)	883 ^{de} 100 (6)
	871 ±97 (5)	668 152 (6)	572 160 (6)	668 ^{de} 144 (6)	1201 ^{de} 257 (6)	836 ^{de} 143 (6)	991 ^{de} 250 (6)	980 ^{de} 242 (6)	1313 ^{de} 495 (6)	820 ^{de} 153 (6)	739 ^{de} 153 (6)
D70 / 20	605 ±197 (4)	431 97 (6)	642 244 (6)	424 ^{de} 64 (6)	551 ^{de} 213 (5)	488 ^{de} 83 (6)	537 ^{de} 158 (6)	720 ^{de} 213 (6)	591 ^{de} 137 (6)	585 ^{de} 168 (6)	603 ^{de} 145 (6)

^a Data are presented as mean ± standard error of the mean with the number of animals, n, in parentheses.

^b Value is significantly different from the group baseline (Day 0) at p = 0.05 using the Dunnett's test.

^c The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 D70 dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^d The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HSD dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^e The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HS dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

TABLE 5
Serum Chemistry Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day				7	14	
		-7	0	1	2			
		Alanine Aminotransferase (U/l)						
RL / 20	30.03	28.87	29.53	36.83	32.37	32.47	30.58	30.27
	±6.09	8.96	7.30	9.16	7.17	5.05	5.80	5.77
	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

TABLE 5 (cont.)

Group/Dose (mL/kg/day)	Q ^b	Study Day						
		-7	0	1	2	3	7	14
Alanine Aminotransferase (U/l)								
HS / 12	52.98	27.32	29.08	67.97 ^{ti}	56.42 ^{ti}	47.55 ^{ti}	35.97 ^{ti}	42.85 ^{ti}
	±52.62	6.96	6.30	78.21	53.76	37.62	15.70	18.26
	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)
HS / 16	57.10	24.22	22.60	80.48 ^{cti}	68.57 ^{cti}	55.13 ^{fi}	52.08 ^{ti}	37.12 ^{ti}
	±67.21	5.88	5.66	40.77	32.60	22.67	41.59	19.40
	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)
HS / 20	43.90	28.32	28.20	193.83 ^{tqh}	151.37 ^{tqh}	189.00 ^{tqh}	112.85 ^{tqh}	100.78 ^{tqh}
	±29.51	7.84	9.42	241.06	172.61	154.83	90.07	81.84
	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)

Data are presented as the mean $\pm$ the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

value is significantly different from the group baseline (Day 0) at $p = 0.05$ using the Dunnett's test.

The value is significantly different from the group mean ($P < 0.05$). The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3

The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 dose groups for the placebo indicated as determined by the Student-Newman-Keuls multiple range test.

HSD dose groups at $p = 0.05$ using the student-newman-keuls multiple range test.

The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 dose groups for the solution indicated by a Student-Newman-Keuls multiple range test at the 0.05 level.

HS dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.

f The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3

D70 dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.

The mean of the 3 test solution groups for the dose level indicated is significantly different from the D70 dose groups at $p < 0.05$, using the Dunnett's test.

The mean of the 3 test solution groups for the dose level indicated is significantly different from the mean of the 3 low-dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.

mean of the 3 low-dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.

The mean of the 3 test solution groups for the dose level indicated is significantly different from the mean of the 3 test solution groups for the dose level indicated by the Student-Newman-Keuls multiple range test ($P < 0.05$).

mean of the 3 middle-dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.

1 The mean of the 3 test solution groups for the dose level indicated is significantly different from the

The mean of the 3 test correction groups is 1.00. The mean of the 3 high-dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.

TABLE 5 (cont.)
Serum Chemistry Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day						
		-7	0	1	2	3	7	14
Aspartate Aminotransferase (U/l)								
RL / 20	27.48	27.80	30.17	27.67	31.02	35.13	26.48	27.90
	±6.23 (6)	10.66 (6)	7.09 (6)	4.82 (6)	18.79 (6)	21.99 (6)	5.43 (6)	4.88 (6)
HSD / 12	50.03	30.37	28.35	92.52 ^{ce}	94.88 ^{ce}	98.83 ^{ce}	90.25 ^{ce}	90.43 ^{ce}
	±35.51 (6)	4.88 (6)	5.46 (6)	43.12 (6)	24.78 (6)	18.88 (6)	12.46 (6)	8.55 (6)
HSD / 16	26.92	28.73	28.67	108.77 ^{ef}	136.33 ^{ef}	121.40 ^{ef}	89.10 ^e	94.12 ^e
	±14.27 (6)	10.32 (6)	7.67 (6)	30.39 (6)	97.53 (6)	69.94 (6)	15.29 (6)	19.79 (6)
HSD / 20	30.72	30.18	32.67	168.12 ^{ce}	155.15 ^{ce}	130.53 ^{ce}	104.80 ^{ce}	110.67 ^{ce}
	±6.80 (6)	3.68 (6)	5.04 (6)	107.45 (6)	58.04 (6)	24.15 (6)	17.16 (6)	12.31 (6)
HS / 12	42.07	29.58	30.35	29.20 ^{df}	26.30 ^{df}	25.87 ^{df}	27.35 ^{df}	32.18 ^{df}
	±23.92 (6)	4.82 (6)	4.74 (6)	5.60 (6)	4.11 (6)	3.97 (6)	6.59 (6)	5.71 (6)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

^c Value is significantly different from the group baseline (Day 0) at p = 0.05 using the Dunnett's test.

^d The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HSD dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^e The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HS dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^f The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 D70 dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

TABLE 5 (cont.)
Serum Chemistry Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day						
		-7	0	1	2	3	7	14
		Aspartate Aminotransferase (U/l)						
HS / 16	39.07 ±36.77 (6)	30.17 4.33 (6)	30.48 12.65 (6)	31.48 ^{dt} 5.30 (6)	26.73 ^{dt} 5.14 (6)	26.38 ^{dt} 6.98 (6)	36.62 ^{dt} 17.70 (6)	30.75 ^{dt} 4.10 (6)
HS / 20	36.67 ±15.71 (6)	30.72 9.36 (6)	31.02 7.11 (6)	40.22 ^{dt} 18.36 (6)	30.70 ^{dt} 8.34 (6)	30.25 ^{dt} 5.24 (6)	32.15 ^{dt} 3.84 (6)	32.55 ^{dt} 9.14 (6)
D70 / 12	29.92 ±2.71 (6)	26.35 4.37 (6)	28.45 6.50 (6)	67.37 ^{ced} 11.70 (6)	86.82 ^{ced} 12.95 (6)	85.95 ^{ced} 10.61 (6)	84.18 ^{ce} 9.71 (6)	90.65 ^{ce} 7.35 (6)
D70 / 16	41.87 ±13.97 (6)	31.42 9.73 (6)	29.27 4.35 (6)	67.98 ^{ced} 5.59 (6)	85.35 ^{ced} 2.56 (6)	93.97 ^{ced} 1.83 (6)	99.33 ^{ce} 6.84 (6)	100.03 ^{ce} 12.34 (6)
D70 / 20	34.82 ±11.35 (6)	22.47 5.60 (6)	27.47 7.78 (6)	70.68 ^{ced} 19.26 (6)	82.68 ^{ced} 36.47 (6)	92.50 ^{ced} 28.94 (6)	89.45 ^{ce} 32.17 (6)	98.55 ^{ce} 25.63 (6)

^a Data are presented as the mean $\pm$ the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

c Value is significantly different from the group baseline (Day 0) at $p = 0.05$ using the Dunnett's test.

^d The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3

HSD dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.

^e The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3

TABLE 5 (cont.)
Serum Chemistry Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day						
		-7	0	1	2	3	7	14
		Alkaline Phosphatase (U/l)						
RL / 20	66.78	62.42	62.60	61.98	83.53	84.95	60.42	58.75
	±20.04 (6)	24.85 (6)	24.65 (6)	25.82 (6)	77.01 (6)	84.54 (6)	25.72 (6)	22.56 (6)
HSD / 12	70.03	65.85	60.25	157.07 ^e	205.33 ^{ce}	220.77 ^{ce}	190.22 ^{ce}	154.22 ^{ce}
	±10.04 (6)	6.27 (6)	8.51 (6)	34.62 (6)	55.77 (6)	55.81 (6)	45.58 (6)	39.26 (6)
HSD / 16	56.27	48.77	49.18	137.87 ^{ce}	176.77 ^{ce}	188.90 ^{ce}	163.00 ^{ce}	136.28 ^{ce}
	±9.84 (6)	8.67 (6)	10.87 (6)	30.80 (6)	33.90 (6)	30.40 (6)	24.12 (6)	17.20 (6)
HSD / 20	52.63	47.63	48.60	145.33 ^{ce}	189.83 ^{ce}	195.62 ^{ce}	162.13 ^{ce}	118.52 ^{ce}
	±8.86 (6)	7.33 (6)	7.66 (6)	28.26 (6)	47.85 (6)	45.42 (6)	36.04 (6)	22.27 (6)
HS / 12	75.38	70.33	66.38	71.02 ^{df}	65.80 ^{df}	66.62 ^{df}	61.20 ^{df}	58.18 ^{df}
	±19.58 (6)	19.18 (6)	15.86 (6)	21.74 (6)	22.08 (6)	20.10 (6)	13.62 (6)	15.43 (6)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

^c Value is significantly different from the group baseline (Day 0) at p = 0.05 using the Dunnett's test.

^d The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HSD dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^e The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HS dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^f The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 D70 dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

TABLE 5 (cont.)
Serum Chemistry Summary^a

Group/Dose (ml/kg/day)	Q ^b	-7	Study Day				7	14
			0	1	2	3		
Alkaline Phosphatase (U/l)								
HS / 16	74.37	65.73	64.73	66.67 ^{dt}	62.65 ^{dt}	61.60 ^{dt}	76.57 ^{dt}	56.18 ^{dt}
	±17.13 (6)	13.43 (6)	21.01 (6)	24.12 (6)	19.13 (6)	16.71 (6)	42.82 (6)	19.35 (6)
HS / 20	57.22	51.23	53.50	59.90 ^{dt}	57.43 ^{dt}	56.15 ^{dt}	53.20 ^{dt}	48.27 ^{dt}
	±8.29 (6)	6.43 (6)	7.38 (6)	15.36 (6)	14.59 (6)	14.12 (6)	8.77 (6)	17.32 (6)
D70 / 12	56.15	58.55	54.88	155.72 ^{ce}	217.87 ^{ce}	224.98 ^{ce}	174.15 ^{ce}	136.72 ^{ce}
	±16.71 (6)	15.91 (6)	14.25 (6)	61.90 (6)	73.18 (6)	80.91 (6)	58.96 (6)	52.39 (6)
D70 / 16	62.80	51.92	54.08	159.22 ^{ce}	203.45 ^{ce}	221.18 ^{ce}	174.65 ^{ce}	128.83 ^{ce}
	±12.33 (6)	10.12 (6)	8.41 (6)	33.15 (6)	38.97 (6)	51.58 (6)	29.49 (6)	33.93 (6)
D70 / 20	70.33	57.55	56.28	140.65 ^{ce}	177.58 ^{ce}	184.53 ^{ce}	137.52 ^{ce}	98.33 ^{ce}
	±10.51 (6)	13.21 (6)	12.58 (6)	30.56 (6)	43.40 (6)	43.71 (6)	24.03 (6)	22.46 (6)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.
^b Prequarantine sample.

^c Value is significantly different from the group baseline (Day 0) at p = 0.05 using the Dunnett's test.

^d The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HSD dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^e The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HS dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^f The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 D70 dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

TABLE 5 (cont.)
Serum Chemistry Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day							
		-7	0	1	2	3	7	14	
		Lactate Dehydrogenase (U/l)							
RL / 20	196.15	145.48	197.73	139.28	91.10	137.15	133.33	188.62	
	±109.09 (6)	127.48 (6)	153.11 (6)	44.66 (6)	38.28 (6)	98.60 (6)	64.86 (6)	132.34 (6)	
HSD / 12	187.75	122.32	136.47	89.17	99.02	104.82	73.35 ^e	154.32 ^c	
	±105.09 (6)	38.63 (6)	76.38 (6)	44.06 (6)	33.71 (6)	55.70 (6)	37.55 (6)	67.65 (6)	
HSD / 16	202.08	159.32	153.95	93.18	87.27	108.15	131.97 ^e	186.47 ^c	
	±93.97 (6)	158.43 (6)	116.77 (6)	52.44 (6)	32.45 (6)	84.44 (6)	125.00 (6)	203.19 (6)	
HSD / 20	121.83	96.30	137.37	130.93	85.22	91.63	70.88 ^c	191.77 ^c	
	±50.03 (6)	22.04 (6)	49.03 (6)	47.69 (6)	39.55 (6)	59.18 (6)	21.42 (6)	89.55 (6)	
HS / 12	134.60	136.92	137.70	121.77	116.88	109.98	161.42 ^{df}	219.80 ^{c,df}	
	±38.86 (6)	77.50 (6)	56.41 (6)	50.15 (6)	63.33 (6)	48.58 (6)	81.63 (6)	74.28 (6)	

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.
^b Prequarantine sample.

^c Value is significantly different from the group baseline (Day 0) at p = 0.05 using the Dunnett's test.

^d The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HSD dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^e The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HS dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^f The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 D70 dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

TABLE 5 (cont.)
Serum Chemistry Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day						
		-7	0	1	2	3	7	14
Lactate Dehydrogenase (U/l)								
HS / 16	180.38	136.38	136.15	142.42	102.83	114.58	136.97 ^{ad}	214.90 ^{dt}
	±84.75 (6)	46.92 (6)	82.22 (6)	39.18 (6)	37.76 (6)	45.28 (6)	82.66 (6)	141.30 (6)
HS / 20	127.93	180.13	129.67	127.58	123.28	120.42	152.85 ^{dt}	231.67 ^{dt}
	±83.46 (6)	112.47 (6)	61.26 (6)	61.62 (6)	103.04 (6)	79.98 (6)	74.52 (6)	109.94 (6)
D70 / 12	208.32	121.80	132.33	143.28	128.47	87.47	103.97 ^c	191.20 ^c
	±101.68 (6)	58.69 (6)	108.70 (6)	104.71 (6)	51.22 (6)	41.36 (6)	40.27 (6)	131.75 (6)
D70 / 16	143.25	136.80	128.95	97.55	74.73	80.28	98.57 ^c	158.47 ^c
	±54.68 (6)	117.32 (6)	37.39 (6)	65.55 (6)	21.87 (6)	33.51 (6)	83.71 (6)	98.03 (6)
D70 / 20	157.57	125.67	198.88	161.03	103.47	77.60	67.40 ^c	111.40 ^c
	±91.65 (6)	102.52 (6)	148.71 (6)	175.80 (6)	103.33 (6)	38.35 (6)	30.96 (6)	40.04 (6)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

^c Value is significantly different from the group baseline (Day 0) at p = 0.05 using the Dunnett's test.

^d The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HSD dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^e The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HS dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^f The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 D70 dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

TABLE 5 (cont.)
Serum Chemistry Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day					7	14
		-7	0	1	2	3		
		Gamma Glutamyl Transpeptidase (U/l)						
RL / 20	4.57	5.63	4.30	3.40	3.48	3.63	3.65	4.63
	±1.76 (6)	6.32 (6)	1.76 (6)	3.21 (6)	1.96 (6)	2.26 (6)	1.81 (6)	1.55 (6)
HSD / 12	2.93	4.87	2.68	4.43	4.35	4.18	5.22	5.53
	±1.97 (6)	4.52 (6)	1.53 (6)	2.22 (6)	1.41 (6)	1.34 (6)	1.16 (6)	1.78 (6)
HSD / 16	3.60	3.62	3.60	4.30	4.27	4.67	5.17	5.42
	±1.24 (6)	1.68 (6)	2.62 (6)	1.65 (6)	2.47 (6)	1.64 (6)	2.63 (6)	0.85 (6)
HSD / 20	3.97	5.88	3.62	4.25	4.30	5.22	7.20	6.67
	±1.91 (6)	4.58 (6)	0.91 (6)	1.72 (6)	3.02 (6)	2.36 (6)	3.00 (6)	3.33 (6)
HS / 12	3.85	5.18	2.78	4.27	3.76	4.30	4.07	4.33
	±1.61 (6)	4.25 (6)	1.24 (6)	2.35 (6)	0.91 (6)	1.29 (6)	1.35 (6)	1.38 (6)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

TABLE 5 (cont.)
Serum Chemistry Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day					
		-7	0	1	2	3	7
		Gamma Glutamyl Transpeptidase (U/l)					
HS / 16	3.42	3.68	3.00	2.58	2.77	2.53	3.25
	±2.08 (6)	1.15 (6)	1.83 (6)	1.78 (6)	1.63 (6)	1.58 (6)	1.79 (6)
HS / 20	4.47	5.00	4.68	5.45	5.42	4.77	5.75
	±1.00 (6)	4.97 (6)	0.68 (6)	3.69 (6)	3.88 (6)	4.17 (6)	4.40 (6)
D70 / 12	4.47	7.48	4.10	4.27	5.25	5.05	5.65
	±0.92 (6)	3.93 (6)	2.14 (6)	2.71 (6)	1.34 (6)	2.28 (6)	1.74 (6)
D70 / 16	3.68	5.95	3.88	4.97	4.35	5.23	4.22
	±1.58 (6)	4.51 (6)	1.50 (6)	2.08 (6)	1.18 (6)	1.33 (6)	1.80 (6)
D70 / 20	5.12	5.45	4.33	4.32	4.95	5.70	6.13
	±1.57 (6)	4.66 (6)	0.90 (6)	3.60 (6)	1.45 (6)	2.09 (6)	2.85 (6)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

TABLE 5 (cont.)
Serum Chemistry Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day						
		-7	0	1	2	3	7	14
		Creatine Phosphokinase (U/l)						
RL / 20	221.00	296.03	294.26	165.67	155.25	144.28	198.10	173.10
	±84.54 (6)	409.04 (6)	252.44 (6)	59.92 (6)	95.24 (6)	60.85 (6)	139.51 (6)	79.08 (6)
HSD / 12	489.32	196.08	235.16	138.07	163.93	142.47	115.92	182.49
	±664.82 (6)	81.37 (6)	111.08 (6)	39.12 (6)	84.09 (6)	40.06 (6)	49.02 (6)	65.84 (6)
HSD / 16	357.59	223.84	308.66	141.31	180.32	127.75	158.93	136.25
	±309.40 (6)	202.55 (6)	358.55 (6)	52.63 (6)	186.80 (6)	71.87 (6)	134.64 (6)	119.72 (6)
HSD / 20	245.73	195.45	195.25	320.16	144.28	123.01	103.71	241.39
	±150.72 (6)	78.24 (6)	41.52 (6)	225.87 (6)	46.42 (6)	42.76 (6)	25.58 (6)	135.39 (6)
HS / 12	235.56	187.46	263.64	155.97	148.22	136.02	169.64	227.05
	±131.74 (6)	87.07 (6)	183.48 (6)	50.82 (6)	86.52 (6)	42.55 (6)	88.70 (6)	46.98 (6)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

TABLE 5 (cont.)
Serum Chemistry Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day						
		-7	0	1	2	3	7	14
Creatine Phosphokinase (U/l)								
HS / 16	215.33	238.85	262.94	206.86	157.10	163.32	191.05	238.26
	±68.16 (6)	106.60 (6)	249.77 (6)	71.02 (6)	30.97 (6)	86.64 (6)	67.52 (6)	58.71 (6)
HS / 20	228.75	257.50	334.03	201.73	184.57	162.84	242.94	237.68
	±106.18 (6)	161.81 (6)	248.92 (6)	93.31 (6)	137.29 (6)	88.93 (6)	112.05 (6)	64.67 (6)
D70 / 12	270.43	201.12	267.36	226.11	148.73	141.21	129.28	112.28
	±100.83 (6)	95.96 (6)	267.75 (6)	157.10 (6)	54.19 (6)	97.84 (6)	23.03 (6)	69.81 (6)
D70 / 16	248.04	287.11	214.54	172.37	120.90	144.82	153.60	156.31
	±103.54 (6)	344.03 (6)	73.33 (6)	74.10 (6)	15.92 (6)	66.44 (6)	60.88 (6)	50.80 (6)
D70 / 20	300.12	131.18	227.27	202.86	132.89	103.77	86.39	121.95
	±216.49 (6)	75.79 (6)	186.59 (6)	201.57 (6)	120.07 (6)	45.79 (6)	40.16 (6)	55.36 (6)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

TABLE 5 (cont.)
Serum Chemistry Summary^a

Group/Dose (ml/kg/day)	Q ^b	-7	0	Study Day 1	2	3	7	14
Total Bilirubin (mg/dl)								
RL / 20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	±0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)
HSD / 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	±0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)
HSD / 16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	±0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)
HSD / 20	0.00	0.00	0.11	0.00	0.00	0.00	0.02	0.01
	±0.00	0.00	0.17	0.00	0.00	0.00	0.05	0.03
	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)
HS / 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	±0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
	(6)	(6)	(6)	(6)	(6)	(6)	(6)	(6)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

TABLE 5 (cont.)
Serum Chemistry Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day					7	14
		-7	0	1	2	3		
Total Bilirubin (mg/dl)								
HS / 16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	±0.00 (6)	0.00 (6)	0.00 (6)	0.00 (6)	0.00 (6)	0.00 (6)	0.00 (6)	0.01 (6)
HS / 20	0.01	0.00	0.10	0.00	0.00	0.00	0.05	0.01
	±0.02 (6)	0.00 (6)	0.18 (6)	0.00 (6)	0.00 (6)	0.00 (6)	0.12 (6)	0.03 (6)
D70 / 12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	±0.00 (6)	0.00 (6)	0.00 (6)	0.00 (6)	0.00 (6)	0.00 (6)	0.00 (6)	0.00 (6)
D70 / 16	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00
	±0.00 (6)	0.00 (6)	0.03 (6)	0.01 (6)	0.00 (6)	0.00 (6)	0.00 (6)	0.00 (6)
D70 / 20	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
	±0.00 (6)	0.00 (6)	0.00 (6)	0.00 (6)	0.00 (6)	0.00 (6)	0.02 (6)	0.00 (6)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

TABLE 5 (cont.)
Serum Chemistry Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day						
		-7	0	1	2	3	7	14
Cholesterol (mg/dl)								
RL / 20	209.73	175.02	172.45	165.87	172.75	168.57	178.45	234.40
	±41.76 (6)	39.20 (6)	46.25 (6)	36.18 (6)	36.46 (6)	34.55 (6)	27.49 (6)	77.30 (6)
HSD / 12	204.48	189.80	175.28	161.58	156.75 ^e	145.72 ^e	113.60 ^e	137.85 ^e
	±34.72 (6)	36.11 (6)	40.98 (6)	39.19 (6)	43.92 (6)	33.17 (6)	28.03 (6)	86.78 (6)
HSD / 16	190.53	173.68	165.47	150.77	139.30 ^{ce}	136.00 ^{ce}	107.83 ^{ce}	93.73 ^{ce}
	±21.17 (6)	16.48 (6)	15.00 (6)	20.91 (6)	20.76 (6)	17.34 (6)	25.28 (6)	28.10 (6)
HSD / 20	214.43	176.02	176.85	164.38	142.52 ^{ce}	138.78 ^{ce}	101.50 ^{ce}	104.03 ^{ce}
	±35.07 (6)	12.96 (6)	8.84 (6)	16.69 (6)	14.60 (6)	19.99 (6)	22.16 (6)	38.11 (6)
HS / 12	197.63	174.53	164.57	164.63	168.08 ^{df}	175.42 ^{df}	170.13 ^{df}	226.10 ^{df}
	±47.27 (6)	48.43 (6)	48.90 (6)	35.91 (6)	37.33 (6)	40.35 (6)	28.84 (6)	94.64 (6)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

^c Value is significantly different from the group baseline (Day 0) at p = 0.05 using the Dunnett's test.

^d The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HSD dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^e The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HS dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^f The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 D70 dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

TABLE 5 (cont.)
Serum Chemistry Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day					14	
		-7	0	1	2	3		7
Cholesterol (mg/dl)								
HS / 16	191.20	161.88	156.53	163.48	163.98 ^{df}	170.43 ^{df}	170.88 ^{df}	195.53 ^{df}
	±31.37 (6)	18.16 (6)	19.69 (6)	21.87 (6)	21.07 (6)	28.21 (6)	24.70 (6)	50.62 (6)
HS / 20	206.20	185.20	181.92	182.35	186.97 ^{df}	186.93 ^{df}	197.93 ^{df}	264.55 ^{df}
	±30.36 (6)	33.68 (6)	36.15 (6)	21.41 (6)	28.71 (6)	32.59 (6)	18.83 (6)	93.63 (6)
D70 / 12	194.88	167.37	160.32	148.27	143.48 ^e	131.65 ^e	105.77 ^e	115.17 ^e
	±38.09 (6)	39.19 (6)	43.01 (6)	37.76 (6)	36.79 (6)	37.29 (6)	29.63 (6)	51.39 (6)
D70 / 16	190.17	169.83	169.60	148.77	132.35 ^{ee}	123.40 ^{ee}	92.28 ^{ee}	86.85 ^{ee}
	±24.50 (6)	22.54 (6)	33.01 (6)	37.60 (6)	34.63 (6)	30.33 (6)	19.20 (6)	42.91 (6)
D70 / 20	181.43	162.77	163.47	140.33	119.08 ^{ee}	110.02 ^{ee}	83.35 ^{ee}	80.60 ^{ee}
	±24.96 (6)	27.44 (6)	22.74 (6)	23.04 (6)	17.95 (6)	17.59 (6)	15.40 (6)	17.56 (6)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

^c Value is significantly different from the group baseline (Day 0) at p = 0.05 using the Dunnett's test.

^d The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3

HSD dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^e The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3

HS dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^f The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3

D70 dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

TABLE 5 (cont.)
Serum Chemistry Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day						
		-7	0	1	2	3	7	14
Triglyceride (mg/dl) - Males								
HS / 16	68.7	41.7	26.7	39.7	54.7	68.0 ^{cd}	54.0 ^{cd}	67.3 ^{cd}
	±11.2 (3)	5.1 (3)	5.0 (3)	10.3 (3)	16.8 (3)	18.3 (3)	10.8 (3)	2.1 (3)
HS / 20	34.0	44.0	40.0	45.7	54.3	61.3 ^{cd}	58.3 ^{cd}	66.3 ^{cd}
	±5.3 (3)	16.5 (3)	14.7 (3)	18.9 (3)	14.5 (3)	24.2 (3)	17.0 (3)	18.1 (3)
D70 / 12	33.7	40.7	35.7	42.3	47.3	38.7 ^{de}	41.7 ^e	36.3 ^e
	±8.1 (3)	3.8 (3)	6.7 (3)	11.5 (3)	7.6 (3)	0.6 (3)	9.3 (3)	3.8 (3)
D70 / 16	37.7	38.3	38.3	40.0	63.7	41.0 ^{de}	30.0 ^e	28.7 ^e
	±2.5 (3)	8.4 (3)	6.7 (3)	20.3 (3)	30.1 (3)	5.2 (3)	8.7 (3)	7.4 (3)
D70 / 20	48.7	46.0	36.7	36.3	36.3	29.7 ^{de}	30.0 ^e	26.0 ^e
	±8.5 (3)	9.6 (3)	3.8 (3)	8.4 (3)	12.3 (3)	6.4 (3)	12.1 (3)	2.6 (3)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.
^b Prequarantine sample.

^c Value is significantly different from the group baseline (Day 0) at p = 0.05 using the Dunnett's test.

^d The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HSD dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^e The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HS dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^f The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 D70 dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

TABLE 5 (cont.)
Serum Chemistry Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day					7	14
		-7	0	1	2	3		
Uric Acid (mg/dl)								
RL / 20	0.20	0.35	0.10	0.20	0.17	0.18	0.68 ^c	0.72 ^d
	±0.11 (6)	0.62 (6)	0.06 (6)	0.09 (6)	0.10 (6)	0.10 (6)	0.83 (6)	0.77 (6)
HSD / 12	0.20	0.07	0.35	0.13	0.15	0.12	0.58	0.35
	±0.09 (6)	0.12 (6)	0.62 (6)	0.15 (6)	0.12 (6)	0.15 (6)	0.79 (6)	0.57 (6)
HSD / 16	0.28	0.35	0.35	0.13	0.17	0.18	0.38	0.67
	±0.19 (6)	0.62 (6)	0.63 (6)	0.15 (6)	0.05 (6)	0.10 (6)	0.66 (6)	0.85 (6)
HSD / 20	0.28	0.37	0.40	0.18	0.18	0.13	0.63	0.47
	±0.08 (6)	0.62 (6)	0.60 (6)	0.12 (6)	0.12 (6)	0.14 (6)	0.80 (6)	0.63 (6)
HS / 12	0.35	0.15	0.43	0.15	0.18	0.17	0.73	0.33
	±0.20 (6)	0.14 (6)	0.58 (6)	0.15 (6)	0.12 (6)	0.15 (6)	0.87 (6)	0.40 (6)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

^c Male group value is significantly different from the group baseline (Day 0) at p = 0.05 using the Dunnett's test.

^d Female group value is significantly different from the group baseline (Day 0) at p = 0.05 using the Dunnett's test.

TABLE 5 (cont.)
Serum Chemistry Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day					7	14
		-7	0	1	2	3		
		Uric Acid (mg/dl)						
HS / 16	0.32	0.37	0.38	0.15	0.18	0.22	0.47	0.72
	±0.12 (6)	0.61 (6)	0.61 (6)	0.14 (6)	0.10 (6)	0.18 (6)	0.66 (6)	0.88 (6)
HS / 20	0.23	0.32	0.30	0.18	0.18	0.17	0.68	0.42
	±0.10 (6)	0.63 (6)	0.64 (6)	0.10 (6)	0.10 (6)	0.10 (6)	0.76 (6)	0.65 (6)
D70 / 12	0.32	0.12	0.40	0.18	0.20	0.17	0.70	0.45
	±0.21 (6)	0.13 (6)	0.60 (6)	0.12 (6)	0.14 (6)	0.14 (6)	0.75 (6)	0.67 (6)
D70 / 16	0.32	0.33	0.15	0.17	0.15	0.10	0.42	0.67
	±0.08 (6)	0.63 (6)	0.12 (6)	0.08 (6)	0.10 (6)	0.11 (6)	0.63 (6)	0.93 (6)
D70 / 20	0.25	0.35	0.30	0.15	0.10	0.10	0.58	0.33
	±0.18 (6)	0.62 (6)	0.64 (6)	0.12 (6)	0.11 (6)	0.11 (6)	0.75 (6)	0.63 (6)

^a Data are presented as the mean $\pm$ the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

TABLE 5 (cont.)
Serum Chemistry Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day					7	14
		-7	0	1	2	3		
Total Protein (g/dl)								
RL / 20	6.03	5.88	6.06	5.84	5.87	5.70	5.95	5.92
	±0.12 (6)	0.37 (6)	0.32 (6)	0.27 (6)	0.25 (6)	0.13 (6)	0.24 (6)	0.25 (6)
HSD / 12	5.93	5.83	5.93	5.76	5.92	5.80	5.90	5.68
	±0.52 (6)	0.37 (6)	0.57 (6)	0.53 (6)	0.63 (6)	0.91 (6)	1.29 (6)	1.28 (6)
HSD / 16	6.33	5.87	5.98	5.98	6.02	6.08	6.22	6.55
	±0.35 (6)	0.54 (6)	0.54 (6)	0.78 (6)	1.17 (6)	1.31 (6)	1.51 (6)	2.16 (6)
HSD / 20	6.17	5.86	5.90	6.16	6.05	6.30	6.28	6.12
	±0.57 (6)	0.60 (6)	0.37 (6)	1.00 (6)	1.22 (6)	1.66 (6)	1.86 (6)	1.49 (6)
HS / 12	6.07	5.76	5.84	5.74	5.94	5.80	5.89	6.08
	±0.54 (6)	0.34 (6)	0.45 (6)	0.27 (6)	0.50 (6)	0.40 (6)	0.52 (6)	0.49 (6)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

TABLE 5 (cont.)
Serum Chemistry Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day					7	14
		-7	0	1	2	3		
Total Protein (g/dl)								
HS / 16	6.05	5.85	5.73	5.92	5.99	6.07	6.12	6.35
	±0.44 (6)	0.40 (6)	0.23 (6)	0.31 (6)	0.39 (6)	0.40 (6)	0.36 (6)	0.34 (6)
HS / 20	5.87	5.68	5.83	5.84	5.94	5.81	5.99	6.20
	±0.45 (6)	0.27 (6)	0.23 (6)	0.47 (6)	0.62 (6)	0.33 (6)	0.52 (6)	0.44 (6)
D70 / 12	5.98	5.61	5.57	5.60	6.09	5.66	5.71	5.53
	±0.61 (6)	0.27 (6)	0.24 (6)	0.75 (6)	1.23 (6)	0.96 (6)	1.56 (6)	1.58 (6)
D70 / 16	5.75	5.68	5.73	5.69	5.59	5.71	5.81	5.73
	±0.63 (6)	0.60 (6)	0.52 (6)	0.86 (6)	1.19 (6)	1.33 (6)	1.94 (6)	2.10 (6)
D70 / 20	5.85	5.92	5.93	5.91	5.92	5.87	6.04	6.03
	±0.36 (6)	0.65 (6)	0.55 (6)	0.93 (6)	1.27 (6)	1.23 (6)	1.96 (6)	1.64 (6)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

TABLE 5 (cont.)
Serum Chemistry Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day				7	14
		-7	0	1	2		
Albumin (g/dl)							
RL / 20	3.15 ±0.29 (6)	3.25 0.32 (6)	3.40 0.28 (6)	3.22 0.23 (6)	3.32 0.33 (6)	3.38 0.21 (6)	3.33 0.38 (6)
HSD / 12	3.17 ±0.33 (6)	3.27 0.21 (6)	3.18 0.15 (6)	2.90 ^e 0.32 (6)	2.82 ^{ce} 0.33 (6)	2.53 ^{ce} 0.31 (6)	2.40 ^{ce} 0.22 (6)
HSD / 16	3.43 ±0.08 (6)	3.43 0.36 (6)	3.38 0.16 (6)	3.08 ^{ce} 0.25 (6)	2.90 ^{ce} 0.21 (6)	2.77 ^{ce} 0.28 (6)	2.62 ^{ce} 0.23 (6)
HSD / 20	3.43 ±0.32 (6)	3.20 0.32 (6)	3.37 0.23 (6)	3.10 ^e 0.30 (6)	2.77 ^{ce} 0.18 (6)	2.42 ^{ce} 0.32 (6)	2.15 ^{ce} 0.15 (6)
HS / 12	3.33 ±0.33 (6)	3.43 0.29 (6)	3.48 0.32 (6)	3.30 ^{df} 0.26 (6)	3.30 ^{df} 0.28 (6)	3.33 ^{df} 0.19 (6)	3.53 ^{df} 0.25 (6)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

^c Value is significantly different from the group baseline (Day 0) at p = 0.05 using the Dunnett's test.

^d The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HSD dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^e The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HS dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^f The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 D70 dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

TABLE 5 (cont.)
Serum Chemistry Summary^a

Group/dose (ml/kg/day)	Q ^b	-7	Study Day				7	14
			0	1	2	3		
Albumin (g/dl)								
HS / 16	3.37	5.38	3.25	3.38 ^{at}	3.28 ^{at}	3.35 ^{at}	3.42 ^{at}	3.55 ^{at}
	±0.39 (6)	0.37 (6)	0.27 (6)	0.29 (6)	0.23 (6)	0.24 (6)	0.19 (6)	0.39 (6)
HS / 20	3.45	3.37	3.55	3.43 ^{at}	3.38 ^{at}	3.42 ^{at}	3.55 ^{at}	3.67 ^{at}
	±0.10 (6)	0.21 (6)	0.31 (6)	0.27 (6)	0.31 (6)	0.16 (6)	0.33 (6)	0.30 (6)
D70 / 12	3.23	3.43	3.48	3.12 ^e	2.95 ^{ee}	2.80 ^{ee}	2.57 ^{ee}	2.48 ^{ee}
	±0.30 (6)	0.27 (6)	0.33 (6)	0.25 (6)	0.19 (6)	0.33 (6)	0.14 (6)	0.17 (6)
D70 / 16	3.32	3.20	3.30	2.92 ^{ee}	2.62 ^{ee}	2.60 ^{ee}	2.40 ^{ee}	2.07 ^{ee}
	±0.35 (6)	0.29 (6)	0.20 (6)	0.37 (6)	0.19 (6)	0.43 (6)	0.26 (6)	0.22 (6)
D70 / 20	3.42	3.30	3.37	2.87 ^{ee}	2.50 ^{ee}	2.47 ^{ee}	2.37 ^{ee}	2.10 ^{ee}
	±0.21 (6)	0.20 (6)	0.22 (6)	0.16 (6)	0.35 (6)	0.20 (6)	0.21 (6)	0.21 (6)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses. Preparantine sample.

^d Value is significantly different from the group baseline (Day 0) at p = 0.05 using the Dunnett's test.

^e The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HSD dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^f The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HSD dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^t The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 D70 dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

TABLE 5 (cont.)
Serum Chemistry Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day						
		-7	0	1	2	3	7	14
		Albumin/Globulin Ratio						
RL / 20	1.13 ±0.28 (6)	1.26 0.27 (6)	1.36 0.38 (6)	1.26 0.26 (6)	1.36 0.41 (6)	1.19 0.23 (6)	1.33 0.18 (6)	1.32 0.32 (6)
HSD / 12	1.18 ±0.19 (6)	1.30 0.22 (6)	1.17 0.16 (6)	1.08 0.30 (6)	0.89 ^e 0.16 (6)	0.99 ^e 0.31 (6)	0.80 ^e 0.21 (6)	0.85 ^e 0.38 (6)
HSD / 16	1.20 ±0.21 (6)	1.45 0.31 (6)	1.35 0.26 (6)	1.17 0.40 (6)	1.02 ^{ee} 0.32 (6)	0.97 ^{ee} 0.45 (6)	0.93 ^{ee} 0.33 (6)	0.83 ^{ee} 0.37 (6)
HSD / 20	1.30 ±0.32 (6)	1.21 0.17 (6)	1.34 0.19 (6)	1.08 ^e 0.31 (6)	0.92 ^{ee} 0.32 (6)	0.87 ^{ee} 0.33 (6)	0.72 ^{ee} 0.29 (6)	0.63 ^{ee} 0.23 (6)
HS / 12	1.25 ±0.27 (6)	1.48 0.23 (6)	1.52 0.34 (6)	1.38 0.30 (6)	1.28 ^{dt} 0.17 (6)	1.34 ^{dt} 0.31 (6)	1.37 ^{dt} 0.22 (6)	1.45 ^{dt} 0.29 (6)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

^c Value is significantly different from the group baseline (Day 0) at p = 0.05 using the Dunnett's test.

^d The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HSD dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^e The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HS dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^f The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 D70 dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

TABLE 5 (cont.)
Serum Chemistry Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day						
		-7	0	1	2	3	7	14
Albumin/Globulin Ratio								
HS / 16	1.28	1.43	1.32	1.35	1.22 ^{dt}	1.25 ^{dt}	1.27 ^{dt}	1.32 ^{dt}
	±0.22 (6)	0.29 (6)	0.16 (6)	0.23 (6)	0.14 (6)	0.19 (6)	0.21 (6)	0.22 (6)
HS / 20	1.42	1.49	1.61	1.42	1.37 ^{dt}	1.48 ^{dt}	1.45 ^{dt}	1.47 ^{dt}
	±0.21 (6)	0.22 (6)	0.36 (6)	0.09 (6)	0.25 (6)	0.20 (6)	0.30 (6)	0.21 (6)
D70 / 12	1.28	1.63	1.76	1.37	1.04 ^{ee}	1.20 ^{ee}	1.00 ^{ee}	1.15 ^{ee}
	±0.33 (6)	0.34 (6)	0.51 (6)	0.46 (6)	0.41 (6)	0.63 (6)	0.45 (6)	0.81 (6)
D70 / 16	1.43	1.35	1.41	1.14	1.01 ^{ee}	1.06 ^{ee}	0.90 ^{ee}	0.80 ^{ee}
	±0.29 (6)	0.32 (6)	0.31 (6)	0.34 (6)	0.39 (6)	0.63 (6)	0.45 (6)	0.45 (6)
D70 / 20	1.43	1.35	1.42	1.07	0.80 ^{ee}	0.85 ^{ee}	0.80 ^{ee}	0.67 ^{ee}
	±0.20 (6)	0.38 (6)	0.47 (6)	0.43 (6)	0.28 (6)	0.40 (6)	0.42 (6)	0.38 (6)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

^c Value is significantly different from the group baseline (Day 0) at p = 0.05 using the Dunnett's test.

^d The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HSD dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^e The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HS dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^f The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 D70 dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

TABLE 5 (cont.)
Serum Chemistry Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day					7	14
		-7	0	1	2	3		
Glucose (mg/dl)								
RL / 20	93.55	93.03	88.90	93.17	97.57	92.65	87.25	87.28
	±12.27 (6)	9.98 (6)	10.68 (6)	10.02 (6)	15.78 (6)	9.43 (6)	8.93 (6)	9.37 (6)
HSD / 12	85.50	87.27	90.43	94.30	98.13 ^c	94.10	103.35 ^d	93.72 ^d
	±12.93 (6)	6.81 (6)	9.97 (6)	7.51 (6)	10.77 (6)	7.78 (6)	5.98 (6)	7.92 (6)
HSD / 16	86.82	90.40	87.20	92.38	94.87 ^c	93.18	101.65 ^d	106.63 ^d
	±13.68 (6)	12.80 (6)	11.10 (6)	9.93 (6)	10.52 (6)	13.52 (6)	11.18 (6)	13.56 (6)
HSD / 20	84.88	93.52	88.12	87.87	96.63 ^c	99.17	103.42 ^d	98.50 ^d
	±15.13 (6)	6.46 (6)	10.25 (6)	7.46 (6)	8.05 (6)	10.09 (6)	11.98 (6)	16.20 (6)
HS / 12	85.48	92.58	89.50	95.53	98.07	92.75	87.83 ^{ce}	86.12 ^{ce}
	±10.21 (6)	17.89 (6)	10.57 (6)	7.29 (6)	6.63 (6)	7.08 (6)	6.11 (6)	12.84 (6)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

^c The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HSD dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^d The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HS dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^e The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 D70 dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

TABLE 5 (cont.)
Serum Chemistry Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day					7	14	
		-7	0	1	2	3			
Glucose (mg/dl)									
HS / 16	71.68	91.85	91.10	94.78	95.75	91.17	94.90 ^{ce}	92.93 ^{ce}	
	±26.57 (6)	9.32 (6)	4.85 (6)	7.52 (6)	11.42 (6)	8.24 (6)	8.99 (6)	14.64 (6)	
HS / 20	87.83	93.08	91.07	90.30	96.77	95.85	92.43 ^{ce}	87.77 ^{ce}	
	±15.14 (6)	6.58 (6)	9.75 (6)	4.77 (6)	6.72 (6)	6.30 (6)	9.69 (6)	9.41 (6)	
D70 / 12	80.67	97.18	92.72	100.32	106.15 ^c	102.92	99.38 ^d	98.08 ^d	
	±11.29 (6)	19.68 (6)	13.14 (6)	13.04 (6)	9.18 (6)	13.41 (6)	9.34 (6)	12.53 (6)	
D70 / 16	78.22	96.85	87.40	94.60	101.00 ^c	94.30	96.42 ^d	95.90 ^d	
	±6.79 (6)	10.85 (6)	16.29 (6)	15.47 (6)	4.66 (6)	5.54 (6)	19.30 (6)	9.59 (6)	
D70 / 20	88.75	94.88	93.67	93.68	103.00 ^c	101.23	100.78 ^d	106.52 ^d	
	±16.65 (6)	15.22 (6)	9.36 (6)	11.37 (6)	1.98 (6)	10.19 (6)	6.93 (6)	7.91 (6)	

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

^c The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HSD dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^d The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HS dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^e The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 D70 dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

TABLE 5 (cont.)
Serum Chemistry Summary^a

Group/Dose (ml/kg/day)	Q ^b	-7	Study Day				3	7	14
			0	1	2				
			Blood Urea Nitrogen (mg/dl)						
RL / 20	18.55 ±4.23 (6)	16.97 3.23 (6)	17.50 6.20 (6)	15.37 1.71 (6)	21.42 2.18 (6)	17.78 3.56 (6)	18.95 3.34 (6)	17.58 2.56 (6)	
HSD / 12	21.10 ±5.77 (6)	17.78 4.58 (6)	17.28 3.80 (6)	16.32 4.39 (6)	18.80 5.11 (6)	20.70 4.93 (6)	17.47 3.39 (6)	18.45 4.49 (6)	
HSD / 16	20.20 ±5.19 (6)	17.00 5.41 (6)	15.73 5.19 (6)	15.25 4.61 (6)	16.68 3.11 (6)	19.27 3.87 (6)	18.07 2.58 (6)	18.32 5.14 (6)	
HSD / 20	20.48 ±2.84 (6)	15.83 4.31 (6)	16.08 0.92 (6)	13.17 ^c 1.71 (6)	16.90 1.68 (6)	16.75 2.67 (6)	16.78 1.86 (6)	16.38 1.97 (6)	
HS / 12	22.43 ±6.12 (6)	16.23 2.16 (6)	14.67 3.34 (6)	14.58 4.52 (6)	17.80 3.34 (6)	17.30 2.09 (6)	18.18 7.34 (6)	17.68 3.74 (6)	

a Data are presented as the mean $\pm$ the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

c value is significantly different from the group baseline (Day 0) at $p = 0.05$ using the Dunnnett's test.

TABLE 5 (cont.)
Serum Chemistry Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day						
		-7	0	1	2	3	7	14
Blood Urea Nitrogen (mg/dl)								
HS / 16	25.13	18.15	18.35	18.15	18.12	22.83	21.13	19.10
	±9.83 (6)	6.75 (6)	8.86 (6)	7.47 (6)	5.05 (6)	6.61 (6)	7.44 (6)	5.25 (6)
HS / 20	23.77	19.98	17.87	15.63	18.65	17.90	17.53	19.32
	±6.14 (6)	5.23 (6)	5.32 (6)	4.07 (6)	5.37 (6)	2.85 (6)	3.70 (6)	2.33 (6)
D70 / 12	18.80	16.08	15.53	16.82	17.05	17.10	17.60	17.47
	±2.11 (6)	3.78 (6)	3.45 (6)	2.00 (6)	3.75 (6)	4.15 (6)	2.82 (6)	5.69 (6)
D70 / 16	24.72	17.50	15.97	16.02	18.73	18.20	16.85	17.57
	±6.07 (6)	3.17 (6)	3.45 (6)	3.53 (6)	3.56 (6)	4.10 (6)	4.76 (6)	3.61 (6)
D70 / 20	19.97	14.83	16.03	16.45	15.53	16.80	16.92	16.45
	±4.26 (6)	3.67 (6)	1.89 (6)	3.48 (6)	3.63 (6)	3.43 (6)	5.89 (6)	2.13 (6)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

TABLE 5 (cont.)
Serum Chemistry Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day							
		-7	0	1	2	3	7	14	
		Creatinine (mg/dl)							
RL / 20	0.78	0.73	0.68	0.60	0.67	0.70	0.72	0.82	
	±0.10 (6)	0.08 (6)	0.04 (6)	0.21 (6)	0.05 (6)	0.11 (6)	0.10 (6)	0.08 (6)	
HSD / 12	0.78	0.73	0.77	0.72	0.72	0.73	0.78	0.80	
	±0.04 (6)	0.08 (6)	0.16 (6)	0.08 (6)	0.13 (6)	0.08 (6)	0.08 (6)	0.13 (6)	
HSD / 16	0.77	0.73	0.73	0.70	0.67	0.67	0.65	0.75	
	±0.05 (6)	0.10 (6)	0.05 (6)	0.09 (6)	0.08 (6)	0.08 (6)	0.05 (6)	0.10 (6)	
HSD / 20	0.80	0.70	0.75	0.72	0.65	0.68	0.72	0.70	
	±0.06 (6)	0.09 (6)	0.08 (6)	0.12 (6)	0.10 (6)	0.08 (6)	0.12 (6)	0.14 (6)	
HS / 12	0.73	0.70	0.68	0.67	0.68	0.70	0.73	0.80	
	±0.08 (6)	0.13 (6)	0.04 (6)	0.05 (6)	0.10 (6)	0.09 (6)	0.12 (6)	0.11 (6)	

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

TABLE 5 (cont.)
Serum Chemistry Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day						
		-7	0	1	2	3	7	14
Creatinine (mg/dl)								
HS / 16	0.80	0.78	0.73	0.68	0.72	0.73	0.72	0.88 ^c
	±0.09 (6)	0.10 (6)	.08 (6)	0.08 (6)	0.12 (6)	0.08 (6)	0.08 (6)	0.17 (6)
HS / 20	0.80	0.73	0.77	0.75	0.70	0.72	0.73	0.83
	±0.09 (6)	0.08 (6)	0.05 (6)	0.05 (6)	0.06 (6)	0.04 (6)	0.12 (6)	0.14 (6)
D70 / 12	0.82	0.67	0.75	0.68	0.68	0.68	0.72	0.73
	±0.13 (6)	0.12 (6)	0.14 (6)	0.08 (6)	0.15 (6)	0.16 (6)	0.16 (6)	0.08 (6)
D70 / 16	0.88	0.82	0.78	0.75	0.68	0.68	0.68	0.77
	±0.08 (6)	0.08 (6)	0.08 (6)	0.08 (6)	0.10 (6)	0.10 (6)	0.12 (6)	0.12 (6)
D70 / 20	0.80	0.73	0.72	0.68	0.65	0.67	0.68	0.68
	±0.06 (6)	0.14 (6)	0.04 (6)	0.10 (6)	0.10 (6)	0.08 (6)	0.08 (6)	0.12 (6)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

^c Value is significantly different from the group baseline (Day 0) at p = 0.05 using the Dunnett's test.

TABLE 5 (cont.)
Serum Chemistry Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day					7	14
		-7	0	1	2	3		
Calcium (mg/dl)								
RL / 20	10.52	10.50	10.53	10.23	10.70	10.35	11.23	10.92
	±0.69 (6)	0.51 (6)	0.66 (6)	0.33 (6)	0.30 (6)	0.52 (6)	0.78 (6)	0.86 (6)
HSD / 12	10.62	10.48	10.15	10.00	9.95 ^e	10.00 ^e	10.08 ^e	9.47 ^e
	±0.84 (6)	0.82 (6)	0.77 (6)	0.41 (6)	0.79 (6)	0.53 (6)	0.95 (6)	0.40 (6)
HSD / 16	10.87	10.65	10.47	10.00	9.65 ^e	9.85 ^e	9.60 ^e	9.68 ^e
	±0.68 (6)	0.66 (6)	0.27 (6)	0.51 (6)	0.55 (6)	0.61 (6)	0.61 (6)	0.62 (6)
HSD / 20	10.63	10.50	10.18	10.03	9.67 ^e	9.60 ^e	9.30 ^e	8.90 ^{ce}
	±0.93 (6)	0.80 (6)	0.67 (6)	0.71 (6)	0.53 (6)	0.42 (6)	0.85 (6)	0.60 (6)
HS / 12	10.72	10.87	10.52	10.40	10.95 ^{df}	10.65 ^{df}	11.02 ^{df}	11.12 ^{df}
	±0.71 (6)	0.97 (6)	0.70 (6)	0.24 (6)	0.46 (6)	0.39 (6)	0.58 (6)	0.87 (6)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

^c Value is significantly different from the group baseline (Day 0) at p = 0.05 using the Dunnett's test.

^d The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HSD dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^e The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HS dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^f The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 D70 dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

TABLE 5 (cont.)
Serum Chemistry Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day					7	14
		-7	0	1	2	3		
Calcium (mg/dl)								
HS / 16	11.00	10.65	10.40	10.47	10.43 ^{df}	10.65 ^{df}	10.77 ^{df}	11.27 ^{df}
	±1.01 (6)	0.70 (6)	0.49 (6)	0.93 (6)	0.69 (6)	0.31 (6)	0.48 (6)	0.88 (6)
HS / 20	10.95	10.80	10.18	10.45	10.60 ^{df}	10.48 ^{df}	11.32 ^{df}	11.02 ^{df}
	±0.96 (6)	0.96 (6)	0.44 (6)	0.53 (6)	0.56 (6)	0.66 (6)	0.76 (6)	0.62 (6)
D70 / 12	10.42	10.75	10.43	10.08	10.35 ^e	9.88 ^e	9.88 ^e	9.48 ^e
	±0.93 (6)	0.71 (6)	0.39 (6)	0.74 (6)	0.66 (6)	0.47 (6)	0.64 (6)	0.59 (6)
D70 / 16	10.80	10.28	10.30	10.05	9.77 ^e	9.60 ^e	9.52 ^e	9.48 ^e
	±1.22 (6)	0.80 (6)	0.70 (6)	0.52 (6)	0.52 (6)	0.47 (6)	0.32 (6)	0.71 (6)
D70 / 20	10.58	10.53	10.33	10.20	9.92 ^e	9.63 ^e	9.77 ^e	9.15 ^{ce}
	±0.96 (6)	0.76 (6)	0.55 (6)	0.89 (6)	0.45 (6)	0.45 (6)	0.47 (6)	0.51 (6)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.
^b Prequarantine sample.

^c Value is significantly different from the group baseline (Day 0) at p = 0.05 using the Dunnett's test.

^d The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HSD dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^e The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HS dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^f The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 D70 dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

TABLE 5 (cont.)
Serum Chemistry Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day						
		-7	0	1	2	3	7	14
		Phosphorus (mg/dl)						
RL / 20	5.92	5.60	5.28	4.97	5.63	4.92	6.23	5.12
	±1.03 (6)	0.88 (6)	0.97 (6)	0.68 (6)	0.75 (6)	0.60 (6)	1.73 (6)	0.63 (6)
HSD / 12	5.37	5.05	5.07	5.35	5.07	5.25	5.72	5.47
	±1.09 (6)	1.27 (6)	0.75 (6)	1.23 (6)	0.83 (6)	0.94 (6)	1.47 (6)	0.76 (6)
HSD / 16	5.45	4.82	4.80	5.17	4.98	5.45	6.10	5.85
	±0.70 (6)	0.56 (6)	0.46 (6)	0.75 (6)	0.57 (6)	1.08 (6)	0.97 (6)	1.10 (6)
HSD / 20	5.82	5.02	5.05	4.93	5.12	5.35	5.62	5.22
	±0.71 (6)	0.62 (6)	0.55 (6)	0.69 (6)	0.80 (6)	0.61 (6)	0.61 (6)	0.95 (6)
HS / 12	5.45	5.17	4.97	5.17	4.92	5.28	5.63	5.13
	±0.87 (6)	0.53 (6)	0.66 (6)	0.52 (6)	0.68 (6)	0.37 (6)	0.66 (6)	0.77 (6)

^a Data are presented as the mean $\pm$ the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

TABLE 5 (cont.)
Serum Chemistry Summary^a

Group/Dose (ml/kg./day)	Q ^b	Study Day						
		-7	0	1	2	3	7	14
		Phosphorus (mg/dl)						
HS / 16	5.63	5.27	4.90	5.28	5.20	5.38	5.75	5.30
	±1.09 (6)	0.64 (6)	0.49 (6)	0.68 (6)	1.36 (6)	0.87 (6)	0.37 (6)	0.68 (6)
HS / 20	5.28	5.22	5.28	4.87	5.15	5.15	5.45	5.18
	±1.05 (6)	0.88 (6)	0.67 (6)	0.49 (6)	0.45 (6)	0.57 (6)	0.65 (6)	0.79 (6)
D70 / 12	5.05	5.12	4.93	5.15	5.00	5.12	5.92	5.05
	±0.65 (6)	0.73 (6)	0.39 (6)	0.61 (6)	0.49 (6)	0.91 (6)	1.20 (6)	0.30 (6)
D70 / 16	5.47	5.10	4.65	4.93	5.15	5.40	5.60	5.55
	±0.56 (6)	0.94 (6)	0.39 (6)	1.00 (6)	0.96 (6)	0.84 (6)	0.64 (6)	0.55 (6)
D70 / 20	5.55	4.90	5.08	5.07	5.10	5.37	5.88	5.42
	±0.87 (6)	0.61 (6)	0.46 (6)	0.39 (6)	0.42 (6)	0.68 (6)	0.78 (6)	0.87 (6)

^a Data are presented as the mean $\pm$ the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

TABLE 5 (cont.)
Serum Chemistry Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day					7	14	
		-7	0	1	2	3			
Sodium (Meq/i)									
RL / 20	156.68	153.22	154.55	153.17	154.02	152.12	154.58	152.28	
	±1.22 (6)	2.19 (6)	5.49 (6)	2.74 (6)	2.44 (6)	2.79 (6)	1.46 (6)	3.39 (6)	
HSD / 12	154.17	153.90	153.68	152.93	151.38	151.52	152.60 ^a	148.40 ^a	
	±3.53 (6)	2.10 (6)	1.93 (6)	1.97 (6)	1.28 (6)	2.92 (6)	3.00 (6)	4.11 (6)	
HSD / 16	158.58	154.08	154.83	153.57	151.87	152.17	151.67 ^a	152.67 ^a	
	±2.11 (6)	2.28 (6)	2.63 (6)	3.19 (6)	1.00 (6)	1.82 (6)	2.11 (6)	3.61 (6)	
HSD / 20	157.43	154.33	152.53	155.88	151.52	151.47	151.60 ^a	150.70 ^a	
	±3.11 (6)	1.78 (6)	3.49 (6)	5.08 (6)	1.21 (6)	1.05 (6)	2.78 (6)	2.44 (6)	
HS / 12	156.57	153.08	154.00	153.27	153.45	152.28 ^a	154.20 ^a	154.62 ^a	
	±2.63 (6)	2.42 (6)	2.04 (6)	2.96 (6)	4.48 (6)	2.67 (6)	1.42 (6)	3.15 (6)	

^a Data are presented as the mean $\pm$ the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

^c The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HSD dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.

^d The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HS dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.

^e The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 D70 dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.

TABLE 5 (cont.)
Serum Chemistry Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day						
		-7	0	1	2	3	7	14
Sodium (Meq/l)								
HS / 10	157.18 ±2.10 (6)	154.20 2.37 (6)	153.10 3.37 (6)	155.25 2.36 (6)	153.25 1.48 (6)	154.13 ^e 2.18 (6)	154.37 ^{ce} 3.01 (6)	154.25 ^{ce} 4.05 (6)
HS / 20	155.93 ±1.86 (6)	153.38 6.98 (6)	152.58 1.09 (6)	153.38 6.50 (6)	154.10 3.09 (6)	153.00 ^e 2.11 (6)	153.92 ^{ce} 4.88 (6)	153.03 ^{ce} 2.61 (6)
D70 / 12	155.67 ±2.56 (6)	153.95 1.66 (6)	153.68 1.89 (6)	151.67 2.30 (6)	154.70 3.50 (6)	152.10 ^d 3.44 (6)	151.80 ^d 1.90 (6)	149.13 ^d 2.24 (6)
D70 / 16	157.07 ±2.96 (6)	154.47 1.93 (6)	153.50 3.77 (6)	153.12 3.28 (6)	151.30 1.26 (6)	150.52 ^d 2.89 (6)	151.98 ^d 4.34 (6)	151.17 ^d 2.93 (6)
D70 / 20	156.13 ±1.57 (6)	154.73 1.46 (6)	154.25 2.38 (6)	154.58 4.23 (6)	153.52 3.73 (6)	147.95 ^d 9.38 (6)	151.57 ^d 3.31 (6)	149.57 ^d 1.43 (6)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

^c The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HSD dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.

^d The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HS dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.

^e The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 D70 dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.

TABLE 5 (cont.)
Serum Chemistry Summary^a

Group/Dose (ml/kg/day)	Q ^b	-7	Study Day				Chloride (Meq/l)
			0	1	2	3	
RL / 20	117.5	112.0	116.5	116.3	115.8	114.7	115.8
	±3.4 (6)	4.4 (6)	2.7 (6)	2.2 (6)	2.1 (6)	2.0 (6)	1.7 (6)
HSD / 12	115.3	114.8	115.8	116.7	116.5	116.0	115.2 ^c
	±1.5 (6)	2.5 (6)	2.0 (6)	1.0 (6)	3.8 (6)	2.7 (6)	4.0 (6)
HSD / 16	119.7	115.3	116.2	119.0	118.0	115.8	117.3
	±1.5 (6)	1.5 (6)	2.4 (6)	3.0 (6)	2.8 (6)	1.5 (6)	1.6 (6)
HSD / 20	116.2	116.0	114.5	120.0	117.0	115.8	117.5 ^d
	±3.5 (6)	1.8 (6)	3.3 (6)	4.2 (6)	3.2 (6)	1.2 (6)	3.1 (6)
HS / 12	117.2	114.2	117.2	116.8	115.7	115.0	116.5 ^{e,f}
	±1.6 (6)	1.9 (6)	1.9 (6)	1.5 (6)	4.2 (6)	2.2 (6)	2.4 (6)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

^c Value is significantly different from the group baseline (Day 0) at p = 0.05 using the Dunnett's test.

^d The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HSD dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^e The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HS dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^f The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 L70 dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

TABLE 5 (cont.)
Serum Chemistry Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day					7	14
		-7	0	1	2	3		
Chloride (Meq/l)								
HS / 16	115.0	113.3	115.3	117.0	114.7	114.3	114.2	113.7 ^{df}
	±3.7 (6)	1.5 (6)	2.3 (6)	2.3 (6)	2.6 (6)	2.4 (6)	3.4 (6)	4.2 (6)
HS / 20	116.2	114.8	114.0	119.2 ^c	117.2 ^c	114.5	115.3	112.8 ^{df}
	±1.2 (6)	2.9 (6)	1.9 (6)	3.0 (6)	2.6 (6)	2.6 (6)	3.9 (6)	2.1 (6)
D70 / 12	118.2	115.3	118.5	116.3	119.2	117.3	117.7	117.2 ^c
	±3.4 (6)	2.3 (6)	1.5 (6)	1.9 (6)	3.1 (6)	2.3 (6)	2.2 (6)	1.8 (6)
D70 / 16	118.3	114.5	116.2	118.3	116.3	117.2	119.5	119.5 ^c
	±2.2 (6)	1.6 (6)	3.6 (6)	2.8 (6)	1.2 (6)	4.2 (6)	1.8 (6)	1.9 (6)
D70 / 20	118.7	117.2	115.5	117.8	118.7	117.0	118.7	118.5 ^c
	±2.7 (6)	1.7 (6)	1.8 (6)	2.6 (6)	2.5 (6)	2.6 (6)	3.1 (6)	1.4 (6)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

^c Value is significantly different from the group baseline (Day 0) at p = 0.05 using the Dunnett's test.

^d The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HSD dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^e The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HS dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^f The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 D70 dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

TABLE 5 (cont.)
Serum Chemistry Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day					7	14
		-7	0	1	2	3		
Potassium (Meq/l)								
RL / 20	4.88	4.65	4.80	4.80	4.65	4.78	4.75	4.90
	±0.40 (6)	0.34 (6)	0.43 (6)	0.47 (6)	0.34 (6)	0.26 (6)	0.34 (6)	0.26 (6)
HSD / 12	4.80	4.75	4.72	4.62	4.58 ^d	4.72	4.40 ^d	4.53 ^d
	±0.44 (6)	0.15 (6)	0.15 (6)	0.33 (6)	0.21 (6)	0.29 (6)	0.15 (6)	0.26 (6)
HSD / 16	5.05	4.65	4.62	4.62	4.63 ^d	4.70	4.47 ^d	4.45 ^d
	±0.36 (6)	0.10 (6)	0.34 (6)	0.27 (6)	0.28 (6)	0.39 (6)	0.29 (6)	0.22 (6)
HSD / 20	4.88	4.68	4.88	4.52	4.55 ^d	4.75	4.60 ^d	4.60 ^d
	±0.31 (6)	0.30 (6)	0.48 (6)	0.31 (6)	0.23 (6)	0.14 (6)	0.26 (6)	0.25 (6)
HS / 12	4.87	4.70	4.80	4.72	4.77 ^{ce}	4.87 ^e	4.67 ^{ce}	4.85 ^{ce}
	±0.24 (6)	0.37 (6)	0.30 (6)	0.15 (6)	0.20 (6)	0.16 (6)	0.20 (6)	0.16 (6)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

^c The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HSD dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.

^d The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HS dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.

^e The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 D70 dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.

TABLE 5 (cont.)
Serum Chemistry Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day						
		-7	0	1	2	3	7	14
Potassium (Meq/l)								
HS / 16	4.98	4.65	4.57	4.62	4.72 ^{ce}	4.77 ^e	4.75 ^{ce}	4.97 ^{ce}
	±0.15 (6)	0.26 (6)	0.19 (6)	0.41 (6)	0.21 (6)	0.33 (6)	0.21 (6)	0.39 (6)
HS / 20	4.85	4.80	4.82	4.63	4.87 ^{ce}	4.78 ^e	4.87 ^{ce}	5.02 ^{ce}
	±0.41 (6)	0.32 (6)	0.37 (6)	0.18 (6)	0.33 (6)	0.31 (6)	0.51 (6)	0.17 (6)
D70 / 12	4.73	4.75	4.90	4.65	4.75 ^d	4.73 ^d	4.58 ^a	4.58 ^d
	±0.31 (6)	0.21 (6)	0.46 (6)	0.43 (6)	0.44 (6)	0.29 (6)	0.45 (6)	0.23 (6)
D70 / 16	4.68	4.43	4.62	4.45	4.52 ^d	4.60 ^d	4.45 ^d	4.43 ^d
	±0.25 (6)	0.26 (6)	0.50 (6)	0.30 (6)	0.32 (6)	0.33 (6)	0.29 (6)	0.19 (6)
D70 / 20	4.87	4.80	4.88	4.68	4.72 ^d	4.58 ^d	4.42 ^d	4.62 ^d
	±0.14 (6)	0.17 (6)	0.26 (6)	0.34 (6)	0.27 (6)	0.44 (6)	0.17 (6)	0.19 (6)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

^c The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HSD dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.

^d The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HS dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.

^e The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 D70 dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.

TABLE 5 (cont.)
Serum Chemistry Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day					7	14
		-7	0	1	2	3		
Iron (µg/dl)								
RL / 20	171.62	137.22	175.22	142.33	135.27	104.97	125.75	124.73
	±51.35 (6)	32.63 (6)	66.84 (6)	66.12 (6)	83.14 (6)	28.08 (6)	61.07 (6)	32.46 (6)
HSD / 12	189.28	152.25	144.78	126.57 ^e	135.80 ^e	96.55 ^e	58.17 ^e	46.52 ^e
	±71.98 (6)	76.60 (6)	96.66 (6)	71.32 (6)	127.05 (6)	41.03 (6)	31.37 (6)	7.12 (6)
HSD / 16	138.35	121.47	109.27	81.58 ^e	107.95 ^e	87.40 ^e	84.17 ^e	69.12 ^e
	±20.47 (6)	36.15 (6)	39.34 (6)	18.17 (6)	41.88 (6)	36.29 (6)	22.04 (6)	15.55 (6)
HSD / 20	172.88	117.22	128.13	115.22 ^e	109.92 ^e	90.05 ^e	76.63 ^e	75.18 ^e
	±63.28 (6)	25.29 (6)	28.68 (6)	60.67 (6)	28.14 (6)	35.70 (6)	37.64 (6)	14.27 (6)
HS / 12	157.65	120.33	121.58	185.17 ^{df}	200.28 ^{df}	148.83 ^{df}	95.22 ^{df}	148.88 ^{df}
	±83.74 (6)	58.32 (6)	70.94 (6)	68.25 (6)	46.79 (6)	41.03 (6)	38.08 (6)	38.48 (6)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.
^b Prequarantine sample.

^c Value is significantly different from the group baseline (Day 0) at p = 0.05 using the Dunnett's test.

^d The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HSD dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^e The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HS dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 D70 dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

TABLE 5 (cont.)
Serum Chemistry Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day					Iron (µg/dl)
		-7	0	1	2	3	
HS / 16	153.75	94.60	108.98	173.78 ^{df}	176.50 ^{df}	154.18 ^{df}	142.18 ^{df}
	±48.44 (6)	26.56 (6)	54.36 (6)	100.99 (6)	96.75 (6)	23.98 (6)	47.95 (6)
HS / 20	168.97	171.32	172.45	157.90 ^{df}	219.68 ^{df}	199.13 ^{df}	199.23 ^{df}
	±70.68 (6)	71.96 (6)	84.67 (6)	43.43 (6)	39.12 (6)	64.20 (6)	57.06 (6)
D70 / 12	126.95	145.23	144.03	129.35 ^e	87.90 ^e	71.50 ^e	71.53 ^e
	±27.25 (6)	45.21 (6)	65.89 (6)	76.68 (6)	37.85 (6)	30.24 (6)	14.46 (6)
D70 / 16	142.43	183.07	90.70	113.30 ^e	94.22 ^e	76.33 ^e	59.20 ^e
	±32.57 (6)	82.85 (6)	23.93 (6)	65.76 (6)	69.14 (6)	28.02 (6)	22.03 (6)
D70 / 20	185.90	126.62	129.60	71.53 ^{ce}	78.57 ^{ce}	67.83 ^{ce}	68.12 ^{ce}
	±75.13 (6)	32.58 (6)	20.45 (6)	34.93 (6)	11.28 (6)	14.93 (6)	15.62 (6)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

^c Value is significantly different from the group baseline (Day 0) at p = 0.05 using the Dunnett's test.

^d The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HS dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^e The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HS dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^f The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 D70 dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

TABLE 5 (cont.)
Serum Chemistry Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day					7	14
		-7	0	1	2	3		
Magnesium (mg/dl)								
RL / 20	1.758	1.703	1.753	1.673	1.763	1.705	1.788	1.763
	±0.194 (6)	0.108 (6)	0.234 (6)	0.088 (6)	0.073 (6)	0.148 (6)	0.191 (6)	0.216 (6)
HSD / 12	1.700	1.723	1.648	1.485	1.542 ^e	1.677 ^e	1.513 ^e	1.500 ^{ef}
	±0.091 (6)	0.128 (6)	0.097 (6)	0.114 (6)	0.063 (6)	0.114 (6)	0.143 (6)	0.201 (6)
HSD / 16	1.787	1.667	1.660	1.582	1.518 ^e	1.608 ^e	1.533 ^e	1.550 ^{ef}
	±0.110 (6)	0.080 (6)	0.053 (6)	0.082 (6)	0.052 (6)	0.194 (6)	0.158 (6)	0.191 (6)
HSD / 20	1.845	1.633	1.660	1.582	1.637 ^e	1.613 ^e	1.575 ^e	1.563 ^{ef}
	±0.194 (6)	0.175 (6)	0.062 (6)	0.155 (6)	0.123 (6)	0.061 (6)	0.098 (6)	0.088 (6)
HS / 12	1.775	1.743	1.652	1.597	1.765 ^{df}	1.722 ^{df}	1.778 ^{df}	1.760 ^{df}
	±0.071 (6)	0.167 (6)	0.106 (6)	0.108 (6)	0.140 (6)	0.223 (6)	0.170 (6)	0.113 (6)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses

^b Prequarantine sample.

^c Value is significantly different from the group baseline (Day 0) at p = 0.05 using the Dunnett's test.

^d The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HSD dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^e The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HS dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^f The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 D70 dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

TABLE 5 (cont.)
Serum Chemistry Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day					3	7	14
		-7	0	1	2				
Magnesium (mg/dl)									
HS / 16	1.753	1.658	1.623	1.663	1.595 ^{df}	1.747 ^{dt}	1.663 ^{df}	1.718 ^{dt}	
	±0.149 (6)	0.084 (6)	0.034 (6)	0.055 (6)	0.050 (6)	0.101 (6)	0.182 (6)	0.136 (6)	
HS / 20	1.822	1.848	1.693	1.682	1.698 ^{df}	1.805 ^{dt}	1.840 ^{dt}	1.878 ^{dt}	
	±0.102 (6)	0.172 (6)	0.033 (6)	0.069 (6)	0.146 (6)	0.186 (6)	0.163 (6)	0.161 (6)	
D70 / 12	1.727	1.682	1.690	1.597	1.630 ^e	1.678 ^e	1.572 ^e	1.457 ^{de}	
	±0.106 (6)	0.094 (6)	0.185 (6)	0.105 (6)	0.160 (6)	0.220 (6)	0.103 (6)	0.118 (6)	
D70 / 16	1.788	1.742	1.635	1.583	1.593 ^e	1.547 ^e	1.497 ^e	1.463 ^{de}	
	±0.162 (6)	0.175 (6)	0.127 (6)	0.053 (6)	0.135 (6)	0.113 (6)	0.106 (6)	0.107 (6)	
D70 / 20	1.773	1.692	1.718	1.682	1.550 ^{ee}	1.557 ^{ee}	1.505 ^{ee}	1.455 ^{cde}	
	±0.150 (6)	0.180 (6)	0.117 (6)	0.149 (6)	0.095 (6)	0.139 (6)	0.071 (6)	0.082 (6)	

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.
^b Prequarantine sample.

^c Value is significantly different from the group baseline (Day 0) at p = 0.05 using the Dunnett's test.

^d The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HSD dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^e The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HS dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^f The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 D70 dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

TABLE 6
Hematology Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day					7	14
		-7	0	1	2	3		
Total Leukocyte Count (x10 ³ /μl)								
RL / 20	11.40	10.82	10.43	11.73	12.50	11.28	11.18	9.68
	±2.51 (6)	3.37 (6)	3.63 (6)	4.35 (6)	4.47 (6)	3.55 (6)	3.32 (6)	1.45 (6)
HSD / 12	12.15	12.50	10.92	12.50	13.17	10.75	9.53 ^c	9.80
	±2.43 (6)	3.53 (6)	2.89 (6)	5.32 (6)	5.50 (6)	1.64 (6)	0.84 (6)	1.64 (6)
HSD / 16	12.62	10.88	11.48	10.72	9.95	10.75	8.58 ^c	9.88
	±2.74 (6)	2.24 (6)	3.10 (6)	2.80 (6)	2.02 (6)	2.59 (6)	2.22 (6)	4.23 (6)
HSD / 20	13.70	10.37	11.37	10.48	10.50	8.80 ^c	7.47 ^c	7.42 ^c
	±4.81 (6)	1.13 (6)	1.54 (6)	2.42 (6)	2.12 (6)	1.20 (6)	1.33 (6)	0.95 (6)
HS / 12	12.50	11.68	10.58	11.68	11.73	11.33	12.03 ^d	11.58
	±2.63 (6)	0.98 (6)	2.39 (6)	1.40 (6)	2.12 (6)	1.74 (6)	1.58 (6)	1.65 (6)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

^c Value is significantly different from the group baseline (Day 0) at p = 0.05 using the Dunnett's test.

^d The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HSD dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^e The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HS dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^f The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 D70 dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

TABLE 6 (cont.)

Hematology Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day					3	7	14
		-7	0	1	2				
Total Leukocyte Count (x10 ³ /μl)									
HS / 16	12.50	11.05	10.62	11.68	11.40	12.63	12.47 ^{dt}	10.43	
	±2.16 (6)	1.61 (6)	2.63 (6)	4.07 (6)	2.32 (6)	3.01 (6)	6.12 (6)	2.04 (6)	
HS / 20	11.42	11.60	10.42	9.68	10.57	10.58	11.72 ^{dt}	10.80	
	±2.14 (6)	3.09 (6)	1.99 (6)	2.18 (6)	1.70 (6)	1.89 (6)	3.10 (6)	2.91 (6)	
D70 / 12	15.75	10.98	10.73	12.25	10.95	11.55	9.25 ^c	10.52	
	±8.02 (6)	2.95 (6)	2.48 (6)	3.13 (6)	1.99 (6)	2.86 (6)	2.47 (6)	4.29 (6)	
D70 / 16	13.13	11.17	11.48	10.85	11.43	10.33	8.28 ^c	9.80	
	±3.90 (6)	3.14 (6)	3.63 (6)	2.88 (6)	3.47 (6)	3.77 (6)	1.47 (6)	2.91 (6)	
D70 / 20	12.35	12.70	11.48	9.53	8.65 ^c	9.25	7.20 ^{ce}	8.25 ^c	
	±2.40 (6)	3.26 (6)	3.11 (6)	2.33 (6)	2.28 (6)	2.42 (6)	2.61 (6)	0.68 (6)	

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.^b Prequarantine sample.^c Value is significantly different from the group baseline (Day 0) at p = 0.05 using the Dunnett's test.^d The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HSD dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.^e The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HS dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.^f The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 D70 dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

TABLE 6 (cont.)
Hematology Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day					7	14
		-7	0	1	2	3		
Erythrocytes (x10 ⁶ /μl)								
RL / 20	7.290	7.455	7.138	7.047	7.018	6.847	6.880	7.195
	±0.531 (6)	0.403 (6)	0.319 (6)	0.502 (6)	0.438 (6)	0.657 (6)	0.485 (6)	0.711 (6)
HSD / 12	7.448	7.328	6.980	6.805	6.687 ^c	6.740	6.240 ^d	6.197 ^e
	±0.479 (6)	0.585 (6)	0.700 (6)	0.497 (6)	0.507 (6)	0.610 (6)	0.598 (6)	0.847 (6)
HSD / 16	7.395	7.487	7.150	6.900	6.753 ^c	6.703 ^c	6.573 ^d	6.465 ^e
	±0.388 (6)	0.519 (6)	0.569 (6)	0.487 (6)	0.482 (6)	0.246 (6)	0.467 (6)	0.753 (6)
FSD / 20	7.508	7.123	7.335	6.678	6.738 ^c	6.542	6.247 ^d	6.087 ^e
	±0.540 (6)	0.431 (6)	0.223 (6)	0.551 (6)	0.165 (6)	0.195 (6)	0.459 (6)	0.965 (6)
HS / 12	7.318	7.115	6.835	6.558	7.060 ^d	6.802 ^f	6.515 ^d	7.253 ^d
	±0.688 (6)	0.702 (6)	0.420 (6)	0.492 (6)	0.606 (6)	0.357 (6)	0.315 (6)	0.615 (6)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

^c Value is significantly different from the group baseline (Day 0) at p = 0.05 using the Dunnett's test.

^d The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HSD dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^e The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HS dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^f The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 D70 dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

TABLE 6 (cont.)
Hematology Summary^a

Group/dose (ml/kg/day)	Q ^b	Study Day					7	14
		-7	0	1	2	3		
Hemoglobin (g/dl)								
HS / 16	16.80	16.35	16.20	16.37	16.07 ^{at}	15.72 ^{at}	15.93 ^{at}	17.10 ^{cd}
	±0.83 (6)	1.56 (6)	1.00 (6)	0.90 (6)	0.77 (6)	1.03 (6)	0.80 (6)	0.56 (6)
HS / 20	16.53	16.70	16.25	15.67	16.02 ^{at}	15.58 ^t	15.55 ^{at}	16.78 ^{at}
	±1.00 (6)	0.76 (6)	1.02 (6)	1.12 (6)	0.88 (6)	1.18 (6)	1.26 (6)	1.07 (6)
D70 / 12	16.27	16.45	16.05	15.02 ^c	15.00 ^{ce}	14.33 ^{ce}	13.33 ^{bc}	13.22 ^{cd}
	±1.42 (6)	1.43 (6)	0.91 (6)	1.23 (6)	1.02 (6)	0.92 (6)	0.79 (6)	1.41 (6)
D70 / 16	16.03	16.52	15.80	15.03 ^c	14.57 ^{ce}	14.37 ^{ce}	13.47 ^{cd}	12.20 ^{cd}
	±0.96 (6)	1.36 (6)	1.33 (6)	1.32 (6)	0.90 (6)	1.21 (6)	1.10 (6)	1.34 (6)
D70 / 20	16.88	16.37	16.05	15.52	14.77 ^{ce}	14.30 ^{ce}	13.07 ^{cd}	12.67 ^{cd}
	±0.71 (6)	0.98 (6)	0.61 (6)	0.84 (6)	0.86 (6)	0.40 (6)	0.75 (6)	0.56 (6)

a Data are presented as the mean $\pm$ the standard deviation with the number of animals, *n*, in parentheses.

^b prequarantine sample.

c Value is significantly different from the group baseline (Day 0) at $p = 0.05$ using the Dunnett's test.

The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HSD dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.

The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.

The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.

TABLE 6 (cont.)

Hematology Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day					7	14
		-7	0	1	2	3		
Mean Corpuscular Volume (femtoliters)								
HS / 16	68.98	68.00	68.27	68.07	68.15	67.83	68.57	69.68 ^{cd}
	±2.44 (6)	2.38 (6)	2.64 (6)	1.73 (6)	2.44 (6)	2.26 (6)	2.56 (6)	2.71 (6)
HS / 20	68.15	67.45	67.62	67.57	67.67	67.15	68.22	69.23 ^{cd}
	±1.95 (6)	1.86 (6)	1.63 (6)	1.15 (6)	1.34 (6)	1.14 (6)	1.35 (6)	1.30 (6)
D70 / 12	68.27	66.87	67.62	67.23	67.35	67.23	67.30	68.22 ^a
	±2.21 (6)	2.90 (6)	2.69 (6)	3.45 (6)	3.13 (6)	2.74 (6)	2.76 (6)	2.97 (6)
D70 / 16	67.62	67.03	66.80	66.92	66.35	66.85	66.63	67.03 ^{ac}
	±1.36 (6)	1.48 (6)	0.97 (6)	1.09 (6)	1.14 (6)	1.36 (6)	0.85 (6)	0.81 (6)
D70 / 20	68.77	68.70	68.77	67.78	68.47	67.95 ^a	67.92 ^a	68.68 ^{ac}
	±2.41 (6)	2.25 (6)	2.24 (6)	2.32 (6)	2.39 (6)	2.66 (6)	2.03 (6)	2.69 (6)

TABLE 6 (cont.)
Hematology Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day						
		-7	0	1	2	3	7	14
Mean Corpuscular Hemoglobin (picograms)								
RL / 20	22.83	22.60	22.93	23.00	22.88	23.10	23.05	23.02
	±0.77 (6)	0.48 (6)	0.52 (6)	0.52 (6)	0.37 (6)	0.97 (6)	0.71 (6)	0.37 (6)
HSD / 12	22.72	22.52	22.80	22.73	23.03	22.87	22.78	22.92
	±1.17 (6)	1.04 (6)	1.16 (6)	1.05 (6)	1.17 (6)	1.26 (6)	1.02 (6)	1.07 (6)
HSD / 16	22.57	22.45	22.70	22.65	22.65	22.58	22.67	22.78
	±0.91 (6)	0.86 (6)	0.85 (6)	0.76 (6)	0.79 (6)	0.58 (6)	0.83 (6)	0.88 (6)
HSD / 20	22.67	22.85	22.95	22.95	23.08	23.03	22.83	23.10
	±0.12 (6)	0.33 (6)	0.34 (6)	0.30 (6)	0.30 (6)	0.58 (6)	0.39 (6)	0.48 (6)
HS / 12	22.27	22.08	22.40	22.72	22.40	22.47	22.70	22.55
	±0.90 (6)	1.01 (6)	1.09 (6)	0.75 (6)	0.92 (6)	0.77 (6)	0.84 (6)	0.84 (6)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

TABLE 6 (cont.)
Hematology Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day						
		-7	0	1	2	3	7	14
Mean Corpuscular Hemoglobin (picograms)								
HS / 16	23.12	22.83	23.15	23.25	23.05	23.07	23.22	23.12
	±0.99 (6)	0.84 (6)	0.97 (6)	0.90 (6)	0.85 (6)	0.81 (6)	0.94 (6)	0.97 (6)
HS / 20	22.68	22.62	22.78	23.02	22.95	23.02	23.02	23.08
	±0.67 (6)	0.65 (6)	0.67 (6)	0.68 (6)	0.54 (6)	0.73 (6)	0.53 (6)	0.51 (6)
D70 / 12	22.87	22.57	22.63	22.98	22.72	22.98	22.87	23.02
	±1.11 (6)	0.82 (6)	1.03 (6)	1.14 (6)	0.66 (6)	1.27 (6)	1.16 (6)	1.14 (6)
D70 / 16	22.72	22.38	22.82	22.38	22.68	22.62	22.65	22.53
	±0.63 (6)	0.43 (6)	0.62 (6)	0.36 (6)	0.61 (6)	0.51 (6)	0.49 (6)	0.39 (6)
D70 / 20	22.98	23.03	23.12	23.03	23.20	23.08	23.13	23.32
	±0.91 (6)	1.11 (6)	1.13 (6)	1.11 (6)	1.03 (6)	1.14 (6)	1.05 (6)	1.02 (6)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

TABLE 6 (cont.)
Hematology Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day					Mean Corpuscular Hemoglobin Concentration (g/dl)
		-7	0	1	2	3	
RL / 20	33.62	33.53	33.87	34.30	33.83	34.15	33.33
	±0.67 (6)	0.16 (6)	0.73 (6)	0.47 (6)	0.34 (6)	1.20 (6)	0.19 (6)
HSD / 12	33.53	33.43	33.87	33.98	34.17	33.90	33.62
	±0.72 (6)	0.37 (6)	0.53 (6)	0.62 (6)	0.88 (6)	0.61 (6)	0.49 (6)
HSD / 16	33.38	33.60	33.85	33.83	33.67	33.92	33.73
	±0.55 (6)	0.64 (6)	0.40 (6)	0.56 (6)	0.41 (6)	0.41 (6)	0.37 (6)
HSD / 20	33.00	33.62	33.67	33.95	33.90	34.00	33.65
	±0.54 (6)	0.64 (6)	0.46 (6)	0.70 (6)	0.81 (6)	1.09 (6)	0.37 (6)
HS / 12	33.13	33.13	33.77	34.25	33.65	33.80	33.18
	±0.43 (6)	0.72 (6)	0.85 (6)	0.27 (6)	0.65 (6)	0.46 (6)	0.39 (6)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

a Data are presented as the mean $\pm$ the standard deviation with the number of animals, n, in parentheses.
b Prequarantine sample.
c Value is significantly different from the group baseline (Day 0) at $p = 0.05$ using the Dunnett's test.
d The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HSD dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.
e The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HS dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.
f The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 D70 dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.

TABLE 6 (cont.)

Hematology Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day					7	14
		-7	0	1	2	3		
Platelets (x10 ³ /μl)								
HS / 16	399.7	324.3	322.5	315.0	301.7 ^a	301.2 ^{at}	327.0 ^{at}	359.7 ^{at}
	±52.1 (6)	66.2 (6)	41.4 (6)	53.2 (6)	39.9 (6)	55.5 (6)	79.4 (6)	63.6 (6)
HS / 20	394.0	370.8	363.2	350.8	349.8 ^d	353.8 ^d	376.2 ^d	405.8 ^d
	±79.7 (6)	65.0 (6)	66.7 (6)	48.5 (6)	41.3 (6)	70.3 (6)	52.8 (6)	82.2 (6)
D70 / 12	393.8	348.8	329.3	301.8	274.3	256.0 ^{ee}	233.0 ^{ee}	224.5 ^{ee}
	±63.4 (6)	10.3 (6)	71.9 (6)	70. (6)	72.8 (6)	55.3 (6)	64.2 (6)	72.1 (6)
D70 / 16	444.5	403.0	366.2	344.5	276.7 ^{ee}	285.2 ^{ee}	227.3 ^{ee}	251.7 ^{ee}
	±105.9 (6)	122.9 (6)	95.4 (6)	86.4 (6)	89.1 (6)	66.2 (6)	65.7 (6)	72.1 (6)
D70 / 20	435.7	409.2	373.3	353.3	295.7	276.0 ^{ee}	187.8 ^{ee}	215.2 ^{ee}
	±96.2 (6)	113.0 (6)	132.5 (6)	129.0 (6)	100.6 (6)	87.4 (6)	41.2 (6)	56.5 (6)

^a Data are presented as the mean $\pm$ the standard deviation with the number of animals, n, in parentheses.^b Prequarantine sample.^c Value is significantly different from the group baseline (Day 0) at $p = 0.05$ using the Dunnett's test.^d The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HSD dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.^e The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HS dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.^f The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 D70 dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.

TABLE 6 (cont.)
Hematology Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day					7	14
		-7	0	1	2	3		
		Reticulocytes (%)						
RL / 20	1.68	1.18	0.95	1.33	0.92	1.23	1.30	2.60 ^c
	±1.21 (6)	0.31 (6)	0.38 (6)	0.81 (6)	0.52 (6)	1.35 (6)	0.66 (6)	1.17 (6)
HSD / 12	1.87	1.77	1.07	1.30	1.30	1.08	0.72	1.75 ^c
	±0.58 (6)	1.25 (6)	0.60 (6)	1.12 (6)	0.61 (6)	0.64 (6)	0.31 (6)	0.75 (6)
HSD / 16	1.57	1.66	1.15	0.88	1.02	0.95	1.00	1.25 ^c
	±0.99 (6)	0.59 (6)	0.69 (6)	0.28 (6)	0.49 (6)	0.75 (6)	0.45 (6)	0.24 (6)
HSD / 20	2.07	2.23	1.48	1.18	0.95	0.78	1.23	1.38 ^c
	±0.81 (6)	1.28 (6)	0.93 (6)	0.44 (6)	0.51 (6)	0.34 (6)	1.03 (6)	0.76 (6)
HS / 12	1.62	1.83	1.53	1.23	1.37	1.42	1.65	2.77 ^{c,d}
	±0.54 (6)	0.69 (6)	0.62 (6)	0.43 (6)	0.85 (6)	0.67 (6)	0.62 (6)	0.76 (6)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

^c Value is significantly different from the group baseline (Day 0) at p = 0.05 using the Dunnett's test.

^d The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HSD dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^e The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HS dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^f The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 D70 dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

TABLE 6 (cont.)
Hematology Summary

Group/Dose (ml/kg/day)	Q ^b	Study Day					7	14
		-7	0	1	2	3		
		Reticulocytes (%)						
HS / 16	1.38 ±0.70 (6)	1.55 0.78 (6)	1.30 0.50 (6)	1.03 0.67 (6)	1.27 0.66 (6)	1.18 0.62 (6)	1.27 0.59 (6)	2.00 ^{ad} 0.53 (6)
HS / 20	1.17 ±0.61 (6)	2.12 0.97 (6)	1.22 0.69 (6)	1.10 0.24 (6)	1.18 0.38 (6)	1.45 0.45 (6)	1.38 0.43 (6)	3.47 ^{ad} 2.08 (6)
D70 / 12	1.40 ±0.46 (6)	1.60 1.61 (6)	1.63 0.90 (6)	1.18 0.76 (6)	1.48 0.93 (6)	0.87 0.31 (6)	0.95 0.51 (6)	1.38 ^{ad} 0.85 (6)
D70 / 16	1.37 ±0.69 (6)	1.05 0.40 (6)	0.95 0.60 (6)	0.77 0.29 (6)	1.43 0.44 (6)	0.72 0.19 (6)	0.77 0.37 (6)	0.98 ^{ad} 0.44 (6)
D70 / 20	1.57 ±0.35 (6)	1.50 0.95 (6)	0.83 0.16 (6)	0.90 0.52 (6)	0.92 0.42 (6)	0.80 0.35 (6)	0.70 0.33 (6)	1.28 ^{ad} 0.88 (6)

a Data are presented as the mean $\pm$ the standard deviation with the number of animals, n, in parentheses.
b prequarantine sample.

value is significantly different from the group baseline (Day 0) at $p = 0.05$ using the Dunnnett's test.

value is significantly different from the group means (Table 3). The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.

The mean of the 3 dose groups for the Student-Newman-Keuls multiple range test. HS dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test. HSD dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.

HS dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.

The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 D70 dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.

TABLE 6 (cont.)

Hematology Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day					Polymorphonuclear Granulocytes (%)				
		-7	0	1	2	3	7	14			
RL / 20	66.7	69.2	73.0	66.8	70.2	66.8	68.3	62.3			
	± 9.7 (6)	9.6 (6)	3.2 (6)	11.9 (6)	9.0 (6)	5.0 (6)	6.2 (6)	7.9 (6)			
HSD / 12	69.0	70.8	69.8	70.3	74.2	69.8	72.3	78.3			
	± 6.9 (6)	8.4 (6)	5.4 (6)	5.6 (6)	7.3 (6)	5.9 (6)	3.7 (6)	5.1 (6)			
HSD / 16	67.5	64.5	69.0	68.5	70.5	73.8	69.3	75.3			
	± 6.3 (6)	5.2 (6)	7.6 (6)	6.1 (6)	5.0 (6)	6.3 (6)	6.0 (6)	8.2 (6)			
HSD / 20	72.5	67.7	64.7	70.0	72.3	72.2	73.8	75.8			
	± 7.8 (6)	7.8 (6)	4.7 (6)	6.2 (6)	7.6 (6)	7.8 (6)	7.0 (6)	8.9 (6)			
HS / 12	63.5	65.7	62.3	58.5	63.8	61.7	60.8	65.5			
	± 9.8 (6)	7.9 (6)	4.6 (6)	10.1 (6)	6.2 (6)	11.6 (6)	6.6 (6)	9.9 (6)			

^a Data are presented as the mean $\pm$ the standard deviation with the number of animals, n, in parentheses.^b Prequarantine sample.

TABLE 6 (cont.)

Hematology Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day					7	14
		-7	0	1	2	3		
Polymorphonuclear Granulocytes (%)								
HS / 16	64.3	68.3	68.3	66.0	67.5	68.8	64.5	65.0
	±11.3 (6)	15.2 (6)	12.6 (6)	8.6 (6)	10.3 (6)	10.3 (6)	11.0 (6)	9.5 (6)
HS / 20	63.8	71.3	67.0	73.7	70.7	72.0	67.8	70.2
	±6.2 (6)	4.6 (6)	10.7 (6)	6.0 (6)	9.0 (6)	2.9 (6)	8.4 (6)	5.2 (6)
D70 / 12	65.5	63.7	60.7	67.3	70.5	70.3	61.2	69.2
	±7.4 (6)	8.8 (6)	4.5 (6)	5.9 (6)	5.5 (6)	10.9 (6)	8.1 (6)	6.7 (6)
D70 / 16	67.3	67.8	70.5	66.5	67.3	68.5	66.5	73.3
	±7.7 (6)	12.2 (6)	5.7 (6)	10.9 (6)	5.6 (6)	4.5 (6)	13.3 (6)	10.3 (6)
D70 / 20	68.7	66.5	59.8	68.2	68.7	71.8	66.7	71.3
	±8.0 (6)	9.5 (6)	7.7 (6)	10.5 (6)	11.0 (6)	9.5 (6)	8.7 (6)	7.7 (6)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.^b Prequarantine sample.

TABLE 6 (cont.)

Hematology Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day						
		-7	0	1	2	3	7	14
Immature Neutrophils (%) - Males								
RL / 20	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0
	±0.0 (3)	0.0 (3)	0.0 (3)	0.0 (3)	0.0 (3)	0.0 (3)	1.2 (3)	0.0 (3)
HSD / 12	0.3	0.0	0.0	0.0	0.0	0.7	0.3 ^a	0.0
	±0.6 (3)	0.0 (3)	0.0 (3)	0.0 (3)	0.0 (3)	1.2 (3)	0.6 (3)	0.0 (3)
HSD / 16	0.3	0.0	0.0	0.0	0.5	0.7	0.0 ^a	0.3
	±0.6 (3)	0.0 (3)	0.0 (3)	0.0 (3)	0.6 (3)	1.2 (3)	0.0 (3)	0.6 (3)
HSD / 20	0.3	0.3	0.7	0.3	0.0	0.0	0.0 ^a	0.0
	±0.6 (3)	0.6 (3)	0.6 (3)	0.6 (3)	0.0 (3)	0.0 (3)	0.0 (3)	0.0 (3)
HS / 12	0.0	0.3	0.7	0.0	0.0	0.3	0.0 ^a	0.0
	±0.0 (3)	0.6 (3)	0.6 (3)	0.0 (3)	0.0 (3)	0.6 (3)	0.0 (3)	0.0 (3)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.^b Prequantitative sample.^c The mean of the 3 test solution groups for the dose level indicated is significantly different from the mean of the 3 low-dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.^d The mean of the 3 test solution groups for the dose level indicated is significantly different from the mean of the 3 middle-dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.^e The mean of the 3 test solution groups for the dose level indicated is significantly different from the mean of the 3 high-dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.

TABLE 6 (cont.)

Hematology Summary

Group/Dose (ml/kg/day)	Q ^b	Study Day						
		-7	0	1	2	3	7	14
Immature Neutrophils (%) - Males								
HS / 16	0.0	0.7	0.0	0.0	0.0	0.0	0.7 ^{cc}	0.3
	±0.0 (3)	0.6 (3)	0.0 (3)	0.0 (3)	0.0 (3)	0.0 (3)	0.6 (3)	0.6 (3)
HS / 20	0.0	0.0	0.0	0.0	0.0	0.0	0.3 ^{cd}	0.0
	±0.0 (3)	0.0 (3)	0.0 (3)	0.0 (3)	0.0 (3)	0.0 (3)	0.6 (3)	0.0 (3)
D70 / 12	0.7	0.0	0.3	0.0	0.0	0.3	0.0 ^{cd}	0.0
	±0.6 (3)	0.0 (3)	0.6 (3)	0.0 (3)	0.0 (3)	0.6 (3)	0.0 (3)	0.0 (3)
D70 / 16	1.0	0.0	0.0	0.0	0.7	0.0	1.7 ^{ccc}	0.3
	±1.0 (3)	0.0 (3)	0.0 (3)	0.0 (3)	1.2 (3)	0.0 (3)	1.2 (3)	0.6 (3)
D70 / 20	0.3	0.0	0.0	0.0	0.0	0.0	0.7 ^d	0.0
	±0.6 (3)	0.0 (3)	0.0 (3)	0.0 (3)	0.0 (3)	0.0 (3)	0.6 (3)	0.0 (3)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

^c The mean of the 3 test solution groups for the dose level indicated is significantly different from the mean of the 3 low-dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^d The mean of the 3 test solution groups for the dose level indicated is significantly different from the mean of the 3 middle-dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^e The mean of the 3 test solution groups for the dose level indicated is significantly different from the mean of the 3 high-dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

TABLE 6 (cont.)

Hematology Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day						
		-7	0	1	2	3	7	14
Immature Neutrophils (%) - Females								
RL / 20	0.0	0.0	0.3	0.0	0.3	0.0	0.0	0.3
	±0.0 (3)	0.0 (3)	0.6 (3)	0.0 (3)	0.6 (3)	0.0 (3)	0.0 (3)	0.6 (3)
HSD / 12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	±0.0 (3)	0.0 (3)	0.0 (3)	0.0 (3)	0.0 (3)	0.0 (3)	0.0 (3)	0.0 (3)
HSD / 16	0.3	0.0	0.0	0.0	0.0	0.7	0.0	0.0
	±0.6 (3)	0.0 (3)	0.0 (3)	0.0 (3)	0.0 (3)	0.6 (3)	0.0 (3)	0.0 (3)
HSD / 20	0.0	0.3	0.3	0.0	0.0	0.3	0.0	0.7
	±0.0 (3)	0.6 (3)	0.6 (3)	0.0 (3)	0.0 (3)	0.6 (3)	0.0 (3)	1.2 (3)
HS / 12	0.0	0.0	0.3	0.0	0.0	0.7	0.0	0.3
	±0.0 (3)	0.0 (3)	0.6 (3)	0.0 (3)	0.0 (3)	0.6 (3)	0.0 (3)	0.6 (3)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.^b Prequarantine sample.

TABLE 6 (cont.)
Hematology Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day					7	14
		-7	0	1	2	3		
Immature Neutrophils (%) - Females								
HS / 16	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0
	±0.0 (3)	0.0 (3)	0.0 (3)	0.0 (3)	0.0 (3)	0.6 (3)	0.6 (3)	0.0 (3)
HS / 20	1.3	0.0	0.3	0.0	0.0	0.0	1.0	0.0
	±0.6 (3)	0.0 (3)	0.6 (3)	0.0 (3)	0.0 (3)	0.0 (3)	1.0 (3)	0.0 (3)
D70 / 12	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.0
	±0.0 (3)	0.0 (3)	0.0 (3)	0.0 (3)	0.6 (3)	0.6 (3)	0.6 (3)	0.0 (3)
D70 / 16	0.3	0.0	0.7	0.0	0.3	0.0	0.0	0.0
	±0.6 (3)	0.0 (3)	1.2 (3)	0.0 (3)	0.6 (3)	0.0 (3)	0.0 (3)	0.0 (3)
D70 / 20	0.0	0.3	0.3	0.3	0.0	0.7	0.0	0.7
	±0.0 (3)	0.6 (3)	0.6 (3)	0.6 (3)	0.0 (3)	1.2 (3)	0.0 (3)	0.6 (3)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

TABLE 6 (cont.)
Hematology Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day					7	14
		-7	0	1	2	3		
		Eosinophils (%)						
RL / 20	2.3	1.8	2.3	2.3	3.5	2.3	1.7	2.8
	±2.6 (6)	0.8 (6)	2.3 (6)	1.8 (6)	2.1 (6)	1.2 (6)	1.8 (6)	2.2 (6)
HSD / 12	2.5	2.0	1.0	1.7	2.3	1.3	1.7	1.3
	±1.4 (6)	2.1 (6)	0.9 (6)	1.8 (6)	2.5 (6)	0.5 (6)	1.8 (6)	2.0 (6)
HSD / 16	2.5	3.2	2.5	2.3	4.5	3.3	2.2	3.3
	±1.4 (6)	2.4 (6)	3.5 (6)	2.4 (6)	3.0 (6)	2.5 (6)	1.8 (6)	2.9 (6)
HSD / 20	0.7	2.3	1.3	2.5	1.2	1.5	1.5	1.5
	±0.8 (6)	1.9 (6)	1.0 (6)	2.8 (6)	1.5 (6)	1.4 (6)	1.9 (6)	1.5 (6)
HS / 12	1.7	4.3	2.3	2.3	2.2	1.3	1.5	2.2
	±1.4 (6)	2.7 (6)	2.2 (6)	1.5 (6)	2.9 (6)	0.5 (6)	1.0 (6)	1.5 (6)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

TABLE 6 (cont.)
Hematology Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day						14
		-7	0	1	2	3	7	
		Eosinophils (%)						
HS / 16	1.3	2.0	1.7	1.3	1.8	1.2	1.0	1.2
	±1.2 (6)	(6)	(6)	(6)	(6)	(6)	(6)	1.0 (6)
HS / 20	1.7	1.8	2.0	1.7	1.7	2.0	2.3	1.5
	±1.2 (6)	(6)	(6)	(6)	(6)	(6)	(6)	1.6 (6)
D70 / 12	3.5	3.8	3.0	3.2	3.3	4.3	5.5	4.3
	±2.3 (6)	(6)	(6)	(6)	(6)	(6)	(6)	4.1 (6)
D70 / 16	1.3	2.0	1.8	2.0	2.3	2.7	3.0	3.3
	±1.6 (6)	(6)	(6)	(6)	(6)	(6)	(6)	2.7 (6)
D70 / 20	1.0	1.2	3.2	2.0	1.5	0.8	2.8	3.5
	±0.9 (6)	(6)	(6)	(6)	(6)	(6)	(6)	2.3 (6)

^a Data are presented as the mean $\pm$ the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

TABLE 6 (cont.)
Hematology Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day					Basophils (%)	7	14
		-7	0	1	2	3			
RL / 20	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.2
	±0.0 (6)	0.0 (6)	0.0 (6)	0.0 (6)	0.0 (6)	0.0 (6)		0.0 (6)	0.4 (6)
HSD / 12	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
	±0.0 (6)	0.0 (6)	0.0 (6)	0.0 (6)	0.0 (6)	0.0 (6)		0.0 (6)	0.0 (6)
HSD / 16	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
	±0.0 (6)	0.0 (6)	0.0 (6)	0.0 (6)	0.0 (6)	0.0 (6)		0.0 (6)	0.0 (6)
HSD / 20	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
	±0.0 (6)	0.0 (6)	0.0 (6)	0.0 (6)	0.0 (6)	0.0 (6)		0.0 (6)	0.0 (6)
HS / 12	0.2	0.2	0.0	0.0	0.0	0.0		0.0	0.0
	±0.4 (6)	0.4 (6)	0.0 (6)	0.0 (6)	0.0 (6)	0.0 (6)		0.0 (6)	0.0 (6)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

TABLE 6 (cont.)
Hematology Summary^a

Group/Dose (ml/kg/day)	Q ^b	-7	0	Study Day 1	2	3	7	14
Basophils (%)								
HS / 16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	±0.0 (6)	0.0 (6)	0.0 (6)	0.0 (6)	0.0 (6)	0.0 (6)	0.0 (6)	0.0 (6)
HS / 20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	±0.0 (6)	0.0 (6)	0.0 (6)	0.0 (6)	0.0 (6)	0.0 (6)	0.0 (6)	0.0 (6)
D70 / 12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	±0.0 (6)	0.0 (6)	0.0 (6)	0.0 (6)	0.0 (6)	0.0 (6)	0.0 (6)	0.0 (6)
D70 / 16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	±0.0 (6)	0.0 (6)	0.0 (6)	0.0 (6)	0.0 (6)	0.0 (6)	0.0 (6)	0.0 (6)
D70 / 20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	±0.0 (6)	0.0 (6)	0.0 (6)	0.0 (6)	0.0 (6)	0.0 (6)	0.0 (6)	0.0 (6)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

TABLE 6 (cont.)

Hematology Summary^a

Group/Dose (ml/kg/day)	Q ^b	-7	Study Day					7	14	
			0	1	2	3				
Lymphocytes (%)										
HS / 16	29.7	26.3	26.2	28.0	27.2	25.2	30.2	26.7 ^a		
	±12.7 (6)	14.0 (6)	8.6 (6)	9.7 (6)	11.2 (6)	10.2 (6)	11.6 (6)	7.4 (6)		
HS / 20	27.8	22.7	26.7	20.2	23.3	21.5	23.7	22.2 ^a		
	±8.0 (6)	4.8 (6)	10.6 (6)	6.6 (6)	8.5 (6)	6.2 (6)	7.3 (6)	5.7 (6)		
D70 / 12	24.5	28.2	31.0	26.5	22.2	20.2	29.8	22.8		
	±6.2 (6)	6.9 (6)	2.8 (6)	6.0 (6)	4.5 (6)	11.1 (6)	6.0 (6)	3.3 (6)		
D70 / 16	25.5	25.5	23.0	26.7	26.2	24.8	25.7	19.3		
	±5.7 (6)	9.5 (6)	4.5 (6)	6.8 (6)	4.7 (6)	5.6 (6)	8.9 (6)	7.0 (6)		
D70 / 20	23.2	26.5	32.7	25.2	23.8	23.0	26.0	22.0		
	±6.7 (6)	9.0 (6)	7.7 (6)	10.7 (6)	8.4 (6)	8.2 (6)	9.6 (6)	8.1 (6)		

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.^b Prequarantine sample.^c Value is significantly different from the group baseline (Day 0) at p = 0.05 using the Dunnett's test.^d The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HSD dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

TABLE 6 (cont.)

Hematology Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day					7	14
		-7	0	1	2	3		
		Monocytes (%)						
HS / 16	3.2	1.8	1.8	3.2	2.5	2.7	2.5	4.3
	±2.5 (6)	1.5 (6)	1.8 (6)	2.8 (6)	0.8 (6)	2.3 (6)	1.6 (6)	2.2 (6)
HS / 20	3.5	3.2	3.0	2.8	2.5	3.2	3.5	5.3
	±1.4 (6)	2.3 (6)	1.8 (6)	1.2 (6)	1.6 (6)	2.6 (6)	1.6 (6)	1.6 (6)
D70 / 12	4.0	3.2	3.8	2.8	3.3	4.2	3.2	3.2
	±2.8 (6)	2.5 (6)	2.6 (6)	1.3 (6)	2.2 (6)	2.4 (6)	1.2 (6)	2.4 (6)
D70 / 16	3.5	3.2	4.2	3.2	2.8	3.5	3.2	3.0
	±1.8 (6)	0.8 (6)	1.8 (6)	2.1 (6)	1.9 (6)	2.3 (6)	2.6 (6)	2.1 (6)
D70 / 20	3.5	3.5	3.2	2.5	4.5	3.3	3.2	2.2
	±2.1 (6)	2.5 (6)	1.7 (6)	0.5 (6)	4.7 (6)	2.9 (6)	2.6 (6)	1.0 (6)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.^b Prequarantine sample.

TABLE 6 (cont.)
Hematology Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day					7	14
		-7	0	1	2	3		
Atypical Lymphocytes (%) - Males								
RL / 20	1.0	1.7	1.7	1.0	2.0	1.0	1.3	0.0
	±0.0 (3)	1.5 (3)	1.2 (3)	1.0 (3)	2.0 (3)	1.0 (3)	2.3 (3)	0.0 (3)
HSD / 12	2.3	0.3	2.7	0.3	2.0	1.0 ^d	0.7	0.0
	±2.5 (3)	0.6 (3)	3.1 (3)	0.6 (3)	1.0 (3)	1.0 (3)	0.6 (3)	0.0 (3)
HSD / 16	0.7	4.0	1.3	2.3	0.7	4.0 ^{ce}	2.0	0.7
	±1.2 (3)	2.6 (3)	1.2 (3)	1.5 (3)	0.6 (3)	0.0 (3)	2.0 (3)	0.6 (3)
HSD / 20	0.7	2.0	1.3	0.7	0.3	2.0 ^d	0.7	0.7
	±0.6 (3)	2.6 (3)	2.3 (3)	1.2 (3)	0.6 (3)	2.0 (3)	1.2 (3)	0.6 (3)
HS / 12	1.7	1.7	1.3	1.7	1.0	1.3 ^d	1.7	0.7
	±2.1 (3)	0.6 (3)	0.6 (3)	1.5 (3)	1.0 (3)	0.6 (3)	0.6 (3)	0.6 (3)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.
^b Prequantitative sample.

^c The mean of the 3 test solution groups for the dose level indicated is significantly different from the mean of the 3 low-dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.

^d The mean of the 3 test solution groups for the dose level indicated is significantly different from the mean of the 3 middle-dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.

^e The mean of the 3 test solution groups for the dose level indicated is significantly different from the mean of the 3 high-dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.

TABLE 6 (cont.)

Hematology Summary^d

Group/Dose (ml/kg/day)	Q ^b	Study Day					7	14
		-7	0	1	2	3		
Atypical Lymphocytes (%) - Males								
HS / 16	1.7	1.7	3.0	0.7	0.3	3.3 ^{ce}	1.7	3.0
	±2.1 (3)	0.6 (3)	3.5 (3)	0.6 (3)	0.6 (3)	1.5 (3)	1.5 (3)	3.6 (3)
HS / 20	3.7	1.7	1.7	1.3	1.7	0.7 ^d	2.0	1.3
	±3.5 (3)	1.2 (3)	2.9 (3)	0.6 (3)	0.6 (3)	0.6 (3)	3.5 (3)	0.6 (3)
D70 / 12	1.7	0.7	1.3	0.0	0.3	0.7 ^d	0.0	0.0
	±2.9 (3)	1.2 (3)	1.5 (3)	0.0 (3)	0.6 (3)	0.6 (3)	0.0 (3)	0.0 (3)
D70 / 16	2.0	1.3	0.3	2.7	1.0	1.0 ^{ce}	1.0	1.0
	±1.7 (3)	0.6 (3)	0.6 (3)	2.5 (3)	1.0 (3)	1.0 (3)	1.0 (3)	1.0 (3)
D70 / 20	4.0	2.0	2.0	2.3	1.7	1.0 ^d	2.0	0.3
	±1.0 (3)	2.0 (3)	2.6 (3)	2.3 (3)	1.5 (3)	1.0 (3)	1.0 (3)	0.6 (3)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.
^b Prequarantine sample.

^c The mean of the 3 test solution groups for the dose level indicated is significantly different from the mean of the 3 low-dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.

^d The mean of the 3 test solution groups for the dose level indicated is significantly different from the mean of the 3 middle-dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.

^e The mean of the 3 test solution groups for the dose level indicated is significantly different from the mean of the 3 high-dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.

TABLE 6 (cont.)

Hematology Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day					7	14
		-7	0	1	2	3		
Atypical Lymphocytes (%) - Females								
RL / 20	0.3	4.0	1.3	1.3	2.0	0.7	2.0	3.3
	±0.6 (3)	1.0 (3)	2.3 (3)	1.5 (3)	1.0 (3)	0.6 (3)	2.0 (3)	3.5 (3)
HSD / 12	1.3	1.7	0.3	0.7	0.3	0.7	1.0 ^u	1.7
	±0.6 (3)	0.6 (3)	0.6 (3)	0.6 (3)	0.6 (3)	1.2 (3)	1.0 (3)	0.6 (3)
HSD / 16	1.0	1.3	0.7	0.0	0.3	0.3	0.3 ^d	0.3
	±1.0 (3)	1.5 (3)	1.2 (3)	0.0 (3)	0.6 (3)	0.6 (3)	0.6 (3)	0.6 (3)
HSD / 20	4.7	1.7	3.3	2.3	1.0	2.7	0.3 ^u	1.3
	±2.5 (3)	1.5 (3)	3.1 (3)	1.5 (3)	1.7 (3)	2.1 (3)	0.6 (3)	1.2 (3)
HS / 12	2.0	0.7	3.0	1.3	1.0	2.3	4.0 ^{ee}	2.7
	±2.6 (3)	1.2 (3)	2.6 (3)	1.2 (3)	1.7 (3)	2.3 (3)	2.0 (3)	1.2 (3)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.^b Prequarantine sample.^c The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HSD dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.^d The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HS dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.^e The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 D70 dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

TABLE 6 (cont.)

Hematology Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day						
		-7	0	1	2	3	7	14
Atypical Lymphocytes (%) - Females								
HS / 16	1.0	0.7	1.0	2.3	1.7	0.7	1.0 ^{cc}	2.3
	±1.0 (3)	1.2 (3)	1.0 (3)	0.6 (3)	2.9 (3)	1.2 (3)	1.7 (3)	3.2 (3)
HS / 20	1.3	0.3	0.7	2.0	2.0	2.0	2.0 ^{cc}	0.3
	±0.6 (3)	0.6 (3)	1.2 (3)	2.0 (3)	1.7 (3)	1.7 (3)	1.7 (3)	0.6 (3)
D70 / 12	2.7	1.7	1.3	0.3	0.7	0.7	0.3 ^d	1.0
	±2.5 (3)	1.5 (3)	1.5 (3)	0.6 (3)	1.2 (3)	1.2 (3)	0.6 (3)	1.0 (3)
D70 / 16	1.3	1.7	0.0	0.7	0.7	0.0	0.7 ^d	0.7
	±1.5 (3)	2.1 (3)	0.0 (3)	1.2 (3)	1.2 (3)	0.0 (3)	0.6 (3)	1.2 (3)
D70 / 20	3.0	2.3	0.0	1.7	1.3	0.3	0.0 ^d	1.0
	±2.0 (3)	1.2 (3)	0.0 (3)	2.1 (3)	1.5 (3)	0.6 (3)	0.0 (3)	0.0 (3)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prepurantive sample.

^c The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HSD dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.

^d The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HS dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.

^e The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 D70 dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.

TABLE 6 (cont.)
Hematology Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day					7	14
		-7	0	1	2	3		
Nucleated Red Blood Cells (#/100 WBC)								
RL / 20	0.0	0.3	0.5	0.0	0.5	0.0	0.2	0.7
	±0.0 (6)	0.8 (6)	0.8 (6)	0.0 (6)	1.2 (6)	0.0 (6)	0.4 (6)	1.2 (6)
HSD / 12	0.3	0.0	0.2	0.0	0.3	0.2	0.2 ^d	0.3 ^d
	±0.8 (6)	0.0 (6)	0.4 (6)	0.0 (6)	0.5 (6)	0.4 (6)	0.4 (6)	0.5 (6)
HSD / 16	0.2	0.5	0.2	0.0	0.2	0.2	0.0 ^a	0.7 ^a
	±0.4 (6)	0.5 (6)	0.4 (6)	0.0 (6)	0.4 (6)	0.4 (6)	0.0 (6)	0.5 (6)
HSD / 20	0.6	0.5	1.0	0.0	0.2	0.5	0.2 ^a	0.8 ^a
	±1.4 (6)	0.8 (6)	1.3 (6)	0.0 (6)	0.4 (6)	0.8 (6)	0.4 (6)	1.0 (6)
HS / 12	0.0	0.0	0.5	0.3	0.2	0.3	1.2 ^{ee}	0.7 ^{ee}
	±0.0 (6)	0.0 (6)	1.2 (6)	0.8 (6)	0.4 (6)	0.8 (6)	1.3 (6)	1.6 (6)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

^c The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HSD dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^d The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HS dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^e The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 D70 dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

TABLE 6 (cont.)

Hematology Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day						
		-7	0	1	2	3	7	14
Nucleated Red Blood Cells (#/100 WBC)								
HS / 16	0.5	0.5	0.0	0.5	0.5	0.5	0.5 ^{ce}	1.5 ^{ce}
	±0.8 (6)	0.8 (6)	0.0 (6)	0.8 (6)	0.8 (6)	0.5 (6)	0.8 (6)	0.8 (6)
HS / 20	0.0	0.2	0.0	0.0	0.5	0.0	1.0 ^{ce}	1.5 ^{ce}
	±0.0 (6)	0.4 (6)	0.0 (6)	0.0 (6)	0.8 (6)	0.0 (6)	1.3 (6)	2.5 (6)
D70 / 12	0.0	0.2	0.0	0.0	0.0	0.3	0.0 ^d	0.2 ^d
	±0.0 (6)	0.4 (6)	0.0 (6)	0.0 (6)	0.0 (6)	0.5 (6)	0.0 (6)	0.4 (6)
D70 / 16	0.5	0.0	0.2	0.0	0.0	0.0	0.0 ^d	0.2 ^d
	±0.8 (6)	0.0 (6)	0.4 (6)	0.0 (6)	0.0 (6)	0.0 (6)	0.0 (6)	0.4 (6)
D70 / 20	0.5	0.0	0.2	0.3	0.0	0.2	0.2 ^d	0.3 ^d
	±0.8 (6)	0.0 (6)	0.4 (6)	0.8 (6)	0.0 (6)	0.4 (6)	0.4 (6)	0.5 (6)

^a Data are presented as the mean $\pm$ the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

^c The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HSD dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.

^d The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HS dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.

^e The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 D70 dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.

TABLE 6 (cont.)
Hematology Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day				Prothrombin Time (seconds) - Males			
		-7	0	1	2	3	7	14	
RL / 20	-	8.77	7.77	7.73	8.07	8.33	10.33	8.40	
	-	±1.17	1.37	0.93	1.25	1.42	2.66	1.71	
		(3)	(3)	(3)	(3)	(3)	(3)	(3)	

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

TABLE 6 (cont.)

Hematology Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day						
		-7	0	1	2	3		
Prothrombin Time (seconds) - Males								
HSD / 12	-	8.77	8.83	8.03	8.03	8.20	8.77	9.13 ^{ehi}
	-	±2.05 (3)	0.71 (3)	0.90 (3)	1.57 (3)	1.00 (3)	0.93 (3)	1.90 (3)
HSD / 16	-	8.10	8.20	7.83	7.90	6.90 ⁱ	10.13	12.17 ^{eqj}
	-	±0.79 (3)	1.20 (3)	1.11 (3)	1.39 (3)	0.10 (3)	1.80 (3)	2.06 (3)
HSD / 20	-	9.80	8.27	8.73	8.13	12.17 ^h	10.17	17.17 ^{eqk}
	-	±2.46 (3)	1.29 (3)	1.10 (3)	1.68 (3)	5.78 (3)	2.22 (3)	6.01 (3)

TABLE 6 (cont.)

Hematology Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day					7	14
		-7	0	1	2	3		
Prothrombin Time (seconds) - Males								
HS / 12	-	8.27	8.63	7.53	6.90	7.93	8.20	8.37 ^{dt h}
	-	±2.05 (3)	0.67 (3)	1.15 (3)	0.99 (2)	0.90 (3)	1.40 (3)	2.98 (3)
HS / 16	-	9.43	7.67	7.20	7.73	4.63 ⁱ	7.37	8.20 ^{dt q}
	-	±3.10 (3)	1.29 (3)	0.72 (3)	1.10 (3)	2.98 (3)	0.98 (3)	1.59 (3)
HS / 20	-	8.93	7.67	7.20	7.37	8.27 ^h	7.43	9.13 ^{dt q}
	-	±1.27 (3)	0.50 (3)	1.91 (3)	1.16 (3)	1.51 (3)	0.96 (3)	1.45 (3)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.^b Prequantitative sample.^c Value is significantly different from the group baseline (Day 0) at p = 0.05 using the Dunnett's test.^d The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HSD dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.^e The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HS dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.^f The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 D70 dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.^g The mean of the 3 test solution groups for the dose level indicated is significantly different from the mean of the 3 low-dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.^h The mean of the 3 test solution groups for the dose level indicated is significantly different from the mean of the 3 middle-dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.ⁱ The mean of the 3 test solution groups for the dose level indicated is significantly different from the mean of the 3 high-dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

TABLE 6 (cont.)

Hematology Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day					Prothrombin Time (seconds) - Males				
		-7	0	1	2	3	7	14			
D70 / 12	-	9.10	8.67	7.93	8.37	7.80	8.37	9.03 ^{ehi}			
	-	±2.01 (3)	1.06 (3)	0.90 (3)	1.45 (3)	0.89 (3)	0.49 (3)	1.57 (3)			
D70 / 16	-	8.50	7.93	8.17	7.50	8.33 ⁱ	9.93	11.00 ^{ghi}			
	-	±1.93 (3)	0.46 (3)	0.76 (3)	1.14 (3)	1.19 (3)	0.51 (3)	1.32 (3)			
D70 / 20	-	8.97	7.87	8.10	8.53	7.63 ^h	10.03	14.93 ^{cegh}			
	-	±1.36 (3)	1.33 (3)	0.96 (3)	1.40 (3)	1.69 (3)	2.24 (3)	4.24 (3)			

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.
^b Prequarantine sample.

^c Value is significantly different from the group baseline (Day 0) at $p = 0.05$ using the Dunnett's test.
^d The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HSD dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.
^e The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HS dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.
^f The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 D70 dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.
^g The mean of the 3 test solution groups for the dose level indicated is significantly different from the mean of the 3 low-dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.
^h The mean of the 3 test solution groups for the dose level indicated is significantly different from the mean of the 3 middle-dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.
ⁱ The mean of the 3 test solution groups for the dose level indicated is significantly different from the mean of the 3 high-dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.

TABLE 6 (cont.)
Hematology Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day					Prothrombin Time (seconds) - Females				
		-7	0	1	2	3	7	14			
RL / 20	-	8.67	8.37	8.60	27.97	8.40	8.50	9.17			
	-	±0.99 (3)	1.56 (3)	1.59 (3)	34.69 (3)	0.69 (3)	0.62 (3)	0.65 (3)			
HSD / 12	-	8.57	5.67	8.00	8.73	8.70	7.57	9.57 ^{de}			
	-	±0.21 (3)	4.02 (3)	1.74 (3)	1.55 (3)	0.44 (3)	0.81 (3)	2.06 (3)			
HSD / 16	-	8.13	8.07	7.77	7.80	8.77	9.23	11.47 ^{de}			
	-	±1.04 (3)	0.90 (3)	0.93 (3)	2.12 (3)	2.00 (3)	0.68 (3)	3.01 (3)			
HSD / 20	-	7.73	7.73	8.63	9.23	9.03	10.67	10.60 ^{de}			
	-	±0.50 (3)	1.29 (3)	1.44 (3)	1.69 (3)	1.39 (3)	1.67 (3)	1.15 (3)			
HS / 12	-	8.13	8.00	8.53	8.53	9.20	7.67	8.27 ^{de}			
	-	±0.70 (3)	0.92 (3)	1.67 (3)	1.62 (3)	0.69 (3)	1.36 (3)	1.07 (3)			

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

^c The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HSD dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^d The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HS dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^e The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 D70 dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

TABLE 6 (cont.)
Hematology Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day					7	14
		-7	0	1	2	3		
Prothrombin Time (seconds) - Females								
HS / 16	-	7.83	7.80	7.07	7.80	8.40	9.60	8.17 ^{ce}
	-	±0.85 (3)	0.53 (3)	1.03 (3)	2.35 (3)	2.01 (3)	2.62 (3)	1.04 (3)
HS / 20	-	7.93	7.43	8.60	8.70	8.10	7.23	7.67 ^{ce}
	-	±0.75 (3)	1.18 (3)	1.56 (3)	1.85 (3)	1.21 (3)	1.32 (3)	0.96 (3)
D70 / 12	-	8.70	7.97	8.20	8.73	9.27	8.90	13.63 ^{cd}
	-	±1.01 (3)	1.19 (3)	1.44 (3)	1.42 (3)	0.12 (3)	0.17 (3)	2.50 (3)
D70 / 16	-	8.33	8.60	8.83	9.67	8.47	9.20	12.50 ^{cd}
	-	±0.76 (3)	1.21 (3)	1.15 (3)	3.76 (3)	1.10 (3)	0.62 (3)	2.18 (3)
D70 / 20	-	7.77	7.33	8.87	8.83	9.40	11.17	13.63 ^{cd}
	-	±0.25 (3)	1.14 (3)	1.62 (3)	1.15 (3)	1.65 (3)	2.35 (3)	2.23 (3)

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

^c The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HSD dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.

^d The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HS dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.

^e The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 D70 dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.

TABLE 6 (cont.)
Hematology Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day					Activated Partial Thromboplastin Time (seconds)				
		-7	0	1	2	3	7	14			
RL / 20	-	16.23	14.85	15.40	15.73	16.43	16.47	16.68			
	-	±2.70 (6)	1.03 (6)	1.37 (6)	1.80 (6)	1.30 (6)	1.99 (6)	3.27 (6)			
HSD / 12	-	15.55	12.95	15.20	16.35	16.48	18.15 ^f	20.97 ^g			
	-	±2.09 (6)	5.96 (6)	0.80 (6)	1.73 (6)	2.30 (6)	2.59 (6)	6.94 (6)			
HSD / 16	-	15.68	16.27	17.23	16.78	17.80	22.57 ^h	26.77 ^h			
	-	±1.11 (6)	1.80 (6)	1.41 (6)	1.64 (6)	1.41 (6)	5.04 (6)	7.13 (6)			
HSD / 20	-	15.55	15.47	16.08	17.52	18.94	21.80 ⁱ	21.80 ^g			
	-	±1.29 (6)	1.07 (6)	1.91 (6)	1.36 (6)	2.41 (5)	1.81 (6)	4.38 (5)			
HS / 12	-	17.97	16.95	15.80	17.70	16.70	17.35 ^j	18.27 ^g			
	-	±3.29 (6)	2.41 (6)	1.24 (6)	2.30 (5)	1.76 (6)	2.18 (6)	4.15 (6)			

^a Data are presented as the mean ± the standard deviation with the number of animals, n, in parentheses.

^b Prequarantine sample.

^c Value is significantly different from the group baseline (Day 0) at p = 0.05 using the Dunnett's test.

^d The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HSD dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^e The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HS dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

^f The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 D70 dose groups at p = 0.05 using the Student-Newman-Keuls multiple range test.

TABLE 6 (cont.)

Hematology Summary^a

Group/Dose (ml/kg/day)	Q ^b	Study Day					Activated Partial Thromboplastin Time (seconds)				
		-7	0	1	2	3	7	14			
HS / 16	-	17.77	15.28	15.38	16.65	15.93	17.47 ^f	18.20 ^{dt}			
	-	± 4.41 (6)	1.11 (6)	1.88 (6)	0.81 (6)	1.70 (6)	1.86 (6)	4.27 (6)			
HS / 20	-	15.28	16.17	15.23	16.75	15.45	18.32 ^f	17.75 ^{dt}			
	-	± 0.81 (6)	2.03 (6)	2.70 (6)	2.48 (6)	1.07 (6)	3.57 (6)	3.51 (6)			
D70 / 12	-	16.60	15.55	15.93	17.75	17.38	21.55 ^{de}	30.52 ^{de}			
	-	± 2.22 (6)	1.93 (6)	1.89 (6)	3.76 (6)	3.33 (6)	3.34 (6)	15.78 (5)			
D70 / 16	-	16.22	16.63	16.32	19.77	19.32	23.90 ^{de}	28.62 ^{de}			
	-	± 2.44 (6)	2.37 (6)	2.56 (6)	1.53 (6)	3.75 (6)	3.56 (6)	4.75 (6)			
D70 / 20	-	14.30	15.63	16.90	17.33	20.12	27.07 ^{de}	38.33 ^{de}			
	-	± 1.38 (6)	1.75 (6)	3.14 (6)	2.50 (6)	3.05 (6)	8.24 (6)	18.01 (3)			

^a Data are presented as the mean $\pm$ the standard deviation with the number of animals, n, in parentheses.^b Prequarantine sample.^c Value is significantly different from the group baseline (Day 0) at $p = 0.05$ using the Dunnett's test.^d The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HSD dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.^e The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 HS dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.^f The mean of the 3 dose groups for the solution indicated is significantly different from the mean of the 3 D70 dose groups at $p = 0.05$ using the Student-Newman-Keuls multiple range test.

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Appendix A: CHEMICAL DATA



Pharmacia

CERTIFICATE OF ANALYSIS 1988-06-27

Product

6 % Dextran 70 in 7,5 %
Sodium Chloride Injection

Charge No. OD 59331

Identification	passed test
Inherent viscosity	26 ml/g
Absorbance	0,009
pH	5,2
Heavy metals	< 5 ppm

Assay for

- Sodium chloride	75 g/1000 ml
- Dextran 70	59 g/1000 ml

Particulate matter	passed test
Sterility	passed test
Pyrogens	passed test

Released for clinical trials.

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Appendix A (cont.): CHEMICAL DATA



Pharmacia

CERTIFICATE OF ANALYSIS 1988-06-27

Product

7,5 % Sodium Chloride

Charge No. OD 59339

pH	6,2
Heavy metals	< 5 ppm
Assay for	
- Sodium chloride	71 g/1000 ml
Particulate matter	passed test
Sterility	passed test
Pyrogens	passed test
Released for clinical trials.	

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Appendix A (cont.): CHEMICAL DATA



Pharmacia

Certificate of Analysis

Name MACRODEX 60 mg/ml in Normal Saline

Item No.: 10-4510-00

Charge No.: 00 59340

Test	Result	Tolerance limit	Control method
Inherent viscosity ml/g	26	25 - 28	03700
Colour	0.01	Max. 0,04	03811
pH	4.9	4,0 - 7,0	USP XX p. 968
Heavy metals ppm	< 5	Max. 5	USP XX p. 909
Assay for			
- sodium chloride g/1000 ml	8.86	8,10 - 9,90	02355
- dextran 70 g/1000 ml	59	54 - 66	02356
Sterility	Passed test	To pass test	02885
Pyrogens	Passed test	To pass test	02983

The identity is assured through strict adherence to established GMP rules throughout the manufacturing procedures.

Released for sale: 1988-04-19

fM09

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Appendix A (cont.): CHEMICAL DATA



Pharmacia

Certificate of analysis

Name: MACRODEX 60 mg/ml in Normal saline

Item No.: 10-4510-00

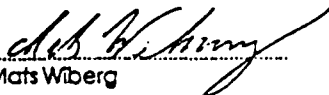
Lot No.: NE 54941

Test		Result	Tolerance limit	Method
Inherent viscosity	ml/g	26	25 - 28	03700
Colour		0,01	Max. 0,04	03811
pH		4,9	4,0 - 7,0	USP XX p. 968
Heavy metals ppm		< 5	Max. 5	USP XX p. 909
Assay for				
- sodium chloride	g/1000ml	8,88	8,10 - 9,90	02355
- dextran 70	g/1000ml	59	54 - 66	02356
Sterility		Passed test	To pass test	02885
Pyrogens		Passed test	To pass test	02983

The identity is assured through strict adherence to established GMP rules throughout the manufacturing procedures.

Released for sale: 1987-05-25

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Appendix A (cont.): CHEMICAL DATA



Pharmacia

CERTIFICATE OF ANALYSIS 1988-06-27

Product

Lactated Ringer's Insektion

Charge No. OD 59336

Identification	passed test
pH	5,8
Heavy metals	< 5 ppm

Assay for

- Sodium	121 mmol/1000 ml
- Potassium	3,72 mmol/1000 ml
- Calcium	1,32 mmol/1000 ml
- Chloride	104 mmol/1000 ml
- Lactate	26,3 mmol/1000 ml

Particulate matter	passed test
Sterility	passed test
Pyrogens	passed test

Released for clinical trials.

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Appendix A (cont.): CHEMICAL DATA



Pharmacia

CERTIFICATE OF ANALYSIS 1989-12-19

Product

LACTATED RINGER'S INJECTION

Charge No. NC 54847

pH	5,8
Heavy metals	< 5 ppm
Sodium	127 mmol/1000 ml
Potassium	3,91 mmol/1000 ml
Calcium	1,30 mmol/1000 ml
Chloride	105,5 mmol/1000 ml
Lactate	27,2 mmol/1000 ml
Particulate matter	passed test
Sterility	passed test
Pyrogens	passed test

Released for clinical trials.

Pharmacia AB
Analytical Chemistry Department

448/71
Pharmacia Uppsala 1989

Elisabet Fransson
Elisabet Fransson

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Appendix B: ANIMAL DATA

Species: *Canis familiaris*

Strain: Beagle

Source: Hazleton-LRE
6321 South 6th St.
Kalamazoo, MI 49009

Sex: Male and female

Month of birth: April - July 88

Method of randomization: Weight bias, stratified animal
allocation (XYBION Medical Systems PATH/TOX AESLCT Program)

Animals in each group: 3 males and 3 females

Condition of animals at start of study: Normal

Body weight range at dosing: Males 10.00 - 14.10 kg
Females 9.10 - 12.80 kg

Identification procedures: Supplier ear tattoo with
corresponding LAIR animal number

Pretest conditioning: Quarantine/acclimation 13 January to
30 January 1989 and 22 February to 6 March 1989, Phase I and
II, respectively

Justification: The beagle dog is a standard laboratory model
for subacute toxicity studies and is accepted by all
regulatory agencies.

Appendix C: HISTORICAL LISTING OF STUDY EVENTS

Phase I

<u>Date</u>	<u>Event</u>
12 Jan 89	Phase I animals arrived. They were sexed, observed for illness, and caged in the GLP Suite. Forty-one animals were assigned to the study.
17, 30 Jan 89	Quarantine physical examinations and heartworm tests were performed.
17, 18, 19 Jan 89	Fecal analyses for parasitic ova were performed.
12 Jan - 21 Feb 89	Phase I animals were observed twice daily.
17, 24, 30, 31 Jan; 6, 7, 8, 14, 15, 21, 22 Feb 89	Phase I animals were weighed.
19, 24, 31 Jan; 1-15, 21, 22 Feb 89	Water consumption was monitored for Phase I animals.
17, 24, 25, 31 Jan; 1, 2, 3, 4, 7, 8, 9, 10, 11, 14, 15, 21, 22 Feb 89	Blood was collected for hematology and clinical chemistry analyses, Phase I animals.
22 Jan 89	Phase I animals were randomized into dose groups.
30, 31 Jan; 6, 7, 13, 14, 20, 21 Feb 89	Ophthalmic examinations were performed for Phase I animals.
31 Jan - 21 Feb 89	Phase I animals were dosed beginning at approximately 0830 hours. Observations were conducted before and 1 hr after dosing, and in the pm.
14, 15, 21, 22 Feb 89	Phase I animals were delivered to the Necropsy Suite for blood sampling, euthanasia, and necropsy.

Appendix C (cont.): HISTORICAL LISTING OF STUDY EVENTS

Phase II

<u>Date</u>	<u>Event</u>
22 Feb 89	Phase II animals arrived. They were sexed, observed for illness, and caged in the GLP Suite. Thirty-one animals were assigned to the study.
23 Feb, 6 Mar 89	Quarantine physical examinations and heartworm tests were performed.
23, 24, 27 Feb 89	Fecal analyses for parasitic ova were performed.
23 Feb - 28 Mar 89	Phase II animals were observed twice daily.
23, 28 Feb; 6, 7 13-15, 21, 22, 28, 29 Mar 89	Phase II animals were weighed.
28 Feb; 7-22, 28, 29 Mar 89	Water consumption was monitored for Phase II animals.
23, 28 Feb; 1, 7-11, 14-18, 21, 22, 28, 29 Mar 89,	Blood was collected for hematology and clinical chemistry analyses, Phase II animals.
27 Feb 89	Phase II animals were randomized into dose groups.
6, 7, 13, 14, 20, 21, 27, 28 Mar 89	Ophthalmic examinations were performed.
7-28 Mar 89	Phase II animals were dosed beginning at approximately 0830 hours. Observations were conducted before and 1 hr after dosing, and in the pm.
21, 22, 28, 29 Mar 89	Phase II animals were delivered to the Necropsy Suite for blood sampling, euthanasia, and necropsy.

Appendix D: INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEA-LE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008M

Data Listing by Animal

Study Start Date: 07-Feb-89

PRINTED: 03-Oct-89
Page: 1

SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time Data was Taken	Oper #	Clinical signs / Comments
1	89A00012 M/ 1/2	05-May-89 14:50	1 / 08:53	9	normal/no significant signs
		05-May-89 14:54	1 / 09:56	9	inactive, slight vomiting
		05-May-89 15:02	1 / 15:02	9	tremors, moderate inactive, slight
		05-May-89 15:08	2 / 09:00	9	tremors, moderate soft stool, moderate
		05-May-89 15:12	2 / 10:18	9	inactive, moderate vomiting
		08-May-89 08:24	2 / 14:16	9	tremors, moderate inactive, slight
		08-May-89 08:29	3 / 08:50	9	tremors, moderate soft stool, moderate
		08-May-89 08:32	3 / 10:08	9	inactive, moderate vomiting
		08-May-89 08:38	3 / 14:30	9	tremors, slight inactive, slight
		08-May-89 08:41	4 / 08:35	9	soft stool, moderate
		08-May-89 08:44	4 / 11:36	9	inactive, moderate vomiting
		08-May-89 08:57	4 / 14:00	9	tremors, severe inactive, slight
		08-May-89 09:02	5 / 08:23	9	tremors, slight soft stool, moderate
		08-May-89 09:04	5 / 11:01	9	vomiting inactive, moderate
		08-May-89 09:12	5 / 14:33	9	tremors, severe disoriented, slight
		08-May-89 09:19	6 / 09:00	9	inactive, slight tremors, moderate
		08-May-89 09:26	6 / 10:19	9	soft stool, moderate inactive, slight
					vomiting tremors, moderate
					disoriented, slight

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses
Study Number: 88008M
Data Listing by Animal
Study Start Date: 07-Feb-89

PRINTED: 03-Oct-89
Page: 2

SUB-ACUTE/

Cage #	Animal Sex/group Number /Subgroup	Date Data was Entered	Time Data was Entered	Study Day/time Data was Taken	Oper #	Clinical signs / Comments
1	89A00012 M/ 1/2	08-May-89	09:42	6 / 14:27	9	tremors, moderate disoriented, slight
		08-May-89	09:46	7 / 09:00	9	soft stool, moderate
		08-May-89	09:49	7 / 10:09	9	soft stool, moderate inactive, slight vomiting
						disoriented, slight tremors, moderate
		08-May-89	09:57	7 / 14:45	9	tremors, slight
		08-May-89	10:03	8 / 09:30	9	soft stool, slight
		08-May-89	10:07	8 / 10:56	9	vomiting
		08-May-89	10:14	8 / 14:25	9	excessive thirst, moderate excessive thirst, moderate inactive, slight
		08-May-89	10:41	9 / 07:29	9	tremors, moderate inactive, slight tremors, slight
		08-May-89	10:46	9 / 09:43	9	soft stool, moderate inactive, slight tremors, slight
						soft stool, moderate excessive thirst, moderate hunched posture, moderate
		08-May-89	10:55	9 / 14:15	9	tremors, slight excessive thirst, moderate hunched posture, slight
		08-May-89	14:00	10 / 07:27	9	tremors, moderate excessive thirst, moderate inactive, slight
		08-May-89	14:05	10 / 10:38	9	tremors, moderate excessive thirst, severe inactive, slight
		08-May-89	14:08	10 / 14:29	9	soft stool, moderate tremors, severe inactive, slight

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
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DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008M

Data Listing by Animal

Study Start Date: 07-Feb-89

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Page: 3

SUB-ACUTE/

Cage #	Animal Sex/group	Date Data was Entered	Time Data was Entered	Study Day/Time Oper Data was Taken	#	Clinical signs / Comments
1	89A00012	M/ 1/2				
						08-May-89 14:15 11 / 09:55 9 inactive, slight
						08-May-89 14:18 11 / 12:06 9 inactive, slight vomiting
						08-May-89 14:28 11 / 14:00 9 tremors, slight excessive thirst, severe
						08-May-89 14:32 12 / 09:30 9 excessive thirst, moderate
						08-May-89 14:34 12 / 11:23 9 increased resp rate, slight
						08-May-89 14:37 12 / 14:00 9 lack of appetite, moderate
						08-May-89 14:40 13 / 08:15 9 lack of appetite, slight
						08-May-89 14:42 13 / 11:54 9 lack of appetite, moderate
						08-May-89 14:46 13 / 14:10 9 excessive thirst, moderate
						08-May-89 14:49 14 / 07:44 9 lack of appetite, severe
						08-May-89 14:51 14 / 09:23 9 excessive thirst, moderate
						08-May-89 14:57 14 / 14:32 9 excessive thirst, moderate
						08-May-89 15:01 15 / 07:08 9 tremors, moderate
2	89A00042	M/ 1/3				08-May-89 15:01 15 / 07:08 9 lack of appetite, slight
						11-May-89 14:34 1 / 09:30 9 tremors, slight
						11-May-89 14:37 1 / 10:46 9 normal/no significant signs
						11-May-89 14:42 1 / 14:45 9 vomiting
						11-May-89 14:46 2 / 07:20 9 disoriented, moderate
						11-May-89 14:46 2 / 07:20 9 tremors, slight
						11-May-89 14:42 1 / 14:45 9 inactive, slight
						11-May-89 14:46 2 / 07:20 9 excessive thirst, moderate
						11-May-89 14:42 1 / 14:45 9 excessive thirst, moderate
						11-May-89 14:46 2 / 07:20 9 normal/no significant signs

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008M

Data Listing by Animal

Study Start Date: 07-Feb-89

PRINTED: 03-Oct-89
Page: 4

SUB-ACUTE/

Cage #	Animal Sex/group	Date Data was Entered	Time Data was Taken	Study Day/time Oper	Clinical signs / Comments
2	89A00042	M/ 1/3	11-May-89 14:50	2 / 10:40	9 vomiting disoriented, moderate tremors, moderate inactive, slight excessive thirst, slight salivation, moderate
		11-May-89 14:57	2 / 14:12	9	inactive, slight
		11-May-89 15:07	3 / 07:14	9	normal/no significant signs
		11-May-89 15:10	3 / 10:51	9	vomiting disoriented, moderate tremors, moderate inactive, moderate excessive thirst, moderate salivation, slight
		11-May-89 15:16	3 / 14:00	9	inactive, slight
		11-May-89 15:23	4 / 09:10	9	normal/no significant signs
		11-May-89 15:26	4 / 10:39	9	vomiting disoriented, moderate inactive, moderate excessive thirst, moderate
		11-May-89 15:33	4 / 14:30	9	inactive, slight
		12-May-89 08:16	5 / 07:12	9	normal/no significant signs
		12-May-89 08:31	5 / 10:56	9	vomiting disoriented, moderate excessive thirst, moderate inactive, moderate
		12-May-89 08:43	5 / 14:00	9	excessive thirst, slight salivation, slight
		12-May-89 08:46	6 / 07:27	9	normal/no significant signs
		12-May-89 08:55	6 / 11:00	9	vomiting disoriented, slight inactive, slight excessive thirst, slight
		12-May-89 09:02	6 / 15:29	9	normal/no significant signs
		12-May-89 09:06	7 / 07:50	9	soft stool, moderate

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
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PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008M

Data Listing by Animal

Study Start Date: 07-Feb-89

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SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time Oper Data was Taken	#	Clinical signs / Comments
2	89A00042	M/ 1/3	12-May-89 09:10	7 / 10:11	9 vomiting disoriented, moderate tremors, slight inactive, moderate excessive thirst, moderate salivation, moderate 9 inactive, slight 9 normal/no significant signs 9 inactive, slight vomiting
		12-May-89 09:54	7 / 14:55	9	disoriented, moderate excessive thirst, moderate normal/no significant signs
		15-May-89 08:06	8 / 07:15	9	normal/no significant signs
		15-May-89 08:09	8 / 10:05	9	normal/no significant signs
		15-May-89 08:17	8 / 14:53	9	disoriented, moderate excessive thirst, moderate normal/no significant signs
		15-May-89 08:22	9 / 07:20	9	normal/no significant signs
		15-May-89 08:31	9 / 10:03	9	normal/no significant signs vomiting
		15-May-89 09:48	9 / 14:00	9	disoriented, moderate salivation, moderate normal/no significant signs
		15-May-89 09:07	10 / 07:22	9	normal/no significant signs
		15-May-89 09:15	10 / 10:11	9	normal/no significant signs vomiting
		15-May-89 09:22	10 / 14:07	9	disoriented, moderate excessive thirst, severe salivation, severe normal/no significant signs
		15-May-89 09:32	11 / 07:26	9	normal/no significant signs
		15-May-89 09:37	11 / 10:05	9	normal/no significant signs vomiting
		15-May-89 09:45	11 / 14:25	9	disoriented, moderate excessive thirst, moderate salivation, moderate disoriented, slight normal/no significant signs
		15-May-89 09:50	12 / 08:00	9	normal/no significant signs
		15-May-89 09:53	12 / 11:02	9	normal/no significant signs inactive, slight

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
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PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008M

Date Listing by Animal

Study Start Date: 07-Feb-89

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SUB-ACUTE/

Cage #	Animal Sex/group Number /Subgroup	Date Data was Entered	Time Data was Entered	Study Day/time Data was Taken	Oper #	Clinical signs / Comments
2	89A00042 M/ 1/3	15-May-89	09:53	12 / 11:02	9	vomiting disoriented, slight salivation, moderate
		15-May-89	09:59	12 / 16:52	9	inactive, slight disoriented, slight
		15-May-89	10:06	13 / 08:05	9	soft stool, slight
		15-May-89	10:09	13 / 10:10	9	inactive, slight vomiting disoriented, slight excessive thirst, severe salivation, moderate
		15-May-89	10:14	13 / 15:45	9	normal/no significant signs
		15-May-89	10:20	14 / 07:23	9	excessive thirst, slight
		15-May-89	10:23	14 / 10:19	9	excessive thirst, slight inactive, slight vomiting
		15-May-89	10:28	14 / 14:56	9	pacing, slight
		15-May-89	10:31	15 / 08:00	9	normal/no significant signs
		15-May-89	14:17	1 / 09:30	9	normal/no significant signs
		15-May-89	14:22	1 / 11:03	9	vomiting disoriented, moderate
		15-May-89	14:27	1 / 14:15	9	disoriented, slight
		15-May-89	14:52	2 / 07:18	9	soft stool, slight
		15-May-89	14:58	2 / 11:16	9	vomiting disoriented, moderate
		15-May-89	15:03	2 / 14:01	9	disoriented, slight
		15-May-89	15:11	3 / 09:15	9	soft stool, slight
		15-May-89	15:15	3 / 11:01	9	vomiting disoriented, moderate
		15-May-89	15:35	3 / 14:30	9	disoriented, slight
		15-May-89	15:43	4 / 07:20	9	soft stool, slight
		15-May-89	15:47	4 / 11:21	9	disoriented, moderate
		15-May-89	15:53	4 / 14:05	9	normal/no significant signs
		16-May-89	08:03	5 / 07:25	9	normal/no significant signs
		16-May-89	08:07	5 / 11:20	9	excessive thirst, moderate
		16-May-89	08:11	5 / 15:22	9	normal/no significant signs

3 89A00058 M/ 1/4

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
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DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008M

Data Listing by Animal

Study Start Date: 07-Feb-89

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SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time Oper Data was Taken	#	Clinical signs / Comments
3	89A00058	M/ 1/4			
		16-May-89 08:15	6 / 07:55	9	soft stool, moderate
		16-May-89 08:18	6 / 10:37	9	disoriented, moderate
					excessive thirst, moderate
		16-May-89 08:22	6 / 14:50	9	disoriented, slight
		16-May-89 08:25	7 / 07:19	9	soft stool, moderate
		16-May-89 08:29	7 / 10:32	9	disoriented, moderate
					excessive thirst, slight
		16-May-89 08:35	7 / 14:54	9	normal/no significant signs
		16-May-89 09:30	8 / 07:25	9	soft stool, slight
		16-May-89 09:33	8 / 10:26	9	disoriented, slight
					inactive, slight
		16-May-89 09:50	8 / 14:00	9	disoriented, slight
					hunched posture, slight
		16-May-89 09:54	9 / 07:19	9	soft stool, moderate
		16-May-89 09:58	9 / 10:37	9	disoriented, moderate
					inactive, slight
		16-May-89 10:04	9 / 14:01	9	disoriented, slight
					hunched posture, slight
		16-May-89 10:16	10 / 07:19	9	soft stool, moderate
		16-May-89 10:20	10 / 10:32	9	disoriented, slight
		16-May-89 10:23	10 / 14:25	9	disoriented, slight
					hunched posture, slight
		16-May-89 13:22	11 / 08:05	9	soft stool, slight
		16-May-89 13:26	11 / 11:38	9	soft stool, severe
					disoriented, moderate
					inactive, slight
					hunched posture, slight
					tremors, slight
		16-May-89 13:52	11 / 16:54	9	disoriented, slight
					hunched posture, slight
					tremors, moderate
		16-May-89 13:56	12 / 08:10	9	hunched posture, slight
					soft stool, moderate
		16-May-89 14:00	12 / 11:00	9	hunched posture, moderate
					disoriented, moderate

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008M

Data Listing by Animal

Study Start Date: 07-Feb-89

PRINTED: 03-Oct-89
Page: 8

SUB-ACUTE/

Cage #	Animal Sex/group	Date Entered	Time Data Was Taken	Study Day/time Oper	Clinical signs / Comments
3	89A00058	M/ 1/4	16-May-89	14:00	12 / 11:00 9 inactive, slight tremors, severe
			16-May-89	14:22	12 / 15:35 9 hunched posture, slight
			16-May-89	14:34	13 / 07:12 9 normal/no significant signs
			16-May-89	14:39	13 / 10:45 9 inactive, slight disoriented, moderate hunched posture, moderate tremors, severe
			16-May-89	14:45	13 / 14:50 9 disoriented, slight
			16-May-89	14:48	14 / 09:00 9 normal/no significant signs
			16-May-89	14:52	14 / 10:08 9 disoriented, slight inactive, slight hunched posture, slight
			16-May-89	14:56	14 / 14:30 9 disoriented, slight
			16-May-89	15:04	15 / 07:37 9 inactive, slight hunched posture, slight soft stool, moderate
			03-May-89	14:58	1 / 09:14 9 normal/no significant signs
			03-May-89	15:08	1 / 10:15 9 vomiting salivation, moderate hunched posture, moderate disoriented, slight
4	89A00003	M/ 2/1	03-May-89	15:21	1 / 14:33 9 hunched posture, slight
			03-May-89	15:26	2 / 09:10 9 disoriented, slight
			03-May-89	15:42	2 / 10:14 9 normal/no significant signs vomiting salivation, moderate hunched posture, moderate disoriented, slight
			03-May-89	15:50	2 / 14:58 9 tremors, moderate hunched posture, slight
			04-May-89	08:00	3 / 08:54 9 tremors, slight
			04-May-89	08:03	3 / 09:56 9 normal/no significant signs vomiting hunched posture, moderate

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
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Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008M

Data Listing by Animal

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SUB-ACUTE/

Cage #	Animal Sex/group	Date Entered	Time	Study Day/time	Oper	Clinical signs / Comments
4	89A00003	M/ 2/1				
		04-May-89	08:03	3 / 09:56	9	inactive, slight
		04-May-89	08:08	3 / 14:12	9	hunched posture, moderate
						inactive, slight
		04-May-89	08:14	4 / 08:42	9	normal/no significant signs
		04-May-89	08:26	4 / 09:43	9	vomiting
						salivation, moderate
						hunched posture, moderate
						disoriented, moderate
						tremors, slight
						inactive, moderate
		04-May-89	08:35	4 / 14:29	9	inactive, slight
		04-May-89	08:39	5 / 08:30	9	soft stool, slight
		04-May-89	08:44	5 / 11:16	9	vomiting
						salivation, moderate
						hunched posture, moderate
						tremors, slight
						inactive, moderate
		04-May-89	08:50	5 / 14:00	9	hunched posture, moderate
						tremors, slight
						inactive, slight
		04-May-89	09:00	6 / 08:20	9	normal/no significant signs
		04-May-89	09:05	6 / 10:43	9	vomiting
						salivation, moderate
						hunched posture, moderate
						disoriented, moderate
						tremors, moderate
						inactive, slight
		04-May-89	09:13	6 / 14:30	9	hunched posture, moderate
						disoriented, slight
						tremors, moderate
						inactive, slight
		04-May-89	09:20	7 / 08:30	9	normal/no significant signs
		04-May-89	09:25	7 / 09:35	9	vomiting
						salivation, moderate
						hunched posture, moderate

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Meses
Study Number: 88008M
Data Listing by Animal
Study Start Date: 07-Feb-89

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Page: 10

SUB-ACUTE/

Cage #	Animal Sex/group	Date Entered	Time Entered	Study Day/time	Oper Data was Taken	#	Clinical signs / Comments
4	89A00003	M/ 2/1	04-May-89	09:25	7 / 09:35	9	disoriented, slight tremors, moderate inactive, moderate increased resp depth, moderate hunched posture, slight disoriented, slight tremors, slight hunched posture, slight vomiting
		04-May-89	09:34		7 / 14:22	9	disoriented, slight tremors, moderate inactive, moderate increased resp depth, moderate hunched posture, slight disoriented, slight tremors, slight hunched posture, slight vomiting
		04-May-89	09:38		8 / 08:42	9	disoriented, slight tremors, moderate inactive, moderate increased resp depth, moderate hunched posture, slight disoriented, slight tremors, slight hunched posture, slight vomiting
		04-May-89	09:47		8 / 09:45	9	disoriented, slight tremors, moderate inactive, moderate increased resp depth, moderate hunched posture, slight disoriented, slight tremors, slight hunched posture, slight vomiting
		04-May-89	09:57		8 / 14:45	9	disoriented, slight tremors, moderate inactive, moderate increased resp depth, moderate hunched posture, slight disoriented, slight tremors, slight hunched posture, slight vomiting
		04-May-89	10:08		9 / 09:00	9	disoriented, slight tremors, moderate inactive, moderate increased resp depth, moderate hunched posture, slight disoriented, slight tremors, slight hunched posture, slight vomiting
		04-May-89	10:14		9 / 10:17	9	disoriented, slight tremors, moderate inactive, moderate increased resp depth, moderate hunched posture, slight disoriented, slight tremors, slight hunched posture, slight vomiting
		04-May-89	10:22		9 / 14:17	9	disoriented, slight tremors, moderate inactive, moderate increased resp depth, moderate hunched posture, slight disoriented, slight tremors, slight hunched posture, slight vomiting
		04-May-89	10:35		10 / 07:17	9	disoriented, slight tremors, moderate inactive, moderate increased resp depth, moderate hunched posture, slight disoriented, slight tremors, slight hunched posture, slight vomiting
		04-May-89	10:43		10 / 09:13	9	disoriented, slight tremors, moderate inactive, moderate increased resp depth, moderate hunched posture, slight disoriented, slight tremors, slight hunched posture, slight vomiting
		04-May-89	10:49		10 / 14:03	9	disoriented, slight tremors, moderate inactive, moderate increased resp depth, moderate hunched posture, slight disoriented, slight tremors, slight hunched posture, slight vomiting
		04-May-89	14:04		11 / 07:20	9	disoriented, slight tremors, moderate inactive, moderate increased resp depth, moderate hunched posture, slight disoriented, slight tremors, slight hunched posture, slight vomiting
		04-May-89	14:17		11 / 10:10	9	disoriented, slight tremors, moderate inactive, moderate increased resp depth, moderate hunched posture, slight disoriented, slight tremors, slight hunched posture, slight vomiting

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
 DIV OF RES SUPP, PATH SERV GP
 PRESIDIO OF SAN FRANCISCO, CA 94129
 DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008M

Data Listing by Animal

Study Start Date: 07-Feb-89

PRINTED: 03-Oct-89
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SUB-ACUTE/

Cage #	Animal Sex/group	Date Data was Entered	Time Data was Entered	Study Day/time	Oper Data was Taken	#	Clinical signs / Comments
4	89A00003	M/ 2/1	04-May-89	14:17	11 / 10:10	9	inactive, slight
			04-May-89	14:41	11 / 14:23	9	excessive thirst, moderate tremors, moderate inactive, slight
			04-May-89	15:02	12 / 08:50	9	hunched posture, slight
			04-May-89	15:07	12 / 11:15	9	normal/no significant signs
							vomiting
							salivation, severe
							inactive, moderate
			04-May-89	15:16	12 / 14:10	9	inactive, slight
			04-May-89	15:19	13 / 09:25	9	normal/no significant signs
			04-May-89	15:21	13 / 10:36	9	tremors, moderate
			04-May-89	15:26	13 / 14:00	9	excessive thirst, moderate
			04-May-89	15:29	14 / 08:19	9	lack of appetite, moderate
			04-May-89	15:40	14 / 11:10	9	normal/no significant signs
							salivation, slight
							excessive thirst, moderate
							lack of appetite, moderate
							lack of appetite, moderate
							tremors, slight
			25-May-89	12:33	1 / 08:53	4	normal/no significant signs
			24-May-89	16:47	1 / 09:54	4	disoriented, slight
							vomiting
							tremors, severe
			25-May-89	12:37	1 / 15:01	4	tremors, severe
			25-May-89	12:39	2 / 09:00	4	normal/no significant signs
			25-May-89	12:44	2 / 10:19	4	vomiting
							tremors, severe
							disoriented, moderate
			25-May-89	12:45	2 / 14:17	4	excessive thirst, moderate
			25-May-89	12:47	3 / 08:50	4	normal/no significant signs
			25-May-89	12:50	3 / 10:11	4	normal/no significant signs
							vomiting
							inactive, slight
							tremors, moderate

5 89A00009 M/ 2/2

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

PRINTED: 03-Oct-89
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Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008M

Data Listing by Animal

Study Start Date: 07-Feb-89

SUB-ACUTE/

Cage #	Animal Sex/group	Date Data was Entered	Time Data was Entered	Study Day/time Oper Data was Taken	#	Clinical signs / Comments
5	89A00009	M/ 2/2	25-May-89	12:50	3 / 10:11	4 disoriented, slight hunched posture, slight tremors, moderate normal/no significant signs vomiting, moderate disoriented, moderate excessive thirst, severe hunched posture, slight salivation, moderate tremors, moderate disoriented, moderate excessive thirst, severe hunched posture, slight salivation, moderate tremors, slight normal/no significant signs tremors, severe excessive thirst, severe hunched posture, moderate
			25-May-89	12:52	3 / 14:31	4
			25-May-89	12:54	4 / 08:35	4
			25-May-89	12:57	4 / 11:43	4
			25-May-89	12:59	4 / 14:00	4
			25-May-89	13:01	5 / 08:23	4
			25-May-89	13:03	5 / 11:05	4
			25-May-89	13:06	5 / 14:32	4
			25-May-89	13:07	6 / 09:00	4
			25-May-89	13:09	6 / 10:23	4
			25-May-89	13:11	6 / 14:27	4
			25-May-89	13:13	7 / 09:00	4
			25-May-89	13:18	7 / 10:13	4

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses
Study Number: 88008M
Data Listing by Animal
Study Start Date: 07-Feb-89

PRINTED: 03-Oct-89
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SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time Oper Data was Taken	#	Clinical signs / Comments
5	89A00009	M/ 2/2	25-May-89 13:18	7 / 10:13	4 excessive thirst, moderate salivation, moderate hunched posture, slight
		25-May-89 13:19	7 / 14:45	4 normal/no significant signs	
		25-May-89 13:20	8 / 09:31	4 normal/no significant signs	
		25-May-89 13:22	8 / 10:58	4 excessive thirst, moderate tremors, slight salivation, slight disoriented, slight	
		25-May-89 13:23	8 / 14:27	4 normal/no significant signs	
		25-May-89 13:24	9 / 07:27	4 normal/no significant signs	
		25-May-89 13:26	9 / 09:39	4 excessive thirst, moderate tremors, moderate salivation, slight hunched posture, slight	
		25-May-89 13:28	9 / 14:09	4 excessive thirst, moderate hunched posture, slight	
		25-May-89 13:29	10 / 07:25	4 normal/no significant signs	
		25-May-89 13:30	10 / 10:40	4 excessive thirst, severe tremors, slight salivation, moderate	
		25-May-89 13:32	10 / 14:28	4 tremors, slight disoriented, slight	
		25-May-89 13:38	11 / 14:00	4 normal/no significant signs	
		25-May-89 13:33	11 / 09:55	4 hunched posture, slight lack of appetite, moderate	
		25-May-89 13:35	11 / 12:12	4 lack of appetite, moderate excessive thirst, slight	
		25-May-89 13:39	12 / 09:30	4 lack of appetite, slight	
		25-May-89 13:40	12 / 11:28	4 excessive thirst, moderate salivation, slight	
		25-May-89 13:41	12 / 14:00	4 normal/no significant signs	
		25-May-89 13:43	13 / 08:15	4 lack of appetite, moderate	
		25-May-89 13:44	13 / 12:02	4 lack of appetite, moderate salivation, slight	

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008H

Data Listing by Animal

Study Start Date: 07-Feb-89

PRINTED: 03-Oct-89

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SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time Oper Data was Taken	#	Clinical signs / Comments
5	89A00009 M/ 2/2	25-May-89 13:44	13 / 12:02	4	excessive thirst, moderate
		25-May-89 13:45	13 / 14:10	4	lack of appetite, moderate
		25-May-89 13:46	14 / 07:44	4	lack of appetite, moderate
		25-May-89 13:48	14 / 09:29	4	excessive thirst, moderate
		25-May-89 13:49	14 / 14:32	4	excessive thirst, moderate
		25-May-89 13:50	15 / 07:08	4	normal/no significant signs
		11-May-89 14:34	1 / 09:30	9	normal/no significant signs
6	89A00047 M/ 2/3	11-May-89 14:38	1 / 10:49	9	vomiting
		11-May-89 14:43	1 / 14:46	9	hunched posture, slight
		11-May-89 14:46	2 / 07:20	9	hunched posture, slight
		11-May-89 14:50	2 / 10:41	9	soft stool, moderate
		11-May-89 14:57	2 / 14:11	9	vomiting
		11-May-89 15:07	3 / 07:15	9	hunched posture, moderate
		11-May-89 15:11	3 / 10:55	9	hunched posture, slight
		11-May-89 15:16	3 / 14:00	9	vomiting
		11-May-89 15:23	4 / 09:10	9	hunched posture, moderate
		11-May-89 15:28	4 / 10:43	9	inactive, moderate
		11-May-89 15:33	4 / 14:30	9	normal/no significant signs
		12-May-89 08:17	5 / 07:13	9	normal/no significant signs
		12-May-89 08:32	5 / 10:57	9	vomiting
		12-May-89 08:43	5 / 14:01	9	inactive, moderate
		12-May-89 08:46	6 / 07:29	9	excessive thirst, moderate
		12-May-89 08:57	6 / 11:02	9	normal/no significant signs
					soft stool, slight
					excessive thirst, slight
					soft stool, slight
					excessive thirst, moderate
					vomiting
					hunched posture, slight

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses
Study Number: 88008M
Data Listing by Animal
Study Start Date: 07-Feb-89

PRINTED: 03-Oct-89
Page: 15
SUB-ACUTE/

Cage #	Animal	Sex/Group	Date Data Entered	Time Data Entered	Study Day/Time Data Was Taken	Oper #	Clinical signs / Comments
6	89A00047	M/ 2/3	12-May-89	08:57	6 / 11:02	9	inactive, slight
			12-May-89	09:04	6 / 15:30	9	hunched posture, slight tremors, slight
			12-May-89	09:06	7 / 07:51	9	hunched posture, slight tremors, slight
			12-May-89	09:11	7 / 10:17	9	inactive, slight hunched posture, slight tremors, moderate
							vomiting
							excessive thirst, slight tremors, slight
			12-May-89	09:54	7 / 14:55	9	hunched posture, slight tremors, slight
			15-May-89	08:06	8 / 07:15	9	inactive, slight
			15-May-89	08:09	8 / 10:07	9	soft stool, moderate vomiting
							inactive, moderate
			15-May-89	08:18	8 / 14:53	9	hunched posture, moderate
			15-May-89	08:23	9 / 07:21	9	inactive, moderate
			15-May-89	08:32	9 / 10:04	9	soft stool, slight vomiting
							inactive, moderate
			15-May-89	08:49	9 / 14:00	9	hunched posture, moderate tremors, moderate
							inactive, slight
			15-May-89	09:08	10 / 07:22	9	hunched posture, slight tremors, moderate
			15-May-89	09:16	10 / 10:13	9	inactive, slight tremors, moderate
							inactive, slight tremors, slight
			15-May-89	09:22	10 / 14:07	9	hunched posture, moderate excessive thirst, moderate
							inactive, slight tremors, slight
							hunched posture, moderate

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses
Study Number: 88008M
Data Listing by Animal
Study Start Date: 07-Feb-89

PRINTED: 03-Oct-89
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SUB-ACUTE/

Cage #	Animal Sex/group Date and Number /Subgroup Date was Entered	Time Study Day/time Oper Data was Taken	#	Clinical signs / Comments
6	89A00047 M/ 2/3	15-May-89 09:33	11 / 07:27	9 inactive, slight tremors, slight soft stool, slight
	15-May-89 09:39	11 / 10:06	9	inactive, slight tremors, slight hunched posture, moderate vomiting
	15-May-89 09:45	11 / 14:25	9	excessive thirst, moderate inactive, slight hunched posture, slight
	15-May-89 09:50	12 / 08:00	9	soft stool, moderate
	15-May-89 09:54	12 / 11:03	9	inactive, slight hunched posture, moderate tremors, slight
	15-May-89 09:59	12 / 16:52	9	inactive, slight hunched posture, slight
	15-May-89 10:07	13 / 08:05	9	soft stool, slight tremors, moderate
	15-May-89 10:10	13 / 10:10	9	inactive, moderate hunched posture, moderate vomiting
	15-May-89 10:15	13 / 15:45	9	tremors, severe excessive thirst, severe salivation, moderate
	15-May-89 10:20	14 / 07:24	9	inactive, slight hunched posture, moderate tremors, moderate
	15-May-89 10:24	14 / 10:25	9	hunched posture, moderate tremors, moderate
	15-May-89 10:29	14 / 14:57	9	inactive, slight vomiting disoriented, slight

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008M

Data Listing by Animal

Study Start Date: 07-Feb-89

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SUB-ACUTE/

Cage #	Animal Sex/group Date and Number /Subgroup Date was Entered	Time Data was Entered	Study Day/Time Oper Data was Taken	#	Clinical signs / Comments
6	89A00047 M/ 2/3	15-May-89 10:29	14 / 14:57	9	hunched posture, moderate
		15-May-89 10:31	15 / 08:00	9	inactive, slight
7	89A00002 M/ 3/1	03-May-89 14:58	1 / 09:14	9	hunched posture, moderate
			1 / 10:15	9	normal/no significant signs
		03-May-89 15:12	1 / 10:15	9	vomiting
				9	inactive, slight
		03-May-89 15:21	1 / 14:34	9	inactive, slight
				9	normal/no significant signs
		03-May-89 15:38	2 / 09:14	9	vomiting
				9	inactive, moderate
		03-May-89 15:43	2 / 10:18	9	tremors, moderate
				9	inactive, moderate
		03-May-89 15:51	2 / 14:59	9	normal/no significant signs
				9	vomiting
		04-May-89 08:00	3 / 08:57	9	inactive, moderate
				9	tremors, slight
		04-May-89 08:03	3 / 09:57	9	vomiting
				9	inactive, slight
		04-May-89 08:09	3 / 14:14	9	tremors, moderate
				9	normal/no significant signs
		04-May-89 08:19	4 / 10:40	9	vomiting
				9	inactive, moderate
		04-May-89 08:27	4 / 09:41	9	vomiting
				9	inactive, slight
		04-May-89 08:36	4 / 14:29	9	tremors, slight
				9	tremors, slight
		04-May-89 08:40	5 / 08:30	9	vomiting
				9	inactive, moderate
		04-May-89 08:45	5 / 11:19	9	vomiting
				9	inactive, slight
		04-May-89 08:50	5 / 14:00	9	vomiting
				9	inactive, slight
		04-May-89 09:01	6 / 08:20	9	soft stool, slight
				9	vomiting
		04-May-89 09:05	6 / 10:43	9	vomiting
				9	inactive, moderate
		04-May-89 09:13	6 / 14:30	9	tremors, moderate
				9	inactive, slight
		04-May-89 09:20	7 / 08:50	9	soft stool, slight
				9	vomiting
		04-May-89 09:26	7 / 09:55	9	vomiting
				9	vomiting

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 86008H

Data Listing by Animal

Study Start Date: 07-Feb-89

PRINTED: 03-Oct-89
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SUB-ACUTE/

Cage #	Animal Sex/group Number /Subgroup	Date and Time Data was Entered	Study Day/time Data was Taken	Oper #	Clinical signs / Comments
7	89A00002	M/ 3/1	04-May-89 09:26	7 / 09:55	9 inactive, slight tremors, slight increased resp depth, slight
		04-May-89 09:35	7 / 14:23	9 inactive, slight	
		04-May-89 09:39	8 / 08:42	9 tremors, slight	
		04-May-89 09:48	8 / 09:49	9 tremors, slight inactive, slight vomiting	
		04-May-89 09:58	8 / 14:45	9 tremors, slight	
		04-May-89 10:08	9 / 09:03	9 tremors, slight	
		04-May-89 10:16	9 / 10:19	9 tremors, slight vomiting	
					inactive, slight increased resp depth, slight salivation, slight excessive thirst, moderate
		04-May-89 10:23	9 / 14:19	9 inactive, slight	
		04-May-89 10:36	10 / 07:19	9 inactive, slight	
		04-May-89 10:43	10 / 09:15	9 inactive, moderate tremors, moderate	
		04-May-89 10:50	10 / 14:04	9 inactive, moderate tremors, slight	
					lack of appetite, moderate
		04-May-89 14:07	11 / 07:21	9 inactive, moderate tremors, moderate	
					excessive thirst, moderate
		04-May-89 14:19	11 / 10:11	9 vomiting	
					inactive, moderate tremors, moderate
					excessive thirst, slight
		04-May-89 14:42	11 / 14:23	9 inactive, slight tremors, slight	
		04-May-89 15:04	12 / 09:15	9 inactive, moderate	
					lack of appetite, moderate
		04-May-89 15:10	12 / 11:25	9 inactive, moderate	

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008M

Data Listing by Animal

Study Start Date: 07-Feb-89

PRINTED: 03-Oct-89
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SUB-ACUTE/

Cage #	Animal Sex/group Date	Time Data was Entered	Study Day/time Data was Taken	Oper #	Clinical signs / Comments
7	89A00002 M/ 3/1	04-May-89 15:10	12 / 11:25	9	Lack of appetite, moderate
		04-May-89 15:16	12 / 14:10	9	inactive, severe
		04-May-89 15:19	13 / 09:25	9	lack of appetite, severe
		04-May-89 15:22	13 / 10:43	9	inactive, severe
	04-May-89	15:27	13 / 14:00	9	vomiting tremors, slight excessive thirst, moderate
		15:30	14 / 08:19	9	inactive, severe
		15:41	14 / 11:14	9	inactive, severe
		15:46	14 / 14:01	9	lack of appetite, severe
	04-May-89	15:50	15 / 06:45	9	inactive, slight tremors, slight
		14:34	1 / 09:30	9	normal/no significant signs
		14:39	1 / 10:51	9	vomiting salivation, moderate
		14:43			tremors, moderate
8	89A00045 M/ 3/3	14:43	1 / 14:45	9	inactive, slight
		14:47	2 / 07:20	9	hunched posture, moderate
		14:52	2 / 10:45	9	normal/no significant signs
		15:04	2 / 14:11	9	soft stool, slight
	11-May-89	15:07	3 / 07:15	9	vomiting salivation, moderate
		15:07			tremors, moderate
		15:07			inactive, moderate
		15:07			hunched posture, slight
	11-May-89	15:07			tremors, moderate
		15:07			soft stool, moderate
		15:07			
		15:07			

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008M

Data Listing by Animal

Study Start Date: 07-Feb-89

PRINTED: 03-Oct-89
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SUB-ACUTE /

Cage #	Animal Sex/group	Date a.	Time	Study Day/time	Oper	Clinical signs / Comments
#	Number /Subgroup	Date was	Entered	Data was Taken	#	
8	89A00045	M/ 3/3	11-May-89	15:12	3 / 10:55	9 vomiting salivation, moderate tremors, severe inactive, moderate hunched posture, moderate panting, slight soft stool, moderate vomiting salivation, slight tremors, moderate inactive, severe panting, slight tremors, moderate soft stool, slight tremors, slight soft stool, slight vomiting salivation, moderate inactive, moderate hunched posture, moderate panting, slight soft stool, moderate soft stool, moderate panting, slight salivation, moderate soft stool, moderate salivation, moderate vomiting tremors, moderate inactive, slight hunched posture, slight excessive thirst, slight vomiting soft stool, moderate increased resp depth, slight
			11-May-89	15:16	3 / 14:00	9
			11-May-89	15:23	4 / 09:10	9
			11-May-89	15:29	4 / 10:42	9
			11-May-89	15:34	4 / 14:30	9
			12-May-89	08:18	5 / 07:14	9
			12-May-89	08:34	5 / 11:01	9
			12-May-89	08:43	5 / 14:01	9
			12-May-89	08:47	6 / 07:30	9
			12-May-89	08:58	6 / 11:03	9
			12-May-89	09:04	6 / 15:30	9
			12-May-89	09:07	7 / 07:52	9

Raw Data Listings of Clinical Signs Without Masses
Study Number: 88008M
Data Listing by Animal
Study Start Date: 07-Feb-89

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SUB-ACUTE

Cage #	Animal Sex/ Subgroup	Date	Time Data was Entered	Study Day/Time Data was Taken	Operator	Clinical signs / Comments
8	89A00045	M	3/3	12-May-89 09:07	9	disoriented, slight
				12-May-89 09:12	9	soft stool, moderate
				7 / 07:52		increased resp depth, moderate
				7 / 10:19		hunched posture, moderate
						tremors, severe
						salivation, moderate
						vomiting
				12-May-89 09:55	9	disoriented, moderate
				15-May-89 08:06	9	soft stool, severe
				15-May-89 08:10	9	disoriented, moderate
				8 / 10:11		vomiting
						tremors, severe
						increased resp depth, moderate
						excessive thirst, moderate
				15-May-89 08:18	9	inactive, slight
				15-May-89 08:24	9	soft stool, slight
				15-May-89 08:33	9	disoriented, moderate
				9 / 10:07		vomiting
						increased resp depth, slight
						inactive, moderate
						salivation, severe
				15-May-89 08:50	9	disoriented, moderate
				9 / 14:00		increased resp depth, slight
						soft stool, severe
						tremors, moderate
				15-May-89 09:10	9	panting, moderate
				15-May-89 09:18	9	disoriented, moderate
				10 / 10:17		vomiting
						tremors, moderate
						increased resp depth, slight
						excessive thirst, slight
						inactive, moderate
						salivation, severe
				15-May-89 09:24	9	panting, slight
				10 / 14:08		hyperactive, moderate

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008M

Data Listing by Animal

Study Start Date: 07-Feb-89

PRINTED: 03-Oct-89
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SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time Data was Taken	Oper #	Clinical signs / Comments
8 89A00045	M/ 3/3	15-May-89 09:34	11 / 07:30	9	panting, moderate hyperactive, moderate soft stool, moderate disoriented, slight vomiting
		15-May-89 09:39	11 / 10:10	9	tremors, slight excessive thirst, slight inactive, slight salivation, moderate panting, slight hyperactive, slight disoriented, moderate vomiting
		15-May-89 09:46	11 / 14:27	9	tremors, slight increased resp depth, slight inactive, slight salivation, severe hunched posture, slight disoriented, slight soft stool, moderate disoriented, moderate vomiting
		15-May-89 09:50	12 / 08:00	9	tremors, moderate increased resp depth, moderate excessive thirst, severe inactive, moderate salivation, moderate hunched posture, moderate panting, slight hyperactive, slight hunched posture, slight panting, moderate
		15-May-89 09:55	12 / 11:15	9	tremors, moderate increased resp depth, moderate excessive thirst, severe inactive, moderate salivation, moderate hunched posture, moderate panting, slight hyperactive, slight hunched posture, slight panting, moderate
		15-May-89 09:59	12 / 16:52	9	tremors, moderate increased resp depth, moderate excessive thirst, severe inactive, moderate salivation, moderate hunched posture, moderate panting, slight hyperactive, slight hunched posture, slight panting, moderate
		15-May-89 10:07	13 / 08:05	9	tremors, moderate increased resp depth, moderate excessive thirst, severe inactive, moderate salivation, moderate hunched posture, moderate panting, slight hyperactive, slight hunched posture, slight panting, moderate
		15-May-89 10:11	13 / 10:18	9	tremors, moderate increased resp depth, moderate excessive thirst, severe inactive, moderate salivation, moderate hunched posture, moderate panting, slight hyperactive, slight hunched posture, slight panting, moderate
		15-May-89 10:16	13 / 15:46	9	tremors, moderate increased resp depth, moderate excessive thirst, severe inactive, moderate salivation, moderate hunched posture, moderate panting, slight hyperactive, slight hunched posture, slight panting, moderate
		15-May-89 10:20	14 / 07:25	9	tremors, moderate increased resp depth, moderate excessive thirst, severe inactive, moderate salivation, moderate hunched posture, moderate panting, slight hyperactive, slight hunched posture, slight panting, moderate

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008M

Data Listing by Animal

Study Start Date: 07-Feb-89

PRINTED: 03-Oct-89
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SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time Oper Data was Taken	#	Clinical signs / Comments
8	89A00045	M/ 3/3	15-May-89 10:20	14 / 07:25	9 excessive thirst, slight
			15-May-89 10:25	14 / 10:27	9 vomiting
					disoriented, slight
					inactive, slight
					excessive thirst, severe
					salivation, slight
		15-May-89 10:29	14 / 14:57	9 panting, slight	
		15-May-89 10:31	15 / 08:00	9 normal/no significant signs	
		15-May-89 14:17	1 / 07:25	9 normal/no significant signs	
		15-May-89 14:23	1 / 11:07	9 inactive, moderate	
					vomiting
					excessive thirst, moderate
		15-May-89 14:27	1 / 14:15	9 inactive, slight	
		15-May-89 14:53	2 / 07:18	9 soft stool, moderate	
		15-May-89 14:59	2 / 11:17	9 inactive, moderate	
					vomiting
					excessive thirst, moderate
		15-May-89 15:04	2 / 14:02	9 inactive, slight	
		15-May-89 15:12	3 / 09:15	9 soft stool, slight	
		15-May-89 15:18	3 / 11:04	9 vomiting	
					inactive, moderate
					excessive thirst, slight
					salivation, moderate
					disoriented, moderate
		15-May-89 15:36	3 / 14:30	9 inactive, slight	
		15-May-89 15:43	4 / 07:21	9 normal/no significant signs	
		15-May-89 15:48	4 / 11:24	9 inactive, moderate	
					vomiting
					excessive thirst, severe
					salivation, moderate
					disoriented, slight
		15-May-89 15:53	4 / 14:06	9 normal/no significant signs	
		16-May-89 08:04	5 / 07:26	9 soft stool, slight	
		16-May-89 08:08	5 / 11:21	9 vomiting	
					inactive, moderate

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008M

Data Listing by Animal

Study Start Date: 07-Feb-89

PRINTED: 03-Oct-89
Page: 24

SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time Oper Data was Taken	#	Clinical signs / Comments
9	89A00052	M/ 3/4	16-May-89 08:08	5 / 11:21	9 excessive thirst, moderate salivation, moderate
		16-May-89 08:12	5 / 15:23	9 inactive, slight	
		16-May-89 08:15	6 / 07:55	9 normal/no significant signs	
		16-May-89 08:19	6 / 10:38	9 inactive, moderate vomiting	
				9 excessive thirst, moderate salivation, moderate	
				9 disoriented, slight	
		16-May-89 08:23	6 / 14:50	9 normal/no significant signs	
		16-May-89 08:26	7 / 07:20	9 normal/no significant signs	
		16-May-89 08:30	7 / 10:34	9 inactive, moderate vomiting	
				9 excessive thirst, moderate salivation, slight	
				9 disoriented, moderate	
		16-May-89 08:35	7 / 14:54	9 normal/no significant signs	
		16-May-89 09:30	8 / 07:26	9 normal/no significant signs	
		16-May-89 09:36	8 / 10:28	9 soft stool, moderate vomiting	
				9 inactive, slight	
				9 excessive thirst, moderate salivation, severe	
				9 disoriented, slight	
		16-May-89 09:50	8 / 14:00	9 lack of appetite, severe	
		16-May-89 09:55	9 / 07:19	9 normal/no significant signs	
		16-May-89 09:59	9 / 10:41	9 vomiting	
				9 inactive, slight	
				9 excessive thirst, moderate salivation, slight	
				9 disoriented, moderate	
				9 lack of appetite, severe	
		16-May-89 10:04	9 / 14:01	9 normal/no significant signs	
		16-May-89 10:16	10 / 07:20	9 normal/no significant signs	
		16-May-89 10:20	10 / 10:34	9 vomiting	

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008M

Date Listing by Animal

Study Start Date: 07-Feb-89

PRINTED: 03-Oct-89
Page: 25

SUB-ACUTE/

Cage #	Animal Sex/group Number /Subgroup	Date and Date was Entered	Time Data was Entered	Study Day/time Oper Data was Taken	#	Clinical signs / Comments
9	89A00052	M/ 3/4	16-May-89	10:20	10 / 10:34	9 excessive thirst, moderate salivation, severe disoriented, slight
		16-May-89	10:23	10 / 14:25	9	normal/no significant signs
		16-May-89	13:22	11 / 08:05	9	normal/no significant signs
		16-May-89	13:27	11 / 11:40	9	vomiting
						inactive, slight
						excessive thirst, severe salivation, severe disoriented, moderate
		16-May-89	13:53	11 / 16:54	9	lack of appetite, moderate
		16-May-89	13:57	12 / 08:10	9	normal/no significant signs
		16-May-89	14:01	12 / 11:05	9	soft stool, slight vomiting
						inactive, slight
						excessive thirst, severe salivation, severe disoriented, moderate
		16-May-89	14:26	12 / 15:35	9	lack of appetite, moderate
		16-May-89	14:34	13 / 07:13	9	normal/no significant signs
						soft stool, moderate
		16-May-89	14:40	13 / 10:48	9	excessive thirst, slight vomiting
						inactive, slight
						excessive thirst, severe salivation, severe disoriented, moderate
		16-May-89	14:45	13 / 14:50	9	lack of appetite, moderate
		16-May-89	14:49	14 / 09:00	9	normal/no significant signs
		16-May-89	14:52	14 / 10:09	9	normal/no significant signs
						salivation, severe
						excessive thirst, severe vomiting
						inactive, slight
						disoriented, slight

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008M

Study Start Date: 07-Feb-89

PRINTED: 03-Oct-89
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SUB-ACUTE /

Cage #	Animal Number	Ex/group Date	Time Entered	Study Data Taken	Day/time Oper #	Clinical signs / Comments
9	89A00052	3/4	16-May-89	14:56	14 / 14:30	9 lack of appetite, severe
			16-May-89	15:05	15 / 07:38	9 normal/no significant signs
10	89A00018	M/ 4/2	05-May-89	14:51	1 / 09:00	9 normal/no significant signs
			05-May-89	14:55	1 / 10:00	9 vomiting
			05-May-89	15:03	1 / 15:03	9 hunched posture, slight
			05-May-89	15:09	2 / 09:00	9 normal/no significant signs
			05-May-89	15:15	2 / 10:32	9 soft stool, slight
			05-May-89	15:15	2 / 10:32	9 vomiting
			08-May-89	08:25	2 / 14:17	9 disoriented, slight
			08-May-89	08:29	3 / 08:50	9 disoriented, slight
			08-May-89	08:34	3 / 10:15	9 soft stool, slight
			08-May-89	08:34	3 / 10:15	9 vomiting
			08-May-89	08:39	3 / 14:31	9 disoriented, slight
			08-May-89	08:41	4 / 08:35	9 normal/no significant signs
			08-May-89	08:51	4 / 11:44	9 soft stool, moderate
			08-May-89	08:51	4 / 11:44	9 vomiting
			08-May-89	08:59	4 / 14:00	9 hunched posture, slight
			08-May-89	08:59	4 / 14:00	9 disoriented, moderate
			08-May-89	09:02	5 / 08:23	9 tremors, slight
			08-May-89	09:07	5 / 11:06	9 hunched posture, slight
			08-May-89	09:14	5 / 14:33	9 disoriented, slight
			08-May-89	09:20	6 / 09:00	9 disoriented, slight
			08-May-89	09:28	6 / 10:26	9 soft stool, slight
			08-May-89	09:28	6 / 10:26	9 vomiting
			08-May-89	09:43	6 / 14:27	9 hunched posture, slight
			08-May-89	09:48	7 / 09:00	9 disoriented, slight
			08-May-89	09:53	7 / 10:15	9 tremors, slight
			08-May-89	09:53	7 / 10:15	9 disoriented, slight
			08-May-89	09:53	7 / 10:15	9 soft stool, slight
			08-May-89	09:53	7 / 10:15	9 soft stool, moderate
			08-May-89	09:53	7 / 10:15	9 vomiting
			08-May-89	09:53	7 / 10:15	9 hunched posture, slight

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008M
Data Listing by Animal
Study Start Date: 07-Feb-89

PRINTED: 03-Oct-89
Page: 27

SUB-ACUTE/

Cage #	Animal Sex/group	Date Data Was Entered	Time Data Was Entered	Study Day/time Oper Data was Taken	#	Clinical signs / Comments
10	89A00018	M/ 4/2	08-May-89 09:53	7 / 10:15	9	disoriented, moderate tremors, moderate
		08-May-89 09:58	7 / 14:45	9	disoriented, slight	
		08-May-89 10:03	8 / 09:33	9	normal/no significant signs	
		08-May-89 10:09	8 / 11:02	9	vomiting	
					disoriented, slight	
		08-May-89 10:15	8 / 14:29	9	excessive thirst, moderate	
		08-May-89 10:43	9 / 07:30	9	normal/no significant signs	
					hunched posture, slight	
		08-May-89 10:49	9 / 09:41	9	tremors, slight	
					hunched posture, slight	
					tremors, slight	
					soft stool, slight	
		08-May-89 10:56	9 / 14:16	9	normal/no significant signs	
		08-May-89 14:01	10 / 07:30	9	hunched posture, slight	
					excessive thirst, slight	
		08-May-89 14:06	10 / 10:44	9	hunched posture, slight	
					excessive thirst, severe	
		08-May-89 14:10	10 / 14:29	9	hunched posture, slight	
					disoriented, slight	
		08-May-89 14:16	11 / 09:55	9	normal/no significant signs	
		08-May-89 14:19	11 / 12:18	9	excessive thirst, moderate	
					inactive, slight	
		08-May-89 14:29	11 / 14:00	9	normal/no significant signs	
		08-May-89 14:32	12 / 09:30	9	normal/no significant signs	
		08-May-89 14:35	12 / 11:34	9	normal/no significant signs	
		08-May-89 14:38	12 / 14:00	9	disoriented, slight	
					lack of appetite, moderate	
		08-May-89 14:40	13 / 08:15	9	disoriented, slight	
					lack of appetite, moderate	
		08-May-89 14:43	13 / 12:09	9	disoriented, slight	
					lack of appetite, moderate	
					excessive thirst, moderate	
		08-May-89 14:47	13 / 14:10	9	disoriented, slight	
		08-May-89 14:50	14 / 07:44	9	lack of appetite, moderate	

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008M

Data Listing by Animal

Study Start Date: 07-Feb-89

PRINTED: 03-Oct-89
Page: 28

SUB-ACUTE/

Cage #	Animal #	Subgroup	Date	Time	Study Day	Time Oper	Clinical signs / Comments
#			Data was Entered	Data was Taken	#		
10	89A00018	M / 4/2	08-May-89	14:53	14 / 09:35	9	excessive thirst, moderate disoriented, slight vomiting
			08-May-89	14:58	14 / 14:37	9	normal/no significant signs
			08-May-89	15:01	15 / 07:08	9	normal/no significant signs
			11-May-89	14:34	1 / 09:30	9	normal/no significant signs
			11-May-89	14:39	1 / 10:54	9	excessive thirst, moderate
			11-May-89	14:43	1 / 14:45	9	normal/no significant signs
			11-May-89	14:47	2 / 07:21	9	soft stool, slight
			11-May-89	14:53	2 / 10:45	9	vomiting disoriented, slight excessive thirst, slight
			11-May-89	15:04	2 / 14:11	9	normal/no significant signs
			11-May-89	15:08	3 / 07:15	9	soft stool, slight
			11-May-89	15:12	3 / 11:00	9	disoriented, moderate
			11-May-89	15:17	3 / 14:00	9	disoriented, slight
			11-May-89	15:24	4 / 09:10	9	soft stool, slight
			11-May-89	15:30	4 / 10:47	9	excessive thirst, moderate disoriented, moderate vomiting
			11-May-89	15:34	4 / 14:30	9	disoriented, slight
			12-May-89	08:18	5 / 07:14	9	normal/no significant signs
			12-May-89	08:35	5 / 11:04	9	excessive thirst, moderate disoriented, slight vomiting
			12-May-89	08:44	5 / 14:02	9	normal/no significant signs
			12-May-89	08:47	6 / 07:30	9	soft stool, moderate
			12-May-89	08:59	6 / 11:04	9	excessive thirst, moderate
			12-May-89	09:04	6 / 15:31	9	normal/no significant signs
			12-May-89	09:07	7 / 07:52	9	normal/no significant signs
			12-May-89	09:13	7 / 10:21	9	excessive thirst, moderate soft stool, moderate disoriented, slight
			12-May-89	10:11	7 / 14:55	9	normal/no significant signs
			15-May-89	08:06	8 / 07:16	9	normal/no significant signs

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008M

Data Listing by Animal

Study Start Date: 07-Feb-89

PRINTED: 03-Oct-89
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SU9-ACUTE/

Cage #	Animal Sex/group	Date Entered	Time Entered	Study Date	Time Oper	Clinical signs / Comments
11	89A00048 M / 3	15-May-89	08:10	8 / 10:14	9	disoriented, moderate vomiting
		15-May-89	08:19	8 / 14:54	9	normal/no significant signs
		15-May-89	08:24	9 / 07:22	9	soft stool, slight
		15-May-89	08:35	9 / 10:09	9	normal/no significant signs
		15-May-89	08:50	9 / 14:00	9	normal/no significant signs
		15-May-89	09:10	10 / 07:22	9	normal/no significant signs
		15-May-89	09:18	10 / 10:17	9	disoriented, slight inactive, slight
		15-May-89	09:24	10 / 14:09	9	normal/no significant signs
		15-May-89	09:34	11 / 07:31	9	soft stool, slight
		15-May-89	09:40	11 / 10:11	9	inactive, slight
		15-May-89	09:46	11 / 14:28	9	excessive thirst, moderate
		15-May-89	09:50	12 / 08:00	9	normal/no significant signs
		15-May-89	09:55	12 / 11:16	9	soft stool, slight vomiting
						disoriented, moderate
						excessive thirst, moderate
		15-May-89	09:59	12 / 16:52	9	normal/no significant signs
		15-May-89	10:07	13 / 08:05	9	normal/no significant signs
		15-May-89	10:11	13 / 10:20	9	disoriented, slight
		15-May-89	10:16	13 / 15:47	9	normal/no significant signs
		15-May-89	10:21	14 / 07:25	9	soft stool, moderate
		15-May-89	10:25	14 / 13:29	9	excessive thirst, slight disoriented, slight
						inactive, slight
		15-May-89	10:29	14 / 14:58	9	normal/no significant signs
		15-May-89	10:31	15 / 08:00	9	normal/no significant signs
		15-May-89	14:18	1 / 07:25	9	normal/no significant signs
		15-May-89	14:23	1 / 11:07	9	vomiting
						disoriented, moderate
						inactive, slight
						hunched posture, moderate
		15-May-89	14:28	1 / 14:17	9	disoriented, slight
		15-May-89	14:54	2 / 07:19	9	soft stool, moderate
12	89A00056 M / 4/4					

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

New Data Listings of Clinical Signs Without Masses

Study Number: 88008M

Data Listing by Animal

Study Start Date: 07-Feb-89

PRINTED: 03-Oct-89
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SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time Oper Data was Taken	#	Clinical signs / Comments
12	89A00056	M / 4/4	15-May-89	15:00	2 / 11:18 9 vomiting disoriented, moderate inactive, slight hunched posture, moderate
		15-May-89	15:04	2 / 14:02 9	disoriented, slight
		15-May-89	15:12	3 / 09:15 9	hunched posture, moderate
		15-May-89	15:25	3 / 11:05 9	soft stool, slight vomiting disoriented, moderate inactive, slight hunched posture, slight
		15-May-89	15:36	3 / 14:30 9	hunched posture, slight soft stool, moderate
		15-May-89	15:44	4 / 07:21 9	hunched posture, slight soft stool, moderate
		15-May-89	15:49	4 / 11:26 9	disoriented, slight inactive, moderate hunched posture, slight excessive thirst, slight
		15-May-89	15:54	4 / 14:06 9	disoriented, slight
		16-May-89	08:05	5 / 07:26 9	soft stool, slight excessive thirst, moderate panting, moderate
		16-May-89	08:09	5 / 11:23 9	disoriented, slight excessive thirst, slight
		16-May-89	08:12	5 / 15:24 9	normal/no significant signs
		16-May-89	08:16	6 / 07:56 9	soft stool, moderate panting, moderate disoriented, moderate inactive, slight
		16-May-89	08:19	6 / 10:43 9	hunched posture, slight normal/no significant signs
		16-May-89	08:23	6 / 14:50 9	soft stool, slight
		16-May-89	08:26	7 / 07:21 9	disoriented, moderate inactive, slight hunched posture, slight
		16-May-89	08:31	7 / 10:36 9	

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008M

Date Listing by Animal

Study Start Date: 07-Feb-89

PRINTED: 03-Oct-89
Page: 31

SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/Time Oper Data was Taken	#	Clinical signs / Comments
12	89A00056	M / 4/4			
		16-May-89 08:36	7 / 14:52	9	inactive, slight
		16-May-89 09:31	8 / 07:26	9	soft stool, slight panting, moderate vomiting
		16-May-89 09:41	8 / 10:31	9	disoriented, moderate
		16-May-89 09:50	8 / 14:05	9	disoriented, moderate
		16-May-89 09:55	9 / 07:19	9	disoriented, slight
		16-May-89 09:59	9 / 10:42	9	panting, moderate disoriented, moderate
		16-May-89 10:05	9 / 14:03	9	panting, moderate inactive, slight
					disoriented, moderate
					panting, moderate hyperactive, moderate
		16-May-89 10:17	10 / 07:21	9	pacing, moderate
					panting, moderate hyperactive, moderate
		16-May-89 10:21	10 / 10:37	9	pacing, moderate soft stool, moderate
					panting, moderate hyperactive, slight
					pacing, moderate
		16-May-89 10:24	10 / 14:26	9	disoriented, moderate
					panting, moderate disoriented, slight
		16-May-89 13:22	11 / 08:05	9	inactive, slight
					disoriented, slight
		16-May-89 13:29	11 / 11:42	9	soft stool, slight
					disoriented, moderate
					pacing, slight
		16-May-89 13:53	11 / 16:52	9	congested, moderate
					disoriented, slight
		16-May-89 13:57	12 / 08:10	9	inactive, slight
					disoriented, slight
					soft stool, slight

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Messes

Study Number: 88008M

Data Listing by Animal

Study Start Date: 07-Feb-89

PRINTED: 03-Oct-89
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SUB-ACUTE/

Cage #	Animal Sex/group	Date Entered	Time Entered	Study Day	Time Oper	Clinical signs / Comments
#	Number /Subgroup	Date	Time	Data	Was Taken	#
12	89A00056	M/ 4/4	16-May-89	13:57	12 / 08:10	9 panting, moderate congested, slight
			16-May-89	14:10	12 / 11:15	9 disoriented, moderate inactive, slight
			16-May-89	14:27	12 / 15:36	9 disoriented, slight hyperactive, slight
			16-May-89	14:35	13 / 07:15	9 pacing, slight hyperactive, slight
						9 pacing, slight soft stool, slight
			16-May-89	14:40	13 / 10:50	9 panting, moderate disoriented, moderate
			16-May-89	14:46	13 / 14:27	9 inactive, slight panting, moderate
						9 hyperactive, slight pacing, slight
			16-May-89	14:49	14 / 09:06	9 panting, severe hyperactive, slight
			16-May-89	14:53	14 / 10:14	9 congested, slight disoriented, slight
			16-May-89	14:57	14 / 14:30	9 hunched posture, slight disoriented, moderate
						9 panting, moderate hyperactive, severe
			16-May-89	15:05	15 / 07:39	9 pacing, severe panting, moderate
						9 hyperactive, moderate soft stool, moderate
13	89A00004	M/ 5/1	03-May-89	14:59	1 / 09:22	9 normal/no significant signs
			03-May-89	15:14	1 / 10:23	9 vomiting salivation, moderate
						9 tremors, moderate
			13-May-89	15:22	1 / 14:33	9 inactive, moderate
			3-May-89	15:38	2 / 09:19	9 normal/no significant signs

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses
Study Number: 88008M
Data Listing by Animal
Study Start Date: 07-Feb-89

PRINTED: 03-Oct-89
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SUB-ACUTE/

Cage #	Animal Sex/group Date	and Time Study Day/time Oper	Raw Data Listings of Clinical Signs Without Masses	Clinical signs / Comments
#	Number /Subgroup	Data was Entered	Data was Taken	#
13	89A00004	M/ 5/1	03-May-89 15:44	2 / 10:20 9 vomiting
				salivation, severe
				inactive, moderate
				hunched posture, slight
				normal/no significant signs
				vomiting
				salivation, moderate
				tremors, moderate
				inactive, slight
				hunched posture, moderate
				normal/no significant signs
				soft stool, moderate
				vomiting
				salivation, slight
				tremors, moderate
				inactive, slight
				hunched posture, moderate
				tremors, slight
				soft stool, moderate
				vomiting
				salivation, moderate
				tremors, moderate
				inactive, slight
				hunched posture, slight
				tremors, slight
				soft stool, slight
				vomiting
				salivation, severe
				tremors, moderate
				inactive, slight
				hunched posture, slight
				normal/no significant signs
				tremors, slight
				tremors, moderate
				vomiting

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008M

Data Listing by Animal

Study Start Date: 07-Feb-89

PRINTED: 03-Oct-89
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SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time Oper Data was Taken	#	Clinical signs / Comments
13	89A00004	M/ 5/1	04-May-89 09:28	7 / 10:01	9 salivation, slight inactive, slight hunched posture, slight disoriented, slight tremors, slight tremors, slight tremors, moderate vomiting salivation, moderate inactive, slight hunched posture, slight soft stool, slight disoriented, slight tremors, slight normal/no significant signs vomiting salivation, moderate tremors, moderate inactive, slight excessive thirst, moderate normal/no significant signs vomiting salivation, moderate tremors, moderate inactive, slight hunched posture, slight excessive thirst, slight normal/no significant signs salivation, slight tremors, slight inactive, slight hunched posture, slight soft stool, moderate disoriented, slight
		04-May-89 09:35	7 / 14:23	9	
		04-May-89 09:39	8 / 08:42	9	
		04-May-89 09:50	8 / 09:51	9	
		04-May-89 09:59	8 / 14:45	9	
		04-May-89 10:09	9 / 09:15	9	
		04-May-89 10:17	9 / 10:21	9	
		04-May-89 10:23	9 / 14:20	9	
		04-May-89 10:36	10 / 07:20	9	
		04-May-89 10:45	10 / 09:20	9	
		04-May-89 10:51	10 / 14:05	9	
		04-May-89 14:09	11 / 07:22	9	
		04-May-89 14:21	11 / 10:18	9	

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008M

Data Listing by Animal

Study Start Date: 07-Feb-89

PRINTED: 03-Oct-89
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SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time	Oper Data was Taken	#	Clinical signs / Comments
13	89A00004	M/ 5/1	04-May-89 14:21	11 / 10:18	9	excessive thirst, severe
			04-May-89 14:42	11 / 14:23	9	normal/no significant signs
			04-May-89 15:04	12 / 09:50	9	normal/no significant signs
			04-May-89 15:11	12 / 11:30	9	salivation, moderate tremors, moderate inactive, moderate excessive thirst, severe
			04-May-89 15:17	12 / 14:10	9	excessive thirst, slight
			04-May-89 15:19	13 / 09:25	9	normal/no significant signs
			04-May-89 15:23	13 / 10:53	9	excessive thirst, moderate
			04-May-89 15:27	13 / 14:00	9	normal/no significant signs
			04-May-89 15:30	14 / 08:19	9	normal/no significant signs
			04-May-89 15:42	14 / 11:23	9	inactive, slight excessive thirst, severe
			04-May-89 15:46	14 / 14:01	9	inactive, slight
			04-May-89 15:50	15 / 06:45	9	soft stool, slight
			05-May-89 14:51	1 / 09:00	9	normal/no significant signs
			05-May-89 14:56	1 / 10:01	9	vomiting salivation, severe hunched posture, moderate
			05-May-89 15:04	1 / 15:04	9	vomiting
			05-May-89 15:09	2 / 09:00	9	soft stool, moderate
			05-May-89 15:17	2 / 10:24	9	vomiting salivation, moderate hunched posture, moderate
			08-May-89 08:27	2 / 14:18	9	increased resp depth, slight soft stool, moderate hunched posture, slight tremors, moderate
			08-May-89 08:30	3 / 08:50	9	soft stool, slight
			08-May-89 08:35	3 / 10:19	9	vomiting hunched posture, moderate increased resp depth, moderate tremors, severe
			08-May-89 08:39	3 / 14:32	9	hunched posture, slight

14 89A00011 M/ 5/2

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
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PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008M

Data Listing by Animal

Study Start Date: 07-Feb-89

PRINTED: 03-Oct-89
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SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time Oper Data was Taken	#	Clinical signs / Comments
14	89A00011	M/ 5/2			
		08-May-89 08:39	3 / 14:32	9	Increased resp depth, slight
		08-May-89 08:42	4 / 08:35	9	soft stool, moderate
		08-May-89 08:52	4 / 11:49	9	vomiting
					hunched posture, moderate
					Increased resp depth, slight
					tremors, moderate
		08-May-89 09:00	4 / 14:00	9	soft stool, slight
					Increased resp depth, moderate
		08-May-89 09:03	5 / 08:24	9	normal/no significant signs
		08-May-89 09:09	5 / 11:11	9	vomiting
					hunched posture, moderate
					Increased resp depth, slight
					excessive thirst, moderate
					inactive, slight
		08-May-89 09:16	5 / 14:34	9	hunched posture, slight
					inactive, slight
					tremors, slight
		08-May-89 09:20	6 / 09:00	9	normal/no significant signs
		08-May-89 09:36	6 / 10:30	9	vomiting
					salivation, moderate
					hunched posture, slight
					Increased resp depth, slight
					tremors, slight
					inactive, slight
		08-May-89 09:45	6 / 14:28	9	hunched posture, slight
					tremors, moderate
					soft stool, moderate
		08-May-89 09:48	7 / 09:00	9	normal/no significant signs
		08-May-89 09:55	7 / 10:21	9	vomiting
					salivation, slight
					hunched posture, moderate
					tremors, moderate
					inactive, moderate
					disoriented, slight
		08-May-89 09:59	7 / 14:45	9	hunched posture, slight

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008M

Date Listing by Animal

Study Start Date: 07-Feb-89

PRINTED: 03-Oct-89
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SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time Oper Data was Taken	#	Clinical signs / Comments
14	89A00011	M/ 5/2	08-May-89 14:35	12 / 11:43	9 excessive thirst, slight
			08-May-89 14:38	12 / 14:00	9 inactive, slight
			08-May-89 14:41	13 / 08:15	9 lack of appetite, slight
			08-May-89 14:44	13 / 12:15	9 lack of appetite, slight
					9 excessive thirst, moderate
			08-May-89 14:47	13 / 14:10	9 salivation, moderate
					9 lack of appetite, moderate
			08-May-89 14:50	14 / 07:44	9 excessive thirst, moderate
			08-May-89 14:55	14 / 09:39	9 lack of appetite, moderate
					9 hunched posture, slight
					9 salivation, moderate
					9 vomiting
			08-May-89 14:59	14 / 14:39	9 increased resp depth, slight
					9 salivation, severe
			08-May-89 15:01	15 / 07:08	9 tremors, moderate
			11-May-89 14:35	1 / 09:30	9 normal/no significant signs
			11-May-89 14:39	1 / 10:58	9 normal/no significant signs
					9 vomiting
			11-May-89 14:43	1 / 14:46	9 inactive, moderate
			11-May-89 14:47	2 / 07:23	9 normal/no significant signs
			11-May-89 14:54	2 / 10:49	9 normal/no significant signs
					9 inactive, slight
			11-May-89 15:04	2 / 14:11	9 excessive thirst, slight
			11-May-89 15:08	3 / 07:15	9 normal/no significant signs
			11-May-89 15:13	3 / 11:00	9 normal/no significant signs
					9 vomiting
					9 inactive, slight
					9 excessive thirst, moderate
			11-May-89 15:17	3 / 14:00	9 salivation, moderate
			11-May-89 15:24	4 / 09:10	9 normal/no significant signs
			11-May-89 15:30	4 / 10:48	9 normal/no significant signs
					9 vomiting
					9 inactive, slight
			11-May-89 15:34	4 / 14:30	9 disoriented, moderate
			12-May-89 08:18	5 / 07:15	9 normal/no significant signs
					9 normal/no significant signs

15 89A00046 M/ 5/3

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008M

Data Listing by Animal

Study Start Date: 07-Feb-89

PRINTED: 03-Oct-89
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SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data Was Entered	Study Day/time	Oper #	Clinical signs / Comments	
15	89A00046	M/ 5/3	12-May-89 08:36	5 / 11:07	9	inactive, moderate excessive thirst, moderate salivation, slight
		12-May-89 08:44	5 / 14:03	9	normal/no significant signs	
		12-May-89 08:48	6 / 07:31	9	normal/no significant signs	
		12-May-89 09:00	6 / 11:06	9	inactive, slight excessive thirst, slight disoriented, slight	
		12-May-89 09:05	6 / 15:32	9	normal/no significant signs	
		12-May-89 09:08	7 / 07:52	9	normal/no significant signs	
		12-May-89 09:13	7 / 10:24	9	inactive, slight excessive thirst, slight disoriented, moderate	
		12-May-89 10:11	7 / 14:55	9	normal/no significant signs	
		15-May-89 08:06	8 / 07:17	9	normal/no significant signs	
		15-May-89 08:12	8 / 10:16	9	vomiting disoriented, slight inactive, slight	
		15-May-89 08:19	8 / 14:54	9	inactive, severe	
		15-May-89 08:26	9 / 07:22	9	inactive, slight hunched posture, slight	
		15-May-89 08:36	9 / 10:13	9	inactive, slight hunched posture, slight disoriented, moderate tremors, moderate	
		15-May-89 08:51	9 / 14:00	9	inactive, slight hunched posture, slight	
		15-May-89 09:10	10 / 07:22	9	hunched posture, slight	
		15-May-89 09:19	10 / 10:25	9	hunched posture, moderate disoriented, slight inactive, slight	
		15-May-89 09:24	10 / 14:08	9	increased resp depth, slight	
		15-May-89 09:34	11 / 07:32	9	normal/no significant signs	
		15-May-89 09:41	11 / 10:16	9	normal/no significant signs disoriented, slight	

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 8808M

Data Listing by Animal

Study Start Date: 07-Feb-89

PRINTED: 03-Oct-89
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SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time Oper Data was Taken	#	Clinical signs / Comments	
15	89A00046	M/ 5/3	15 May-89	09:41	11 / 10:16	9 inactive, moderate hunched posture, moderate tremors, slight
			15-May-89	09:46	11 / 14:29	9 normal/no significant signs
			15-May-89	09:50	12 / 08:00	9 normal/no significant signs
			15-May-89	09:56	12 / 11:21	9 disoriented, moderate inactive, moderate hunched posture, slight
		15-May-89	10:00	12 / 16:52	9 disoriented, slight	
		15-May-89	10:07	13 / 08:05	9 normal/no significant signs	
		15-May-89	10:12	13 / 10:30	9 disoriented, slight inactive, slight hunched posture, slight excessive thirst, moderate	
		15-May-89	10:17	13 / 15:47	9 disoriented, slight tremors, slight	
		15-May-89	10:21	14 / 07:26	9 disoriented, slight	
		15-May-89	10:26	14 / 10:32	9 disoriented, slight tremors, moderate excessive thirst, moderate	
16	89A0007	M/ 6/1	15-May-89	10:29	14 / 14:59	9 inactive, moderate
			15-May-89	10:31	15 / 08:00	9 inactive, slight
			03-May-89	14:59	1 / 09:24	9 disoriented, slight
			03-May-89	15:16	1 / 10:25	9 normal/no significant signs vomiting
		03-May-89	15:22		9 hunched posture, moderate salivation, moderate	
		03-May-89	15:39	1 / 14:34	9 disoriented, moderate	
		03-May-89	15:45	2 / 09:24	9 hunched posture, slight	
		03-May-89	15:52	2 / 10:25	9 normal/no significant signs vomiting	
		03-May-89	15:52		9 hunched posture, moderate disoriented, moderate	
		04-May-89	08:01	2 / 15:00	9 hunched posture, slight	
		3 / 08:54	9 normal/no significant signs			

16 89A00007 M/ 6/1

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

PRINTED: 03-Oct-89

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Study Number: 88008M

Data Listing by Animal

SUB-ACUTE/

Study Start Date: 07-Feb-89

Cage #	Animal Sex/group	Date Data was Entered	Time Data was Taken	Study Day/time Oper	Clinical signs / Comments
16	89A00007	M / 6/1	04-May-89 08:06	3 / 10:04	9 vomiting hunched posture, moderate disoriented, moderate
	04-May-89	08:12	3 / 14:14	9	normal/no significant signs
	04-May-89	08:20	4 / 08:45	9	normal/no significant signs
	04-May-89	08:30	4 / 09:50	9	vomiting hunched posture, slight salivation, moderate
	04-May-89	08:37	4 / 14:30	9	disoriented, moderate
	04-May-89	08:41	5 / 08:30	9	normal/no significant signs
	04-May-89	08:47	5 / 11:23	9	soft stool, moderate vomiting hunched posture, moderate
	04-May-89	08:52	5 / 14:00	9	salivation, moderate tremors, slight hunched posture, slight
	04-May-89	09:02	6 / 08:20	9	tremors, slight
	04-May-89	09:09	6 / 10:48	9	soft stool, slight vomiting hunched posture, slight
	04-May-89	09:14	6 / 14:30	9	salivation, moderate disoriented, slight tremors, slight
	04-May-89	09:21	7 / 09:00	9	excessive thirst, severe hunched posture, slight
	04-May-89	09:29	7 / 10:02	9	soft stool, slight vomiting hunched posture, moderate
	04-May-89	09:36	7 / 14:23	9	disoriented, slight tremors, moderate excessive thirst, severe
	04-May-89	09:41	8 / 08:42	9	inactive, slight hunched posture, slight tremors, slight

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses
Study Number: 88008M
Data Listing by Animal
Study Start Date: 07-Feb-89

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SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/Time Oper Data was Taken	#	Clinical signs / Comments
16	89A00007	M/ 6/1			
		04-May-89 09:41	8 / 08:42	9	soft stool, slight
		04-May-89 09:52	8 / 09:56	9	tremors, moderate
					soft stool, slight
					vomiting
					hunched posture, slight
					salivation, moderate
					disoriented, moderate
					excessive thirst, moderate
					inactive, slight
		04-May-89 09:59	8 / 14:45	9	hunched posture, slight
		04-May-89 10:10	9 / 09:20	9	salivation, slight
					soft stool, slight
		04-May-89 10:19	9 / 10:37	9	salivation, slight
					vomiting
					hunched posture, slight
					tremors, slight
					excessive thirst, moderate
					inactive, slight
		04-May-89 10:24	9 / 14:20	9	hunched posture, slight
		04-May-89 10:36	10 / 07:21	9	normal/no significant signs
		04-May-89 10:47	10 / 09:22	9	hunched posture, moderate
					salivation, slight
					disoriented, moderate
					soft stool, moderate
					tremors, moderate
					excessive thirst, moderate
					inactive, slight
		04-May-89 10:52	10 / 14:06	9	excessive thirst, slight
		04-May-89 14:09	11 / 07:23	9	normal/no significant signs
		04-May-89 14:33	11 / 10:22	9	vomiting
					hunched posture, moderate
					salivation, slight
					disoriented, slight
					tremors, slight
					excessive thirst, severe

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
 DIV OF RES SUPP, PATH SERV GP
 PRESIDIO OF SAN FRANCISCO, CA 94129
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Raw Data Listings of Clinical Signs Without Masses
 Study Number: 88008M
 Data Listing by Animal
 Study Start Date: 07-Feb-89

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SUB-ACUTE/

Cage #	Animal Sex/group	Date Data was Entered	Time Data was Entered	Study Day/time	Oper Data was Taken	#	Clinical signs / Comments
16	89A00007	M/ 6/1	04-May-89	14:43	11 / 14:23	9	hunched posture, slight
			04-May-89	15:04	12 / 09:50	9	normal/no significant signs
			04-May-89	15:12	12 / 11:35	9	salivation, slight
							excessive thirst, moderate
			04-May-89	15:17	12 / 14:10	9	normal/no significant signs
			04-May-89	15:19	13 / 09:25	9	normal/no significant signs
			04-May-89	15:24	13 / 10:58	9	salivation, slight
							excessive thirst, moderate
			04-May-89	15:27	13 / 14:00	9	normal/no significant signs
			04-May-89	15:30	14 / 08:19	9	normal/no significant signs
			04-May-89	15:42	14 / 11:28	9	salivation, slight
							inactive, moderate
17	89A00050	M/ 6/3	04-May-89	15:46	14 / 14:01	9	excessive thirst, severe
			04-May-89	15:50	15 / 06:45	9	normal/no significant signs
			11-May-89	14:35	1 / 09:30	9	normal/no significant signs
			11-May-89	14:40	1 / 10:59	9	excessive thirst, slight
							tremors, moderate
							inactive, moderate
							salivation, slight
			11-May-89	14:44	1 / 14:52	9	tremors, slight
			11-May-89	14:47	2 / 07:25	9	normal/no significant signs
			11-May-89	14:54	2 / 10:51	9	excessive thirst, moderate
							tremors, severe
							inactive, moderate
11-May-89							vomiting
							hunched posture, moderate
			11-May-89	15:05	2 / 14:14	9	inactive, slight
							hunched posture, slight
			11-May-89	15:08	3 / 07:16	9	tremors, slight
			11-May-89	15:14	3 / 11:05	9	tremors, moderate
11-May-89							excessive thirst, slight
							inactive, moderate
							vomiting
11-May-89							hunched posture, moderate

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
 DIV OF RES SUPP, PATH SERV GP
 PRESIDIO OF SAN FRANCISCO, CA 94129
 DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses
 Study Number: 88008M
 Data Listing by Animal
 Study Start Date: 07-Feb-89

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 SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/Time Oper Data was Taken	#	Clinical signs / Comments
17	89A00050	M/ 6/3	11-May-89	15:18	3 / 14:01 9 tremors, moderate inactive, slight hunched posture, slight tremors, slight vomiting hunched posture, slight tremors, severe excessive thirst, moderate tremors, moderate inactive, slight hunched posture, slight tremors, moderate hunched posture, slight tremors, slight hunched posture, slight excessive thirst, moderate
			11-May-89	15:24	4 / 09:10 9 tremors, moderate hunched posture, slight tremors, slight vomiting hunched posture, slight tremors, severe excessive thirst, moderate tremors, moderate inactive, slight hunched posture, slight tremors, moderate hunched posture, slight tremors, slight hunched posture, slight excessive thirst, moderate
			11-May-89	15:31	4 / 10:51 9 tremors, moderate hunched posture, slight tremors, slight hunched posture, slight excessive thirst, moderate tremors, moderate inactive, slight hunched posture, slight tremors, moderate hunched posture, slight tremors, slight hunched posture, slight excessive thirst, moderate
			11-May-89	15:35	4 / 14:30 9 tremors, moderate hunched posture, slight tremors, slight hunched posture, slight excessive thirst, moderate tremors, moderate inactive, slight hunched posture, slight tremors, moderate hunched posture, slight tremors, slight hunched posture, slight excessive thirst, moderate
			12-May-89	08:30	5 / 07:16 9 tremors, moderate hunched posture, slight tremors, slight hunched posture, slight excessive thirst, moderate tremors, moderate inactive, slight hunched posture, slight tremors, moderate hunched posture, slight tremors, slight hunched posture, slight excessive thirst, moderate
			12-May-89	08:37	5 / 11:09 9 tremors, moderate hunched posture, slight tremors, slight hunched posture, slight excessive thirst, moderate tremors, moderate inactive, slight hunched posture, slight tremors, moderate hunched posture, slight tremors, slight hunched posture, slight excessive thirst, moderate
			12-May-89	08:44	5 / 14:03 9 tremors, moderate hunched posture, slight tremors, slight hunched posture, slight excessive thirst, moderate tremors, moderate inactive, slight hunched posture, slight tremors, moderate hunched posture, slight tremors, slight hunched posture, slight excessive thirst, moderate
			12-May-89	08:48	6 / 07:22 9 tremors, moderate hunched posture, slight tremors, slight hunched posture, slight excessive thirst, moderate tremors, moderate inactive, slight hunched posture, slight tremors, moderate hunched posture, slight tremors, slight hunched posture, slight excessive thirst, moderate
			12-May-89	09:00	6 / 11:07 9 tremors, moderate hunched posture, slight tremors, slight hunched posture, slight excessive thirst, moderate tremors, moderate inactive, slight hunched posture, slight tremors, moderate hunched posture, slight tremors, slight hunched posture, slight excessive thirst, moderate
			12-May-89	09:05	6 / 15:27 9 tremors, moderate hunched posture, slight tremors, slight hunched posture, slight excessive thirst, moderate tremors, moderate inactive, slight hunched posture, slight tremors, moderate hunched posture, slight tremors, slight hunched posture, slight excessive thirst, moderate
			12-May-89	09:08	7 / 07:55 9 tremors, moderate hunched posture, slight tremors, slight hunched posture, slight excessive thirst, moderate tremors, moderate inactive, slight hunched posture, slight tremors, moderate hunched posture, slight tremors, slight hunched posture, slight excessive thirst, moderate
			12-May-89	09:14	7 / 10:25 9 tremors, moderate hunched posture, slight tremors, slight hunched posture, slight excessive thirst, moderate tremors, moderate inactive, slight hunched posture, slight tremors, moderate hunched posture, slight tremors, slight hunched posture, slight excessive thirst, moderate
			12-May-89	10:12	7 / 14:55 9 tremors, moderate hunched posture, slight tremors, slight hunched posture, slight excessive thirst, moderate tremors, moderate inactive, slight hunched posture, slight tremors, moderate hunched posture, slight tremors, slight hunched posture, slight excessive thirst, moderate

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF (ES SUPP, PATH SERV GP
PRESID) OF SAN FRANCISCO, CA 94129
DOG/BEA:LE

Raw Data Listings of Clinical Signs Without Masses
Study Number: 88008M
Data Listing by Animal
Study Start Date: 07-Feb-89

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SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/Time Oper	Clinical signs / Comments
17	89A00050 M/ 6/3	12-May-89 10:12	7 / 14:55	9 disoriented, slight
		15-May-89 08:07	8 / 07:19	9 tremors, slight
		15-May-89 08:13	8 / 10:17	9 tremors, moderate inactive, moderate disoriented, moderate vomiting
		15-May-89 08:20	8 / 14:55	9 hunched posture, slight tremors, slight inactive, slight
		15-May-89 08:27	9 / 07:23	9 tremors, slight inactive, slight
		15-May-89 08:37	9 / 10:14	9 disoriented, moderate inactive, moderate vomiting
		15-May-89 08:53	9 / 14:00	9 hunched posture, moderate disoriented, slight inactive, slight hunched posture, moderate tremors, moderate lack of appetite, severe
		15-May-89 09:11	10 / 07:22	9 hunched posture, slight tremors, moderate
		15-May-89 09:20	10 / 10:26	9 hunched posture, moderate tremors, moderate disoriented, moderate inactive, moderate
		15-May-89 09:25	10 / 14:08	9 tremors, slight inactive, slight
		15-May-89 09:35	11 / 07:17	9 inactive, slight disoriented, moderate hunched posture, moderate
		15-May-89 09:42	11 / 10:18	9 inactive, moderate disoriented, slight hunched posture, moderate tremors, slight

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Messes
Study Number: 88008M
Data Listing by Animal
Study Start Date: 07-Feb-89

PRINTED: 03-Oct-89
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SUB-ACUTE/

Cage #	Animal Sex/group	Date Data was Entered	Time Data was Entered	Study Day/time	Oper Data was Taken	#	Clinical signs / Comments		
17	89A00050	M/ 6/3	15-May-89 09:42	11 / 10:18	9	9	salivation, slight		
			15-May-89 09:47	11 / 14:30	9	9	hunched posture, slight tremors, slight salivation, slight tremors, slight		
		15-May-89 09:57	12 / 08:05	9	9	tremors, slight			
			12 / 11:22	9	9	inactive, moderate disoriented, slight vomiting			
		15-May-89 10:00	12 / 16:52	9	9	hunched posture, moderate salivation, slight			
			13 / 08:05	9	9	inactive, slight			
		15-May-89 10:13	13 / 10:32	9	9	hunched posture, slight			
				9	9	tremors, moderate			
		18	89A00051	M/ 6/4	15-May-89 10:18	13 / 15:43	9	9	inactive, moderate disoriented, moderate vomiting
					15-May-89 10:21	14 / 07:21	9	9	hunched posture, moderate salivation, slight
15-May-89 10:26	14 / 10:34			9	9	hunched posture, slight tremors, slight			
				9	9	inactive, slight tremors, slight vomiting			
15-May-89 10:30	14 / 14:55			9	9	inactive, moderate disoriented, slight			
	15 / 08:00			9	9	tremors, severe			
15-May-89 14:18	1 / 07:25			9	9	excessive thirst, moderate salivation, moderate			
	1 / 11:12			9	9	tremors, slight			
15-May-89 14:24	1 / 07:25			9	9	hunched posture, slight			
	1 / 11:12			9	9	normal/no significant signs			

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008M

Data Listing by Animal

Study Start Date: 07-Feb-89

PRINTED: 03-Oct-89
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SUB-ACUTE/

Cage #	Animal Sex/group Date	and Time Study Day/time Oper	Clinical signs / Comments
#	Number /Subgroup Date was Entered	Data was Taken	#
18 89A00051	M/ 6/4 15-May-89	14:24	1 / 11:12 9 vomiting
			hunched posture, moderate
	15-May-89	14:28	1 / 14:17 9 inactive, moderate
	15-May-89	14:54	2 / 07:19 9 inactive, slight
	15-May-89	15:01	2 / 11:23 9 normal/no significant signs
			salivation, severe
			vomiting
			hunched posture, moderate
			disoriented, moderate
			inactive, moderate
	15-May-89	15:05	2 / 14:03 9 tremors, slight
			disoriented, slight
	15-May-89	15:12	3 / 09:15 9 inactive, slight
	15-May-89	15:31	3 / 11:09 9 normal/no significant signs
			salivation, severe
			vomiting
			hunched posture, slight
			inactive, moderate
			disoriented, moderate
			tremors, severe
	15-May-89	15:38	3 / 14:30 9 disoriented, slight
			inactive, slight
	15-May-89	15:44	4 / 07:22 9 normal/no significant signs
	15-May-89	15:50	4 / 11:33 9 salivation, moderate
			vomiting
			hunched posture, slight
			inactive, moderate
			disoriented, slight
	15-May-89	15:54	4 / 14:07 9 tremors, slight
			inactive, slight
			disoriented, slight
			tremors, slight
	16-May-89	08:05	5 / 07:27 9 normal/no significant signs
	16-May-89	08:09	5 / 11:25 9 salivation, moderate
			vomiting

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses
Study Number: 8806PM
Date Listing by Animal
Study Start Date: 07-Feb-89

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SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time Oper Data was Taken	#	Clinical signs / Comments
18	89A00051	M/ 6/4	16-May-89	08:09	5 / 11:25 9 hunched posture, slight inactive, moderate disoriented, slight tremors, slight
		16-May-89	08:13	5 / 15:24 9 hunched posture, slight	
		16-May-89	08:16	6 / 07:57 9 salivation, severe hunched posture, slight inactive, slight tremors, moderate lack of appetite, moderate salivation, severe hunched posture, slight inactive, moderate tremors, moderate vomiting	
		16-May-89	08:21	6 / 10:44 9 salivation, severe hunched posture, slight inactive, moderate tremors, moderate vomiting	
		16-May-89	08:24	6 / 14:50 9 disoriented, slight salivation, slight inactive, slight tremors, moderate	
		16-May-89	08:26	7 / 07:22 9 salivation, slight hunched posture, slight disoriented, slight salivation, severe hunched posture, slight disoriented, moderate	
		16-May-89	08:32	7 / 10:40 9 salivation, severe hunched posture, slight disoriented, moderate vomiting	
		16-May-89	08:36	7 / 15:00 9 inactive, moderate tremors, moderate	
		16-May-89	09:31	8 / 07:27 9 normal/no significant signs hunched posture, slight inactive, slight	
		16-May-89	09:45	8 / 10:33 9 inactive, moderate vomiting	
		16-May-89	09:51	8 / 14:05 9 increased resp depth, slight inactive, slight	

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008M

Data Listing by Animal

Study Start Date: 07-Feb-89

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SUB-ACUTE/

Cage #	Animal Sex/group	Date	Time	Study Day/Time	Oper	Clinical signs / Comments
#	/Subgroup	Data was Entered	Data was Taken	#		
18	89A00051	M/ 6/4	16-May-89	09:51	8 / 14:05	9 hunched posture, slight disoriented, slight lack of appetite, severe tremors, moderate
		16-May-89	09:56	9 / 07:20	9 tremors, slight	
		16-May-89	10:01	9 / 10:48	9 tremors, severe inactive, slight hunched posture, moderate vomiting	
					increased resp depth, slight disoriented, moderate lack of appetite, moderate tremors, slight	
		16-May-89	10:05	9 / 14:03	9 inactive, slight hunched posture, moderate disoriented, moderate lack of appetite, slight	
		16-May-89	10:18	10 / 07:22	9 tremors, slight inactive, slight hunched posture, slight	
		16-May-89	10:22	10 / 10:40	9 tremors, moderate inactive, slight hunched posture, slight salivation, slight	
		16-May-89	10:25	10 / 14:25	9 tremors, moderate inactive, slight hunched posture, slight disoriented, slight	
		16-May-89	13:23	11 / 08:05	9 tremors, slight	
		16-May-89	13:39	11 / 11:45	9 tremors, slight inactive, slight hunched posture, slight vomiting	
					increased resp depth, moderate salivation, moderate	

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Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses
Study Number: 88008M
Data Listing by Animal
Study Start Date: 07-Feb-89

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Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time	Up or Down	Clinical signs / Comments	
18	89A00051	M / 6/4				SUB-ACUTE /
	16-May-89	13:39	11 / 11:45	9	swollen legs, severe, front legs	
	16-May-89	13:54	11 / 16:54	9	inactive, slight	
	16-May-89	13:58	12 / 08:10	9	hunched posture, slight	
	16-May-89	14:16	12 / 11:10	9	hunched posture, slight	
					tremors, moderate	
					hunched posture, moderate	
					vomiting	
					increased resp depth, slight	
					disoriented, slight	
					lack of appetite, moderate	
					tremors, slight	
					salivation, moderate	
	16-May-89	14:28	12 / 15:37	9	tremors, moderate	
	16-May-89	14:36	13 / 07:15	9	salivation, moderate	
					tremors, moderate	
					salivation, slight	
					excessive thirst, slight	
					inactive, slight	
	16-May-89	14:43	13 / 10:53	9	hunched posture, slight	
					hunched posture, moderate	
					vomiting	
					increased resp depth, slight	
					disoriented, slight	
					lack of appetite, moderate	
					tremors, slight	
	16-May-89	14:47	13 / 14:51	9	salivation, moderate	
					hunched posture, slight	
					disoriented, slight	
					lack of appetite, moderate	
					tremors, moderate	
					salivation, moderate	
					inactive, slight	
	16-May-89	14:50	14 / 09:07	9	hunched posture, slight	
					tremors, slight	
					salivation, moderate	

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
 DIV OF RES SUPP, PATH SERV GP
 PRESIDIO OF SAN FRANCISCO, CA 94129
 DOG/BEAGLE

Re: Data Listings of Clinical Signs Without Masses
 Study Number: 88008M
 Data Listing by Animal
 Study Start Date: 07-Feb-89

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SUB-ACUTE/

Cage #	Animal Sex/group Date	Time Data was Entered	Study Day/Time Oper Data was Taken	#	Clinical signs / Comments
18 89A00051	M/ 6/4	16-May-89 14:50	14 / 09:07	9	inactive, slight
		16-May-89 14:53	14 / 10:16	9	increased resp depth, moderate tremors, moderate salivation, severe inactivity, moderate vomiting
		16-May-89 14:59	14 / 14:30	9	tremors, slight inactivity, slight increased resp depth, slight lack of appetite, moderate tremors, slight inactivity, slight salivation, moderate hunched posture, slight
		16-May-89 15:07	15 / 07:37	9	normal/no significant signs
19 89A00019	M/ 7/2	05-May-89 14:52	1 / 09:05	9	normal/no significant signs
		05-May-89 14:57	1 / 10:06	9	vomiting tremors, slight inactivity, slight
		05-May-89 15:04	1 / 15:04	9	tremors, slight
		05-May-89 15:10	2 / 09:07	9	normal/no significant signs
		05-May-89 15:18	2 / 10:35	9	disoriented, slight hunched posture, slight
		08-May-89 08:27	2 / 14:18	9	normal/no significant signs
		08-May-89 08:30	3 / 08:50	9	normal/no significant signs
		08-May-89 08:36	3 / 10:22	9	disoriented, moderate
		08-May-89 08:40	3 / 14:32	9	normal/no significant signs
		08-May-89 08:42	4 / 08:35	9	soft stool, slight
		08-May-89 08:54	4 / 11:50	9	vomiting inactivity, slight disoriented, slight
					soft stool, slight
		08-May-89 09:00	4 / 14:00	9	increased resp rate, moderate
		08-May-89 09:03	5 / 08:24	9	disoriented, slight
		08-May-89 09:09	5 / 11:13	9	normal/no significant signs
					inactive, slight

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008M

Date Listing by Animal

Study Start Date: 07-Feb-89

SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Entered	Study Day/Time Oper	Clinical signs / Comments
19	89A00019 M/ 7/2	08-May-89 09:09	5 / 11:13	9 disoriented, slight
		08-May-89 09:17	5 / 14:35	9 disoriented, slight tremors, slight
		08-May-89 09:20	6 / 09:00	9 normal/no significant signs
		08-May-89 09:36	6 / 10:33	9 vomiting tremors, moderate inactive, moderate disoriented, slight hunched posture, slight
		08-May-89 09:45	6 / 14:28	9 disoriented, slight
		08-May-89 09:48	7 / 09:00	9 normal/no significant signs
		08-May-89 09:55	7 / 10:22	9 vomiting tremors, slight inactive, slight disoriented, slight
		08-May-89 10:00	7 / 14:45	9 disoriented, slight
		08-May-89 10:05	8 / 09:34	9 soft stool, slight
		08-May-89 10:11	8 / 11:09	9 tremors, slight disoriented, moderate increased resp depth, moderate
		08-May-89 10:17	8 / 14:31	9 tremors, slight disoriented, slight
		08-May-89 10:44	9 / 07:33	9 tremors, slight disoriented, slight hunched posture, slight
		08-May-89 10:51	9 / 09:49	9 tremors, moderate inactive, slight disoriented, moderate hunched posture, moderate
		08-May-89 10:50	9 / 14:18	9 tremors, slight disoriented, slight
		08-May-89 14:02	10 / 07:31	9 disoriented, slight circling, slight

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Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008M

Date Listing by Animal

Study Start Date: 07-Feb-89

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SUB-A: TE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time	Oper Data was Taken	#	Clinical signs / Comments	
19	89A00019	M/ 7/2	08-May-89	14:07	10 / 10:46	9	disoriented, slight circling, moderate
			08-May-89	14:11	10 / 14:29	9	disoriented, slight hunched posture, slight
			08-May-89	14:16	11 / 09:55	9	circling, slight
			08-May-89	14:26	11 / 12:25	9	circling, moderate
			08-May-89	14:30	11 / 14:00	9	disoriented, slight
			08-May-89	14:33	12 / 09:30	9	circling, moderate
			08-May-89	14:36	12 / 11:48	9	circling, slight
			08-May-89	14:39	12 / 14:00	9	disoriented, slight
			08-May-89	14:41	13 / 08:15	9	disoriented, slight
			08-May-89	14:45	13 / 12:20	9	lack of appetite, slight
20	89A00043	M/ 7/3	08-May-89	14:47	13 / 14:10	9	normal/no significant signs
			08-May-89	14:50	14 / 07:44	9	circling, slight
			08-May-89	14:56	14 / 09:44	9	normal/no significant signs
			08-May-89	14:59	14 / 14:40	9	soft stool, slight
			08-May-89	15:02	15 / 07:09	9	disoriented, moderate
			11-May-89	14:35	1 / 09:30	9	tremors, slight
			11-May-89	14:40	1 / 11:07	9	disoriented, moderate
			11-May-89	14:44	1 / 14:46	9	tremors, slight
			11-May-89	14:48	2 / 07:23	9	normal/no significant signs
			11-May-89	14:55	2 / 11:02	9	normal/no significant signs
20	89A00043	M/ 7/3	11-May-89	15:05	2 / 14:13	9	normal/no significant signs
			11-May-89	15:09	3 / 07:15	9	normal/no significant signs
			11-May-89	15:14	3 / 11:05	9	soft stool, slight
			11-May-89	15:18	3 / 14:00	9	disoriented, slight
			11-May-89	15:24	4 / 09:10	9	normal/no significant signs
			11-May-89	15:24	4 / 09:10	9	normal/no significant signs
			11-May-89	15:24	4 / 09:10	9	normal/no significant signs
			11-May-89	15:24	4 / 09:10	9	normal/no significant signs
			11-May-89	15:24	4 / 09:10	9	normal/no significant signs
			11-May-89	15:24	4 / 09:10	9	normal/no significant signs

20 89A00043 M/ 7/3

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008M

Data Listing by Animal

Study Start Date: 07-Feb-89

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SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time Data was Taken	Oper #	Clinical signs / Comments
20	89A00043	M/ 7/3			
		11-May-89 15:31	4 / 10:52	9	disoriented, moderate
		11-May-89 15:35	4 / 14:30	9	normal/no significant signs
		12-May-89 08:30	5 / 07:16	9	normal/no significant signs
		12-May-89 08:37	5 / 11:12	9	disoriented, moderate
		12-May-89 08:45	5 / 14:04	9	soft stool, slight
		12-May-89 08:48	6 / 07:22	9	normal/no significant signs
		12-May-89 09:00	6 / 11:12	9	normal/no significant signs
		12-May-89 09:05	6 / 15:32	9	normal/no significant signs
		12-May-89 09:08	7 / 07:53	9	panting, moderate
		12-May-89 09:14	7 / 10:30	9	disoriented, slight
		12-May-89 10:12	7 / 14:50	9	normal/no significant signs
		15-May-89 08:07	8 / 07:17	9	normal/no significant signs
		15-May-89 08:13	8 / 10:23	9	disoriented, slight
		15-May-89 08:20	8 / 14:55	9	disoriented, slight
		15-May-89 08:28	9 / 07:23	9	soft stool, moderate
					panting, moderate
		15-May-89 08:41	9 / 10:17	9	panting, slight
					hyperactive, moderate
					disoriented, slight
		15-May-89 08:54	9 / 14:00	9	disoriented, slight
		15-May-89 09:12	10 / 07:20	9	soft stool, moderate
					panting, moderate
		15-May-89 09:21	10 / 10:30	9	disoriented, slight
		15-May-89 09:25	10 / 14:09	9	panting, moderate
					hyperactive, moderate
		15-May-89 09:35	11 / 07:34	9	soft stool, moderate
					panting, moderate
					hyperactive, moderate
		15-May-89 09:42	11 / 10:20	9	hyperactive, moderate
					disoriented, slight
		15-May-89 09:47	11 / 14:31	9	hyperactive, slight
		15-May-89 09:51	12 / 08:00	9	soft stool, moderate
					panting, slight
		15-May-89 09:57	12 / 11:26	9	disoriented, moderate
		15-May-89 10:01	12 / 16:52	9	normal/no significant signs
		15-May-89 10:08	13 / 08:05	9	normal/no significant signs

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses
Study Number: 86008M
Data Listing by Animal
Study Start Date: 07-Feb-89

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SUB-ACUTE

Case #	Animal Sex/group	Date and Time Data was Entered	Time Study Data was Taken	Day/time Oper	Clinical signs / Comments	
20	89A00043	M/ 7/3	15-May-89 10:13	13 / 10:37	9	disoriented, moderate panting, moderate hyperactive, moderate hyperactive, slight panting, slight soft stool, moderate disoriented, slight
			15-May-89 10:19	13 / 15:48	9	normal/no significant signs
			15-May-89 10:22	14 / 07:27	9	normal/no significant signs
21	89A00054	M/ 7/4				
			15-May-89 10:27	14 / 10:37	9	normal/no significant signs
			15-May-89 10:30	14 / 14:59	9	normal/no significant signs
			15-May-89 10:32	15 / 08:00	9	normal/no significant signs
			15-May-89 14:19	1 / 07:25	9	normal/no significant signs
			15-May-89 14:25	1 / 11:13	9	normal/no significant signs
			15-May-89 14:28	1 / 14:18	9	normal/no significant signs
			15-May-89 14:55	2 / 07:20	9	soft stool, slight
			15-May-89 15:01	2 / 11:24	9	normal/no significant signs
			15-May-89 15:03	2 / 14:03	9	normal/no significant signs
			15-May-89 15:13	3 / 09:15	9	normal/no significant signs
			15-May-89 15:31	3 / 11:10	9	normal/no significant signs
			15-May-89 15:38	3 / 14:30	9	normal/no significant signs
			15-May-89 15:45	4 / 07:23	9	normal/no significant signs
			15-May-89 15:50	4 / 11:32	9	normal/no significant signs
			15-May-89 15:55	4 / 14:08	9	normal/no significant signs
			16-May-89 08:05	5 / 07:28	9	soft stool, slight
			16-May-89 08:10	5 / 11:37	9	normal/no significant signs
			16-May-89 08:13	5 / 15:25	9	normal/no significant signs
			16-May-89 08:17	6 / 07:58	9	panting, slight
			16-May-89 08:21	6 / 10:46	9	normal/no significant signs
			16-May-89 08:24	6 / 14:50	9	normal/no significant signs
			16-May-89 08:27	7 / 07:22	9	soft stool, moderate
			16-May-89 08:33	7 / 10:40	9	normal/no significant signs
			16-May-89 08:37	7 / 15:01	9	excessive thirst, slight
			16-May-89 09:31	8 / 07:27	9	soft stool, moderate
			16-May-89 09:45	8 / 10:37	9	inactive, slight
			16-May-89 09:51	8 / 14:05	9	normal/no significant signs
			16-May-89 09:56	9 / 07:20	9	soft stool, slight

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 8800AM

Date Listing by Animal

Study Start Date: 07-Feb-89

PRINTED: 03-Oct-89

Page: 56

SUB-ACUTE/

Cage #	Animal Sex/group Number /Subgroup	Date and Date was Entered	Time	Study Day/time	Oper #	Clinical signs / Comments	
21	89A00054	M/ 7/4	16-May-89	10:01	9 / 10:49	9	inactive, slight
			16-May-89	10:06	9 / 14:04	9	normal/no significant signs
			16-May-89	10:18	10 / 07:24	9	soft stool, slight
							panting, slight
			16-May-89	10:22	10 / 10:41	9	normal/no significant signs
			16-May-89	10:25	10 / 14:26	9	normal/no significant signs
			16-May-89	13:23	11 / 08:05	9	soft stool, moderate
			16-May-89	13:40	11 / 11:46	9	inactive, slight
			16-May-89	13:55	11 / 16:54	9	inactive, slight
			16-May-89	13:58	12 / 08:10	9	panting, moderate
			16-May-89	14:18	12 / 11:17	9	bleeding from IV site, slight
			16-May-89	14:30	12 / 15:38	9	panting, slight
22	89A00001	M/ 8/1	16-May-89	14:36	13 / 07:18	9	hyperactive, slight
							panting, slight
							excessive thirst, slight
			16-May-89	14:43	13 / 10:55	9	soft stool, slight
							inactive, slight
			16-May-89	14:47	13 / 14:52	9	bleeding from IV site, slight
			16-May-89	14:50	14 / 09:08	9	hyperactive, slight
			16-May-89	14:54	14 / 10:19	9	panting, moderate
							panting, moderate
							hyperactive, slight
			16-May-89	14:59	14 / 14:30	9	soft stool, moderate
			16-May-89	15:07	15 / 07:39	9	normal/no significant signs
22	89A00001	M/ 8/1					panting, moderate
							hyperactive, moderate
							soft stool, moderate
			03-May-89	15:00	1 / 09:28	9	normal/no significant signs
			03-May-89	15:17	1 / 10:29	9	normal/no significant signs
			03-May-89	15:22	1 / 14:34	9	normal/no significant signs
			03-May-89	15:39	2 / 09:28	9	normal/no significant signs
			03-May-89	15:45	2 / 10:29	9	normal/no significant signs
			03-May-89	15:53	2 / 15:00	9	normal/no significant signs
			04-May-89	08:01	3 / 08:54	9	normal/no significant signs
			04-May-89	08:06	3 / 10:10	9	disoriented, slight
			04-May-89	08:13	3 / 14:15	9	normal/no significant signs
04-May-89	08:20	4 / 08:45	9	normal/no significant signs			

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Messes

Study Number: 88008M

Data Listing by Animal

Study Start Date: 07-feb-89

PRINTED: 03-Oct-89
Page: 57

SUB-ACUTE/

Cage #	Animal Sex/group	Date Entered	Time Entered	Study Date	Time Oper	#	Clinical signs / Comments
22	89A00001	M/ 8/1					
		04-May-89	08:31	4 / 09:56	9		disoriented, slight
		04-May-89	08:37	4 / 14:30	9		normal/no significant signs
		04-May-89	08:41	5 / 08:30	9		normal/no significant signs
		04-May-89	08:47	5 / 11:29	9		disoriented, moderate
		04-May-89	08:52	5 / 14:00	9		normal/no significant signs
		04-May-89	09:02	6 / 08:20	9		soft stool, severe
		04-May-89	09:09	6 / 10:52	9		normal/no significant signs
		04-May-89	09:17	6 / 14:30	9		vomiting
		04-May-89	09:22	7 / 09:00	9		soft stool, moderate
		04-May-89	09:30	7 / 10:08	9		disoriented, slight
		04-May-89	09:36	7 / 14:23	9		normal/no significant signs
		04-May-89	09:41	8 / 08:43	9		soft stool, moderate
		04-May-89	09:52	8 / 09:59	9		normal/no significant signs
		04-May-89	10:00	8 / 14:45	9		normal/no significant signs
		04-May-89	10:10	9 / 09:22	9		normal/no significant signs
		04-May-89	10:19	9 / 10:39	9		normal/no significant signs
		04-May-89	10:24	9 / 14:22	9		normal/no significant signs
		04-May-89	10:37	10 / 07:23	9		soft stool, slight
		04-May-89	10:47	10 / 09:25	9		normal/no significant signs
		04-May-89	10:52	10 / 14:06	9		normal/no significant signs
		04-May-89	14:10	11 / 07:23	9		soft stool, slight
		04-May-89	14:34	11 / 10:24	9		soft stool, slight
		04-May-89	14:43	11 / 14:23	9		normal/no significant signs
		04-May-89	15:06	12 / 09:50	9		lack of appetite, moderate
		04-May-89	15:12	12 / 11:44	9		normal/no significant signs
		04-May-89	15:17	12 / 14:10	9		normal/no significant signs
		04-May-89	15:20	13 / 09:25	9		normal/no significant signs
		04-May-89	15:24	13 / 11:04	9		normal/no significant signs
		04-May-89	15:27	13 / 14:00	9		normal/no significant signs
		04-May-89	15:30	14 / 08:19	9		normal/no significant signs
		04-May-89	15:43	14 / 11:39	9		normal/no significant signs
		04-May-89	15:46	14 / 14:01	9		normal/no significant signs
		04-May-89	15:50	15 / 06:45	9		normal/no significant signs
		05-May-89	14:52	1 / 09:07	9		normal/no significant signs
		05-May-89	14:57	1 / 10:08	9		normal/no significant signs
		05-May-89	15:05	1 / 15:05	9		normal/no significant signs
23	89A00013	M/ 8/2					

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 880084

Data Listing by Animal

Study Start Date: 07-Feb-89

PRINTED: 03-Oct-89
Page: 58

SUB-ACUTE/

Cage #	Animal Sex/group Date	Time Data was Entered	Study Day/time Oper Data was Taken	#	Clinical signs / Comments
23	89A00013	M/ 8/2			
	05-May-89	15:10	2 / 09:00	9	soft stool, moderate
	05-May-89	15:18	2 / 10:38	9	normal/no significant signs
	08-May-89	08:27	2 / 14:19	9	tremors, slight
	08-May-89	08:31	3 / 08:50	9	soft stool, moderate
	08-May-89	08:36	3 / 10:25	9	vomiting
					tremors, slight
	08-May-89	08:40	3 / 14:33	9	tremors, slight
	08-May-89	08:42	4 / 08:35	9	soft stool, moderate
	08-May-89	08:56	4 / 11:54	9	tremors, moderate
					vomiting
					disoriented, slight
	08-May-89	09:01	4 / 14:00	9	tremors, slight
	08-May-89	09:03	5 / 08:24	9	normal/no significant signs
	08-May-89	09:10	5 / 11:17	9	tremors, slight
					disoriented, slight
	08-May-89	09:17	5 / 14:35	9	normal/no significant signs
	08-May-89	09:21	6 / 09:00	9	normal/no significant signs
	08-May-89	09:39	6 / 10:33	9	tremors, slight
					disoriented, moderate
	08-May-89	09:45	6 / 14:29	9	tremors, slight
	08-May-89	09:48	7 / 09:00	9	normal/no significant signs
	08-May-89	09:56	7 / 10:25	9	tremors, moderate
					disoriented, slight
	08-May-89	10:00	7 / 14:45	9	normal/no significant signs
	08-May-89	10:05	8 / 09:35	9	normal/no significant signs
	08-May-89	10:11	8 / 11:10	9	normal/no significant signs
	08-May-89	10:17	8 / 14:32	9	normal/no significant signs
	08-May-89	10:44	9 / 07:34	9	normal/no significant signs
	08-May-89	10:51	9 / 09:50	9	normal/no significant signs
	08-May-89	10:58	9 / 14:19	9	normal/no significant signs
	08-May-89	14:02	10 / 07:32	9	normal/no significant signs
	08-May-89	14:07	10 / 10:47	9	normal/no significant signs
	08-May-89	14:12	10 / 14:31	9	hunched posture, slight
	08-May-89	14:17	11 / 09:55	9	normal/no significant signs
	08-May-89	14:26	11 / 12:37	9	normal/no significant signs
	08-May-89	14:30	11 / 14:00	9	normal/no significant signs
	08-May-89	14:33	12 / 09:30	9	normal/no significant signs

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOC/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008M

Data Listing by Animal

Study Start Date: 07-Feb-89

PRINTED: 03-Oct-89
Page: 59

SUB-ACUTE/

Cage #	Animal Sex/group Number /Subgroup	Date and Time Data was Entered	Study Day/Time Oper Data was Taken	#	Clinical signs / Comments		
24	89A00053	M/ 8/4	08-May-89	14:36	12 / 11:55	9	normal/no significant signs
			08-May-89	14:39	12 / 14:00	9	lack of appetite, moderate
			08-May-89	14:41	13 / 08:15	9	normal/no significant signs
			08-May-89	14:45	13 / 12:25	9	normal/no significant signs
			08-May-89	14:47	13 / 14:10	9	normal/no significant signs
			08-May-89	14:50	14 / 07:44	9	normal/no significant signs
			08-May-89	14:56	14 / 09:50	9	soft stool, slight disoriented, slight
			08-May-89	15:00	14 / 14:41	9	normal/no significant signs
			08-May-89	15:02	15 / 07:11	9	soft stool, slight
			15-May-89	14:20	1 / 07:25	9	normal/no significant signs
			15-May-89	14:25	1 / 11:17	9	normal/no significant signs
			15-May-89	14:29	1 / 14:18	9	normal/no significant signs
			15-May-89	14:56	2 / 07:20	9	soft stool, slight
			15-May-89	15:01	2 / 11:28	9	normal/no significant signs
			15-May-89	15:06	2 / 14:03	9	normal/no significant signs
			15-May-89	15:13	3 / 09:15	9	normal/no significant signs
			15-May-89	15:32	3 / 11:15	9	normal/no significant signs
			15-May-89	15:39	3 / 14:30	9	normal/no significant signs
			15-May-89	15:45	4 / 07:23	9	normal/no significant signs
			15-May-89	15:50	4 / 11:35	9	normal/no significant signs
			15-May-89	15:55	4 / 14:08	9	normal/no significant signs
			16-May-89	08:05	5 / 07:28	9	normal/no significant signs
			16-May-89	08:10	5 / 11:37	9	normal/no significant signs
			16-May-89	08:14	5 / 15:25	9	normal/no significant signs
			16-May-89	08:17	6 / 07:58	9	normal/no significant signs
			16-May-89	08:21	6 / 10:48	9	normal/no significant signs
			16-May-89	08:24	6 / 14:50	9	normal/no significant signs
			16-May-89	08:27	7 / 07:22	9	soft stool, moderate
16-May-89	08:33	7 / 10:45	9	normal/no significant signs			
16-May-89	08:37	7 / 15:02	9	normal/no significant signs			
16-May-89	09:32	8 / 07:27	9	normal/no significant signs			
16-May-89	09:46	8 / 10:41	9	inactive, slight			
16-May-89	09:51	8 / 14:05	9	normal/no significant signs			
16-May-89	09:57	9 / 07:20	9	soft stool, moderate			
16-May-89	10:02	9 / 10:52	9	normal/no significant signs			
16-May-89	10:06	9 / 14:05	9	normal/no significant signs			

24 89A00053 M/ 8/4

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008M

Data Listing by Animal

Study Start Date: 07-Feb-89

PRINTED: 03-Oct-89
Page: 60

SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data Was Entered	Study Day/time Oper Data was Taken	#	Clinical signs / Comments
24	89A00053 M/ B/4	16-May-89 10:18	10 / 07:24	9	soft stool, moderate
		16-May-89 10:22	10 / 10:50	9	normal/no significant signs
		16-May-89 10:25	10 / 14:28	9	normal/no significant signs
		16-May-89 13:23	11 / 08:05	9	normal/no significant signs
		16-May-89 13:40	11 / 11:48	9	normal/no significant signs
		16-May-89 13:55	11 / 16:54	9	inactive, slight
		16-May-89 13:58	12 / 08:10	9	panting, moderate
		16-May-89 14:18	12 / 11:20	9	normal/no significant signs
		16-May-89 14:31	12 / 15:38	9	panting, moderate
		16-May-89 14:37	13 / 07:20	9	panting, slight
		16-May-89 14:43	13 / 10:58	9	normal/no significant signs
		16-May-89 14:47	13 / 14:54	9	normal/no significant signs
		16-May-89 14:50	14 / 09:06	9	panting, slight
		16-May-89 14:55	14 / 10:23	9	panting, moderate
		16-May-89 14:59	14 / 14:30	9	normal/no significant signs
		16-May-89 15:07	15 / 07:41	9	panting, slight
		03-May-89 15:00	1 / 09:32	9	normal/no significant signs
		03-May-89 15:17	1 / 10:33	9	inactive, slight tremors, moderate disoriented, slight
25	89A00005 M/ 9/1	03-May-89 15:23	1 / 14:35	9	normal/no significant signs
		03-May-89 15:40	2 / 09:29	9	normal/no significant signs
		03-May-89 15:45	2 / 10:30	9	tremors, slight
		03-May-89 15:53	2 / 15:01	9	normal/no significant signs
		04-May-89 08:01	3 / 08:54	9	normal/no significant signs
		04-May-89 08:07	3 / 10:10	9	tremors, moderate
		04-May-89 08:13	3 / 14:15	9	tremors, moderate
		04-May-89 08:20	4 / 08:45	9	soft stool, moderate
		04-May-89 08:32	4 / 09:57	9	tremors, moderate disoriented, slight
		04-May-89 08:37	4 / 14:30	9	tremors, moderate
		04-May-89 08:42	5 / 08:30	9	inactive, slight
		04-May-89 08:48	5 / 11:31	9	soft stool, severe inactive, slight tremors, severe

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 86008M

Data Listing by Animal

Study Start Date: 07-feb-89

PRINTED: 03-Oct-89
Page: 61

SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time Data was Taken	Oper #	Clinical signs / Comments
25	89A00005	M/ 9/1			
		04-May-89 08:48	5 / 11:31	9	disoriented, moderate
		04-May-89 08:54	5 / 14:00	9	tremors, moderate
		04-May-89 09:03	6 / 08:22	9	disoriented, slight
		04-May-89 09:11	6 / 10:54	9	soft stool, moderate
					inactive, slight
					tremors, severe
		04-May-89 09:18	6 / 14:30	9	disoriented, moderate
		04-May-89 09:22	7 / 09:00	9	tremors, slight
		04-May-89 09:31	7 / 10:09	9	soft stool, moderate
		04-May-89 09:37	7 / 14:24	9	normal/no significant signs
		04-May-89 09:42	8 / 08:43	9	tremors, slight
		04-May-89 09:53	8 / 10:02	9	tremors, moderate
					tremors, severe
					inactive, moderate
					disoriented, moderate
					soft stool, slight
		04-May-89 10:00	8 / 14:45	9	disoriented, moderate
		04-May-89 10:10	9 / 09:23	9	tremors, slight
		04-May-89 10:20	9 / 10:46	9	tremors, slight
					inactive, slight
		04-May-89 10:25	9 / 14:24	9	disoriented, moderate
		04-May-89 10:37	10 / 07:25	9	tremors, slight
		04-May-89 10:48	10 / 09:26	9	normal/no significant signs
					tremors, moderate
		04-May-89 10:53	10 / 14:10	9	disoriented, moderate
		04-May-89 14:10	11 / 07:24	9	panting, moderate
		04-May-89 14:35	11 / 10:28	9	normal/no significant signs
					tremors, moderate
					disoriented, slight
					pacing, moderate
		04-May-89 14:43	11 / 14:24	9	tremors, moderate
		04-May-89 15:06	12 / 09:50	9	normal/no significant signs
		04-May-89 15:13	12 / 11:51	9	normal/no significant signs
		04-May-89 15:17	12 / 14:10	9	normal/no significant signs
		04-May-89 15:20	13 / 09:25	9	normal/no significant signs
		04-May-89 15:24	13 / 11:10	9	normal/no significant signs

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: R8008M

Data Listing by Animal

Study Start Date: 07-Feb-89

PRINTED: 03-Oct-89
Page: 62

SUB-ACUTE/

Cage #	Animal Sex/group	Date	Time Data was Entered	Study Day/time Data was Taken	Oper #	Clinical signs / Comments
25	89A00005	M/ 9/1	04-May-89 15:28	13 / 14:00	9	lack of appetite, slight
			04-May-89 15:30	14 / 08:19	9	lack of appetite, moderate
			04-May-89 15:43	14 / 11:34	9	lack of appetite, moderate
			04-May-89 15:47	14 / 14:01	9	lack of appetite, severe
			04-May-89 15:50	15 / 06:45	9	normal/no significant signs
			11-May-89 14:35	1 / 09:30	9	normal/no significant signs
			11-May-89 14:40	1 / 11:05	9	normal/no significant signs
			11-May-89 14:44	1 / 14:50	9	normal/no significant signs
			11-May-89 14:48	2 / 07:24	9	normal/no significant signs
			11-May-89 14:55	2 / 10:55	9	disoriented, moderate
			11-May-89 15:09	2 / 14:13	9	disoriented, slight
			11-May-89 15:10	3 / 07:15	9	normal/no significant signs
			11-May-89 15:14	3 / 11:10	9	disoriented, moderate
			11-May-89 15:18	3 / 14:00	9	disoriented, slight
			11-May-89 15:25	4 / 09:10	9	normal/no significant signs
			11-May-89 15:32	4 / 10:56	9	disoriented, moderate
			11-May-89 15:35	4 / 14:30	9	normal/no significant signs
			12-May-89 08:30	5 / 07:18	9	normal/no significant signs
			12-May-89 08:38	5 / 11:15	9	normal/no significant signs
			12-May-89 08:45	5 / 14:04	9	normal/no significant signs
			12-May-89 08:49	6 / 07:24	9	normal/no significant signs
			12-May-89 09:01	6 / 11:12	9	normal/no significant signs
			12-May-89 09:05	6 / 15:33	9	normal/no significant signs
			12-May-89 09:08	7 / 07:54	9	normal/no significant signs
			12-May-89 09:14	7 / 10:31	9	disoriented, slight
			12-May-89 10:13	7 / 14:55	9	disoriented, slight
			15-May-89 08:07	8 / 07:17	9	normal/no significant signs
			15-May-89 08:16	8 / 10:25	9	bleeding from IV site, severe
			15-May-89 08:21	8 / 14:55	9	normal/no significant signs
			15-May-89 08:28	9 / 07:23	9	normal/no significant signs
			15-May-89 08:43	9 / 10:20	9	disoriented, slight
						bleeding from IV site, severe
			15-May-89 08:54	9 / 14:00	9	disoriented, slight
			15-May-89 09:13	10 / 07:24	9	soft stool, slight
						bleeding from IV site, moderate

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Hauses

Study Number: 88008M

Data Listing b/ Animal

Study Start Date: 07-Feb-89

PRINTED: 03-Oct-89
Page: 63

SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time Oper Data was Taken	#	Clinical signs / Comments
26	89A00049	M/ 9/3	15-May-89 09:21	10 / 10:31	9 disoriented, moderate
			15-May-89 09:25	10 / 14:09	9 normal/no significant signs
			15-May-89 09:36	11 / 07:35	9 normal/no significant signs
			15-May-89 09:43	11 / 10:24	9 bleeding from IV site, severe panting, moderate
			15-May-89 09:47	11 / 14:32	9 normal/no significant signs
			15-May-89 09:52	12 / 08:00	9 normal/no significant signs
			15-May-89 09:57	12 / 11:30	9 disoriented, slight
			15-May-89 10:01	12 / 16:52	9 normal/no significant signs
			15-May-89 10:08	13 / 08:05	9 normal/no significant signs
			15-May-89 10:13	13 / 10:49	9 disoriented, slight
			15-May-89 10:19	13 / 15:49	9 normal/no significant signs
			15-May-89 10:22	14 / 07:28	9 normal/no significant signs
			15-May-89 10:27	14 / 10:40	9 bleeding from IV site, severe disoriented, moderate
			15-May-89 10:30	14 / 15:00	9 normal/no significant signs
			15-May-89 10:32	15 / 08:00	9 soft stool, slight
			15-May-89 14:20	1 / 07:25	9 normal/no significant signs
			15-May-89 14:25	1 / 11:20	9 inactive, slight
			15-May-89 14:29	1 / 14:18	9 inactive, slight
			15-May-89 14:56	2 / 07:20	9 normal/no significant signs
			15-May-89 15:02	2 / 11:29	9 inactive, slight tremors, moderate
			15-May-89 15:06	2 / 14:03	9 normal/no significant signs
			15-May-89 15:13	3 / 09:15	9 normal/no significant signs
			15-May-89 15:32	3 / 11:17	9 normal/no significant signs
			15-May-89 15:39	3 / 14:30	9 normal/no significant signs
			15-May-89 15:45	4 / 07:24	9 normal/no significant signs
			15-May-89 15:51	4 / 11:35	9 inactive, moderate tremors, slight
			15-May-89 15:55	4 / 14:09	9 inactive, slight
			16-May-89 08:06	5 / 07:39	9 tremors, slight
			16-May-89 08:10	5 / 11:38	9 normal/no significant signs
			16-May-89 08:14	5 / 15:26	9 normal/no significant signs
			16-May-89 08:17	6 / 07:58	9 normal/no significant signs
27	89A00055	M/ 9/4			

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIL OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008M

Date Listing by Animal

Study Start Date: 07-Feb-89

PRINTED: 03-Oct-89

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Cage #	Animal Sex/group	Date Entered	Time Data was Taken	Study Day/time Oper	Clinical signs / Comments
27	89A00055 M/9/4	16-May-89	08:21	6 / 10:54	9 inactive, slight
		16-May-89	08:24	6 / 14:50	9 normal/no significant signs
		16-May-89	08:27	7 / 07:22	9 normal/no significant signs
		16-May-89	08:33	7 / 10:46	9 inactive, slight
		16-May-89	08:38	7 / 15:03	9 inactive, moderate
		16-May-89	09:32	8 / 07:29	9 normal/no significant signs
		16-May-89	09:46	8 / 10:44	9 inactive, slight
					increased resp depth, slight
		16-May-89	09:52	8 / 14:00	9 inactive, slight
					tremors, severe
		16-May-89	09:57	9 / 07:21	9 normal/no significant signs
		16-May-89	10:02	9 / 10:54	9 inactive, moderate
					increased resp depth, slight
		16-May-89	10:06	9 / 14:05	9 inactive, slight
					tremors, slight
		16-May-89	10:19	10 / 07:25	9 normal/no significant signs
		16-May-89	10:22	10 / 10:51	9 increased resp depth, moderate
		16-May-89	10:26	10 / 14:28	9 tremors, moderate
		16-May-89	13:24	11 / 08:05	9 normal/no significant signs
		16-May-89	13:40	11 / 11:52	9 increased resp depth, slight
		16-May-89	13:55	11 / 16:55	9 normal/no significant signs
		16-May-89	13:58	12 / 08:10	9 normal/no significant signs
		16-May-89	14:19	12 / 11:25	9 increased resp depth, slight
		16-May-89	14:31	12 / 12:39	9 tremors, slight
		16-May-89	14:37	13 / 07:20	9 normal/no significant signs
		16-May-89	14:44	13 / 11:00	9 increased resp depth, slight
					tremors, moderate
		16-May-89	14:48	13 / 14:54	9 normal/no significant signs
		16-May-89	14:51	14 / 09:09	9 normal/no significant signs
		16-May-89	14:55	14 / 10:25	9 tremors, moderate
		16-May-89	15:00	14 / 14:30	9 normal/no significant signs
		16-May-89	15:07	15 / 07:41	9 normal/no significant signs
		03-May-89	15:00	1 / 09:36	9 normal/no significant signs
		03-May-89	15:18	1 / 10:37	9 normal/no significant signs
		03-May-89	15:23	1 / 14:35	9 normal/no significant signs
		03-May-89	15:40	2 / 09:36	9 normal/no significant signs
		03-May-89	15:46	2 / 10:37	9 normal/no significant signs
28	89A00006 M/10/1				

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008M

Data Listing by Animal

Study Start Date: 07-Feb-89

PRINTED: 03-Oct-89

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Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time	Oper Data was Taken	#	Clinical signs / Comments
03-May-89		15:53		2 / 15:01	9	normal/no significant signs
04-May-89		08:01		3 / 08:54	9	normal/no significant signs
04-May-89		08:07		3 / 10:18	9	normal/no significant signs
04-May-89		08:13		3 / 14:15	9	normal/no significant signs
04-May-89		08:21		4 / 08:45	9	normal/no significant signs
04-May-89		08:32		4 / 10:05	9	normal/no significant signs
04-May-89		08:37		4 / 14:30	9	normal/no significant signs
04-May-89		08:42		5 / 08:30	9	normal/no significant signs
04-May-89		08:48		5 / 11:36	9	normal/no significant signs
04-May-89		08:54		5 / 14:00	9	normal/no significant signs
04-May-89		09:03		6 / 08:22	9	normal/no significant signs
04-May-89		09:11		6 / 10:59	9	normal/no significant signs
04-May-89		09:18		6 / 14:30	9	normal/no significant signs
04-May-89		09:22		7 / 09:00	9	normal/no significant signs
04-May-89		09:31		7 / 10:17	9	normal/no significant signs
04-May-89		09:37		7 / 14:24	9	normal/no significant signs
04-May-89		09:43		8 / 08:45	9	soft stool, slight
04-May-89		09:53		8 / 10:07	9	normal/no significant signs
04-May-89		10:00		8 / 14:45	9	normal/no significant signs
04-May-89		10:11		9 / 09:25	9	soft stool, slight
04-May-89		10:20		9 / 10:52	9	normal/no significant signs
04-May-89		10:25		9 / 14:24	9	normal/no significant signs
04-May-89		10:37		10 / 07:26	9	normal/no significant signs
04-May-89		10:48		10 / 09:37	9	normal/no significant signs
04-May-89		10:53		10 / 14:08	9	normal/no significant signs
04-May-89		14:10		11 / 07:25	9	normal/no significant signs
04-May-89		14:36		11 / 10:33	9	normal/no significant signs
04-May-89		14:43		11 / 14:24	9	normal/no significant signs
04-May-89		15:06		12 / 09:50	9	normal/no significant signs
04-May-89		15:13		12 / 11:51	9	normal/no significant signs
04-May-89		15:17		12 / 14:10	9	normal/no significant signs
04-May-89		15:20		13 / 09:25	9	normal/no significant signs
04-May-89		15:24		13 / 11:17	9	normal/no significant signs
04-May-89		15:28		13 / 14:00	9	normal/no significant signs
04-May-89		15:30		14 / 08:19	9	lack of appetite, moderate

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV CP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008M

Data Listing by Animal

Study Start Date: 07-Feb-89

PRINTED: 03-Oct-89
Page: 66

SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/Time Oper Data was Taken	#	Clinical signs / Comments
28	89A00006	M/10/1	04-May-89 15:43	14 / 11:48	9 lack of appetite, moderate
		01-May-89 15:48	14 / 14:01	9	9 lack of appetite, moderate
		04-May-89 15:51	15 / 06:48	9	9 lack of appetite, moderate
29	89A00044	M/10/3	11-May-89 14:35	1 / 09:30	9 normal/no significant signs
		11-May-89 14:41	1 / 11:11	9	9 tremors, slight
		11-May-89 14:44	1 / 14:51	9	9 excessive thirst, slight
		11-May-89 14:48	2 / 07:25	9	9 normal/no significant signs
		11-May-89 14:55	2 / 10:53	9	9 tremors, slight
		11-May-89 15:06	2 / 14:14	9	9 normal/no significant signs
		11-May-89 15:09	3 / 07:15	9	9 normal/no significant signs
		11-May-89 15:15	3 / 11:11	9	9 normal/no significant signs
		11-May-89 15:18	3 / 14:00	9	9 normal/no significant signs
		11-May-89 15:25	4 / 09:10	9	9 normal/no significant signs
		11-May-89 15:32	4 / 10:57	9	9 normal/no significant signs
		11-May-89 15:35	4 / 14:30	9	9 normal/no significant signs
		12-May-89 08:30	5 / 07:18	9	9 normal/no significant signs
		12-May-89 08:38	5 / 11:17	9	9 normal/no significant signs
		12-May-89 08:45	5 / 14:04	9	9 normal/no significant signs
		12-May-89 08:49	6 / 07:24	9	9 soft stool, slight
		12-May-89 09:01	6 / 11:14	9	9 excessive thirst, moderate
		12-May-89 09:05	6 / 15:34	9	9 soft stool, slight
		12-May-89 09:08	7 / 07:54	9	9 normal/no significant signs
		12-May-89 09:14	7 / 10:32	9	9 normal/no significant signs
		12-May-89 10:13	7 / 14:55	9	9 soft stool, moderate
		15-May-89 08:07	8 / 07:17	9	9 normal/no significant signs
		15-May-89 08:16	8 / 10:27	9	9 normal/no significant signs
		15-May-89 08:21	8 / 14:56	9	9 normal/no significant signs
		15-May-89 08:28	9 / 07:23	9	9 normal/no significant signs
		15-May-89 08:43	9 / 10:21	9	9 normal/no significant signs
		15-May-89 08:54	9 / 14:00	9	9 normal/no significant signs
		15-May-89 09:13	10 / 07:25	9	9 normal/no significant signs
		15-May-89 09:21	10 / 10:32	9	9 normal/no significant signs
		15-May-89 09:25	10 / 14:10	9	9 normal/no significant signs

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 86008M

Data Listing by Animal

Study Start Date: 07-Feb-89

PRINTED: 03-Oct-89

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SUB-ACUTE/

Cage #	Animal Sex/group	Date Data was Entered	Time Data was Entered	Study Day/time	Oper Data was Taken	#	Clinical signs / Comments
29	89A00044	M/10/3	15-May-89	09:36	11 / 07:35	9	soft stool, slight
			15-May-89	09:43	11 / 10:25	9	normal/no significant signs
			15-May-89	09:47	11 / 14:33	9	normal/no significant signs
			15-May-89	09:52	12 / 08:00	9	normal/no significant signs
			15-May-89	09:58	12 / 11:23	9	normal/no significant signs
			15-May-89	10:01	12 / 16:52	9	normal/no significant signs
			15-May-89	10:08	13 / 08:05	9	soft stool, slight
			15-May-89	10:14	13 / 11:00	9	normal/no significant signs
			15-May-89	10:19	13 / 15:50	9	normal/no significant signs
			15-May-89	10:22	14 / 07:29	9	normal/no significant signs
			15-May-89	10:27	14 / 10:40	9	normal/no significant signs
			15-May-89	10:30	14 / 15:00	9	normal/no significant signs
			15-May-89	10:32	15 / 08:00	9	normal/no significant signs
			15-May-89	14:21	1 / 07:25	9	normal/no significant signs
			15-May-89	14:26	1 / 11:24	9	normal/no significant signs
			15-May-89	14:30	1 / 14:19	9	normal/no significant signs
			15-May-89	14:56	2 / 07:20	9	soft stool, moderate
			15-May-89	15:02	2 / 11:35	9	normal/no significant signs
			15-May-89	15:07	2 / 14:04	9	normal/no significant signs
			15-May-89	15:13	3 / 09:15	9	normal/no significant signs
30	89A00051	M/10/4	15-May-89	15:32	3 / 11:20	9	normal/no significant signs
			15-May-89	15:39	3 / 14:30	9	normal/no significant signs
			15-May-89	15:46	4 / 07:24	9	soft stool, slight
			15-May-89	15:51	4 / 11:41	9	normal/no significant signs
			15-May-89	15:55	4 / 14:09	9	normal/no significant signs
			16-May-89	08:06	5 / 07:40	9	normal/no significant signs
			16-May-89	08:11	5 / 11:39	9	normal/no significant signs
			16-May-89	08:14	5 / 15:26	9	normal/no significant signs
			16-May-89	08:18	6 / 07:59	9	soft stool, moderate
			16-May-89	08:22	6 / 10:55	9	normal/no significant signs
			16-May-89	08:24	6 / 14:50	9	normal/no significant signs
			16-May-89	08:28	7 / 07:23	9	soft stool, slight
			16-May-89	08:33	7 / 10:48	9	normal/no significant signs
			16-May-89	08:38	7 / 15:04	9	inactive, severe
			16-May-89	09:32	8 / 07:29	9	soft stool, slight
			16-May-89	09:47	8 / 10:46	9	normal/no significant signs
			16-May-89	09:52	8 / 14:05	9	normal/no significant signs

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008M

Date Listing by Animal

Study Start Date: 07-Feb-89

PRINTED: 03-Oct-89

Page: 68

SUB-ACUTE/

Cage #	Animal Sex/group	Date Data was Entered	Time Data was Taken	Study Day/time Oper	#	Clinical signs / Comments
16-May-89		09:57	9 / 07:21	9	9	normal/no significant signs
16-May-89		10:03	9 / 10:59	9	9	normal/no significant signs
16-May-89		10:07	9 / 14:06	9	9	normal/no significant signs
16-May-89		10:19	10 / 07:25	9	9	soft stool, slight
16-May-89		10:22	10 / 10:56	9	9	normal/no significant signs
16-May-89		10:26	10 / 14:28	9	9	normal/no significant signs
16-May-89		13:24	11 / 08:05	9	9	normal/no significant signs
16-May-89		13:41	11 / 11:58	9	9	normal/no significant signs
16-May-89		13:55	11 / 16:55	9	9	normal/no significant signs
16-May-89		13:58	12 / 08:10	9	9	normal/no significant signs
16-May-89		14:19	12 / 11:27	9	9	normal/no significant signs
16-May-89		14:31	12 / 15:40	9	9	normal/no significant signs
16-May-89		14:37	13 / 07:21	9	9	normal/no significant signs
16-May-89		14:44	13 / 11:02	9	9	normal/no significant signs
16-May-89		14:48	13 / 14:55	9	9	normal/no significant signs
16-May-89		14:51	14 / 09:09	9	9	normal/no significant signs
16-May-89		14:55	14 / 10:30	9	9	normal/no significant signs
16-May-89		15:00	14 / 14:30	9	9	normal/no significant signs
16-May-89		15:08	15 / 07:41	9	9	soft stool, moderate

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008f

Data Listing by Animal

Study Start Date: 31-Jan-89

PRINTED: 03-Oct-89
Page: 1

SUB-ACUTE/

Cage #	Animal Sex/group	Date Entered	Time Entered	Date Taken	Study Day/time Oper	Clinical signs / Comments
1	89A00022 F / 1/1	21-Feb-89 17:54		1 / 08:52	3	normal/no significant signs
		12-Apr-89 13:39		1 / 09:53	9	disoriented, severe tremors, moderate vomiting
		12-Apr-89 13:57		1 / 14:04	9	tremors, slight
		13-Apr-89 10:13		2 / 10:12	9	disoriented, moderate
		13-Apr-89 10:20		2 / 11:13	9	normal/no significant signs
						disoriented, moderate tremors, moderate vomiting
		13-Apr-89 10:27		2 / 14:34	9	inactive, moderate
						disoriented, moderate
		13-Apr-89 10:36		3 / 07:39	9	inactive, slight
		13-Apr-89 10:47		3 / 09:43	9	normal/no significant signs
						disoriented, moderate tremors, slight vomiting
						inactive, moderate
		13-Apr-89 11:02		3 / 14:01	9	diarrhea, slight
						tremors, slight
		13-Apr-89 11:51		4 / 08:50	9	inactive, slight
		13-Apr-89 11:55		4 / 09:54	9	normal/no significant signs
						disoriented, moderate tremors, moderate vomiting
						inactive, moderate
		13-Apr-89 12:05		4 / 14:03	9	diarrhea, slight
						tremors, moderate
						vomiting
						inactive, severe
		13-Apr-89 12:15		5 / 09:30	9	inactive, moderate
		13-Apr-89 12:22		5 / 12:32	9	inactive, moderate
		13-Apr-89 12:27		5 / 14:05	9	inactive, moderate
		13-Apr-89 12:31		6 / 09:19	9	normal/no significant signs
		13-Apr-89 12:40		6 / 10:30	9	inactive, moderate

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

PRINTED: 03-Oct-89
Page: 2

Ref Data Listings of Clinical Signs Without Masses

Study Number: 88008F

Data Listing by Animal

Study Start Date: 31-Jan-89

SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time	Oper #	Clinical signs / Comments
1	89A00022	F / 1/1			
		13-Apr-89 12:45	6 / 14:04	9	inactive, slight
		13-Apr-89 12:48	7 / 08:51	9	normal/no significant signs
		13-Apr-89 12:51	7 / 10:04	9	disoriented, severe tremors, severe vomiting
		13-Apr-89 12:57	7 / 14:45	9	inactive, severe tremors, moderate
		13-Apr-89 13:04	8 / 09:41	9	inactive, moderate
		13-Apr-89 13:08	8 / 10:42	9	normal/no significant signs
				9	disoriented, slight tremors, severe vomiting
		13-Apr-89 13:18	8 / 14:38	9	inactive, moderate hunched posture, moderate
				9	disoriented, slight tremors, moderate
		13-Apr-89 13:23	9 / 09:38	9	inactive, moderate
		13-Apr-89 13:28	9 / 10:39	9	normal/no significant signs
				9	disoriented, moderate tremors, moderate vomiting
		17-Apr-89 08:09	9 / 15:07	9	inactive, moderate tremors, slight
				9	inactive, moderate
		17-Apr-89 08:40	10 / 09:13	9	increased respiration depth, moderate
				9	tremors, slight
				9	inactive, moderate
		17-Apr-89 08:49	10 / 10:41	9	hunched posture, moderate
				9	tremors, severe
				9	inactive, severe
				9	hunched posture, severe
				9	disoriented, severe vomiting
		17-Apr-89 09:02	10 / 14:26	9	increased respiration depth, moderate
				9	tremors, severe

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008F

Data Listing by Animal

Study Start Date: 31-Jan-89

PRINTED: 03-Oct-89
Page: 3

SUB-ACUTE/

Cage #	Animal Sex/group Date	Time	Study Day/Time Oper	Clinical signs / Comments
#	Number /Subgroup Date was Entered	Date was Taken	#	
1	89A00022 F/ 1/1	17-Apr-89 09:02	10 / 14:26	9 inactive, severe hunched posture, severe increased respiration depth, slight tremors, moderate inactive, moderate hunched posture, moderate tremors, severe inactive, severe hunched posture, moderate vomiting
		18-Apr-89 13:32	11 / 09:00	9 increased respiration depth, slight tremors, moderate inactive, moderate hunched posture, moderate tremors, severe
		18-Apr-89 13:40	11 / 10:28	9 hunched posture, moderate tremors, severe inactive, severe hunched posture, moderate vomiting
		18-Apr-89 13:45	11 / 14:34	9 disoriented, moderate tremors, moderate inactive, moderate hunched posture, severe disoriented, moderate tremors, moderate inactive, moderate hunched posture, moderate tremors, severe
		18-Apr-89 13:51	12 / 08:42	9 hunched posture, moderate tremors, moderate inactive, moderate hunched posture, moderate tremors, severe
		18-Apr-89 13:59	12 / 11:55	9 hunched posture, moderate tremors, severe inactive, moderate hunched posture, moderate disoriented, moderate vomiting
		19-Apr-89 13:22	12 / 14:00	9 increased respiration depth, slight tremors, moderate inactive, moderate hunched posture, moderate disoriented, slight
		19-Apr-89 13:28	13 / 08:27	9 hunched posture, moderate tremors, moderate inactive, moderate hunched posture, moderate disoriented, slight
		19-Apr-89 13:41	13 / 11:17	9 hunched posture, moderate tremors, severe vomiting
				increased respiration depth, moderate

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008f

Data Listing by Animal

Study Start Date: 31-Jan-89

PRINTED: 03-Oct-89

Page: 4

SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time Oper Data was Taken	#	Clinical signs / Comments
1	89A00022 F / 1/1	19-Apr-89 13:54	13 / 14:34	9	inactive, slight hunched posture, slight tremors, slight
		24-Apr-89 11:13	14 / 09:30	9	inactive, slight hunched posture, moderate
		24-Apr-89 11:18	14 / 10:44	9	inactive, slight hunched posture, moderate disoriented, moderate tremors, moderate vomiting
		24-Apr-89 11:26	14 / 14:31	9	increased respiration depth, moderate hunched posture, moderate tremors, severe disoriented, moderate
		24-Apr-89 11:33	15 / 08:15	9	inactive, slight hunched posture, slight tremors, moderate
2	89A00038 F / 1/2	25-Apr-89 13:15	1 / 09:05	9	normal/no significant signs
		25-Apr-89 13:22	1 / 10:07	9	circling
		25-Apr-89 13:33	1 / 14:42	9	circling
		25-Apr-89 13:44	2 / 07:30	9	normal/no significant signs
		25-Apr-89 18:40	2 / 10:26	3	disoriented, slight vomiting
		25-Apr-89 13:53	2 / 14:00	3	normal/no significant signs
		27-Jun-89 12:15	3 / 09:33	4	normal/no significant signs
		26-Jun-89 16:13	3 / 10:37	4	disoriented, moderate vomiting
		01-May-89 13:57	3 / 14:13	9	tremors, slight
		27-Jun-89 12:21	4 / 09:30	4	normal/no significant signs
		25-Apr-89 14:33	4 / 13:01	3	circling
		01-May-89 14:20	4 / 14:20	9	vomiting
		01-May-89 14:25	5 / 10:16	9	normal/no significant signs
		01-May-89 14:29	5 / 11:16	9	normal/no significant signs
		01-May-89 14:39	5 / 14:10	9	normal/no significant signs
		01-May-89 14:46	6 / 08:58	9	normal/no significant signs

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 86008F

Data Listing by Animal

Study Start Date: 31-Jan-89

PRINTED: 03-Oct-89
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SUB-ACUTE/

Cage #	Animal Sex/group	Date Data was Entered	Time Data was Entered	Study Day/time Data was Taken	Oper #	Clinical signs / Comments
2	89A00038	F	1/2	01-May-89	14:51	6 / 10:28 9 disoriented, slight tremors, slight
		01-May-89	15:03	6 / 14:39 9 disoriented, slight		
		01-May-89	15:11	7 / 10:11 9 normal/no significant signs		
		01-May-89	15:15	7 / 11:12 9 disoriented, slight vomiting		
		02-May-89	14:28	7 / 14:44 9 tremors, moderate vomiting		
		02-May-89	14:35	8 / 10:05 9 normal/no significant signs		
		02-May-89	14:41	8 / 11:06 9 disoriented, slight tremors, moderate		
		02-May-89	14:55	8 / 15:12 9 disoriented, slight tremors, slight		
		02-May-89	15:06	9 / 09:34 9 soft stool, slight vomiting		
		02-May-89	15:18	9 / 11:06 9 disoriented, moderate tremors, moderate		
		02-May-89	15:26	9 / 14:20 9 disoriented, moderate tremors, moderate		
		02-May-89	15:37	10 / 09:15 9 tremors, slight		
		02-May-89	15:42	10 / 10:54 9 tremors, moderate disoriented, moderate vomiting		
		02-May-89	15:49	10 / 14:41 9 tremors, moderate disoriented, slight hunched posture, slight		
		03-May-89	08:04	11 / 08:38 9 tremors, slight panting, moderate		
		03-May-89	08:14	11 / 12:15 9 disoriented, moderate vomiting		
						tremors, severe hunched posture, slight
		03-May-89	08:22	11 / 14:00 9 disoriented, slight tremors, slight		

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008F

Data Listing by Animal

Study Start Date: 31-Jan-89

PRINTED: 03-Oct-89
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SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time Oper Data was Taken	#	Clinical signs / Comments
2	89A00038 F / 1/2	03-May-89 08:22	11 / 14:00	9	hunched posture, slight
		03-May-89 08:30	12 / 08:31	9	tremors, moderate
		03-May-89 08:36	12 / 11:41	9	tremors, severe
					disoriented, moderate
					vomiting
		03-May-89 09:04	12 / 14:40	9	hunched posture, slight
					tremors, moderate
		03-May-89 09:08	13 / 10:00	9	disoriented, moderate
		03-May-89 09:11	13 / 11:03	9	tremors, moderate
					tremors, moderate
					disoriented, moderate
					vomiting
		03-May-89 09:29	13 / 14:45	9	increased respiration depth, slight
					tremors, slight
		03-May-89 09:35	14 / 09:00	9	disoriented, slight
		03-May-89 09:43	14 / 10:27	9	tremors, moderate
					tremors, moderate
					disoriented, moderate
					vomiting
		03-May-89 09:52	14 / 14:58	9	hunched posture, moderate
					excess salivation, moderate
					disoriented, slight
		03-May-89 09:57	15 / 07:23	9	panting, moderate
		10-May-89 08:07	1 / 06:50	9	normal/no significant signs
		10-May-89 08:10	1 / 10:32	9	normal/no significant signs
					vomiting
					inactive, slight
		10-May-89 08:15	1 / 14:03	9	disoriented, slight
		10-May-89 08:17	2 / 07:10	9	normal/no significant signs
		10-May-89 08:19	2 / 10:24	9	normal/no significant signs
		10-May-89 08:24	2 / 14:22	9	disoriented, slight
		10-May-89 08:28	3 / 07:45	9	normal/no significant signs
		10-May-89 08:33	3 / 10:26	9	normal/no significant signs
					vomiting
					inactive, slight

3 89A00072 F / 1/4

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008F

Data Listing by Animal

Study Start Date: 31-Jan-89

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SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time	Oper Data was Taken	#	Clinical signs / Comments
3	89A00072	F / 1/4	10-May-89 08:33	3 / 10:26	9	disoriented, slight
		10-May-89 08:38	3 / 14:05		9	normal/no significant signs
		10-May-89 08:40	4 / 07:15		9	normal/no significant signs
		10-May-89 08:43	4 / 11:50		9	normal/no significant signs
		10-May-89 08:48	4 / 14:21		9	normal/no significant signs
		10-May-89 08:51	5 / 07:19		9	normal/no significant signs
		10-May-89 08:53	5 / 10:45		9	inactive, slight excess salivation, moderate excessive thirst, moderate
		10-May-89 08:56	5 / 14:25		9	normal/no significant signs
		10-May-89 08:58	6 / 07:12		9	normal/no significant signs
		10-May-89 09:01	6 / 10:49		9	vomiting inactive, slight disoriented, slight
		10-May-89 09:03	6 / 14:12		9	excessive thirst, moderate
		10-May-89 09:05	7 / 07:39		9	normal/no significant signs
		10-May-89 09:07	7 / 10:31		9	normal/no significant signs vomiting inactive, slight disoriented, slight
		10-May-89 09:11	7 / 14:37		9	excessive thirst, moderate
		10-May-89 09:20	8 / 07:18		9	disoriented, slight
		10-May-89 09:23	8 / 10:26		9	normal/no significant signs disoriented, slight
		10-May-89 09:31	8 / 14:10		9	inactive, slight
		10-May-89 09:33	9 / 07:12		9	inactive, slight
		10-May-89 09:35	9 / 10:36		9	normal/no significant signs disoriented, moderate
						inactive, moderate vomiting excess salivation, severe
		10-May-89 09:39	9 / 14:11		9	normal/no significant signs
		10-May-89 09:41	10 / 09:05		9	normal/no significant signs
		10-May-89 09:43	10 / 10:25		9	normal/no significant signs disoriented, moderate inactive, moderate

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008f

Date Listing by Animal

Study Start Date: 31-Jan-89

PRINTED: 03-Oct-89
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SUB-ACUTE/

Cage #	Animal Sex/group Date and Number /Subgroup Date was Entered	Time Date was Entered	Study Day/time Oper Data was Taken	#	Clinical signs / Comments
3	89A00072	F / 1/4	10-May-89 09:43	10 / 10:25	9 vomiting
			10-May-89 09:46	10 / 14:30	excess salivation, slight
			10-May-89 09:48	11 / 07:06	normal/no significant signs
			10-May-89 09:51	11 / 10:37	normal/no significant signs
					disoriented, slight
					inactive, slight
					vomiting
			10-May-89 09:57	11 / 14:10	excess salivation, slight
			10-May-89 10:00	12 / 07:24	normal/no significant signs
			10-May-89 10:02	12 / 10:43	excess salivation, moderate
					disoriented, slight
					inactive, slight
					vomiting
					excess salivation, slight
					excessive thirst, slight
			10-May-89 10:06	12 / 15:10	normal/no significant signs
			10-May-89 10:09	13 / 07:45	lack of appetite, moderate
			10-May-89 10:12	13 / 09:58	disoriented, slight
					inactive, moderate
					vomiting
			10-May-89 10:15	13 / 15:15	disoriented, slight
					inactive, slight
			10-May-89 10:18	14 / 07:12	normal/no significant signs
			10-May-89 10:21	14 / 09:50	excess salivation, severe
					vomiting
					excessive thirst, slight
					inactive, slight
			10-May-89 10:25	14 / 14:51	inactive, slight
					hunched posture, slight
					disoriented, slight
			10-May-89 10:27	15 / 07:16	normal/no significant signs
			21-Feb-89 17:54	1 / 09:00	normal/no significant signs
			12-Apr-89 13:43	1 / 10:02	disoriented, moderate
					tremors, moderate
					inactive, moderate

4 89A00031

F / 2/1

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOGS/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008F

Data Listing by Animal

Study Start Date: 31-Jan-89

PRINTED: 03-Oct-89
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SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/Time Data was Taken	Oper #	Clinical signs / Comments
4	89A00031	F / 2/1	12-Apr-89 13:43	1 / 10:02	9 excess salivation, severe vomiting
		12-Apr-89 13:58	1 / 14:17	9 disoriented, moderate inactive, moderate	
		13-Apr-89 10:14	2 / 10:15	9 normal/no significant signs	
		13-Apr-89 10:21	2 / 11:18	9 inactive, moderate vomiting	
		13-Apr-89 10:29	2 / 14:35	9 tremors, slight inactive, slight	
		13-Apr-89 10:37	3 / 07:43	9 disoriented, slight	
		13-Apr-89 10:49	3 / 09:47	9 normal/no significant signs	
				9 inactive, moderate vomiting	
				9 excess salivation, severe tremors, slight	
				9 disoriented, moderate	
		13-Apr-89 11:03	3 / 14:06	9 inactive, moderate	
				9 tremors, slight	
		13-Apr-89 11:51	4 / 09:00	9 normal/no significant signs	
		13-Apr-89 11:57	4 / 10:00	9 inactive, moderate vomiting	
				9 excess salivation, moderate tremors, moderate	
		13-Apr-89 12:06	4 / 14:04	9 inactive, moderate	
				9 tremors, moderate	
		13-Apr-89 12:15	5 / 09:30	9 inactive, slight	
				9 tremors, slight	
		13-Apr-89 12:23	5 / 12:35	9 inactive, slight	
				9 vomiting	
		13-Apr-89 12:27	5 / 14:07	9 inactive, slight	
		13-Apr-89 12:32	6 / 09:29	9 normal/no significant signs	
		13-Apr-89 12:41	6 / 10:30	9 inactive, slight	
				9 excess salivation, slight	
				9 tremors, slight	
		13-Apr-89 12:46	6 / 14:05	9 inactive, slight	

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008F

Date Listing by Animal

Study Start Date: 31-Jan-89

PRINTED: 03-Oct-89
Page: 10

SUB-ACUTE/

Cage #	Animal Sex/group Date	Time Entered	Study Day/Time	Oper Date Taken	#	Clinical signs / Comments
4	89A00031	F / 2/1				
	13-Apr-89	12:46	6 / 14:05	9	9	tremors, slight
	13-Apr-89	12:49	7 / 08:52	9	9	normal/no significant signs
	13-Apr-89	12:52	7 / 10:06	9	9	vomiting tremors, moderate
	13-Apr-89	12:58	7 / 14:45	9	9	disoriented, moderate tremors, moderate disoriented, moderate inactive, slight
	13-Apr-89	13:04	8 / 09:43	9	9	hunched posture, moderate
	13-Apr-89	13:09	8 / 10:44	9	9	normal/no significant signs inactive, slight vomiting tremors, moderate
	13-Apr-89	13:19	8 / 14:38	9	9	disoriented, slight
	13-Apr-89	13:24	9 / 09:44	9	9	disoriented, slight
	13-Apr-89	13:29	9 / 10:45	9	9	normal/no significant signs vomiting tremors, moderate
	17-Apr-89	08:10	9 / 15:07	9	9	disoriented, moderate hunched posture, slight tremors, moderate
	17-Apr-89	08:40	10 / 09:13	9	9	disoriented, slight
	17-Apr-89	08:50	10 / 10:44	9	9	hunched posture, slight normal/no significant signs tremors, moderate
	17-Apr-89	09:02	10 / 14:27	9	9	disoriented, moderate hunched posture, slight
	18-Apr-89	13:36	11 / 09:00	9	9	disoriented, slight
	18-Apr-89	13:40	11 / 10:33	9	9	normal/no significant signs vomiting tremors, moderate
	18-Apr-89	13:46	11 / 14:34	9	9	disoriented, moderate tremors, slight
	18-Apr-89	13:52	12 / 08:43	9	9	disoriented, slight normal/no significant signs

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESTIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 86008F

Data Listing by Animal

Study Start Date: 31-Jan-89

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SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time	Oper	Clinical signs / Comments	
4	89A00031	F / 2/1	18-Apr-89	13:59	12 / 12:00	9 tremors, severe disoriented, moderate hunched posture, moderate vomiting
			19-Apr-89	13:22	12 / 14:00	9 inactive, moderate
			19-Apr-89	13:28	13 / 08:27	9 normal/no significant signs
			19-Apr-89	13:43	13 / 11:23	9 normal/no significant signs
						9 inactive, slight vomiting
						9 tremors, moderate disoriented, moderate hunched posture, slight
			19-Apr-89	13:54	13 / 14:34	9 normal/no significant signs
			24-Apr-89	11:13	14 / 09:30	9 normal/no significant signs
			24-Apr-89	11:18	14 / 10:40	9 inactive, slight vomiting
						9 excess salivation, moderate tremors, moderate disoriented, moderate hunched posture, moderate
5	89A00063	F / 2/3	24-Apr-89	11:28	14 / 14:38	9 inactive, slight
			24-Apr-89	11:34	15 / 08:15	9 disoriented, slight
			10-May-89	13:19	1 / 07:30	9 normal/no significant signs
			10-May-89	13:22	1 / 10:21	9 normal/no significant signs
						9 vomiting
			10-May-89	13:27	1 / 14:07	9 disoriented, slight
			10-May-89	13:33	2 / 06:47	9 normal/no significant signs
			10-May-89	13:37	2 / 10:10	9 normal/no significant signs
						9 disoriented, slight
						9 inactive, moderate
10-May-89	13:41	2 / 14:00	9 inactive, slight			
10-May-89	13:43	3 / 07:00	9 normal/no significant signs			
10-May-89	13:45	3 / 10:01	9 vomiting			
			9 disoriented, slight			
			9 inactive, moderate			
10-May-89	14:28	3 / 14:19	9 normal/no significant signs			
10-May-89	14:32	4 / 07:40	9 normal/no significant signs			

5 89A00063 F / 2/3

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008F

Date Listing by Animal

Study Start Date: 31-Jan-89

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SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time Oper	Clinical signs / Comments
5	89A00063	F / 2/3	10-May-89 14:34	4 / 10:07 9 vomiting disoriented, slight inactive, moderate
			10-May-89 14:39	4 / 14:00 9 normal/no significant signs
			10-May-89 14:41	5 / 07:17 9 normal/no significant signs
			10-May-89 14:43	5 / 11:12 9 vomiting disoriented, slight inactive, moderate
			10-May-89 14:47	5 / 14:04 9 normal/no significant signs
			10-May-89 14:50	6 / 07:13 9 normal/no significant signs
			10-May-89 14:53	6 / 10:10 9 vomiting inactive, slight tremors, slight
				excessive thirst, moderate
			10-May-89 14:56	6 / 14:09 9 normal/no significant signs
			10-May-89 14:59	7 / 07:10 9 normal/no significant signs
			10-May-89 15:01	7 / 10:25 9 vomiting disoriented, slight inactive, moderate
			10-May-89 15:07	7 / 14:00 9 normal/no significant signs
			10-May-89 15:15	8 / 07:35 9 normal/no significant signs
			10-May-89 15:20	8 / 10:08 9 vomiting inactive, slight disoriented, slight
				excessive thirst, severe pacing, moderate
			10-May-89 15:24	8 / 14:24 9 disoriented, slight pacing, moderate
			10-May-89 15:28	9 / 07:13 9 soft stool, slight
			10-May-89 15:32	9 / 10:06 9 vomiting inactive, moderate disoriented, moderate
			10-May-89 15:38	9 / 14:05 9 pacing, slight
			11-May-89 12:07	10 / 07:09 9 normal/no significant signs
			11-May-89 12:10	10 / 10:17 9 vomiting

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 66008f

Data Listing by Animal

Study Start Date: 31-Jan-89

PRINTED: 03-Oct-89
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SUB-ACUTE/

Cage #	Animal Sex/group	Date Entered	Time	Study Day/time	Oper	Clinical signs / Comments
#	Number /Subgroup	Date was	Entered	Data was	Taken	#
5	89A00063	F / 2/3	11-May-89	12:10	10 / 10:17	9
						inactive, moderate disoriented, moderate excessive thirst, moderate tremors, slight
	11-May-89	12:14	10 / 14:05	9		9
	11-May-89	12:18	11 / 09:00	9		9
	11-May-89	12:20	11 / 10:07	9		9
						normal/no significant signs vomiting inactive, moderate disoriented, moderate excessive thirst, severe pacing, slight pacing, slight pacing, slight vomiting
	11-May-89	12:25	11 / 14:30	9		9
	11-May-89	12:28	12 / 06:58	9		9
	11-May-89	12:32	12 / 10:11	9		9
						inactive, moderate disoriented, moderate excessive thirst, moderate tremors, slight excess salivation, slight disoriented, slight inactive, slight pacing, slight pacing, slight soft stool, moderate vomiting
	11-May-89	12:36	12 / 14:15	9		9
	11-May-89	12:39	13 / 07:14	9		9
	11-May-89	12:42	13 / 10:23	9		9
						inactive, moderate disoriented, slight excessive thirst, moderate tremors, moderate inactive, slight pacing, slight pacing, slight vomiting disoriented, slight vomiting disoriented, slight pacing, moderate
	11-May-89	12:46	13 / 15:03	9		9
	11-May-89	12:48	14 / 07:42	9		9
	11-May-89	14:11	14 / 09:37	9		9
						inactive, moderate vomiting disoriented, slight pacing, moderate
	11-May-89	14:16	14 / 15:00	9		9

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008f

Date Listing by Animal

Study Start Date: 31-Jan-89

PRINTED: 03-Oct-89

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SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time	Oper Data was Taken	#	Clinical signs / Comments
5	89A00063	F / 2/3	11-May-89 14:16	14 / 15:00	9	disoriented, slight
			11-May-89 14:18	15 / 07:09	9	pacings, slight soft stool, moderate
6	89A00066	F / 2/4	10-May-89 08:07	1 / 06:50	9	normal/no significant signs
			10-May-89 08:11	1 / 10:38	9	vomiting inactive, moderate disoriented, slight tremors, slight excessive thirst, moderate
			10-May-89 08:15	1 / 14:01	9	normal/no significant signs
			10-May-89 08:17	2 / 07:10	9	normal/no significant signs
			10-May-89 08:21	2 / 10:30	9	vomiting inactive, moderate disoriented, slight excessive thirst, moderate
			10-May-89 08:26	2 / 14:21	9	disoriented, slight
			10-May-89 08:28	3 / 07:40	9	normal/no significant signs
			10-May-89 08:34	3 / 10:26	9	vomiting inactive, slight disoriented, slight tremors, slight excessive thirst, moderate
			10-May-89 08:38	3 / 14:05	9	normal/no significant signs
			10-May-89 08:40	4 / 07:17	9	normal/no significant signs
			10-May-89 08:44	4 / 11:55	9	vomiting inactive, slight excessive thirst, moderate
			10-May-89 08:48	4 / 14:19	9	normal/no significant signs
			10-May-89 08:51	5 / 07:16	9	normal/no significant signs
			10-May-89 08:54	5 / 10:49	9	vomiting inactive, slight excessive thirst, moderate
			10-May-89 08:56	5 / 14:20	9	excess salivation, slight
			10-May-89 08:59	6 / 07:10	9	normal/no significant signs

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008f

Data Listing by Animal

Study Start Date: 31-Jan-89

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SUB-ACUTE/

Cage #	Animal Sex/group Date	Time Data was Entered	Study Day/time Oper Data was Taken	Oper #	Clinical signs / Comments
6	89A00066	F / 2/4	10-May-89 09:01	6 / 10:49	9 vomiting inactive, slight
	10-May-89	09:04	6 / 14:12	9	excessive thirst, moderate
	10-May-89	09:06	7 / 07:39	9	normal/no significant signs
	10-May-89	09:08	7 / 10:31	9	normal/no significant signs vomiting
					inactive, slight
					excessive thirst, moderate
					disoriented, slight
	10-May-89	09:11	7 / 14:34	9	normal/no significant signs
	10-May-89	09:20	8 / 07:16	9	normal/no significant signs
	10-May-89	09:24	8 / 10:27	9	normal/no significant signs vomiting
					inactive, slight
					disoriented, slight
					excess salivation, moderate
					excessive thirst, moderate
	10-May-89	09:31	8 / 14:08	9	inactive, slight
	10-May-89	09:33	9 / 07:11	9	normal/no significant signs
	10-May-89	09:36	9 / 10:38	9	normal/no significant signs vomiting
					inactive, moderate
					disoriented, moderate
					excess salivation, slight
					excessive thirst, moderate
	10-May-89	09:39	9 / 14:09	9	normal/no significant signs
	10-May-89	09:41	10 / 09:05	9	normal/no significant signs
	10-May-89	09:44	10 / 10:26	9	normal/no significant signs vomiting
					inactive, slight
					disoriented, moderate
					excess salivation, severe
					excessive thirst, moderate
	10-May-89	09:46	10 / 14:30	9	normal/no significant signs
	10-May-89	09:49	11 / 07:06	9	excessive thirst, slight
	10-May-89	09:52	11 / 10:40	9	excessive thirst, moderate vomiting
					inactive, slight

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008f

Data Listing by Animal

Study Start Date: 31-Jan-89

PRINTED: 03-Oct-89
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SUB-ACUTE/

Cage #	Animal Sex/group Number /Subgroup	Date and Time Data was Entered	Study Day/time Data was Taken	Oper #	Clinical signs / Comments	
6	89A00066	F / 2/4	10-May-89 09:52	11 / 10:40	9	disoriented, slight excess salivation, slight normal/no significant signs
			10-May-89 09:57	11 / 14:10	9	normal/no significant signs
			10-May-89 10:00	12 / 07:22	9	normal/no significant signs
			10-May-89 10:03	12 / 10:40	9	vomiting inactive, slight disoriented, slight excess salivation, moderate excessive thirst, moderate normal/no significant signs
		10-May-89 10:06	12 / 15:08	9	normal/no significant signs	
		10-May-89 10:09	13 / 07:45	9	normal/no significant signs	
		10-May-89 10:13	13 / 09:59	9	vomiting inactive, moderate disoriented, slight excessive thirst, moderate normal/no significant signs	
		10-May-89 10:16	13 / 15:15	9	normal/no significant signs	
		10-May-89 10:18	14 / 07:11	9	normal/no significant signs	
		10-May-89 10:21	14 / 09:52	9	vomiting inactive, slight disoriented, slight excessive thirst, moderate normal/no significant signs	
7	89A00025	F / 3/1	10-May-89 10:25	14 / 14:51	9	inactive, slight normal/no significant signs
			10-May-89 10:28	15 / 07:16	9	normal/no significant signs
			14-Mar-89 07:13	1 / 09:10	3	normal/no significant signs
			12-Apr-89 13:45	1 / 10:11	9	tremors, slight inactive, slight staggering, moderate vomiting
		12-Apr-89 13:59	1 / 14:19	9	disoriented, slight	
		13-Apr-89 10:14	2 / 10:23	9	normal/no significant signs	
		13-Apr-89 10:22	2 / 11:24	9	vomiting tremors, slight disoriented, moderate	
		13-Apr-89 10:31	2 / 14:36	9	disoriented, slight staggering, slight	
		13-Apr-89 10:38	3 / 07:47	9	normal/no significant signs	

7 89A00025 F / 3/1

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
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PRESIDIO OF SAN FRANCISCO, CA 94129
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SUB-ACUTE/

Cage #	Animal Sex/group Date	Time Data was Entered	Study Day/time Oper Data was Taken	#	Clinical signs / Comments
7 89A00025	F / 3/1	13-Apr-89 10:52	3 / 09:53	9	vomiting tremors, moderate disoriented, moderate hunched posture, slight tremors, slight hunched posture, slight inactive, slight normal/no significant signs vomiting tremors, moderate disoriented, moderate hunched posture, moderate tremors, severe hunched posture, moderate inactive, severe excess salivation, moderate tremors, slight inactive, moderate vomiting normal/no significant signs normal/no significant signs tremors, slight inactive, slight excess salivation, slight inactive, slight normal/no significant signs vomiting tremors, moderate inactive, severe excess salivation, slight tremors, moderate inactive, moderate disoriented, moderate normal/no significant signs vomiting
	13-Apr-89	11:05	3 / 14:09	9	
	13-Apr-89	11:52	4 / 09:05	9	
	13-Apr-89	11:58	4 / 10:07	9	
	13-Apr-89	12:09	4 / 14:05	9	
	13-Apr-89	12:16	5 / 09:30	9	
	13-Apr-89	12:23	5 / 12:34	9	
	13-Apr-89	12:27	5 / 14:10	9	
	13-Apr-89	12:32	6 / 09:39	9	
	13-Apr-89	12:42	6 / 10:43	9	
	13-Apr-89	12:46	6 / 14:06	9	
	13-Apr-89	12:49	7 / 08:52	9	
	13-Apr-89	12:53	7 / 10:11	9	
	13-Apr-89	12:59	7 / 14:46	9	
	13-Apr-89	13:04	8 / 09:45	9	
	13-Apr-89	13:10	8 / 10:51	9	

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
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SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/Time Oper Data was Taken	#	Clinical signs / Comments
7	89A00025	F / 3/1	13-Apr-89	13:10	8 / 10:51 9 inactive, moderate disoriented, moderate excess salivation, slight increased respiration depth, slight inactive, moderate disoriented, slight tremors, moderate inactive, slight hunched posture, slight inactive, severe vomiting tremors, severe increased respiration depth, severe inactive, moderate tremors, slight inactive, moderate tremors, moderate vomiting
		13-Apr-89	13:20	8 / 14:39	9 increased respiration depth, slight disoriented, slight tremors, moderate inactive, slight hunched posture, slight inactive, severe vomiting
		13-Apr-89	13:25	9 / 09:44	9 hunched posture, slight inactive, severe vomiting
		13-Apr-89	13:30	9 / 10:45	9 hunched posture, slight inactive, severe vomiting
		17-Apr-89	08:12	9 / 15:08	9 increased respiration depth, severe inactive, moderate tremors, slight inactive, moderate tremors, moderate vomiting
		17-Apr-89	08:41	10 / 09:14	9 hunched posture, moderate disoriented, moderate hunched posture, severe tremors, moderate increased respiration depth, slight inactive, severe tremors, severe disoriented, moderate hunched posture, moderate increased respiration depth, slight inactive, moderate disoriented, slight inactive, moderate vomiting
		17-Apr-89	08:50	10 / 10:47	9 hunched posture, moderate disoriented, moderate hunched posture, severe tremors, moderate increased respiration depth, slight inactive, severe tremors, severe disoriented, moderate hunched posture, moderate increased respiration depth, slight inactive, moderate disoriented, slight inactive, moderate vomiting
		17-Apr-89	09:04	10 / 14:28	9 hunched posture, moderate disoriented, moderate hunched posture, severe tremors, moderate increased respiration depth, slight inactive, severe tremors, severe disoriented, moderate hunched posture, moderate increased respiration depth, slight inactive, moderate disoriented, slight inactive, moderate vomiting
		18-Apr-89	13:37	11 / 09:00	9 hunched posture, moderate disoriented, slight inactive, moderate vomiting
		18-Apr-89	13:41	11 / 10:37	9 hunched posture, moderate disoriented, slight inactive, moderate vomiting

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

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SUB-ACUTE/

Cage #	Animal Sex/group Date	Time Study Day/time Oper	Clinical signs / Comments
7	89A00025	F / 3/1	18-Apr-89 13:47 11 / 14:34 9 tremors, moderate
			inactive, moderate
			disoriented, moderate
			excess salivation, moderate
	18-Apr-89	13:53 12 / 08:44 9	inactive, moderate
			soft stool, slight
	18-Apr-89	14:00 12 / 11:59 9	increased respiration depth, moderate
			inactive, severe
			vomiting
			tremors, severe
			disoriented, slight
			hunched posture, moderate
	19-Apr-89	13:23 12 / 14:00 9	inactive, moderate
			tremors, slight
			disoriented, moderate
			hunched posture, moderate
	19-Apr-89	13:29 13 / 08:27 9	inactive, moderate
			tremors, severe
	19-Apr-89	13:45 13 / 11:23 9	inactive, severe
			vomiting
			hunched posture, moderate
			increased respiration depth, slight
	19-Apr-89	13:55 13 / 14:36 9	inactive, slight
			increased respiration depth, slight
			disoriented, slight
	24-Apr-89	11:14 14 / 09:30 9	inactive, moderate
			tremors, severe
	24-Apr-89	11:20 14 / 10:50 9	vomiting
			tremors, slight
			inactive, moderate
			disoriented, moderate
			hunched posture, slight
			excess salivation, moderate
			increased respiration depth, slight
	24-Apr-89	11:29 14 / 14:39 9	vomiting

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

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Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time Oper Data was Taken	#	Clinical signs / Comments	
7	89A00025	F / 3/1	24-Apr-89	11:29	14 / 14:39	9 inactive, slight disoriented, slight tremors, slight soft stool, slight
			24-Apr-89	11:35	15 / 08:15	9 inactive, slight tremors, slight
8	89A00033	F / 3/2	25-Apr-89	13:16	1 / 09:19	9 normal/no significant signs
			25-Apr-89	13:23	1 / 10:19	9 excess salivation, severe tremors, slight
			25-Apr-89	13:36	1 / 14:44	9 tremors, slight squinting, severe, left eye
			25-Apr-89	13:45	2 / 07:35	9 normal/no significant signs
			27-Jun-89	14:26	2 / 10:31	4 vomiting
						inactive, moderate
						excess salivation, severe hunched posture, moderate
			25-Apr-89	13:56	2 / 14:01	9 inactive, slight
			27-Jun-89	12:52	3 / 09:34	4 hunched posture, slight
			26-Jun-89	16:17	3 / 10:39	4 normal/no significant signs
						4 vomiting
						inactive, moderate
			excess salivation, moderate hunched posture, moderate			
			increased respiration depth, moderate			
01-May-89		13:58	3 / 14:14	9 hunched posture, slight		
				disoriented, slight		
27-Jun-89		12:54	4 / 09:30	4 squinting, slight, left eye		
25-Apr-89		14:35	4 / 13:05	3 squinting, slight, left eye		
				vomiting		
				diarrhea		
01-May-89		14:21	4 / 14:22	9 squinting, slight, left eye		
01-May-89		14:26	5 / 10:20	9 normal/no significant signs		
01-May-89		14:32	5 / 11:21	9 excess salivation, severe		
				squinting, slight, left eye		
				vomiting		
				inactive, moderate		

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

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SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/Time Oper Data was Taken	#	Clinical signs / Comments
8 89A00033	F / 3/2	01-May-89 14:41	5 / 14:11	9	squinting, slight, left eye
		01-May-89 14:46	6 / 08:58	9	normal/no significant signs
		01-May-89 14:56	6 / 10:34	9	excess salivation, severe hunched posture, moderate tremors, slight vomiting
		01-May-89 15:06	6 / 14:39	9	inactive, moderate increased respiration depth, slight hunched posture, slight
		01-May-89 15:12	7 / 10:14	9	inactive, slight
		01-May-89 15:16	7 / 11:15	9	normal/no significant signs vomiting
		02-May-89 14:28	7 / 14:47	9	hunched posture, moderate excessive thirst, severe
		02-May-89 14:37	8 / 10:07	9	hunched posture, slight
		02-May-89 14:47	8 / 11:10	9	inactive, slight excess salivation, slight vomiting
					inactive, moderate hunched posture, moderate increased respiration depth, slight disoriented, slight
		02-May-89 14:56	8 / 15:13	9	excessive thirst, moderate
		02-May-89 15:07	9 / 09:34	9	excessive thirst, severe
		02-May-89 15:20	9 / 11:14	9	inactive, slight hunched posture, slight vomiting
					inactive, moderate hunched posture, moderate increased respiration depth, slight disoriented, slight
		02-May-89 15:29	9 / 14:21	9	excess salivation, severe tremors, moderate disoriented, slight

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

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SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time Oper Data was Taken	#	Clinical signs / Comments	
8	89A00033	F / 3/2	02-May-89 15:29	9 / 14:21	9	inactive, slight hunched posture, slight increased respiration depth, slight normal/no significant signs
		02-May-89 15:37	10 / 09:15	9	vomiting	
		02-May-89 15:44	10 / 11:01	9	inactive, moderate hunched posture, moderate disoriented, moderate excess salivation, severe tremors, moderate	
		02-May-89 15:50	10 / 14:42	9	inactive, slight hunched posture, slight tremors, slight	
		03-May-89 08:09	11 / 08:39	9	hunched posture, slight increased respiration depth, slight excessive thirst, moderate	
		03-May-89 08:16	11 / 12:20	9	vomiting	
					inactive, moderate hunched posture, moderate increased respiration depth, moderate disoriented, moderate excess salivation, moderate	
		03-May-89 08:24	11 / 14:00	9	vomiting	
					inactive, slight hunched posture, moderate excessive thirst, moderate	
		03-May-89 08:32	12 / 08:32	9	normal/no significant signs	
		03-May-89 08:41	12 / 11:47	9	vomiting	
					inactive, moderate hunched posture, moderate increased respiration depth, slight disoriented, slight excessive thirst, moderate tremors, severe	
		03-May-89 09:05	12 / 14:41	9	hunched posture, moderate	

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

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SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time Oper Data was Taken	#	Clinical signs / Comments
8	89A00033	F/ 3/2	03-May-89 09:05	12 / 14:41	9 disoriented, slight
			03-May-89 09:08	13 / 10:00	9 normal/no significant signs
			03-May-89 09:14	13 / 11:09	9 vomiting inactive, moderate hunched posture, moderate increased respiration depth, moderate disoriented, slight excess salivation, severe tremors, moderate
			03-May-89 09:30	13 / 14:45	9 inactive, slight hunched posture, slight
			03-May-89 09:36	14 / 09:00	9 normal/no significant signs
			03-May-89 09:45	14 / 10:30	9 vomiting inactive, moderate hunched posture, moderate disoriented, slight excess salivation, severe tremors, slight
9	89A00064	F/ 3/3	03-May-89 09:53	14 / 14:58	9 hunched posture, slight
			03-May-89 09:57	15 / 07:25	9 normal/no significant signs
			10-May-89 13:19	1 / 07:30	9 normal/no significant signs
			10-May-89 13:23	1 / 10:19	9 vomiting excess salivation, severe inactive, slight
			10-May-89 13:31	1 / 14:07	9 inactive, slight
			10-May-89 13:34	2 / 06:47	9 edema, severe, right leg
			10-May-89 13:37	2 / 10:11	9 edema, slight, right leg vomiting excess salivation, severe inactive, moderate
			10-May-89 13:41	2 / 14:00	9 inactive, slight
			10-May-89 13:43	3 / 07:00	9 normal/no significant signs
			10-May-89 13:46	3 / 09:58	9 vomiting excess salivation, moderate inactive, moderate

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

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SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time Data was Taken	Oper #	Clinical signs / Comments
9	89A00064 F / 3/3	10-May-89 14:28	3 / 14:19	9	inactive, slight
		10-May-89 14:32	4 / 07:40	9	normal/no significant signs
		10-May-89 14:34	4 / 10:07	9	vomiting excess salivation, moderate inactive, moderate
		10-May-89 14:39	4 / 14:00	9	inactive, slight
		10-May-89 14:41	5 / 07:17	9	normal/no significant signs
		10-May-89 14:44	5 / 11:19	9	vomiting excess salivation, moderate inactive, slight
		10-May-89 14:47	5 / 14:08	9	soft stool, slight
		10-May-89 14:50	6 / 07:14	9	soft stool, slight
		10-May-89 14:54	6 / 10:15	9	vomiting excess salivation, moderate inactive, slight
		10-May-89 14:57	6 / 14:12	9	excessive thirst, moderate
		10-May-89 14:59	7 / 07:10	9	normal/no significant signs
		10-May-89 15:02	7 / 10:30	9	soft stool, slight vomiting excess salivation, severe inactive, slight
		10-May-89 15:07	7 / 14:00	9	excessive thirst, moderate
		10-May-89 15:15	8 / 07:35	9	normal/no significant signs
		10-May-89 15:20	8 / 10:08	9	vomiting excess salivation, severe inactive, moderate
		10-May-89 15:25	8 / 14:29	9	excessive thirst, severe
		10-May-89 15:28	9 / 07:13	9	excess salivation, moderate
		10-May-89 15:33	9 / 10:11	9	inactive, slight soft stool, slight vomiting excess salivation, severe inactive, moderate
					excessive thirst, moderate

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

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Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time Oper Date was Taken	#	Clinical signs / Comments
9	89A00064	F / 3/3			
		10-May-89 15:38	9 / 14:05	9	inactive, slight
		11-May-89 12:08	10 / 07:09	9	soft stool, moderate
		11-May-89 12:11	10 / 10:19	9	vomiting
					excess salivation, severe
					inactive, moderate
					excessive thirst, moderate
					hunched posture, slight
		11-May-89 12:15	10 / 14:06	9	inactive, slight
					excessive thirst, moderate
					hunched posture, slight
		11-May-89 12:18	11 / 09:00	9	excessive thirst, moderate
		11-May-89 12:21	11 / 10:12	9	excessive thirst, moderate
					vomiting
					excess salivation, severe
					inactive, moderate
					hunched posture, slight
		11-May-89 12:25	11 / 14:30	9	excessive thirst, moderate
					inactive, slight
					hunched posture, slight
		11-May-89 12:28	12 / 07:00	9	soft stool, slight
		11-May-89 12:33	12 / 10:13	9	vomiting
					excess salivation, severe
					inactive, moderate
					excessive thirst, moderate
					hunched posture, slight
		11-May-89 12:36	12 / 14:16	9	inactive, slight
					disoriented, slight
		11-May-89 12:39	13 / 07:15	9	inactive, slight
					excessive thirst, slight
					soft stool, slight
		11-May-89 12:43	13 / 10:27	9	vomiting
					excess salivation, moderate
					inactive, moderate
					excessive thirst, moderate
					hunched posture, slight

Appendix D (cont): INDIVIDUAL ANIMAL HISTORIES

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Cage #	Animal Sex/group	Date Data was Entered	Time Data was Entered	Study Day/time	Oper #	Clinical signs / Comments
9	89A00064 F / 3/3	11-May-89	12:46	13 / 15:04	9	inactive, slight
		11-May-89	12:48	14 / 07:42	9	inactive, slight
		11-May-89	14:12	14 / 09:37	9	inactive, moderate vomiting
		11-May-89	14:16	14 / 15:00	9	disoriented, moderate pacing, moderate
		11-May-89	14:18	15 / 07:09	9	disoriented, slight soft stool, moderate
						pacing, slight
10	89A00020 F / 4/1	12-Apr-89	13:20	1 / 09:17	9	normal/no significant signs
		12-Apr-89	13:46	1 / 10:19	9	disoriented, severe tremors, moderate
						inactive, slight excess salivation, slight
						vomiting
		12-Apr-89	14:00	1 / 14:20	9	disoriented, moderate
		13-Apr-89	10:14	2 / 10:28	9	inactive, slight
		13-Apr-89	10:23	2 / 11:29	9	normal/no significant signs
		13-Apr-89	10:32	2 / 14:37	9	normal/no significant signs
		13-Apr-89	10:39	3 / 07:49	9	normal/no significant signs
		13-Apr-89	10:54	3 / 09:59	9	vomiting
						disoriented, slight
						inactive, slight
		13-Apr-89	11:05	3 / 14:11	9	normal/no significant signs
		13-Apr-89	11:52	4 / 09:00	9	normal/no significant signs
		13-Apr-89	11:59	4 / 10:01	9	tremors, slight
						inactive, slight
		13-Apr-89	12:09	4 / 14:05	9	normal/no significant signs
		13-Apr-89	12:17	5 / 12:35	9	normal/no significant signs
		13-Apr-89	12:23	5 / 12:40	9	normal/no significant signs
		13-Apr-89	12:28	5 / 14:10	9	normal/no significant signs
		13-Apr-89	12:33	6 / 09:47	9	normal/no significant signs
		13-Apr-89	12:42	6 / 10:51	9	normal/no significant signs
		13-Apr-89	12:46	6 / 14:06	9	normal/no significant signs
		13-Apr-89	12:49	7 / 00:53	9	normal/no significant signs

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

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Cage #	Animal Sex/group Number /Subgroup	Date and Date was Entered	Time Data was Taken	Study Day/time Oper	Clinical signs / Comments
10	89A00020	F / 4/1	13-Apr-89 12:53	7 / 10:12	9 excess salivation, slight inactive, slight
		13-Apr-89 12:59	7 / 14:46	9 normal/no significant signs	
		13-Apr-89 13:04	8 / 09:52	9 normal/no significant signs	
		13-Apr-89 13:13	8 / 10:53	9 vomiting	
		13-Apr-89 13:20	8 / 14:40	9 excessive thirst, severe disoriented, slight	
		13-Apr-89 13:25	9 / 09:50	9 hunched posture, slight	
		13-Apr-89 13:31	9 / 10:51	9 normal/no significant signs	
		17-Apr-89 08:12	9 / 15:08	9 disoriented, slight	
		17-Apr-89 08:41	10 / 09:14	9 excessive thirst, severe	
		17-Apr-89 08:52	10 / 10:54	9 normal/no significant signs	
				9 normal/no significant signs	
				9 disoriented, moderate	
				9 excessive thirst, moderate	
		17-Apr-89 09:05	10 / 14:28	9 hunched posture, slight	
				9 disoriented, slight	
				9 tremors, slight	
		18-Apr-89 13:37	11 / 09:00	9 normal/no significant signs	
		18-Apr-89 13:41	11 / 10:38	9 vomiting	
				9 tremors, moderate	
		18-Apr-89 13:48	11 / 14:35	9 disoriented, slight	
				9 tremors, moderate	
				9 inactive, moderate	
		18-Apr-89 13:53	12 / 08:44	9 normal/no significant signs	
		18-Apr-89 14:01	12 / 12:05	9 vomiting	
				9 tremors, moderate	
				9 excessive thirst, moderate	
		19-Apr-89 13:24	12 / 14:00	9 normal/no significant signs	
		19-Apr-89 13:30	13 / 08:28	9 normal/no significant signs	
		19-Apr-89 13:46	13 / 11:30	9 vomiting	
				9 tremors, moderate	
				9 excessive thirst, moderate	
		19-Apr-89 13:59	13 / 14:37	9 normal/no significant signs	
		24-Apr-89 11:14	14 / 09:30	9 normal/no significant signs	
		24-Apr-89 11:21	14 / 10:48	9 normal/no significant signs	

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LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008F

Data Listing by Animal

Study Start Date: 31-Jan-89

PRINTED: 03-Oct-89

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SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time Oper Data was Taken	#	Clinical signs / Comments
10	89A00020	F / 4/1	24-Apr-89 11:29	14 / 14:40	9 tremors, slight
			24-Apr-89 11:35	15 / 07:30	9 normal/no significant signs
11	89A00039	F / 4/2	25-Apr-89 13:16	1 / 09:29	9 normal/no significant signs
			25-Apr-89 13:24	1 / 10:30	9 disoriented, slight vomiting
			25-Apr-89 13:37	1 / 14:45	9 disoriented, slight tremors, slight
			25-Apr-89 13:45	2 / 07:45	9 normal/no significant signs
			25-Apr-89 13:57	2 / 10:39	9 disoriented, moderate vomiting
			26-Jun-89 11:44	2 / 14:02	4 tremors, slight
			25-Apr-89 14:12	3 / 09:34	9 normal/no significant signs
			27-Jun-89 14:57	3 / 10:43	4 disoriented, moderate inactive, slight hunched posture, slight
			01-May-89 13:58	3 / 14:15	9 normal/no significant signs
			25-Apr-89 14:35	4 / 09:31	3 normal/no significant signs
			01-May-89 14:15	4 / 13:07	9 normal/no significant signs
			01-May-89 14:21	4 / 14:23	9 normal/no significant signs
			01-May-89 14:26	5 / 10:27	9 normal/no significant signs
			01-May-89 14:33	5 / 11:00	9 vomiting
			01-May-89 14:41	5 / 14:11	9 normal/no significant signs
			01-May-89 14:46	6 / 09:00	9 normal/no significant signs
			01-May-89 14:57	6 / 10:34	9 disoriented, slight vomiting
					inactive, slight hunched posture, slight
			01-May-89 15:07	6 / 14:40	9 inactive, slight
			01-May-89 15:12	7 / 10:21	9 normal/no significant signs
			01-May-89 15:18	7 / 11:22	9 disoriented, moderate vomiting
					tremors, moderate hunched posture, slight
			02-May-89 14:30	7 / 14:48	9 disoriented, slight
			02-May-89 14:38	8 / 10:12	9 normal/no significant signs

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
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PRESIDIO OF SAN FRANCISCO, CA 94129
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SUB-ACUTE /

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time	Oper #	Clinical signs / Comments
11	89A00039	F / 4/2	02-May-89 14:49	8 / 11:13	9 disoriented, slight vomiting tremors, moderate inactive, slight hunched posture, slight disoriented, slight panting, moderate normal/no significant signs disoriented, moderate vomiting tremors, moderate hunched posture, moderate disoriented, moderate inactive, slight inactive, slight disoriented, moderate vomiting tremors, slight hunched posture, slight inactive, slight disoriented, slight panting, moderate panting, moderate tremors, moderate disoriented, moderate disoriented, slight tremors, slight panting, moderate tremors, moderate disoriented, slight tremors, slight tremors, moderate disoriented, slight vomiting inactive, slight hunched posture, slight tremors, slight
			02-May-89 15:02	8 / 15:14	9
			02-May-89 15:07	9 / 09:35	9
			02-May-89 15:21	9 / 11:14	9
			02-May-89 15:30	9 / 14:23	9
			02-May-89 15:38	10 / 09:15	9
			02-May-89 15:44	10 / 11:00	9
			02-May-89 15:51	10 / 14:42	9
			03-May-89 08:10	11 / 08:39	9
			03-May-89 08:17	11 / 12:19	9
			03-May-89 08:25	11 / 14:00	9
			03-May-89 08:33	12 / 08:32	9
			03-May-89 08:42	12 / 11:47	9
			03-May-89 09:05	12 / 14:41	9
			03-May-89 09:08	13 / 10:00	9

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
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Raw Data Listings of Clinical Signs Without Masses

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SUB-ACUTE/

Cage #	Animal Sex/group	Date	Time	Study Day/time	Oper	Clinical signs / Comments
#	Number	/Subgroup	Date was Entered	Data wa	Taken	#
11	89A00039	F / 4/2	03-May-89	09:18	13 / 11:09	9
						tremors, moderate disoriented, moderate vomiting
			03-May-89	09:31	13 / 14:46	9
						hunched posture, slight disoriented, slight vomiting
			03-May-89	09:36	14 / 09:00	9
			03-May-89	09:46	14 / 10:33	9
						hunched posture, slight tremors, slight disoriented, slight vomiting
			03-May-89	09:54	14 / 14:58	9
			03-May-89	09:58	15 / 07:28	9
			10-May-89	08:07	1 / 06:50	9
			10-May-89	08:12	1 / 10:40	9
						normal/no significant signs vomiting
			10-May-89	08:15	1 / 14:04	9
			10-May-89	08:17	2 / 07:10	9
			10-May-89	08:21	2 / 10:31	9
						disoriented, slight normal/no significant signs normal/no significant signs vomiting
			10-May-89	08:26	2 / 14:22	9
			10-May-89	08:28	3 / 07:45	9
			10-May-89	08:34	3 / 10:30	9
			10-May-89	08:39	3 / 14:05	9
			10-May-89	08:40	4 / 07:15	9
			10-May-89	08:46	4 / 12:00	9
			10-May-89	08:49	4 / 14:23	9
			10-May-89	08:51	5 / 07:19	9
			10-May-89	08:54	5 / 10:53	9
			10-May-89	08:56	5 / 14:27	9
			10-May-89	08:59	6 / 07:12	9
			10-May-89	09:01	6 / 10:53	9
			10-May-89	09:04	6 / 14:13	9
			10-May-89	09:06	7 / 07:40	9
						normal/no significant signs hyperactive, slight normal/no significant signs

12 89A00071 F / 4/4

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

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Date Listing by Animal

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SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/Time Oper Data was Taken	#	Clinical signs / Comments
12	89A00071	F / 4/4			
		10-May-89 09:08	7 / 10:34	9	excessive thirst, moderate
		10-May-89 09:12	7 / 14:40	9	normal/no significant signs
		10-May-89 09:21	8 / 07:19	9	soft stool, moderate
		10-May-89 09:24	8 / 10:30	9	vomiting
					inactive, slight
					disoriented, slight
		10-May-89 09:32	8 / 14:10	9	normal/no significant signs
		10-May-89 09:33	9 / 07:12	9	soft stool, moderate
		10-May-89 09:37	9 / 10:40	9	disoriented, slight
					hyperactive, moderate
		10-May-89 09:39	9 / 14:11	9	hyperactive, slight
		10-May-89 09:41	10 / 09:05	9	soft stool, moderate
		10-May-89 09:44	10 / 10:29	9	vomiting
					hyperactive, moderate
		10-May-89 09:46	10 / 14:30	9	hyperactive, slight
		10-May-89 09:49	11 / 07:07	9	hyperactive, moderate
					soft stool, slight
		10-May-89 09:52	11 / 10:41	9	hyperactive, moderate
		10-May-89 09:58	11 / 14:11	9	normal/no significant signs
		10-May-89 10:00	12 / 07:25	9	normal/no significant signs
		10-May-89 10:03	12 / 10:45	9	inactive, slight
					excessive thirst, slight
		10-May-89 10:06	12 / 15:15	9	normal/no significant signs
		10-May-89 10:09	13 / 07:47	9	soft stool, moderate
		10-May-89 10:13	13 / 10:03	9	hyperactive, moderate
					excessive thirst, slight
		10-May-89 10:16	13 / 15:15	9	hyperactive, moderate
		10-May-89 10:18	14 / 07:12	9	normal/no significant signs
		10-May-89 10:22	14 / 09:53	9	hyperactive, moderate
		10-May-89 10:26	14 / 14:52	9	hyperactive, slight
		10-May-89 10:28	15 / 07:17	9	soft stool, slight
		10-May-89 10:28	1 / 09:22	9	normal/no significant signs
		12-Apr-89 13:21	1 / 09:22	9	staggering, slight
		12-Apr-89 13:48	1 / 10:24	9	disoriented, moderate
					tremore, slight
13	89A00027	F / 5/1			

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

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Raw Data Listings of Clinical Signs Without Masses

Study Number: 8808f

Data Listing by Animal

Study Start Date: 31-Jan-89

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SUB-ACUTE/

Cage #	Animal Sex/group	Date	Time	Study Day/time	Oper	Clinical signs / Comments
#	Number	/Subgroup	Data was Entered	Data was Taken	#	
13	89A00027	F / 5/1	12-Apr-89	14:00	1 / 14:21	9 disoriented, moderate tremors, slight
			13-Apr-89	10:15	2 / 10:34	9 normal/no significant signs
			13-Apr-89	10:24	2 / 11:35	9 normal/no significant signs
			13-Apr-89	10:32	2 / 14:37	9 normal/no significant signs
			13-Apr-89	10:39	3 / 07:57	9 normal/no significant signs
			13-Apr-89	10:55	3 / 10:01	9 vomiting
			13-Apr-89	11:06	3 / 14:13	9 disoriented, moderate
			13-Apr-89	11:52	4 / 09:20	9 normal/no significant signs
			13-Apr-89	12:00	4 / 10:21	9 vomiting
						disoriented, moderate tremors, slight
			13-Apr-89	12:10	4 / 14:06	9 disoriented, slight
			13-Apr-89	12:18	5 / 11:40	9 normal/no significant signs
			13-Apr-89	12:24	5 / 12:43	9 normal/no significant signs
			13-Apr-89	12:29	5 / 14:12	9 normal/no significant signs
			13-Apr-89	12:33	6 / 09:51	9 normal/no significant signs
			13-Apr-89	12:42	6 / 10:52	9 excess salivation, slight
			13-Apr-89	12:46	6 / 14:07	9 normal/no significant signs
			13-Apr-89	12:49	7 / 08:53	9 normal/no significant signs
			13-Apr-89	12:54	7 / 10:16	9 disoriented, moderate tremors, slight
						excess salivation, slight
			13-Apr-89	13:00	7 / 14:47	9 disoriented, moderate
						tremors, moderate
			13-Apr-89	13:05	8 / 09:58	9 normal/no significant signs
			13-Apr-89	13:14	8 / 10:59	9 disoriented, slight
			13-Apr-89	13:21	8 / 14:41	9 disoriented, slight
						tremors, moderate
			13-Apr-89	13:25	9 / 09:53	9 normal/no significant signs
			13-Apr-89	13:31	9 / 10:54	9 disoriented, slight
						tremors, severe
						excess salivation, moderate
						inactive, moderate

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
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PRESIDIO OF SAN FRANCISCO, CA 94129
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Raw Data Listings of Clinical Signs Without Masses
Study Number: 88008f
Data Listing by Animal
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SUB-ACUTE/

Cage #	Animal Sex/group Date and Number /Subgroup Data was Entered	Time Data was Entered	Study Day/time Oper Data was Taken	#	Clinical signs / Comments
13	89A00027	F / 5/1	17-Apr-89	08:13	9 / 15:09 9 disoriented, slight tremors, moderate
	17-Apr-89	08:42	10 / 09:15	9	hunched posture, slight tremors, slight
	17-Apr-89	08:54	10 / 10:55	9	tremors, moderate disoriented, slight excess salivation, slight inactive, slight
	17-Apr-89	13:27	10 / 14:29	9	hunched posture, moderate tremors, moderate disoriented, slight
	18-Apr-89	13:37	11 / 09:00	9	tremors, moderate
	18-Apr-89	13:42	11 / 10:45	9	tremors, moderate disoriented, slight
	18-Apr-89	13:49	11 / 14:36	9	hunched posture, slight tremors, moderate
	18-Apr-89	13:56	12 / 08:45	9	disoriented, slight hunched posture, slight increased respiration rate, slight
	18-Apr-89	14:01	12 / 12:06	9	hunched posture, moderate disoriented, slight tremors, severe
	19-Apr-89	13:24	12 / 14:00	9	inactive, slight
	19-Apr-89	13:33	13 / 08:28	9	disoriented, slight
	19-Apr-89	13:47	13 / 11:30	9	hunched posture, slight hunched posture, slight vomiting
	19-Apr-89	13:59	13 / 14:37	9	disoriented, moderate tremors, severe
	24-Apr-89	11:14	14 / 09:30	9	hunched posture, slight
	24-Apr-89	11:22	14 / 10:52	9	hunched posture, moderate vomiting

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008F

Data Listing by Animal

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SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time	Oper	Clinical signs / Comments
14	89A00065	F / 5/3			
		10-May-89 14:55	6 / 10:22	9	excess salivation, slight
		10-May-89 14:57	6 / 14:14	9	normal/no significant signs
		10-May-89 14:59	7 / 07:10	9	normal/no significant signs
		10-May-89 15:02	7 / 10:34	9	vomiting
					inactive, slight
					excessive thirst, moderate
		10-May-89 15:08	7 / 14:00	9	vomiting
		10-May-89 15:16	8 / 07:35	9	soft stool, moderate
		10-May-89 15:21	8 / 10:14	9	vomiting
					disoriented, slight
		10-May-89 15:25	8 / 14:30	9	excessive thirst, severe
		10-May-89 15:29	9 / 07:13	9	normal/no significant signs
		10-May-89 15:34	9 / 10:11	9	soft stool, moderate
					vomiting
					disoriented, moderate
					excessive thirst, slight
		10-May-89 15:39	9 / 14:05	9	inactive, slight
		11-May-89 12:08	10 / 07:09	9	soft stool, moderate
		11-May-89 12:12	10 / 10:24	9	soft stool, slight
					vomiting
					disoriented, moderate
		11-May-89 12:15	10 / 14:00	9	inactive, slight
					inactive, slight
		11-May-89 12:18	11 / 09:00	9	panting, slight
		11-May-89 12:22	11 / 10:12	9	normal/no significant signs
					vomiting
					disoriented, moderate
		11-May-89 12:26	11 / 14:30	9	excessive thirst, moderate
					inactive, slight
		11-May-89 12:29	12 / 07:00	9	panting, slight
		11-May-89 12:34	12 / 10:20	9	soft stool, moderate
					disoriented, slight
					excessive thirst, moderate
					inactive, slight
		11-May-89 12:37	12 / 14:17	9	inactive, moderate

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

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SUB-ACUTE/

Cage Animal Sex/group Date and Time Study Day/Time Oper

Number /Subgroup Data was Entered Data was Taken # Clinical signs / Comments

14	89A00065	F / 5/3	11-May-89	12:40	13 / 07:16	9	soft stool, slight excessive thirst, moderate panting, slight vomiting
			11-May-89	12:43	13 / 10:27	9	excessive thirst, moderate normal/no significant signs
			11-May-89	12:46	13 / 15:06	9	soft stool, moderate panting, slight vomiting
			11-May-89	14:13	14 / 09:43	9	inactive, severe disoriented, slight normal/no significant signs
			11-May-89	14:16	14 / 15:00	9	normal/no significant signs
			11-May-89	14:18	15 / 07:09	9	normal/no significant signs
			10-May-89	08:08	1 / 06:50	9	normal/no significant signs
			10-May-89	08:12	1 / 10:45	9	excess salivation, severe vomiting
15	89A00069	F / 5/4	10-May-89	08:16	1 / 14:04	9	tremors, slight hunched posture, slight normal/no significant signs
			10-May-89	08:18	2 / 07:10	9	normal/no significant signs
			10-May-89	08:22	2 / 10:36	9	excess salivation, slight vomiting
			10-May-89	08:26	2 / 14:23	9	hunched posture, slight normal/no significant signs
			10-May-89	08:28	3 / 07:45	9	soft stool, slight
			10-May-89	08:35	3 / 10:31	9	excess salivation, moderate vomiting
			10-May-89	08:39	3 / 14:05	9	tremors, moderate disoriented, slight
			10-May-89	08:41	4 / 07:15	9	normal/no significant signs
			10-May-89	08:46	4 / 12:03	9	vomiting disoriented, slight
			10-May-89	08:49	4 / 14:27	9	excessive thirst, moderate
			10-May-89	08:51	5 / 07:20	9	normal/no significant signs

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

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SUB-ACUTE/

Cage #	Animal Sex/group	Date Entered	Time Data was Taken	Study Day/time (per #)	Clinical signs / Comments
15	89A00069	F / 5/4	10-May-89 08:55	5 / 10:57	9 excess salivation, slight vomiting
					excessive thirst, slight inactive, slight
		10-May-89 08:57	5 / 14:28	9 vomiting	
		10-May-89 08:59	6 / 07:12	9 normal/no significant signs	
		10-May-89 09:02	6 / 10:55	9 excess salivation, moderate vomiting	
					disoriented, slight inactive, moderate
		10-May-89 09:04	6 / 14:13	9 normal/no significant signs	
		10-May-89 09:06	7 / 07:40	9 normal/no significant signs	
		10-May-89 09:10	7 / 10:37	9 excess salivation, moderate vomiting	
					tremors, slight excessive thirst, slight inactive, slight
		10-May-89 09:12	7 / 14:22	9 increased respiration depth, slight	
		10-May-89 09:21	8 / 07:19	9 soft stool, slight	
		10-May-89 09:27	8 / 10:32	9 vomiting	
					excess salivation, moderate inactive, moderate
		10-May-89 09:32	8 / 14:10	9 normal/no significant signs	
		10-May-89 09:34	9 / 07:13	9 normal/no significant signs	
		10-May-89 09:37	9 / 10:43	9 excess salivation, moderate inactive, moderate	
					vomiting
		10-May-89 09:39	9 / 14:11	9 disoriented, slight	
		10-May-89 09:41	10 / 09:05	9 normal/no significant signs	
		10-May-89 09:45	10 / 10:32	9 normal/no significant signs	
					excess salivation, severe inactive, moderate
					vomiting
		10-May-89 09:47	10 / 14:30	9 disoriented, slight	
		10-May-89 09:49	11 / 07:07	9 normal/no significant signs	

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

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Cage #	Animal Sex/group	Date Data was Entered	Time Data was Entered	Study Day/time	Oper Data was Taken	#	Clinical signs / Comments
15	89A00069	F	5/4	10-May-89	09:53	11 / 10:45	9 inactive, moderate vomiting
				10-May-89	09:58	11 / 14:12	9 disoriented, slight
				10-May-89	10:00	12 / 07:25	9 normal/no significant signs
				10-May-89	10:04	12 / 10:41	9 excess salivation, moderate
				10-May-89	10:06	12 / 15:15	9 excessive thirst, moderate
				10-May-89	10:10	13 / 07:48	9 normal/no significant signs
				10-May-89	10:14	13 / 10:05	9 excess salivation, moderate
							9 inactive, moderate vomiting
							9 disoriented, slight
							9 excessive thirst, slight
				10-May-89	10:16	13 / 15:15	9 disoriented, slight
				10-May-89	10:18	14 / 07:13	9 normal/no significant signs
				10-May-89	10:23	14 / 09:55	9 inactive, slight
							9 disoriented, slight
							9 excess salivation, moderate
							9 hunched posture, slight
							9 tremors, slight
				10-May-89	10:26	14 / 14:52	9 normal/no significant signs
				10-May-89	10:28	15 / 07:17	9 normal/no significant signs
				12-Apr-89	13:21	1 / 09:30	9 normal/no significant signs
				12-Apr-89	13:52	1 / 10:31	9 bloody urine, severe vomiting
							9 disoriented, moderate
							9 tremors, moderate
							9 excess salivation, moderate
				12-Apr-89	14:01	1 / 14:21	9 vomiting
				13-Apr-89	10:15	2 / 10:39	9 disoriented, slight
				13-Apr-89	10:24	2 / 11:40	9 normal/no significant signs
				13-Apr-89	10:32	2 / 14:39	9 normal/no significant signs
				13-Apr-89	10:40	3 / 07:58	9 normal/no significant signs

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Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

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Study Number: 88008F

Data Listing by Animal

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SUB-ACUTE/

Cage #	Animal Sex/group	Date Entered	Time Entered	Study Day/time Oper	Clinical signs / Comments
16	89A00029	F / 6/1	13-Apr-89 10:57	3 / 10:08	9 vomiting disoriented, slight tremors, moderate
		13-Apr-89 11:06	3 / 14:11	9	normal/no significant signs
		13-Apr-89 11:52	4 / 09:20	9	normal/no significant signs
		13-Apr-89 12:02	4 / 10:23	9	vomiting disoriented, moderate tremors, moderate
		13-Apr-89 12:11	4 / 14:07	9	disoriented, slight tremors, moderate
		13-Apr-89 12:19	5 / 11:45	9	normal/no significant signs
		13-Apr-89 12:24	5 / 12:50	9	normal/no significant signs
		13-Apr-89 12:29	5 / 14:13	9	normal/no significant signs
		13-Apr-89 12:34	6 / 09:54	9	normal/no significant signs
		13-Apr-89 12:43	6 / 11:05	9	tremors, moderate
		13-Apr-89 12:47	6 / 14:08	9	normal/no significant signs
		13-Apr-89 12:49	7 / 08:56	9	normal/no significant signs
		13-Apr-89 12:54	7 / 10:19	9	normal/no significant signs
		13-Apr-89 13:01	7 / 14:48	9	normal/no significant signs
		13-Apr-89 13:05	8 / 09:59	9	normal/no significant signs
		13-Apr-89 13:14	8 / 10:59	9	disoriented, slight tremors, moderate excess salivation, slight excessive thirst, moderate
		13-Apr-89 13:21	8 / 14:41	9	normal/no significant signs
		13-Apr-89 13:26	9 / 09:56	9	normal/no significant signs
		13-Apr-89 13:32	9 / 10:56	9	disoriented, moderate tremors, moderate excessive thirst, severe
		17-Apr-89 08:14	9 / 15:10	9	normal/no significant signs
		17-Apr-89 08:43	10 / 09:15	9	soft stool, moderate vomiting
		17-Apr-89 08:55	10 / 09:59	9	disoriented, moderate excess salivation, severe
		17-Apr-89 13:29	10 / 14:30	9	disoriented, slight congested lung sounds, slight
		18-Apr-89 13:37	11 / 09:00	9	normal/no significant signs

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses
Study Number: 88008f

Data Listing by Animal

Study Start Date: 31-Jan-89

PRINTED: 03-Oct-89
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SUB-ACUTE/

Cage Animal Sex/group Date and Time Study Day/time Oper

Number /Subgroup Data was Entered Data was Taken

Clinical signs / Comments

16	89A00029	F / 6/1	18-Apr-89	13:42	11 / 10:45	9	vomiting	disoriented, moderate
							excess salivation, moderate	
							congested lung sounds, slight	
							inactive, slight	
			18-Apr-89	13:49	11 / 14:40	9	congested lung sounds, slight	
			18-Apr-89	13:56	12 / 08:45	9	soft stool, slight	
			18-Apr-89	14:03	12 / 12:10	9	vomiting	
							tremors, slight	
							excessive thirst, severe	
							inactive, moderate	
							hunched posture, slight	
			19-Apr-89	13:25	12 / 14:00	9	excessive thirst, moderate	
							congested lung sounds, slight	
			19-Apr-89	13:34	13 / 08:28	9	normal/no significant signs	
			19-Apr-89	13:47	13 / 11:35	9	vomiting	
							disoriented, moderate	
							tremors, slight	
							excessive thirst, severe	
							inactive, slight	
			19-Apr-89	14:00	13 / 14:39	9	normal/no significant signs	
			24-Apr-89	11:15	14 / 09:30	9	normal/no significant signs	
			24-Apr-89	11:23	14 / 10:56	9	vomiting	
							tremors, moderate	
							excessive thirst, severe	
							soft stool, severe	
							congested lung sounds, moderate	
							inactive, moderate	
							hunched posture, moderate	
			24-Apr-89	11:31	14 / 14:41	9	tremors, slight	
							congested lung sounds, moderate	
			24-Apr-89	11:36	15 / 08:15	9	congested lung sounds, slight	
			25-Apr-89	13:16	1 / 09:35	9	normal/no significant signs	
			25-Apr-89	13:25	1 / 10:35	9	excess salivation, moderate	
							vomiting	

17 89A00041 F / 6/2

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DDG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008f

Date Listing by Animal

Study Start Date: 31-Jan-89

PRINTED: 03-Oct-89
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SUB-ACUTE/

Cage #	Animal Sex/group Number /Subgroup	Date Data was Entered	Time Data was Taken	Study Day/time Oper	Clinical signs / Comments
17	89A00041	F/ 6/2	25-Apr-89 13:25	1 / 10:35	9 tremors, severe disoriented, severe tremors, slight
		25-Apr-89 13:39	1 / 14:47	9 disoriented, moderate normal/no significant signs	
		25-Apr-89 13:46	2 / 07:45	9 excess salivation, slight vomiting	
		25-Apr-89 13:59	2 / 10:44	9 tremors, moderate disoriented, moderate hunched posture, slight	
		27-Jun-89 07:58	2 / 14:03	4 tremors, moderate disoriented, slight hunched posture, slight	
		25-Apr-89 14:12	3 / 09:34	9 normal/no significant signs	
		27-Jun-89 15:32	3 / 10:49	4 excess salivation, severe vomiting	
		01-May-89 14:00	3 / 14:15	9 tremors, moderate disoriented, moderate hunched posture, slight	
		27-Jun-89 15:29	4 / 09:30	4 disoriented, slight hunched posture, slight	
		25-Apr-89 14:35	4 / 13:10	3 normal/no significant signs excess salivation, slight vomiting	
		01-May-89 14:21	4 / 14:25	9 normal/no significant signs	
		01-May-89 14:27	5 / 10:34	9 normal/no significant signs	
		01-May-89 14:36	5 / 11:35	9 excess salivation, moderate vomiting	
		01-May-89 14:42	5 / 14:12	9 hunched posture, slight disoriented, slight	
		01-May-89 14:47	6 / 09:00	9 normal/no significant signs	
		01-May-89 14:58	6 / 10:40	9 excess salivation, moderate vomiting	
		01-May-89 15:08	6 / 14:42	9 hunched posture, slight disoriented, slight	
		01-May-89 15:12	7 / 10:24	9 normal/no significant signs	

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008F

Data Listing by Animal

Study Start Date: 31-Jan-89

PRINTED: 03-Oct-89
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SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time Oper Data was Taken	#	Clinical signs / Comments
17	89A00041	F / 6/2	01-May-89	15:21	7 / 11:25 9 excess salivation, moderate vomiting
			02-May-89	14:31	7 / 14:49 9 disoriented, moderate disoriented, moderate
			02-May-89	14:38	8 / 10:15 9 hunched posture, slight normal/no significant signs
			02-May-89	14:51	8 / 11:17 9 excess salivation, moderate tremors, moderate
			02-May-89	15:03	8 / 15:15 9 disoriented, moderate hunched posture, slight
			02-May-89	15:07	9 / 09:36 9 disoriented, moderate normal/no significant signs
			02-May-89	15:23	9 / 11:19 9 excess salivation, moderate vomiting
					tremors, moderate disoriented, moderate
					hunched posture, moderate inactive, slight
			02-May-89	15:33	9 / 14:23 9 disoriented, slight
			02-May-89	15:38	10 / 09:15 9 normal/no significant signs
			02-May-89	15:46	10 / 11:05 9 excess salivation, moderate vomiting
					tremors, slight disoriented, moderate
			02-May-89	15:53	10 / 14:42 9 hunched posture, moderate
			03-May-89	08:10	11 / 08:39 9 hyperactive, slight
			03-May-89	08:19	11 / 12:26 9 panting, slight excess salivation, moderate vomiting
					tremors, moderate disoriented, moderate
					hunched posture, moderate excessive thirst, severe
			03-May-89	08:26	11 / 14:00 9 tremor's, slight
			03-May-89	08:33	12 / 08:32 9 disoriented, slight normal/no significant signs

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 8800bF

Data Listing by Animal

Study Start Date: 31-Jan-89

PRINTED: 03-Oct-89
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SUB-ACUTE/

Cage #	Animal Sex/group Date	Time Data was Entered	Study Day/time Oper Data was Taken	Clinical signs / Comments
17	89A00041	F / 6/2	03-May-89 08:44	12 / 11:54 9 vomiting tremors, moderate disoriented, slight hunched posture, slight inactive, slight excessive thirst, severe
	03-May-89	09:06	12 / 14:42	9 disoriented, slight
	03-May-89	09:09	13 / 10:00	9 normal/no significant signs
	03-May-89	09:19	13 / 11:29	9 excess salivation, slight vomiting
	03-May-89	09:33	13 / 14:48	9 tremors, moderate disoriented, slight hunched posture, slight
	03-May-89	09:37	14 / 09:00	9 normal/no significant signs
	03-May-89	09:47	14 / 10:38	9 vomiting tremors, moderate disoriented, slight inactive, slight
	03-May-89	09:54	14 / 14:58	9 normal/no significant signs
	03-May-89	09:59	15 / 07:30	9 normal/no significant signs
	10-May-89	13:20	1 / 07:30	9 normal/no significant signs
	10-May-89	13:25	1 / 10:30	9 vomiting tremors, slight inactive, slight
	10-May-89	13:31	1 / 14:08	9 normal/no significant signs
	10-May-89	13:35	2 / 06:47	9 normal/no significant signs
	10-May-89	13:38	2 / 10:19	9 inactive, slight
	10-May-89	13:42	2 / 14:00	9 normal/no significant signs
	10-May-89	13:43	3 / 07:00	9 normal/no significant signs
	10-May-89	13:47	3 / 10:08	9 inactive, slight
	10-May-89	14:29	3 / 14:19	9 normal/no significant signs
	10-May-89	14:32	4 / 07:40	9 normal/no significant signs

18 89A00061 F / 6/3

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008f

Data Listing by Animal

Study Start Date: 31-Jan-89

PRINTED: 03-Oct-89
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SUB-ACUTE/

Cage #	Animal Sex/Group	Date Entered	Time Data Was Taken	Study Day/time Oper	Clinical signs / Comments
18	89AG0061	F / 6/3	10-May-89 14:37	4 / 10:14	9 vomiting
					inactive, slight
		10-May-89 14:39	4 / 14:00	9	normal/no significant signs
		10-May-89 14:41	5 / 07:18	9	normal/no significant signs
		10-May-89 14:45	5 / 11:30	9	vomiting
					inactive, moderate
		10-May-89 14:48	5 / 14:14	9	normal/no significant signs
		10-May-89 14:51	6 / 07:15	9	normal/no significant signs
		10-May-89 14:55	6 / 10:26	9	vomiting
		10-May-89 14:57	6 / 14:16	9	normal/no significant signs
		10-May-89 14:59	7 / 07:10	9	normal/no significant signs
		10-May-89 15:02	7 / 10:35	9	vomiting
					inactive, moderate
		10-May-89 15:08	7 / 14:00	9	normal/no significant signs
		10-May-89 15:16	8 / 07:36	9	soft stool, slight
		10-May-89 15:22	8 / 10:18	9	excess salivation, moderate
					vomiting
					tremors, slight
					inactive, slight
		10-May-89 15:26	8 / 14:31	9	normal/no significant signs
		10-May-89 15:29	9 / 07:13	9	normal/no significant signs
		10-May-89 15:34	9 / 10:16	9	vomiting
					inactive, slight
		10-May-89 15:39	9 / 14:06	9	disoriented, slight
		11-May-89 12:09	10 / 07:10	9	soft stool, slight
		11-May-89 12:13	10 / 10:27	9	vomiting
					inactive, slight
					disoriented, slight
		11-May-89 12:16	10 / 14:07	9	inactive, slight
					increased respiration depth, slight
		11-May-89 12:19	11 / 09:00	9	soft stool, slight
		11-May-89 12:23	11 / 10:17	9	excess salivation, moderate
					inactive, slight
					disoriented, slight
		11-May-89 12:27	11 / 14:30	9	inactive, slight

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses
Study Number: 88008F
Data Listing by Animal
Study Start Date: 31-Jan-89

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SUB-ACUTE/

Cage #	Animal Sex/group	Date Data was Entered	Time Data was Taken	Study Day/time Oper	Clinical signs / Comments
18	89A00061	F / 6/3			
		11-May-89	12:27	11 / 14:30	9 increased respiration depth, slight
		11-May-89	12:29	12 / 07:01	9 soft stool, moderate
		11-May-89	12:34	12 / 10:25	9 inactive, slight
					9 hunched posture, slight
		11-May-89	12:37	12 / 14:20	9 inactive, slight
		11-May-89	12:41	13 / 07:17	9 soft stool, slight
					9 excess salivation, slight
		11-May-89	12:44	13 / 10:29	9 excess salivation
					9 inactive, slight
					9 excessive thirst, moderate
		11-May-89	12:46	13 / 15:06	9 increased respiration depth, slight
		11-May-89	12:48	14 / 07:43	9 soft stool, moderate
		11-May-89	14:13	14 / 09:47	9 hunched posture, moderate
					9 vomiting
		11-May-89	14:16	14 / 15:00	9 disoriented, moderate
					9 hunched posture, slight
		11-May-89	14:18	15 / 07:09	9 disoriented, slight
		12-Apr-89	13:21	1 / 09:38	9 soft stool, slight
		12-Apr-89	13:52	1 / 10:39	9 normal/no significant signs
		12-Apr-89	14:02	1 / 14:22	9 tremors, slight
		13-Apr-89	10:16	2 / 10:51	9 normal/no significant signs
		13-Apr-89	10:24	2 / 11:51	9 normal/no significant signs
		13-Apr-89	10:33	2 / 14:39	9 normal/no significant signs
		13-Apr-89	10:40	3 / 08:00	9 tremors, moderate
		13-Apr-89	10:57	3 / 10:14	9 tremors, moderate
		13-Apr-89	11:07	3 / 14:12	9 tremors, slight
		13-Apr-89	11:53	4 / 09:25	9 normal/no significant signs
		13-Apr-89	12:03	4 / 10:30	9 tremors, moderate
					9 hunched posture, moderate
		13-Apr-89	12:11	4 / 14:07	9 hunched posture, slight
		13-Apr-89	12:20	5 / 09:30	9 inactive, slight
		13-Apr-89	12:24	5 / 12:53	9 normal/no significant signs
		13-Apr-89	12:29	5 / 14:16	9 normal/no significant signs
		13-Apr-89	12:34	6 / 09:59	9 normal/no significant signs
		13-Apr-89	12:43	6 / 11:05	9 normal/no significant signs
19	89A00030	F / 7/1			

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008F

Data Listing by Animal

Study Start Date: 31-Jan-89

PRINTED: 03-Oct-89
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SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time	Oper Data was Taken	#	Clinical signs / Comments
19 89A00030	F / 7/1	13-Apr-89 12:47	6 / 14:08	9	9	hunched posture, slight
		13-Apr-89 12:49	7 / 08:56	9	9	normal/no significant signs
		13-Apr-89 12:54	7 / 10:21	9	9	hunched posture, slight
		13-Apr-89 13:02	7 / 14:49	9	9	inactive, slight
		13-Apr-89 13:05	8 / 10:04	9	9	normal/no significant signs
		13-Apr-89 13:15	8 / 11:05	9	9	hunched posture, slight
		13-Apr-89 13:21	8 / 14:42	9	9	hunched posture, slight
						disoriented, slight
		13-Apr-89 13:26	9 / 09:56	9	9	normal/no significant signs
		13-Apr-89 13:32	9 / 10:59	9	9	hunched posture, slight
						disoriented, slight
		17-Apr-89 08:15	9 / 15:10	9	9	tremors, moderate
		17-Apr-89 08:43	10 / 09:16	9	9	hunched posture, slight
		17-Apr-89 08:55	10 / 11:01	9	9	disoriented, slight
		17-Apr-89 13:29	10 / 14:30	9	9	tremors, slight
		18-Apr-89 13:38	11 / 09:00	9	9	hunched posture, slight
		18-Apr-89 13:43	11 / 10:50	9	9	hunched posture, slight
						tremors, moderate
						inactive, slight
						disoriented, slight
		18-Apr-89 13:49	11 / 14:40	9	9	hunched posture, slight
		18-Apr-89 13:56	12 / 08:45	9	9	hunched posture, slight
		18-Apr-89 14:03	12 / 12:10	9	9	hunched posture, moderate
						tremors, moderate
		19-Apr-89 13:26	12 / 14:00	9	9	disoriented, moderate
						hunched posture, slight
		19-Apr-89 13:35	13 / 08:29	9	9	disoriented, slight
		19-Apr-89 13:48	13 / 11:35	9	9	normal/no significant signs
						tremors, moderate
						hunched posture, moderate
						disoriented, moderate
		19-Apr-89 14:00	13 / 14:38	9	9	disoriented, slight
		24-Apr-89 11:15	14 / 09:40	9	9	normal/no significant signs
		24-Apr-89 11:23	14 / 10:57	9	9	tremors, slight
						inactive, slight

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008f

Date Listing by Animal

Study Start Date: 31-Jan-89

PRINTED: 03-Oct-89
Page: 47

SUB-ACUTE/

Cage #	Animal Sex/group Date	Time Date was Entered	Study Day/time Oper	Clinical signs / Comments
19	89A00030	F / 7/1	24-Apr-89 11:23	14 / 10:57 9 hunched posture, slight disoriented, slight
			24-Apr-89 11:31	14 / 14:41 9 hunched posture, slight
			24-Apr-89 11:36	15 / 08:15 9 hunched posture, slight
			25-Apr-89 13:17	1 / 09:42 9 normal/no significant signs
			25-Apr-89 13:26	1 / 10:43 9 normal/no significant signs
			25-Apr-89 13:39	1 / 14:48 9 normal/no significant signs
			25-Apr-89 13:46	2 / 07:50 9 normal/no significant signs
			27-Jun-89 08:28	2 / 10:51 4 normal/no significant signs
			25-Apr-89 14:00	2 / 14:04 9 normal/no significant signs
			27-Jun-89 08:30	3 / 09:35 4 normal/no significant signs
			25-Apr-89 14:12	3 / 10:49 9 normal/no significant signs
			01-May-89 14:00	3 / 14:15 9 normal/no significant signs
			25-Apr-89 14:36	4 / 09:30 3 normal/no significant signs
			25-Apr-89 14:23	4 / 13:12 9 normal/no significant signs
			01-May-89 14:21	4 / 14:27 9 normal/no significant signs
			01-May-89 14:27	5 / 10:40 9 normal/no significant signs
			01-May-89 14:36	5 / 11:40 9 normal/no significant signs
			01-May-89 14:42	5 / 14:14 9 normal/no significant signs
			01-May-89 14:47	6 / 09:02 9 normal/no significant signs
			01-May-89 14:59	6 / 10:41 9 normal/no significant signs
			01-May-89 15:09	6 / 14:42 9 normal/no significant signs
			01-May-89 15:13	7 / 10:25 9 normal/no significant signs
			01-May-89 15:22	7 / 11:26 9 normal/no significant signs
			02-May-89 14:31	7 / 14:49 9 normal/no significant signs
			02-May-89 14:39	8 / 10:18 9 normal/no significant signs
			02-May-89 14:51	8 / 11:19 9 normal/no significant signs
			02-May-89 15:03	8 / 15:16 9 normal/no significant signs
			02-May-89 15:08	9 / 09:36 9 normal/no significant signs
			02-May-89 15:23	9 / 11:21 9 normal/no significant signs
			02-May-89 15:33	9 / 14:23 9 normal/no significant signs
			02-May-89 15:38	10 / 09:15 9 normal/no significant signs
			02-May-89 15:46	10 / 11:07 9 normal/no significant signs
			02-May-89 15:53	10 / 14:43 9 normal/no significant signs
			03-May-89 08:11	11 / 08:39 9 normal/no significant signs
			03-May-89 08:19	11 / 12:27 9 normal/no significant signs

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008f

Date Listing by Animal

Study Start Date: 31-Jan-89

PRINTED: 03-Oct-89
Page: 48

SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time Oper Data was Taken	#	Clinical signs / Comments
21	89A00070 F / 7/4	03-May-89 08:26	11 / 14:00	9	normal/no significant signs
		03-May-89 08:33	12 / 08:33	9	normal/no significant signs
		03-May-89 08:45	12 / 11:58	9	normal/no significant signs
		03-May-89 09:06	12 / 14:42	9	normal/no significant signs
		03-May-89 09:09	13 / 10:00	9	normal/no significant signs
		03-May-89 09:25	13 / 11:13	9	normal/no significant signs
		03-May-89 09:33	13 / 14:48	9	normal/no significant signs
		03-May-89 09:37	14 / 09:00	9	normal/no significant signs
		03-May-89 09:47	14 / 10:40	9	normal/no significant signs
		03-May-89 09:54	14 / 14:58	9	normal/no significant signs
		03-May-89 09:59	15 / 07:31	9	normal/no significant signs
		10-May-89 08:08	1 / 06:50	9	normal/no significant signs
		10-May-89 08:13	1 / 10:46	9	disoriented, slight inactive, slight
		10-May-89 08:16	1 / 14:04	9	disoriented, slight
		10-May-89 08:18	2 / 07:10	9	normal/no significant signs
		10-May-89 08:23	2 / 10:37	9	inactive, slight disoriented, slight
		10-May-89 08:26	2 / 14:23	9	normal/no significant signs
		10-May-89 08:30	3 / 07:45	9	normal/no significant signs
21	89A00070 F / 7/4	10-May-89 08:36	3 / 10:35	9	disoriented, slight
		10-May-89 08:39	3 / 14:05	9	normal/no significant signs
		10-May-89 08:41	4 / 07:16	9	normal/no significant signs
		10-May-89 08:47	4 / 12:07	9	normal/no significant signs
		10-May-89 08:49	4 / 14:28	9	normal/no significant signs
		10-May-89 08:51	5 / 07:21	9	normal/no significant signs
		10-May-89 08:55	5 / 11:01	9	normal/no significant signs
		10-May-89 08:57	5 / 14:29	9	normal/no significant signs
		10-May-89 08:59	6 / 07:12	9	normal/no significant signs
		10-May-89 09:02	6 / 10:57	9	disoriented, slight
		10-May-89 09:05	6 / 14:13	9	normal/no significant signs
		10-May-89 09:06	7 / 07:40	9	normal/no significant signs
		10-May-89 09:10	7 / 10:38	9	disoriented, slight
		10-May-89 09:12	7 / 14:43	9	normal/no significant signs
		10-May-89 09:21	8 / 07:19	9	normal/no significant signs

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008F

Data Listing by Animal

Study Start Date: 31-Jan-89

PRINTED: 03-Oct-89
Page: 49

SUB-ACUTE/

Cage #	Animal Sex/group	Date Data was Entered	Time Data was Entered	Study Day/Time Oper Data was Taken	#	Clinical signs / Comments
21	89A00070	F / 7/4	10-May-89 09:30	8 / 10:33	9	disoriented, slight inactive, slight
			10-May-89 09:32	8 / 14:10	9	normal/no significant signs
			10-May-89 09:34	9 / 07:13	9	normal/no significant signs
			10-May-89 09:38	9 / 10:43	9	normal/no significant signs
			10-May-89 09:40	9 / 14:12	9	normal/no significant signs
			10-May-89 09:41	10 / 09:05	9	normal/no significant signs
			10-May-89 09:45	10 / 10:32	9	normal/no significant signs
			10-May-89 09:47	10 / 14:30	9	normal/no significant signs
			10-May-89 09:49	11 / 07:08	9	normal/no significant signs
			10-May-89 09:54	11 / 10:46	9	inactive, slight
			10-May-89 09:58	11 / 14:12	9	normal/no significant signs
			10-May-89 10:00	12 / 07:26	9	normal/no significant signs
			10-May-89 10:04	12 / 10:46	9	normal/no significant signs
			10-May-89 10:06	12 / 15:15	9	normal/no significant signs
			10-May-89 10:10	13 / 07:48	9	normal/no significant signs
			10-May-89 10:14	13 / 10:07	9	normal/no significant signs
			10-May-89 10:16	13 / 15:15	9	normal/no significant signs
			10-May-89 10:19	14 / 07:13	9	normal/no significant signs
			10-May-89 10:23	14 / 09:56	9	normal/no significant signs
			10-May-89 10:26	14 / 14:52	9	normal/no significant signs
			10-May-89 10:28	15 / 07:17	9	normal/no significant signs
			25-Apr-89 13:17	1 / 09:48	9	normal/no significant signs
			25-Apr-89 13:27	1 / 10:49	9	disoriented, slight
			25-Apr-89 13:40	1 / 14:49	9	disoriented, slight excess salivation, slight
			25-Apr-89 13:47	2 / 07:58	9	normal/no significant signs
			27-Jun-89 08:32	2 / 14:05	4	normal/no significant signs
			25-Apr-89 14:00	2 / 10:58	9	normal/no significant signs
			27-Jun-89 16:31	3 / 09:35	4	normal/no significant signs
			27-Jun-89 08:34	3 / 10:55	4	disoriented, moderate soft stool, slight
			01-May-89 14:01	3 / 14:16	9	disoriented, slight
			25-Apr-89 14:36	4 / 09:30	3	normal/no significant signs
			25-Apr-89 14:23	4 / 13:14	9	normal/no significant signs
			01-May-89 14:22	4 / 14:29	9	normal/no significant signs
			01-May-89 14:27	5 / 10:46	9	normal/no significant signs
22	89A00040	F / 8/2				

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88003F

Data Listing by Animal

Study Start Date: 31-Jan-89

PRINTED: 03-Oct-89
Page: 50

SUB-ACUTE/

Cage #	Animal Sex/group Date and Time	Time Entered	Study Day/Time	Oper Data Was Taken	#	Clinical signs / Comments
01-May-89	14:36	5 / 11:55	9	normal/no significant signs		
01-May-89	14:43	5 / 14:15	9	normal/no significant signs		
01-May-89	14:47	6 / 09:03	9	normal/no significant signs		
01-May-89	14:59	6 / 10:46	9	normal/no significant signs		
01-May-89	15:09	6 / 14:43	9	normal/no significant signs		
01-May-89	15:13	7 / 10:31	9	normal/no significant signs		
01-May-89	15:22	7 / 11:32	9	soft stool, moderate		
02-May-89	14:32	7 / 14:50	9	normal/no significant signs		
02-May-89	14:39	8 / 10:20	9	normal/no significant signs		
02-May-89	14:51	8 / 11:23	9	normal/no significant signs		
02-May-89	15:03	8 / 15:16	9	normal/no significant signs		
02-May-89	15:08	9 / 09:37	9	congested lung sounds, moderate		
02-May-89	15:23	9 / 11:07	9	congested lung sounds, moderate		
02-May-89	15:33	9 / 14:24	9	congested lung sounds, moderate		
02-May-89	15:39	10 / 09:15	9	congested lung sounds, moderate		
02-May-89	15:46	10 / 11:13	9	congested lung sounds, moderate		
02-May-89	15:53	10 / 14:43	9	congested lung sounds, moderate		
03-May-89	08:11	11 / 08:41	9	panting, slight		
03-May-89	08:20	11 / 12:30	9	congested lung sounds, moderate		
03-May-89	08:26	11 / 14:00	9	inactive, slight		
03-May-89	08:34	12 / 08:33	9	congested lung sounds, slight		
03-May-89	08:46	12 / 12:00	9	congested lung sounds, moderate		
03-May-89	09:06	12 / 14:43	9	inactive, slight		
03-May-89	09:09	13 / 10:00	9	congested lung sounds, moderate		
03-May-89	09:26	13 / 11:34	9	congested lung sounds, slight		
03-May-89	09:34	13 / 14:49	9	congested lung sounds, severe		
03-May-89	09:37	14 / 09:00	9	inactive, moderate		
03-May-89	09:48	14 / 10:45	9	disoriented, slight		
03-May-89	09:48	14 / 10:45	9	congested lung sounds, slight		
03-May-89	09:48	14 / 10:45	9	congested lung sounds, moderate		

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008F

Data Listing by Animal

Study Start Date: 31-Jan-89

PRINTED: 03-Oct-89
Page: 51

SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time Oper Data was Taken	#	Clinical signs / Comments
22	89A00040	F / 8/2	03-May-89 09:48	14 / 10:45	9 disoriented, moderate inactive, moderate
			03-May-89 09:55	14 / 14:59	9 congested lung sounds, moderate
			03-May-89 10:01	15 / 07:33	9 eye/nasal discharge, slight
			10-May-89 13:20	1 / 07:30	9 normal/no significant signs
			10-May-89 13:25	1 / 10:35	9 tremors, slight
			10-May-89 13:32	1 / 14:08	9 disoriented, slight
			10-May-89 13:35	2 / 06:47	9 normal/no significant signs
			10-May-89 13:39	2 / 10:23	9 tremors, slight
					9 disoriented
			10-May-89 13:42	2 / 14:00	9 normal/no significant signs
			10-May-89 13:43	3 / 07:00	9 normal/no significant signs
			10-May-89 14:09	3 / 10:14	9 disoriented, slight
			10-May-89 14:30	3 / 14:20	9 normal/no significant signs
			10-May-89 14:32	4 / 07:40	9 normal/no significant signs
			10-May-89 14:37	4 / 10:17	9 normal/no significant signs
			10-May-89 14:39	4 / 14:00	9 normal/no significant signs
			10-May-89 14:41	5 / 07:18	9 normal/no significant signs
			10-May-89 14:45	5 / 11:35	9 normal/no significant signs
			10-May-89 14:48	5 / 14:15	9 normal/no significant signs
			10-May-89 14:51	6 / 07:15	9 normal/no significant signs
			10-May-89 14:55	6 / 10:31	9 normal/no significant signs
			10-May-89 14:57	6 / 14:17	9 normal/no significant signs
			10-May-89 15:00	7 / 07:10	9 normal/no significant signs
			10-May-89 15:04	7 / 10:42	9 normal/no significant signs
			10-May-89 15:08	7 / 14:00	9 normal/no significant signs
			10-May-89 15:17	8 / 07:36	9 normal/no significant signs
			10-May-89 15:22	8 / 10:20	9 normal/no significant signs
			10-May-89 15:26	8 / 14:31	9 normal/no significant signs
			10-May-89 15:29	9 / 07:13	9 normal/no significant signs
			10-May-89 15:35	9 / 10:18	9 normal/no significant signs
			10-May-89 15:39	9 / 14:06	9 normal/no significant signs
			11-May-89 12:09	10 / 07:10	9 normal/no significant signs
			11-May-89 12:13	10 / 10:27	9 normal/no significant signs
			11-May-89 12:16	10 / 14:07	9 normal/no significant signs
			11-May-89 12:19	11 / 09:00	9 normal/no significant signs

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008F

Data Listing by Animal

Study Start Date: 31-Jan-89

PRINTED: 03-Oct-89
Page: 52

SUB-ACUTE/

Cage #	Animal Sex/group	Date	Time	Study Day/time	Oper	Clinical signs / Comments
#	Number /Subgroup	Data was Entered	Data was Taken	#		
24	89A00068	F / 8/4				
		11-May-89	12:23	11 / 10:17	9	normal/no significant signs
		11-May-89	12:27	11 / 14:30	9	normal/no significant signs
		11-May-89	12:29	12 / 07:01	9	normal/no significant signs
		11-May-89	12:34	12 / 10:26	9	normal/no significant signs
		11-May-89	12:37	12 / 14:20	9	normal/no significant signs
		11-May-89	12:41	13 / 07:17	9	normal/no significant signs
		11-May-89	12:44	13 / 10:30	9	normal/no significant signs
		11-May-89	12:47	13 / 15:06	9	normal/no significant signs
		11-May-89	12:48	14 / 07:43	9	normal/no significant signs
		11-May-89	14:14	14 / 09:49	9	inactive, slight
		11-May-89	14:17	14 / 15:00	9	normal/no significant signs
		11-May-89	14:18	15 / 07:10	9	normal/no significant signs
		10-May-89	08:08	1 / 06:50	9	normal/no significant signs
		10-May-89	08:13	1 / 10:50	9	tremors, slight
		10-May-89	08:16	1 / 14:04	9	normal/no significant signs
		10-May-89	08:18	2 / 07:10	9	normal/no significant signs
		10-May-89	08:23	2 / 10:43	9	tremors, slight
		10-May-89	08:27	2 / 14:23	9	normal/no significant signs
		10-May-89	08:30	3 / 07:45	9	soft stool, moderate
		10-May-89	08:36	3 / 10:35	9	normal/no significant signs
		10-May-89	08:39	3 / 14:05	9	normal/no significant signs
		10-May-89	08:41	4 / 07:16	9	normal/no significant signs
		10-May-89	08:47	4 / 12:10	9	normal/no significant signs
		10-May-89	08:49	4 / 14:29	9	normal/no significant signs
		10-May-89	08:51	5 / 07:20	9	normal/no significant signs
		10-May-89	08:55	5 / 11:05	9	normal/no significant signs
		10-May-89	08:57	5 / 14:29	9	normal/no significant signs
		10-May-89	08:59	6 / 07:12	9	normal/no significant signs
		10-May-89	09:03	6 / 11:00	9	normal/no significant signs
		10-May-89	09:05	6 / 14:13	9	normal/no significant signs
		10-May-89	09:06	7 / 07:40	9	normal/no significant signs
		10-May-89	09:10	7 / 10:40	9	normal/no significant signs
		10-May-89	09:12	7 / 14:44	9	normal/no significant signs
		10-May-89	09:22	8 / 07:20	9	normal/no significant signs
		10-May-89	09:30	8 / 10:35	9	normal/no significant signs
		10-May-89	09:32	8 / 14:10	9	normal/no significant signs

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008f

Date Listing by Animal

Study Start Date: 31-Jan-89

PRINTED: 03-Oct-89

Page: 53

SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Entered	Study Day/time	Oper	Clinical signs / Comments
24	89A00068	F / 8/4	10-May-89 09:34	9 / 07:13	9 soft stool, slight
			10-May-89 09:38	9 / 10:47	9 normal/no significant signs
			10-May-89 09:40	9 / 14:12	9 normal/no significant signs
			10-May-89 09:42	10 / 09:05	9 normal/no significant signs
			10-May-89 09:45	10 / 10:36	9 normal/no significant signs
			10-May-89 09:47	10 / 14:30	9 normal/no significant signs
			10-May-89 09:50	11 / 07:09	9 soft stool, slight
			10-May-89 09:54	11 / 10:51	9 normal/no significant signs
			10-May-89 09:58	11 / 14:13	9 normal/no significant signs
			10-May-89 10:00	12 / 07:26	9 normal/no significant signs
			10-May-89 10:04	12 / 10:56	9 normal/no significant signs
			10-May-89 10:06	12 / 15:16	9 normal/no significant signs
			10-May-89 10:10	13 / 07:49	9 normal/no significant signs
			10-May-89 10:14	13 / 10:09	9 normal/no significant signs
			10-May-89 10:17	13 / 15:15	9 normal/no significant signs
			10-May-89 10:19	14 / 07:13	9 soft stool, moderate
			10-May-89 10:23	14 / 10:00	9 normal/no significant signs
			10-May-89 10:26	14 / 14:52	9 normal/no significant signs
			10-May-89 10:28	15 / 07:18	9 normal/no significant signs
			12-Apr-89 13:22	1 / 09:40	9 normal/no significant signs
			12-Apr-89 13:53	1 / 10:43	9 disoriented, slight
			12-Apr-89 14:02	1 / 14:22	9 disoriented, slight
			13-Apr-89 10:16	2 / 10:50	9 normal/no significant signs
			13-Apr-89 10:25	2 / 11:52	9 normal/no significant signs
			13-Apr-89 10:34	2 / 12:40	9 tremors, slight
			13-Apr-89 10:41	3 / 08:04	9 normal/no significant signs
			13-Apr-89 10:59	3 / 10:17	9 disoriented, slight
			13-Apr-89 11:07	3 / 14:12	9 normal/no significant signs
			13-Apr-89 11:53	4 / 09:25	9 normal/no significant signs
			13-Apr-89 12:03	4 / 10:30	9 disoriented, moderate
			13-Apr-89 12:12	4 / 14:07	9 normal/no significant signs
			13-Apr-89 12:20	5 / 11:50	9 normal/no significant signs
			13-Apr-89 12:25	5 / 12:55	9 normal/no significant signs
			13-Apr-89 12:30	5 / 14:18	9 normal/no significant signs
			13-Apr-89 12:34	6 / 10:07	9 normal/no significant signs
			13-Apr-89 12:43	6 / 11:08	9 normal/no significant signs
			13-Apr-89 12:47	6 / 14:09	9 normal/no significant signs

25 89A00026 F / 9/1

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008f

Date Listing by Animal

Study Start Date: 31-Jan-89

PRINTED: 03-Oct-89
Page: 54

SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time Oper Data was Taken	#	Clinical signs / Comments
13-Apr-89		12:50	7 / 08:57	9	normal/no significant signs
13-Apr-89		12:55	7 / 10:26	9	tremors, slight
13-Apr-89		13:02	7 / 14:51	9	normal/no significant signs
13-Apr-89		13:05	8 / 10:06	9	normal/no significant signs
13-Apr-89		13:15	8 / 11:07	9	tremors, slight
13-Apr-89		13:22	8 / 14:44	9	normal/no significant signs
13-Apr-89		13:26	9 / 10:00	9	normal/no significant signs
13-Apr-89		13:33	9 / 11:04	9	disoriented, slight tremors, slight
17-Apr-89		08:15	9 / 15:11	9	disoriented, slight
17-Apr-89		08:44	10 / 09:15	9	normal/no significant signs
17-Apr-89		08:56	10 / 11:06	9	disoriented, slight tremors, moderate
17-Apr-89		13:29	10 / 14:30	9	disoriented, slight
18-Apr-89		13:38	11 / 09:00	9	normal/no significant signs
18-Apr-89		13:43	11 / 10:52	9	disoriented, slight tremors, slight
18-Apr-89		13:50	11 / 14:40	9	normal/no significant signs
18-Apr-89		13:57	12 / 08:45	9	normal/no significant signs
18-Apr-89		14:04	12 / 12:15	9	disoriented, slight tremors, moderate
19-Apr-89		13:26	12 / 14:00	9	disoriented, slight tremors, slight
19-Apr-89		13:35	13 / 08:29	9	normal/no significant signs
19-Apr-89		13:48	13 / 11:40	9	disoriented, slight tremors, slight
19-Apr-89		14:00	13 / 14:38	9	normal/no significant signs
24-Apr-89		11:15	14 / 09:41	9	normal/no significant signs
24-Apr-89		11:24	14 / 11:02	9	disoriented, slight
24-Apr-89		11:32	14 / 14:42	9	normal/no significant signs
24-Apr-89		11:37	15 / 08:16	9	normal/no significant signs
25-Apr-89		13:18	1 / 09:54	9	normal/no significant signs
25-Apr-89		13:29	1 / 10:55	9	circling, moderate disoriented, moderate
25-Apr-89		13:12	1 / 14:50	9	disoriented, slight

26 89A00037 F/ 9/2

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008f

Date Listing by Animal

Study Start Date: 31-Jan-89

PRINTED: 03-Oct-89
Page: 55

SUB-ACUTE /

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time Oper Data was Taken	#	Clinical signs / Comments
26	89A00037	F / 9/2			
		25-Apr-89 13:12	1 / 14:50	9	tremors, slight
		25-Apr-89 13:48	2 / 08:00	9	normal/no significant signs
		27-Jun-89 09:11	2 / 11:06	4	tremors, slight
					disoriented, slight
		25-Apr-89 14:02	2 / 14:05	9	tremors, slight
					disoriented, slight
		27-Jun-89 16:31	3 / 09:35	4	normal/no significant signs
		27-Jun-89 09:08	3 / 10:56	4	tremors, slight
					disoriented, moderate
		01-May-89 14:01	3 / 14:16	9	normal/no significant signs
		25-Apr-89 14:36	4 / 09:30	3	normal/no significant signs
		25-Apr-89 14:23	4 / 13:15	9	normal/no significant signs
		01-May-89 14:22	4 / 14:31	9	normal/no significant signs
		01-May-89 14:27	5 / 10:55	9	normal/no significant signs
		01-May-89 14:37	5 / 11:55	9	tremors, slight
		01-May-89 14:43	5 / 14:15	9	normal/no significant signs
		01-May-89 14:48	6 / 09:04	9	normal/no significant signs
		01-May-89 15:00	6 / 10:47	9	disoriented, slight
					tremors, moderate
					inactive, slight
		01-May-89 15:09	6 / 14:43	9	normal/no significant signs
		01-May-89 15:13	7 / 10:31	9	normal/no significant signs
		01-May-89 15:23	7 / 11:32	9	disoriented, slight
					increased respiration depth, slight
		02-May-89 14:33	7 / 14:50	9	disoriented, slight
					increased respiration depth, slight
		02-May-89 14:39	8 / 10:24	9	normal/no significant signs
		02-May-89 14:54	8 / 11:24	9	disoriented, slight
					tremors, slight
		02-May-89 15:04	8 / 15:17	9	inactive, slight
					tremors, slight
		02-May-89 15:08	9 / 09:37	9	increased respiration depth, slight
		02-May-89 15:24	9 / 11:29	9	normal/no significant signs
		02-May-89 15:33	9 / 14:24	9	tremors, slight
		02-May-89 15:39	10 / 09:15	9	normal/no significant signs

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008f

Date Listing by Animal

Study Start Date: 31-Jan-89

PRINTED: 03-Oct-89
Page: 56

SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time Oper Data was Taken	#	Clinical signs / Comments
26	89A00037	F / 9/2	02-May-89 15:47	10 / 11:13	9 disoriented, slight vomiting
		02-May-89 15:54	10 / 14:43	9 normal/no significant signs	
		03-May-89 08:12	11 / 08:39	9 normal/no significant signs	
		03-May-89 08:20	11 / 12:30	9 disoriented, slight	
		03-May-89 08:26	11 / 14:00	9 normal/no significant signs	
		03-May-89 08:34	12 / 08:33	9 normal/no significant signs	
		03-May-89 08:47	12 / 12:06	9 disoriented, moderate tremors, moderate inactive, slight vomiting	
		03-May-89 09:06	12 / 14:43	9 normal/no significant signs	
		03-May-89 09:09	13 / 10:00	9 normal/no significant signs	
		03-May-89 09:27	13 / 11:35	9 disoriented, slight tremors, moderate increased respiration depth, slight vomiting	
		03-May-89 09:34	13 / 14:50	9 disoriented, slight tremors, moderate	
		03-May-89 09:37	14 / 09:00	9 normal/no significant signs	
		03-May-89 09:49	14 / 10:47	9 disoriented, slight tremors, slight	
		03-May-89 09:55	14 / 14:59	9 normal/no significant signs	
		03-May-89 10:01	15 / 07:34	9 normal/no significant signs	
		10-May-89 13:20	1 / 07:30	9 normal/no significant signs	
		10-May-89 13:26	1 / 10:37	9 tremors, slight inactive, slight	
		10-May-89 13:32	1 / 14:08	9 normal/no significant signs	
		10-May-89 13:35	2 / 06:47	9 normal/no significant signs	
		10-May-89 13:39	2 / 10:24	9 inactive, slight	
		10-May-89 13:42	2 / 14:00	9 normal/no significant signs	
		10-May-89 13:43	3 / 07:00	9 normal/no significant signs	
		10-May-89 14:10	3 / 10:15	9 tremors, slight	
		10-May-89 14:30	3 / 14:20	9 tremors, slight	
		10-May-89 14:32	4 / 07:40	9 normal/no significant signs	
27	89A00060	F / 9/3			

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008f

Data Listing by Animal

Study Start Date: 31-Jan-89

PRINTED: 03-Oct-89
Page: 57

SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time	Oper	Clinical signs / Comments
#	Number /Subgroup	Date	Time	Data was Taken	#
27	89A00060	F / 9/3			
		10-May-89	14:37	4 / 10:20	9 tremors, moderate
		10-May-89	14:39	4 / 14:00	9 normal/no significant signs
		10-May-89	14:41	5 / 07:18	9 normal/no significant signs
		10-May-89	14:45	5 / 11:40	9 inactive, slight
		10-May-89	14:49	5 / 14:16	9 normal/no significant signs
		10-May-89	14:51	6 / 07:16	9 normal/no significant signs
		10-May-89	14:55	6 / 10:35	9 normal/no significant signs
		10-May-89	14:58	6 / 14:17	9 normal/no significant signs
		10-May-89	15:00	7 / 07:10	9 normal/no significant signs
		10-May-89	15:05	7 / 10:42	9 tremors, moderate
		10-May-89	15:08	7 / 14:00	9 normal/no significant signs
		10-May-89	15:17	8 / 07:36	9 normal/no significant signs
		10-May-89	15:23	8 / 10:23	9 tremors, slight
		10-May-89	15:26	8 / 14:32	9 tremors, moderate
		10-May-89	15:29	9 / 07:13	9 normal/no significant signs
		10-May-89	15:36	9 / 10:20	9 tremors, moderate
		10-May-89	15:39	9 / 14:07	9 inactive, slight
		11-May-89	12:09	10 / 07:10	9 normal/no significant signs
		11-May-89	12:13	10 / 10:32	9 normal/no significant signs
		11-May-89	12:17	10 / 14:08	9 inactive, slight
		11-May-89	12:19	11 / 09:00	9 tremors, slight
		11-May-89	12:24	11 / 10:20	9 normal/no significant signs
		11-May-89	12:27	11 / 14:30	9 tremors, moderate
		11-May-89	12:29	12 / 07:01	9 normal/no significant signs
		11-May-89	12:35	12 / 10:31	9 normal/no significant signs
		11-May-89	12:37	12 / 14:21	9 tremors, moderate
		11-May-89	12:41	13 / 07:21	9 inactive, slight
		11-May-89	12:45	13 / 10:31	9 tremors, slight
		11-May-89	12:47	13 / 15:07	9 normal/no significant signs
		11-May-89	12:49	14 / 07:44	9 normal/no significant signs
		11-May-89	14:14	14 / 09:52	9 inactive, slight
		11-May-89	14:17	14 / 15:00	9 tremors, moderate
		11-May-89	14:17	15 / 07:10	9 normal/no significant signs
		25-Apr-89	13:18	1 / 10:03	9 normal/no significant signs

28 89A00034 F/10/2

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DCG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008F

Data Listing by Animal

Study Start Date: 31-Jan-89

PRINTED: 03-Oct-89
Page: 58

SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time Oper Data was Taken	#	Clinical signs / Comments
25-Apr-89		13:30	1 / 11:04	9	normal/no significant signs
25-Apr-89		13:13	1 / 14:50	9	normal/no significant signs
25-Apr-89		13:48	2 / 08:05	9	normal/no significant signs
27-Jun-89		10:12	2 / 11:13	4	normal/no significant signs
25-Apr-89		14:02	2 / 14:05	9	normal/no significant signs
27-Jun-89		10:13	3 / 09:36	4	normal/no significant signs
25-Apr-89		14:13	3 / 11:02	9	normal/no significant signs
01-May-89		14:02	3 / 14:17	9	normal/no significant signs
25-Apr-89		14:36	4 / 09:30	3	normal/no significant signs
01-May-89		14:16	4 / 13:18	9	normal/no significant signs
25-Apr-89		14:23	4 / 14:32	9	normal/no significant signs
01-May-89		14:28	5 / 10:59	9	normal/no significant signs
01-May-89		14:37	5 / 11:58	9	normal/no significant signs
01-May-89		14:44	5 / 14:16	9	normal/no significant signs
01-May-89		14:48	6 / 09:04	9	normal/no significant signs
01-May-89		15:01	6 / 10:52	9	normal/no significant signs
01-May-89		15:10	6 / 14:44	9	normal/no significant signs
01-May-89		15:13	7 / 10:38	9	normal/no significant signs
01-May-89		15:24	7 / 11:39	9	normal/no significant signs
02-May-89		14:33	7 / 14:51	9	normal/no significant signs
02-May-89		14:40	8 / 10:27	9	normal/no significant signs
02-May-89		14:53	8 / 11:29	9	normal/no significant signs
02-May-89		15:04	8 / 15:17	9	normal/no significant signs
02-May-89		15:09	9 / 09:38	9	normal/no significant signs
02-May-89		15:24	9 / 10:34	9	normal/no significant signs
02-May-89		15:34	9 / 14:25	9	normal/no significant signs
02-May-89		15:39	10 / 09:15	9	normal/no significant signs
02-May-89		15:47	10 / 11:19	9	disoriented, slight
02-May-89		15:54	10 / 14:43	9	normal/no significant signs
03-May-89		08:12	11 / 08:39	9	normal/no significant signs
03-May-89		08:20	11 / 12:36	9	normal/no significant signs
03-May-89		08:27	11 / 14:00	9	normal/no significant signs
03-May-89		08:34	12 / 08:34	9	normal/no significant signs
03-May-89		08:52	12 / 12:08	9	normal/no significant signs
03-May-89		09:06	12 / 14:43	9	normal/no significant signs
03-May-89		09:10	13 / 10:00	9	normal/no significant signs
03-May-89		09:27	13 / 11:41	9	normal/no significant signs

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETIERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008F

Data Listing by Animal

Study Start Date: 31-Jan-89

PRINTED: 03-Oct-89
Page: 59

SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time Oper Data was Taken	#	Clinical signs / Comments
29	89A00059	F/10/3	03-May-89 09:34	13 / 14:50	9 normal/no significant signs
			03-May-89 09:38	14 / 09:00	9 normal/no significant signs
			03-May-89 09:50	14 / 10:53	9 disoriented, slight
			03-May-89 09:55	14 / 14:59	9 normal/no significant signs
			03-May-89 10:01	15 / 07:35	9 normal/no significant signs
			10-May-89 13:20	1 / 07:30	9 normal/no significant signs
			10-May-89 13:26	1 / 10:40	9 normal/no significant signs
			10-May-89 13:32	1 / 14:09	9 normal/no significant signs
			10-May-89 13:36	2 / 06:47	9 normal/no significant signs
			10-May-89 13:40	2 / 10:31	9 normal/no significant signs
			10-May-89 13:42	2 / 14:00	9 normal/no significant signs
			10-May-89 13:43	3 / 07:00	9 normal/no significant signs
			10-May-89 14:11	3 / 10:25	9 normal/no significant signs
			10-May-89 14:30	3 / 14:20	9 normal/no significant signs
			10-May-89 14:32	4 / 07:40	9 normal/no significant signs
			10-May-89 14:38	4 / 10:21	9 normal/no significant signs
			10-May-89 14:39	4 / 14:00	9 normal/no significant signs
			10-May-89 14:41	5 / 07:18	9 normal/no significant signs
			10-May-89 14:46	5 / 11:46	9 normal/no significant signs
			10-May-89 14:49	5 / 14:16	9 normal/no significant signs
			10-May-89 14:52	6 / 07:16	9 soft stool, slight
			10-May-89 14:56	6 / 10:41	9 normal/no significant signs
			10-May-89 14:58	6 / 14:18	9 normal/no significant signs
			10-May-89 15:00	7 / 07:10	9 normal/no significant signs
			10-May-89 15:06	7 / 10:45	9 normal/no significant signs
			10-May-89 15:08	7 / 14:00	9 normal/no significant signs
			10-May-89 15:17	8 / 07:37	9 normal/no significant signs
			10-May-89 15:23	8 / 10:26	9 normal/no significant signs
			10-May-89 15:27	8 / 14:33	9 normal/no significant signs
			10-May-89 15:29	9 / 07:13	9 normal/no significant signs
			10-May-89 15:36	9 / 10:21	9 normal/no significant signs
			10-May-89 15:40	9 / 14:07	9 normal/no significant signs
			11-May-89 12:09	10 / 07:10	9 soft stool, slight
			11-May-89 12:13	10 / 10:32	9 normal/no significant signs
			11-May-89 12:17	10 / 14:08	9 normal/no significant signs
			11-May-89 12:19	11 / 09:00	9 normal/no significant signs
			11-May-89 12:24	11 / 10:21	9 normal/no significant signs

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
D/V OF RES SUPD, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DUG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008F

Data Listing by Animal

Study Start Date: 31-Jan-89

PRINTED: 03-Oct-89
Page: 60

SUB-ACUTE/

Cage #	Animal Sex/group	Date Data was Entered	Time Data was Entered	Study Day/time Data was Taken	Oper #	Clinical signs / Comments
30	89A00067	F/10/4				
		11-May-89	12:27	11 / 14:30	9	normal/no significant signs
		11-May-89	12:30	12 / 07:05	9	normal/no significant signs
		11-May-89	12:35	12 / 10:32	9	normal/no significant signs
		11-May-89	12:41	12 / 14:22	9	normal/no significant signs
		11-May-89	12:45	13 / 07:21	9	normal/no significant signs
		11-May-89	12:47	13 / 10:38	9	normal/no significant signs
		11-May-89	12:49	13 / 15:07	9	normal/no significant signs
		11-May-89	12:54	14 / 07:44	9	soft stool, moderate
		11-May-89	14:14	14 / 09:54	9	normal/no significant signs
		11-May-89	14:17	14 / 15:00	9	normal/no significant signs
		11-May-89	14:19	15 / 07:10	9	soft stool, slight
		11-May-89	08:08	1 / 06:50	9	normal/no significant signs
		11-May-89	08:14	1 / 10:50	9	normal/no significant signs
		11-May-89	08:16	1 / 14:05	9	normal/no significant signs
		11-May-89	08:18	2 / 07:10	9	normal/no significant signs
		11-May-89	08:23	2 / 10:44	9	normal/no significant signs
		11-May-89	08:27	2 / 14:23	9	normal/no significant signs
		11-May-89	08:30	3 / 07:45	9	normal/no significant signs
		11-May-89	08:37	3 / 10:39	9	normal/no significant signs
		11-May-89	08:39	3 / 14:05	9	normal/no significant signs
		11-May-89	08:41	4 / 07:16	9	normal/no significant signs
		11-May-89	08:47	4 / 12:15	9	normal/no significant signs
		11-May-89	08:49	4 / 14:30	9	normal/no significant signs
		11-May-89	08:51	5 / 07:21	9	normal/no significant signs
		11-May-89	08:55	5 / 11:09	9	normal/no significant signs
		11-May-89	08:57	5 / 14:30	9	normal/no significant signs
		11-May-89	08:59	6 / 07:12	9	normal/no significant signs
		11-May-89	09:03	6 / 11:01	9	normal/no significant signs
		11-May-89	09:05	6 / 14:13	9	normal/no significant signs
		11-May-89	09:06	7 / 07:40	9	normal/no significant signs
		11-May-89	09:10	7 / 10:42	9	normal/no significant signs
		11-May-89	09:12	7 / 14:45	9	normal/no significant signs
		11-May-89	09:22	8 / 07:20	9	normal/no significant signs
		11-May-89	09:30	8 / 10:37	9	normal/no significant signs
		11-May-89	09:32	8 / 14:10	9	normal/no significant signs
		11-May-89	09:34	9 / 07:13	9	normal/no significant signs
		11-May-89	09:38	9 / 10:48	9	normal/no significant signs

Appendix D (cont.): INDIVIDUAL ANIMAL HISTORIES

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Raw Data Listings of Clinical Signs Without Masses

Study Number: 88008f

Data Listing by Animal

Study Start Date: 31-Jan-89

PRINTED: 03-Oct-89
Page: 61

SUB-ACUTE/

Cage #	Animal Sex/group	Date and Time Data was Entered	Study Day/time Data was Taken	Oper #	Clinical signs / Comments
10-May-89		09:40	9 / 14:12	9	normal/no significant signs
10-May-89		09:42	10 / 09:05	9	normal/no significant signs
10-May-89		09:45	10 / 10:37	9	normal/no significant signs
10-May-89		09:47	10 / 14:30	9	normal/no significant signs
10-May-89		09:50	11 / 07:09	9	normal/no significant signs
10-May-89		09:54	11 / 10:52	9	normal/no significant signs
10-May-89		09:58	11 / 14:13	9	normal/no significant signs
10-May-89		10:01	12 / 07:27	9	normal/no significant signs
10-May-89		10:04	12 / 10:57	9	normal/no significant signs
10-May-89		10:07	12 / 15:16	9	normal/no significant signs
10-May-89		10:10	13 / 07:49	9	normal/no significant signs
10-May-89		10:14	13 / 10:12	9	normal/no significant signs
10-May-89		10:17	13 / 15:15	9	normal/no significant signs
10-May-89		10:19	14 / 07:14	9	normal/no significant signs
10-May-89		10:23	14 / 10:00	9	normal/no significant signs
10-May-89		10:27	14 / 14:53	9	normal/no significant signs
10-May-89		10:28	15 / 07:18	9	normal/no significant signs

Appendix E: BODY WEIGHTS (kg)

Animal Number	Group	Study Day					
		WK-3	WK-2	WK-1	0	7	14
Males							
89A00006	10	11.40	12.00	11.30	11.40	12.10	11.95
89A00044	10	11.90	11.90	12.55	12.20	13.10	12.80
89A00057	10	11.05	10.85	10.50	10.40	10.65	11.00
Mean		11.45	11.58	11.45	11.33	11.95	11.92
Std Dev		0.43	0.64	1.03	0.90	1.23	0.90
SEM		0.25	0.37	0.60	0.52	0.71	0.52
89A00012	1	12.00	12.00	12.10	12.10	12.65	13.00
89A00042	1	10.60	10.90	11.20	11.00	11.70	11.70
89A00058	1	10.55	10.20	10.50	10.40	10.50	10.80
Mean		11.05	11.03	11.27	11.17	11.62	11.83
Std Dev		0.82	0.91	0.80	0.86	1.08	1.11
SEM		0.48	0.52	0.46	0.50	0.62	0.64
89A00003	2	11.25	11.25	11.70	11.40	11.50	11.80
89A00009	2	13.00	13.20	13.60	13.00	13.20	13.10
89A00047	2	10.60	10.20	10.35	10.40	10.80	11.00
Mean		11.62	11.55	11.88	11.60	11.83	11.97
Std Dev		1.24	1.52	1.63	1.31	1.23	1.06
SEM		0.72	0.88	0.94	0.76	0.71	0.61
89A00002	3	10.95	10.90	11.60	11.20	11.20	10.95
89A00045	3	10.00	10.20	10.35	10.50	10.80	11.10
89A00052	3	9.90	9.80	10.10	10.00	10.10	10.30
Mean		10.28	10.30	10.68	10.57	10.70	10.78
Std Dev		0.58	0.56	0.80	0.60	0.56	0.43
SEM		0.33	0.32	0.46	0.35	0.32	0.25
89A00018	4	12.30	12.40	12.30	11.90	12.75	13.15
89A00048	4	10.45	10.40	10.60	11.10	11.00	11.00
89A00056	4	9.72	9.75	10.25	10.70	11.10	10.70
Mean		10.82	10.85	11.05	11.23	11.62	11.62
Std Dev		1.33	1.38	1.10	0.61	0.98	1.34
SEM		0.77	0.80	0.63	0.35	0.57	0.77

Appendix E (cont.): BODY WEIGHTS (kg)

Animal Number	Group	Study Day					
		WK-3	WK-2	WK-1	0	7	14
Males							
89A00004	5	14.35	14.55	14.90	14.10	14.45	15.45
89A00011	5	12.85	13.10	13.00	13.15	13.50	13.05
89A00046	5	10.90	10.60	11.00	11.00	10.70	11.10
Mean		12.70	12.75	12.97	12.75	12.88	13.20
Std Dev		1.73	2.00	1.95	1.59	1.95	2.18
SEM		1.00	1.15	1.13	0.92	1.13	1.26
89A00007	6	10.60	11.20	10.50	10.70	11.45	11.95
89A00050	6	11.10	11.20	11.50	11.60	11.70	12.00
89A00051	6	9.25	9.40	9.30	10.00	9.70	9.80
Mean		10.32	10.60	10.43	10.77	10.95	11.25
Std Dev		0.96	1.04	1.10	0.80	1.09	1.26
SEM		0.68	0.60	0.64	0.46	0.63	0.73
89A00019	7	12.40	12.60	12.10	11.95	12.85	14.65
89A00043	7	9.60	9.85	11.70	11.60	10.10	10.80
89A00054	7	10.80	11.70	11.90	12.30	12.90	13.30
Mean		10.93	11.38	11.90	11.95	11.95	12.92
Std Dev		1.40	1.40	0.20	0.35	1.60	1.95
SEM		0.81	0.81	0.12	0.20	0.93	1.13
89A00001	8	13.65	13.90	13.60	13.60	13.80	14.75
89A00013	8	12.05	12.00	11.70	11.80	12.45	12.65
89A00053	8	10.85	10.70	10.70	10.30	11.40	11.70
Mean		12.18	12.20	12.00	11.90	12.55	13.03
Std Dev		1.40	1.61	1.47	1.65	1.20	1.56
SEM		0.81	0.93	0.85	0.95	0.69	0.90
89A00005	9	12.15	12.20	11.60	11.50	12.60	13.05
89A00049	9	11.10	11.25	10.10	10.00	11.80	12.00
89A00055	9	10.25	10.50	10.30	10.30	10.70	11.00
Mean		11.17	11.32	10.67	10.60	11.70	12.02
Std Dev		0.95	0.85	0.81	0.79	0.95	1.03
SEM		0.55	0.49	0.47	0.46	0.55	0.59

Appendix E (cont.): BODY WEIGHTS (kg)

Animal Number	Group	Study Day				
		WK-2	WK-1	0	7	14
Females						
89A00034	10	10.65	10.60	11.60	10.30	10.15
89A00059	10	8.72	8.90	9.10	9.20	8.70
89A00067	10	9.40	9.80	9.85	9.60	9.90
Mean		9.59	9.77	10.18	9.70	9.58
Std Dev		0.98	0.85	1.28	0.56	0.78
SEM		0.57	0.49	0.74	0.32	0.45
89A00022	1	10.90	11.15	10.85	12.10	12.00
89A00038	1	11.30	10.90	10.80	10.60	11.00
89A00072	1	9.60	10.10	10.30	10.10	10.60
Mean		10.60	10.72	10.65	10.93	11.20
Std Dev		0.89	0.55	0.30	1.04	0.72
SEM		0.51	0.32	0.18	0.60	0.42
89A00031	2	13.30	12.85	12.65	12.85	13.25
89A00063	2	10.00	10.00	10.30	10.00	9.85
89A00066	2	10.20	10.30	10.30	10.60	10.90
Mean		11.17	11.05	11.08	11.15	11.33
Std Dev		1.85	1.57	1.36	1.50	1.74
SEM		1.07	0.90	0.78	0.87	1.01
89A00025	3	9.55	9.45	9.20	9.60	10.08
89A00033	3	12.40	12.60	12.80	12.05	12.35
89A00064	3	10.65	10.75	10.80	11.00	11.20
Mean		10.87	10.93	10.93	10.88	11.21
Std Dev		1.44	1.58	1.80	1.23	1.14
SEM		0.83	0.91	1.04	0.71	0.66
89A00020	4	10.40	10.30	10.30	10.40	10.15
89A00039	4	10.40	10.10	10.85	10.15	10.30
89A00071	4	10.40	11.10	11.20	11.10	11.40
Mean		10.40	10.50	10.78	10.55	10.62
Std Dev		0.00	0.53	0.45	0.49	0.68
SEM		0.00	0.31	0.26	0.28	0.39

Appendix E (cont.): BODY WEIGHTS (kg)

Animal Number	Group	Study Day				
		WK-2	WK-1	0	7	14
Females						
89A00027	5	10.30	10.30	10.15	10.05	10.10
89A00065	5	11.05	10.80	10.80	10.70	10.80
89A00069	5	9.80	9.60	9.65	9.60	9.70
Mean		10.38	10.23	10.20	10.12	10.20
Std Dev		0.63	0.60	0.58	0.55	0.56
SEM		0.36	0.35	0.33	0.32	0.32
89A00029	6	12.50	12.40	12.15	12.20	12.50
89A00041	6	11.10	10.75	10.55	10.45	10.80
89A00061	6	10.00	10.00	9.70	10.00	9.80
Mean		11.20	11.05	10.80	10.88	11.03
Std Dev		1.25	1.23	1.24	1.16	1.37
SEM		0.72	0.71	0.72	0.67	0.79
89A00030	7	11.00	10.55	10.60	10.70	10.60
89A00035	7	11.00	10.60	10.15	10.60	10.95
89A00070	7	9.55	9.50	9.55	9.40	9.30
Mean		10.52	10.22	10.10	10.23	10.28
Std Dev		0.84	0.62	0.53	0.72	0.87
SEM		0.48	0.36	0.30	0.42	0.50
89A00040	8	12.30	12.80	12.15	12.60	13.50
89A00062	8	9.55	10.00	10.00	10.30	9.95
89A00068	8	10.20	9.70	9.80	9.80	10.00
Mean		10.68	10.83	10.65	10.90	11.15
Std Dev		1.44	1.71	1.30	1.49	2.04
SEM		0.83	0.99	0.75	0.67	1.18
89A00026	9	9.90	9.25	9.15	9.40	9.80
89A00037	9	11.95	11.10	10.95	11.20	11.45
89A00060	9	10.25	10.70	10.70	11.10	10.40
Mean		10.70	10.35	10.27	10.57	10.55
Std Dev		1.10	0.97	0.98	1.01	0.84
SEM		0.63	0.56	0.56	0.58	0.48

Appendix F: WATER CONSUMPTION (ml/day)

Animal Number	Sex Group	WK-2	WK-1	Study Day									
				0	1	2	3	4	5	6	7	14	
89A00006	M	10	940	380	375	340	1378	1048	1340	1000	1040	935	600
89A00044	M	10	1020	980	1885	1640	1310	1480	1090	860	1320	600	1290
89A00057	M	10	270	405	515	738	660	400	545	568	602	395	580
89A00034	F	10	800	410	600	470	360	295	293	380	400	260	481
89A00059	F	10		642	542	695	620	450	574	615	480	785	800
89A00067	F	10		753	505	420	395	500	360	340	400	380	595
Mean			758	595	737	717	787	696	700	627	707	559	724
Std Dev			337	242	567	478	448	466	420	261	384	262	296
SEM			169	99	232	195	183	190	172	107	157	107	121
89A00012	M	1	960	580	270	2880	910	2860	2760	2650	3200	2880	1760
89A00042	M	1	695	660	1560	2180	2640	2212	1860	2465	1695	2770	1440
89A00058	M	1	650	895	660	1950	1650	1340	1720	1540	1920	1060	1510
89A00022	F	1	740	910	380	1540	1460	2260	1805	2000	2040	1655	2280
89A00038	F	1	580	310	460	1400	810	1500	1600	350*	1540	1490	1640
89A00072	F	1		750	150	1600	1460	1927	1560	1890	2420	2540	2140
Mean			725	684	580	1925	1488	2017	1884	2109	2136	2066	1795
Std Dev			144	224	510	549	656	555	444	448	603	761	343
SEM			64	92	208	224	268	227	181	200	246	311	140

* Value is considered to be an outlier due to procedural errors in water cylinder maintenance. Therefore, it is not included in the group mean or statistical analysis.

Appendix F (cont.): WATER CONSUMPTION (ml/day)

Animal Number	Sex	Group	WK-2	WK-1	0	Study Day						
						1	2	3	4	5	6	7
89A00003	M	2	815	500	285	2220	3359	2286	2040	2020	2140	1840
89A00009	M	2	880	480	1852	3080	2624	3180	2450	2699	3078	1940
89A00047	M	2	350	500	1354	720	2050	1810	2081	1890	2000	1284
89A00031	F	2	1080	915	600	2460	3005	3065	3065	2410	3540	3400
89A00063	F	2		882	745	1995	1340	1950	1466	1940	2110	2400
89A00066	F	2		780	800	2340	165*	2680	1620	1920	1900	660*
Mean			781	676	939	2136	2476	2495	2120	2147	2461	2173
Std Dev			309	205	567	784	799	572	581	332	678	793
SEM			154	84	231	320	357	234	237	135	277	354
89A00002	M	3	600	500	435	1310	1635	2390	1370	2020	1900	2840
89A00045	M	3	750	500	1920	2060	2120	3010	2180	2220	1943	3000
89A00052	M	3	760	900	680	2030	2460	2467	1880	2040	1963	2600
89A00025	F	3	280	700	490	1640	1930	1805	2045	1987	1730	1520
89A00033	F	3	620	600	380	1770	2220	2260	2140	2660	2800	2470
89A00064	F	3		478	480	2035	2160	1690	2267	1650	1700	2480
Mean			602	613	731	1808	2088	2270	1980	2096	2006	2485
Std Dev			194	164	501	297	280	480	327	333	404	517
SEM			87	67	241	121	114	196	133	136	165	211

* Value is considered to be an outlier due to procedural errors in water cylinder maintenance. Therefore, it is not included in the group mean or statistical analysis.

Appendix F (cont.). WATER CONSUMPTION (ml/day)

Animal Number	Sex	Group	WK-2	WK-1	0	Study Day							
						1	2	3	4	5	6	7	14
89A000018	M	4	940	122	180	2190	790	2015	1485	2255	2035	2034	2000
89A000048	M	4	652	520	1500	1060	1450	1255	1145	1410	1180	1180	1160
89A000056	M	4	450	465	688	1970	1298	1591	1680	1750	1625	1990	1740
89A000020	F	4	460	610	260	1780	1285	2085	1440	2246	1660	1750	1380
89A000039	F	4	640	400	300	1720	1970	1460	155*	1530	1328	1650	1520
89A000071	F	4		600	840	1610	1810	1298	1240	1030	1710	1450	1650
Mean			628	636	628	1722	1434	1617	1398	1704	1590	1676	1575
Std Dev			199	297	501	383	421	357	211	484	302	326	292
SEM			89	121	204	156	172	146	94	198	123	133	119
89A000004	M	5	840	600	360	2308	2830	2890	3105	2440	2980	2440	2650
89A000011	M	5	1470	730	260	3007	2268	2920	2600	2220	2200	3010	2000
89A000046	M	5	180	540	890	1178	1570	1770	1278	1155	1440	1160	1950
89A000027	F	5	820	700	480	1660	1590	1440	1350	1480	1680	1490	1730
89A000065	F	5		1040	820	3000	2160	2485	2220	2020	1720	3000	1740
89A000069	F	5		380	640	1440	1200	1310	1520	1200	1100	1500	1000
Mean			828	665	575	2099	1936	2136	2012	1753	1853	2100	1845
Std Dev			527	222	252	794	592	722	749	548	660	821	533
SEM			263	91	103	324	242	295	306	224	269	335	218

* Value is considered to be an outlier due to procedural errors in water cylinder maintenance. Therefore, it is not included in the group mean or statistical analysis.

Appendix F (cont.): WATER CONSUMPTION (ml/day)

Animal Number	Sex Group	WK-2	WK-1	Study Day									
				0	1	2	3	4	5	6	7	14	
89A00001	M	8	780	450	460	240	2010	830	1980	1645	1545	1500	1420
89A00013	M	8	640	470	197	1071	1750	1050	960	640	690	620	580
89A00053	M	8	1025	800	1322	1085	952	715	630	960	1170	680	880
89A00040	F	8	1040	1320	380	650	1440	1390	1450	1740	3613	880	688
89A00062	F	8		705	610	600	535	650	457	615	540	840	368
89A00068	F	8		260	460	360	520	380	470	280	320	400	500
Mean			871	668	572	668	1201	836	991	980	1313	820	739
Std Dev			195	373	392	352	630	349	613	593	1211	375	376
SEM			97	152	160	144	257	143	250	242	495	153	153
89A00005	M	9	1320	640	510	615	1380	880	1310	1220	1270	1395	1300
89A00049	M	9	706	620	1850	480	380	460	500	560	520	495	540
89A00055	M	9	480	240	400	170	390	440	320	280	500	290	360
89A00026	F	9	280	120	250	320	165	280	310	340	400	340	380
89A00037	F	9	240	300	420	520	30*	430	468	1520	387	410	420
89A00060	F	9		665	420	440	440	440	311	400	470	580	620
Mean			605	431	642	424	551	488	537	720	591	585	603
Std Dev			440	239	598	158	475	203	388	521	337	410	356
SEM			197	97	244	64	213	83	158	213	137	168	145

* Value is considered to be an outlier due to procedural errors in water cylinder maintenance. Therefore, it is not included in the group mean or statistical analysis.

Appendix G: SERUM CHEMISTRY

List of Serum Chemistry Abbreviations/Units

ALT	Alanine Aminotransferase (U/l)
AST	Aspartate Aminotransferase (U/l)
ALK	Alkaline Phosphatase (U/l)
LDH	Lactate Dehydrogenase (U/l)
GGT	Gamma Glutamyl Transpeptidase (U/l)
CK	Creatine Phosphokinase (U/l)
BILI	Total Bilirubin (mg/dl)
CHOL	Cholesterol (mg/dl)
TRIG	Triglyceride (mg/dl)
URIC	Uric Acid (mg/dl)
TP	Total Protein (g/dl)
ALB	Albumin (g/dl)
A-G	Albumin/Globulin Ratio
GLU	Glucose (mg/dl)
BUN	Blood Urea Nitrogen (mg/dl)
CR	Creatinine (mg/dl)
CAL	Calcium (mg/dl)
PHOS	Phosphorus (mg/dl)
NA	Sodium (Meq/l)
CL	Chloride (Meq/l)
K	Potassium (Meq/l)
IRON	Iron (μ g/dl)
MAG	Magnesium (mg/dl)
NT	Not Taken

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	ALT	AST	ALK	LDH	GGT	CK	BILI	CHOL
89A00006	M	10	-21	27.6	25.1	44.6	164.0	2.3	145.52	0.00	236.2
89A00044	M	10	-19	38.1	39.2	95.8	127.1	3.8	307.74	0.00	209.3
89A00057	M	10	-20	36.5	25.5	64.3	198.4	3.6	209.28	0.00	214.8
89A00034	F	10	-15	23.9	22.0	46.0	66.0	7.4	129.11	0.00	174.3
89A00059	F	10	-12	24.1	29.3	82.1	383.2	4.9	336.71	0.00	153.9
89A00067	F	10	-13	30.0	23.8	67.9	238.2	5.4	197.61	0.00	269.9
Mean				30.03	27.48	66.78	196.15	4.57	221.00	0.000	209.73
Std Dev				6.09	6.23	20.04	109.09	1.76	84.54	0.000	41.76

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	ALT	AST	ALK	LDH	GGT	CK	BILI	CHOL
89A00012	M	1	-22	43.1	30.7	71.8	137.7	0.6	172.27	0.00	167.8
89A00042	M	1	-19	122.0	112.9	79.6	141.4	5.1	246.80	0.00	232.9
89A00058	M	1	-20	30.3	26.7	57.0	118.6	3.9	147.29	0.00	241.8
89A00022	F	1	-14	23.9	27.4	58.4	197.8	3.4	213.33	0.00	197.2
89A00038	F	1	-15	17.7	29.8	73.9	135.9	4.2	315.21	0.00	226.7
89A00072	F	1	-13	37.8	72.7	79.5	395.1	0.4	1841.04	0.00	160.5
Mean				45.80	50.03	70.03	187.75	2.93	489.32	0.000	204.48
Std Dev				38.44	35.51	10.04	105.09	1.97	664.82	0.000	34.72
89A00003	M	2	-21	33.9	32.6	55.3	242.1	4.7	180.68	0.00	184.4
89A00009	M	2	-22	20.3	24.4	51.3	184.3	1.8	145.46	0.00	215.0
89A00047	M	2	-19	8.3	0.7	45.0	106.6	3.0	121.32	0.00	163.5
89A00031	F	2	-14	35.7	43.2	60.4	152.6	2.8	945.38	0.00	215.1
89A00063	F	2	-12	21.7	28.9	73.5	155.9	4.5	363.92	0.00	191.1
89A00066	F	2	-13	27.1	31.7	52.1	371.0	4.8	388.75	0.00	174.1
Mean				24.50	26.92	56.27	202.08	3.60	357.59	0.000	190.53
Std Dev				10.08	14.27	9.84	93.97	1.24	309.40	0.000	21.17
89A00002	M	3	-21	38.5	26.9	60.9	131.8	0.5	158.12	0.00	217.1
89A00045	M	3	-19	27.7	21.4	50.2	92.2	4.4	104.81	0.00	263.9
89A00052	M	3	-20	45.5	41.3	58.8	96.0	6.2	510.67	0.00	233.7
89A00025	F	3	-14	31.3	34.4	36.5	146.2	3.6	332.16	0.00	193.3
89A00033	F	3	-15	29.8	28.8	57.1	61.5	4.2	163.90	0.00	160.9
89A00064	F	3	-12	25.7	31.5	52.3	203.3	4.9	204.72	0.00	217.7
Mean				33.08	30.72	52.63	121.83	3.97	245.73	0.000	214.43
Std Dev				7.50	6.80	8.86	50.03	1.91	150.72	0.000	35.07

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	ALT	AST	ALK	LDH	GGT	CK	BILI	CHOL
89A000018	M	4	-22	23.3	26.2	66.1	142.8	3.1	179.26	0.00	210.7
89A000048	M	4	-19	40.3	31.8	100.1	199.7	4.8	240.67	0.00	277.6
89A000056	M	4	-20	159.7	89.8	66.0	124.7	5.8	97.79	0.00	160.4
89A000020	F	4	-14	28.9	29.0	46.2	85.7	2.6	153.28	0.00	193.6
89A000039	F	4	-15	36.2	34.7	84.5	109.3	1.7	473.76	0.00	202.3
89A000071	F	4	-13	29.5	40.9	89.4	145.4	5.1	268.61	0.00	141.2
Mean				52.98	42.07	75.38	134.60	3.85	235.56	0.000	197.63
Std Dev				52.62	23.92	19.58	38.86	1.61	131.74	0.000	47.27
89A000004	M	5	-21	25.4	31.5	89.3	110.2	1.4	229.94	0.00	234.6
89A000011	M	5	-22	48.3	37.0	71.2	322.5	0.2	253.57	0.00	173.0
89A000046	M	5	-19	192.8	109.3	53.8	137.8	4.5	134.77	0.00	203.4
89A000027	F	5	-14	29.0	33.0	58.0	205.6	4.6	322.25	0.00	185.7
89A000065	F	5	-12	20.1	0.8	97.6	188.8	4.5	191.46	0.00	143.5
89A000069	F	5	-13	26.4	22.8	76.3	107.4	5.3	159.97	0.00	207.0
Mean				57.10	39.07	74.37	180.38	3.42	215.33	0.000	191.20
Std Dev				67.21	36.77	17.13	84.75	2.08	68.16	0.000	31.37
89A000007	M	6	-21	24.2	39.7	69.2	272.3	3.7	355.73	0.00	240.6
89A000050	M	6	-19	51.2	25.4	51.2	124.4	4.4	153.75	0.00	247.6
89A000051	M	6	-20	100.6	67.1	60.2	129.9	6.2	185.72	0.00	177.0
89A000029	F	6	-14	27.0	27.3	45.2	61.4	3.4	102.99	0.05	193.0
89A000041	F	6	-15	34.5	31.1	57.1	32.2	4.2	215.99	0.00	197.5
89A000061	F	6	-12	25.9	29.4	60.4	147.4	4.9	358.34	0.00	181.5
Mean				43.90	36.67	57.22	127.93	4.47	228.75	0.008	206.20
Std Dev				29.51	15.71	8.29	83.46	1.00	106.18	0.020	30.36

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	ALT	AST	ALK	LDH	GGT	CK	BILI	CHOL
89A000019	M	7	-22	16.8	29.6	78.2	328.1	4.3	198.32	0.00	194.2
89A000043	M	7	-19	23.4	33.2	43.9	340.9	3.0	383.77	0.00	146.8
89A000054	M	7	-20	35.1	32.3	57.8	113.9	5.3	414.41	0.00	245.5
89A000030	F	7	-14	32.2	30.8	34.1	176.1	5.6	224.79	0.00	232.4
89A000035	F	7	-15	26.6	26.9	51.1	114.5	4.2	189.65	0.00	185.1
89A000070	F	7	-13	30.8	26.7	71.8	176.4	4.4	211.66	0.00	165.3
Mean				27.48	29.92	56.15	208.32	4.47	270.43	0.000	194.88
Std Dev				6.68	2.71	16.71	101.68	0.92	100.83	0.000	38.09
89A000001	M	8	-21	38.5	36.2	59.3	183.7	0.7	409.41	0.00	224.2
89A000013	M	8	-22	36.3	34.0	82.6	177.0	3.7	237.05	0.00	178.2
89A000053	M	8	-20	26.5	34.9	66.9	90.9	5.2	295.80	0.00	218.2
89A000040	F	8	-15	27.3	27.2	52.0	57.6	4.8	110.37	0.00	173.2
89A000062	F	8	-12	72.8	59.8	48.6	180.7	4.0	264.60	0.00	179.8
89A000068	F	8	-13	96.7	59.1	67.4	169.6	3.7	170.99	0.00	167.4
Mean				49.68	41.87	62.80	143.25	3.68	248.04	0.000	190.17
Std Dev				28.59	13.97	12.33	54.68	1.58	103.54	0.000	24.50
89A000005	M	9	-21	23.4	32.0	85.1	193.0	2.8	488.25	0.00	190.7
89A000049	M	9	-19	79.3	56.2	71.3	122.9	7.7	179.72	0.00	133.2
89A000055	M	9	-20	31.9	31.9	62.9	87.1	5.2	70.90	0.00	181.7
89A000026	F	9	-14	24.4	22.3	75.8	112.1	5.3	156.70	0.00	205.8
89A000037	F	9	-15	32.0	35.4	54.7	101.4	4.7	632.65	0.00	190.4
89A000060	F	9	-12	51.3	31.1	72.2	328.9	5.0	272.47	0.00	186.8
Mean				40.38	34.82	70.33	157.57	5.12	300.12	0.000	181.43
Std Dev				21.54	11.35	10.51	91.65	1.57	216.49	0.000	24.96

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	TRIG	URIC	TP	ALB	A-G	GLU	BUN	CR
89A00006	M	10	-21	63	0.3	6.1	3.3	1.2	71.0	20.1	0.8
89A00044	M	10	-19	54	0.0	6.1	2.8	0.8	96.4	22.5	0.8
89A00057	M	10	-20	31	0.2	5.9	3.1	1.1	103.0	18.1	0.6
89A00034	F	10	-15	40	0.2	5.9	3.6	1.6	89.8	13.0	0.8
89A00059	F	10	-12	21	0.3	6.2	2.9	0.9	96.4	14.3	0.8
89A00067	F	10	-13	68	0.2	6.0	3.2	1.2	104.7	23.3	0.9
Mean				46.2	0.20	6.03	3.15	1.13	93.55	18.55	0.78
Std Dev				18.6	0.11	0.12	0.29	0.28	12.27	4.23	0.10

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	TRIG	URIC	TP	ALB	A-G	GLU	BUN	CR
89A00012	M	1	-22	46	0.3	5.1	2.7	1.2	69.1	21.4	0.7
89A00042	M	1	-19	36	0.2	6.1	3.5	1.3	92.7	23.9	0.8
89A00058	M	1	-20	70	0.3	6.2	2.9	0.9	102.0	28.2	0.8
89A00022	F	1	-14	34	0.2	6.6	3.3	1.0	74.1	15.3	0.8
89A00038	F	1	-15	36	0.1	6.0	3.5	1.4	80.3	13.2	0.8
89A00072	F	1	-13	82	0.1	5.6	3.1	1.3	94.8	24.6	0.8
Mean				50.7	0.20	5.93	3.17	1.18	85.50	21.10	0.78
Std Dev				20.4	0.09	0.52	0.33	0.19	12.93	5.77	0.04
89A00003	M	2	-21	52	0.6	6.1	3.5	1.3	75.4	17.0	0.7
89A00009	M	2	-22	31	0.4	6.6	3.4	1.1	76.9	12.3	0.7
89A00047	M	2	-19	31	0.2	6.5	3.4	1.1	105.7	22.3	0.8
89A00031	F	2	-14	62	0.1	5.9	3.5	1.5	74.4	21.0	0.8
89A00063	F	2	-12	28	0.3	6.8	3.3	0.9	87.7	20.9	0.8
89A00066	F	2	-13	37	0.1	6.1	3.5	1.3	100.8	27.7	0.8
Mean				40.2	0.28	6.33	3.43	1.20	86.82	20.20	0.77
Std Dev				13.7	0.19	0.35	0.08	0.21	13.68	5.19	0.05
89A00002	M	3	-21	80	0.4	6.6	3.5	1.1	61.9	21.4	0.7
89A00045	M	3	-19	54	0.3	6.8	3.5	1.1	89.4	21.2	0.8
89A00052	M	3	-20	48	0.3	6.4	3.2	1.0	108.0	20.4	0.8
89A00025	F	3	-14	47	0.2	6.2	4.0	1.8	86.2	24.1	0.8
89A00033	F	3	-15	50	0.2	5.7	3.1	1.2	86.5	15.4	0.9
89A00064	F	3	-12	80	0.3	5.3	3.3	1.6	77.3	20.4	0.8
Mean				59.8	0.28	6.17	2.43	1.30	84.83	20.48	0.80
Std Dev				15.8	0.08	0.57	0.32	0.32	15.13	2.84	0.06

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	TRIG	URIC	TP	ALB	A-G	GLU	BUN	CR
89A000018	M	4	-22	57	0.2	6.4	3.6	1.2	67.0	14.5	0.7
89A000048	M	4	-19	57	0.4	6.0	3.1	1.1	92.9	21.2	0.8
89A000056	M	4	-20	46	0.4	6.7	2.9	0.8	92.1	32.7	0.8
89A000020	F	4	-14	60	0.2	6.4	3.8	1.4	84.4	18.9	0.6
89A000039	F	4	-15	87	0.2	5.6	3.4	1.5	82.6	22.7	0.7
89A000071	F	4	-13	44	0.7	5.3	3.2	1.5	93.9	24.6	0.8
Mean				58.5	0.35	6.07	3.33	1.25	85.48	22.43	0.73
Std Dev				15.4	0.20	0.54	0.33	0.27	10.21	6.12	0.08
89A000004	M	5	-21	56	0.2	6.0	3.4	1.3	75.0	16.5	0.9
89A000011	M	5	-22	73	0.3	6.2	3.6	1.3	69.3	17.6	0.8
89A000046	M	5	-19	77	0.4	6.4	3.0	0.9	74.0	34.1	0.7
89A000027	F	5	-14	38	0.2	6.6	4.0	1.6	89.0	18.9	0.7
89A000065	F	5	-12	36	0.5	5.5	3.0	1.3	22.7	23.4	0.9
89A000069	F	5	-13	60	0.3	5.6	3.2	1.3	100.1	40.3	0.8
Mean				56.7	0.32	6.05	3.37	1.28	71.68	25.13	0.80
Std Dev				17.1	0.12	0.44	0.39	0.22	26.57	9.83	0.09
89A000007	M	6	-21	28	0.2	5.6	3.5	1.6	70.3	12.8	0.7
89A000050	M	6	-19	38	0.1	5.5	3.3	1.5	105.8	22.1	0.8
89A000051	M	6	-20	36	0.4	6.4	3.4	1.1	92.0	26.2	0.8
89A000029	F	6	-14	56	0.3	6.5	3.6	1.2	88.6	23.1	0.7
89A000041	F	6	-15	87	0.2	5.6	3.4	1.5	69.6	29.3	0.9
89A000061	F	6	-12	52	0.2	5.6	3.5	1.6	100.7	29.1	0.9
Mean				49.5	0.23	5.87	3.45	1.42	87.83	23.77	0.80
Std Dev				21.1	0.10	0.45	0.10	0.21	15.14	6.14	0.09

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	TRIG	JRIC	TP	ALB	A-G	GLU	BUN	CR
89A00019	M	7	-22	43	0.7	5.9	3.1	1.1	67.6	15.7	0.6
89A00043	M	7	-19	30	0.3	7.0	3.0	0.8	94.2	18.8	0.8
89A00054	M	7	-20	28	0.1	5.7	3.0	1.2	72.3	17.0	0.8
89A00030	F	7	-14	43	0.2	6.3	3.8	1.6	76.8	20.4	0.8
89A00035	F	7	-15	54	0.2	5.2	3.2	1.7	78.5	21.3	1.0
89A00070	F	7	-13	37	0.4	5.8	3.3	1.3	94.6	19.6	0.9
Mean				39.2	0.32	5.98	3.23	1.28	80.67	18.80	0.82
Std Dev				9.6	0.21	0.61	0.30	0.33	11.29	2.11	0.13
89A00001	M	8	-21	38	0.3	6.5	4.0	1.6	78.3	19.3	0.9
89A00013	M	8	-22	40	0.4	5.5	3.3	1.6	74.8	19.8	0.8
89A00053	M	8	-20	35	0.2	6.6	3.2	1.0	72.9	20.2	0.9
89A00040	F	8	-15	55	0.3	5.4	3.0	1.3	71.8	32.2	0.9
89A00062	F	8	-12	61	0.4	5.4	3.1	1.3	81.5	32.1	1.0
89A00068	F	8	-13	78	0.3	5.1	3.3	1.8	90.0	24.7	0.8
Mean				51.2	0.32	5.75	3.32	1.43	78.22	24.72	0.88
Std Dev				16.7	0.08	0.63	0.35	0.29	6.79	6.07	0.08
89A00005	M	9	-21	39	0.6	6.2	3.2	1.1	67.9	20.5	0.8
89A00049	M	9	-19	55	0.2	5.7	3.3	1.4	91.3	24.3	0.8
89A00055	M	9	-20	52	0.2	6.1	3.6	1.5	89.5	22.4	0.8
89A00026	F	9	-14	33	0.1	5.9	3.7	1.7	72.8	11.9	0.7
89A00037	F	9	-15	44	0.2	6.0	3.5	1.4	113.5	19.4	0.9
89A00060	F	9	-12	43	0.2	5.2	3.2	1.5	97.5	20.7	0.8
Mean				44.3	0.25	5.85	3.42	1.43	88.75	19.87	0.80
Std Dev				8.1	0.18	0.36	0.21	0.20	16.65	4.26	0.06

Appendix G (cont.): SERUM CHEMISTRY

Animal	Sex	Group	Day	CAL	PHOS	NA	CL	K	IRON	MAG
Number										
89A000006	M	10	-21	10.8	5.3	154.4	113	4.5	133.9	1.81
89A000044	M	10	-19	10.5	6.7	156.5	115	4.7	115.4	1.61
89A000057	M	10	-20	9.7	7.0	156.7	117	4.5	223.7	1.98
89A000034	F	10	-15	11.7	4.2	157.8	123	4.5	126.1	1.62
89A000059	F	10	-12	10.2	6.0	157.4	119	5.5	214.1	1.57
89A000067	F	10	-13	10.2	6.3	157.3	118	5.2	216.5	1.96
Mean				10.52	5.92	156.68	117.5	4.88	171.62	1.758
Std Dev				0.69	1.03	1.22	3.4	0.40	51.35	0.184

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	CAL	PHOS	NA	CL	K	IRON	MAG
89A00012	M	1	-22	11.6	4.6	150.8	113	4.5	136.8	1.73
89A00042	M	1	-19	10.1	7.1	156.4	115	5.6	319.3	1.62
89A00058	M	1	-20	9.8	5.9	156.0	115	5.0	160.6	1.64
89A00022	F	1	-14	10.8	4.8	149.2	115	4.7	169.9	1.66
89A00038	F	1	-15	11.6	4.1	153.8	117	4.6	126.5	1.68
89A00072	F	1	-13	9.8	5.7	158.8	117	4.4	222.6	1.87
Mean				10.62	5.37	154.17	115.3	4.80	189.28	1.700
Std Dev				0.84	1.09	3.63	1.5	0.44	71.98	0.091
89A00003	M	2	-21	11.4	4.4	159.9	121	5.2	129.1	1.88
89A00009	M	2	-22	11.6	4.8	160.5	121	4.5	107.2	1.87
89A00047	M	2	-19	10.4	5.7	156.0	119	5.0	130.2	1.61
89A00031	F	2	-14	11.4	5.6	157.5	118	5.6	146.9	1.88
89A00063	F	2	-12	10.0	6.2	160.9	121	4.9	165.4	1.75
89A00066	F	2	-13	10.4	6.0	156.7	118	5.1	151.3	1.73
Mean				10.87	5.45	158.58	119.7	5.05	138.35	1.787
Std Dev				0.68	0.70	2.11	1.5	0.36	20.47	0.110
89A00002	M	3	-21	11.2	6.1	159.5	118	5.4	76.0	2.06
89A00045	M	3	-19	9.9	6.7	159.5	112	4.6	243.9	2.07
89A00052	M	3	-20	9.9	6.0	157.2	112	4.8	183.4	1.80
89A00025	F	3	-14	12.0	4.9	160.8	121	5.1	167.3	1.65
89A00033	F	3	-15	11.1	5.0	152.8	117	4.7	132.2	1.62
89A00064	F	3	-12	9.7	6.2	154.8	117	4.7	234.5	1.87
Mean				10.63	5.82	157.43	116.2	4.88	172.88	1.845
Std Dev				0.93	0.71	3.11	3.5	0.31	63.28	0.194

Animal Number	Sex	Group	Day	CAL	PHOS	NA	CL	P.	IRON	MAG
89A000018	M	4	-22	11.1	4.1	157.8	117	4.4	116.9	1.72
89A000048	M	4	-19	10.8	6.3	159.1	116	4.9	90.6	1.77
89A000056	M	4	-20	9.5	5.7	158.7	116	5.1	182.5	1.90
89A000020	F	4	-14	11.4	5.2	153.7	116	4.9	146.7	1.74
89A000039	F	4	-15	11.2	5.0	152.9	118	5.0	95.6	1.81
89A000071	F	4	-13	10.3	6.4	157.2	120	4.9	313.6	1.71
Mean				10.72	5.45	156.57	117.2	4.87	157.65	1.775
Std Dev				0.71	0.87	2.63	1.6	0.24	83.74	0.071
89A000004	M	5	-21	12.2	5.1	156.4	116	4.9	155.8	1.74
89A000011	M	5	-22	12.0	4.7	155.4	112	4.9	131.7	2.01
89A000046	M	5	-19	9.8	5.9	155.1	111	5.2	235.1	1.72
89A000027	F	5	-14	11.4	4.6	160.8	121	4.8	107.2	1.60
89A000065	F	5	-12	10.1	6.0	158.1	113	5.0	112.1	1.63
89A000069	F	5	-13	10.5	7.5	157.3	117	5.1	180.6	1.82
Mean				11.00	5.63	157.18	115.0	4.98	153.75	1.753
Std Dev				1.01	1.09	2.10	3.7	0.15	48.44	0.149
89A000007	M	6	-21	11.4	4.4	156.1	116	4.5	166.0	1.77
89A000050	M	6	-19	10.2	6.4	153.7	115	5.1	215.6	1.68
89A000051	M	6	-20	10.2	6.5	156.9	116	5.2	149.3	1.83
89A000029	F	6	-14	12.0	3.9	154.8	118	5.2	151.2	1.88
89A000041	F	6	-15	12.0	5.1	155.1	115	4.9	60.8	1.98
89A000061	F	6	-12	9.9	5.4	159.0	117	4.2	270.9	1.79
Mean				10.95	5.28	155.93	116.2	4.85	163.97	1.822
Std Dev				0.96	1.05	1.86	1.2	0.41	70.68	0.107

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	CAL	PHOS	NA	CL	K	IRON	MAG
89A00019	M	7	-22	10.7	5.0	152.1	115	4.3	103.9	1.80
89A00043	M	7	-19	9.3	5.5	158.0	118	4.9	108.6	1.62
89A00054	M	7	-20	10.0	5.4	155.7	116	4.5	110.5	1.57
89A00030	F	7	-14	11.5	4.5	158.9	124	4.8	153.0	1.75
89A00035	F	7	-15	11.4	4.1	153.6	120	4.7	169.2	1.80
89A00070	F	7	-13	9.6	5.8	155.7	116	5.2	116.5	1.82
Mean				10.42	5.05	155.67	118.2	4.73	126.95	1.727
Std Dev				0.93	0.65	2.56	3.4	0.51	27.25	0.106
89A00001	M	8	-21	12.4	5.1	162.9	122	4.7	138.4	1.95
89A00013	M	8	-22	11.4	5.0	156.8	116	4.4	136.1	1.74
89A00053	M	8	-20	9.2	5.5	155.8	117	4.6	143.4	1.67
89A00040	F	8	-15	11.7	5.0	156.6	119	5.1	86.7	1.59
89A00062	F	8	-12	10.2	5.8	154.6	119	4.5	171.8	1.77
89A00068	F	8	-13	9.9	6.4	155.7	117	4.8	178.2	2.01
Mean				10.80	5.47	157.07	118.3	4.68	142.43	1.788
Std Dev				1.22	0.56	2.96	2.2	0.25	32.57	0.162
89A00005	M	9	-21	11.8	5.5	156.1	115	4.9	142.2	1.84
89A00049	M	9	-19	9.9	5.9	158.2	122	5.1	284.7	1.84
89A00055	M	9	-20	9.6	6.4	157.2	119	4.8	128.3	1.86
89A00026	F	9	-14	11.1	4.6	153.9	116	4.7	128.7	1.83
89A00037	F	9	-15	11.4	4.5	154.8	119	4.8	151.8	1.47
89A00060	F	9	-12	9.7	6.5	156.6	121	4.9	279.7	1.80
Mean				10.58	5.55	156.13	118.7	4.87	185.90	1.773
Std Dev				0.96	0.87	1.57	2.7	0.14	75.13	0.150

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	ALT	AST	ALK	LDH	GGT	CK	BILI	CHOL
89A00006	M	10	-7	26.1	21.8	40.7	62.2	4.4	117.60	0.00	194.0
89A00044	M	10	-7	32.2	35.4	107.4	222.9	1.4	228.24	0.00	197.4
89A00057	M	10	-7	45.3	20.4	60.4	94.5	1.5	125.34	0.00	146.7
89A00034	F	10	-7	20.1	19.2	41.2	33.9	18.2	60.50	0.00	156.0
89A00059	F	10	-7	25.7	24.0	70.7	89.9	3.6	120.91	0.00	124.9
89A00067	F	10	-7	23.8	46.0	54.1	369.5	4.7	1123.59	0.00	231.1
Mean				28.87	27.80	62.42	145.48	5.63	296.03	0.000	175.02
Std Dev				8.96	10.66	24.85	127.48	6.32	409.04	0.000	39.20

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	ALT	AST	ALK	LDH	GGT	CK	BILI	CHOL
89A00012	M	1	-7	31.9	27.6	71.4	79.1	4.0	90.94	0.00	166.4
89A00042	M	1	-7	27.7	35.8	70.1	145.0	3.6	281.62	0.00	183.2
89A00058	M	1	-7	35.7	34.0	70.4	160.7	0.3	239.65	0.00	233.6
89A00022	F	1	-7	19.7	25.9	55.0	71.0	5.0	124.49	0.00	163.4
89A00038	F	1	-7	13.3	24.6	62.8	153.4	13.5	277.23	0.00	236.3
89A00072	F	1	-7	28.7	34.3	65.4	124.7	2.8	162.53	0.00	155.9
Mean				26.17	30.37	65.85	122.32	4.87	196.08	0.000	189.80
Std Dev				8.24	4.88	6.27	38.63	4.52	81.37	0.000	36.11
89A00003	M	2	-7	38.5	33.6	50.2	86.5	5.7	110.39	0.00	170.2
89A00009	M	2	-7	20.7	22.3	40.5	109.1	4.8	135.42	0.00	189.9
89A00047	M	2	-7	24.3	20.4	41.2	105.0	1.4	98.99	0.00	145.6
89A00031	F	2	-7	28.1	23.4	58.0	66.7	4.7	172.23	0.00	177.2
89A00063	F	2	-7	18.5	25.1	60.0	107.6	2.7	195.47	0.00	189.9
89A00066	F	2	-7	25.3	47.6	42.7	481.0	2.4	630.51	0.00	169.3
Mean				25.90	28.73	48.77	159.32	3.62	223.84	0.000	173.68
Std Dev				7.05	10.32	8.67	158.43	1.68	202.55	0.000	16.48
89A00002	M	3	-7	26.0	26.2	54.6	79.7	2.4	124.58	0.00	170.8
89A00045	M	3	-7	24.0	32.4	47.6	119.9	2.9	187.87	0.00	177.4
89A00052	M	3	-7	28.1	30.5	52.6	91.7	5.0	161.48	0.00	184.7
89A00025	F	3	-7	25.7	35.4	36.7	127.6	5.5	332.46	0.00	195.9
89A00033	F	3	-7	31.3	25.8	53.3	83.2	14.9	131.67	0.00	159.5
89A00064	F	3	-7	21.8	30.8	41.0	75.7	4.6	234.66	0.00	167.8
Mean				26.15	30.18	47.63	96.30	5.88	195.45	0.000	176.02
Std Dev				3.29	3.68	7.33	22.04	4.58	78.24	0.000	12.96

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	ALT	AST	ALK	LDH	GGT	CK	BILI	CHOL
89A00018	M	4	-7	19.2	28.4	80.7	155.1	4.0	172.73	0.00	230.1
89A00048	M	4	-7	33.1	39.1	92.0	285.6	3.6	281.20	0.00	216.1
89A00056	M	4	-7	34.1	26.2	53.7	103.5	0.7	83.11	0.00	109.0
89A00020	F	4	-7	22.1	26.8	41.3	102.2	4.5	130.75	0.00	166.3
89A00039	F	4	-7	33.6	27.3	82.1	101.7	13.3	152.89	0.00	196.6
89A00071	F	4	-7	21.8	29.7	72.2	73.4	5.0	304.09	0.00	129.1
Mean				27.32	29.58	70.33	136.92	5.18	187.46	0.000	174.53
Std Dev				6.96	4.82	19.18	77.50	4.25	87.07	0.000	48.43
89A00004	M	5	-7	21.2	27.9	73.3	109.3	1.5	196.93	0.00	186.1
89A00011	M	5	-7	29.3	34.2	61.8	122.8	4.3	440.23	0.00	157.2
89A00046	M	5	-7	32.5	28.9	46.8	218.0	3.8	186.85	0.00	149.8
89A00027	F	5	-7	24.7	30.8	58.4	160.0	4.3	269.63	0.00	175.7
89A00065	F	5	-7	21.1	35.5	86.0	123.9	3.5	195.27	0.00	135.8
89A00069	F	5	-7	16.5	23.7	68.1	84.3	4.7	144.21	0.00	166.7
Mean				24.22	30.17	65.73	136.38	3.68	238.85	0.000	161.88
Std Dev				5.88	4.33	13.43	46.92	1.15	106.60	0.000	18.16
89A00007	M	6	-7	23.5	31.8	54.1	176.8	3.5	220.36	0.00	209.9
89A00050	M	6	-7	41.9	37.6	61.0	315.6	3.4	521.60	0.00	229.1
89A00051	M	6	-7	31.2	24.2	47.7	131.6	5.6	140.20	0.00	131.3
89A00029	F	6	-7	23.8	45.1	42.6	315.5	0.2	388.22	0.00	171.4
89A00041	F	6	-7	29.5	25.5	53.8	60.0	14.5	142.13	0.00	189.1
89A00061	F	6	-7	20.0	20.1	48.2	81.3	2.8	132.50	0.00	180.4
Mean				28.32	30.72	51.23	180.13	5.00	257.50	0.000	185.20
Std Dev				7.84	9.36	6.43	112.47	4.97	161.81	0.000	33.68

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	ALT	AST	ALK	LDH	GGT	CK	BILI	CHOL
89A000019	M	7	-7	15.4	24.9	88.0	148.4	6.3	143.64	0.00	164.4
89A000043	M	7	-7	84.2	31.9	58.8	228.3	9.7	244.28	0.00	114.8
89A000054	M	7	-7	30.9	28.3	57.4	86.4	4.8	212.61	0.00	192.7
89A000030	F	7	-7	23.8	24.8	41.8	67.3	4.9	109.58	0.00	219.6
89A000035	F	7	-7	22.8	19.3	47.8	97.3	14.5	130.18	0.00	181.8
89A000070	F	7	-7	20.5	28.9	57.5	103.1	4.7	366.44	0.00	130.9
Mean				32.93	26.35	58.55	121.80	7.48	201.12	0.000	167.37
Std Dev				25.61	4.37	15.91	58.69	3.93	95.96	0.000	39.19
89A000001	M	8	-7	28.0	24.2	48.1	104.2	3.1	179.56	0.00	193.9
89A000013	M	8	-7	26.0	27.3	68.5	58.3	8.2	116.51	0.00	175.6
89A000053	M	8	-7	22.7	34.7	51.4	211.2	4.1	235.19	0.00	190.9
89A000040	F	8	-7	21.1	22.7	52.1	35.0	14.2	89.87	0.00	143.5
89A000062	F	8	-7	44.8	30.4	37.2	71.7	3.3	120.36	0.00	173.2
89A000068	F	8	-7	37.3	49.2	54.2	340.4	2.8	981.17	0.00	141.9
Mean				29.98	31.42	51.92	136.80	5.95	287.11	0.000	169.83
Std Dev				9.22	9.73	10.12	117.32	4.51	344.03	0.000	22.54
89A000005	M	9	-7	28.4	21.0	71.4	103.9	4.2	105.31	0.00	159.9
89A000049	M	9	-7	22.4	31.3	52.9	314.4	2.4	278.65	0.00	128.3
89A000055	M	9	-7	27.7	27.4	49.8	160.4	1.8	134.45	0.00	139.9
89A000026	F	9	-7	19.0	18.0	74.2	70.5	4.6	103.38	0.00	200.9
89A000037	F	9	-7	26.3	17.7	39.6	25.3	14.6	62.50	0.00	160.6
89A000060	F	9	-7	32.7	19.4	57.4	79.5	5.1	102.81	0.00	187.0
Mean				26.08	22.47	57.55	125.67	5.45	131.18	0.000	162.77
Std Dev				4.81	5.60	13.21	102.52	4.66	75.79	0.000	27.44

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	TRIG	URIC	TP	ALB	A-G	GLU	BUN	CR
89A00006	M	10	-7	35	1.6	6.2	3.6	1.4	90.5	13.0	0.8
89A00044	M	10	-7	54	0.1	6.3	3.0	0.9	78.2	22.8	0.8
89A00057	M	10	-7	39	0.2	5.8	3.6	1.6	90.0	17.4	0.6
89A00034	F	10	-7	41	0.0	6.0	3.4	1.3	107.6	15.8	0.8
89A00059	F	10	-7	26	0.1	5.7	2.9	1.0	100.0	16.6	0.7
89A00067	F	10	-7	81	0.1	5.3	3.0	1.3	91.9	16.2	0.7
Mean				46.0	0.35	5.88	3.25	1.26	93.03	16.97	0.73
Std Dev				19.4	0.62	0.37	0.32	0.27	9.98	3.23	0.08

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	TRIG	URIC	TP	ALB	A-G	GLU	BUN	CR
89A00012	M	1	-7	52	0.1	5.7	3.5	1.5	96.0	16.6	0.8
89A00042	M	1	-7	49	0.0	5.7	3.5	1.6	92.2	16.5	0.7
89A00058	M	1	-7	52	0.3	6.1	3.2	1.1	82.8	19.6	0.6
89A00022	F	1	-7	38	0.0	5.8	3.0	1.1	77.9	15.1	0.7
89A00038	F	1	-7	43	0.0	6.4	3.3	1.1	90.8	12.9	0.8
89A00072	F	1	-7	74	0.0	5.3	3.1	1.4	83.9	26.0	0.8
Mean				51.3	0.07	5.83	3.27	1.30	87.27	17.78	0.73
Std Dev				12.4	0.12	0.37	0.21	0.22	6.81	4.58	0.08
89A00003	M	2	-7	43	1.6	5.6	3.7	2.0	100.0	12.6	0.7
89A00009	M	2	-7	28	0.2	6.5	3.9	1.5	75.0	16.4	0.9
89A00047	M	2	-7	37	0.1	6.2	3.6	1.4	101.9	15.3	0.8
89A00031	F	2	-7	53	0.0	5.0	3.0	1.5	74.9	12.5	0.6
89A00063	F	2	-7	62	0.1	6.2	3.3	1.1	101.2	18.1	0.7
89A00066	F	2	-7	55	0.1	5.7	3.1	1.2	89.4	27.1	0.7
Mean				46.3	0.35	5.87	3.43	1.45	90.40	17.00	0.73
Std Dev				12.6	0.62	0.54	0.36	0.31	12.80	5.41	0.10
89A00002	M	3	-7	48	1.6	5.9	3.4	1.3	87.8	10.1	0.6
89A00045	M	3	-7	43	0.3	6.6	3.4	1.1	89.1	14.7	0.7
89A00052	M	3	-7	32	0.2	6.4	3.4	1.2	100.7	15.7	0.8
89A00025	F	3	-7	46	0.0	5.7	3.4	1.5	89.1	22.1	0.6
89A00033	F	3	-7	60	0.0	5.7	2.9	1.0	91.8	19.3	0.8
89A00064	F	3	-7	49	0.1	4.9	2.7	1.2	102.6	13.1	0.7
Mean				46.3	0.37	5.86	3.20	1.21	93.52	15.83	0.70
Std Dev				9.1	0.62	0.60	0.32	0.17	6.46	4.31	0.09

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	TRIG	URIC	TP	ALB	A-G	GLU	BUN	CR
89A00018	M	4	-7	59	0.0	6.0	3.7	1.6	98.6	14.6	0.6
89A00048	M	4	-7	40	0.3	6.1	3.4	1.3	90.7	15.8	0.8
89A00056	M	4	-7	45	0.3	5.9	3.2	1.2	72.0	19.7	0.7
89A00020	F	4	-7	52	0.1	5.9	3.7	1.6	80.4	17.2	0.5
89A00039	F	4	-7	103	0.0	5.5	3.6	1.8	89.9	16.6	0.8
89A00071	F	4	-7	47	0.2	5.2	3.0	1.4	123.9	13.5	0.8
Mean				57.7	0.15	5.76	3.43	1.48	92.58	16.23	0.70
Std Dev				23.1	0.14	0.34	0.29	0.23	17.89	2.16	0.13
89A00004	M	5	-7	43	1.6	5.8	3.8	1.8	80.4	12.5	0.8
89A00011	M	5	-7	36	0.1	6.0	3.5	1.4	98.0	10.8	0.8
89A00046	M	5	-7	46	0.1	6.4	3.1	1.0	86.7	15.6	0.8
89A00027	F	5	-7	71	0.0	6.1	3.8	1.7	84.1	18.9	0.6
89A00065	F	5	-7	24	0.2	5.4	3.0	1.3	103.5	22.0	0.9
89A00069	F	5	-7	13	0.2	5.4	3.1	1.4	98.4	29.1	0.8
Mean				38.8	0.37	5.85	3.38	1.43	91.85	18.15	0.78
Std Dev				20.0	0.61	0.40	0.37	0.29	9.32	6.75	0.10
89A00007	M	6	-7	35	1.6	5.6	3.2	1.3	89.1	16.8	0.8
89A00050	M	6	-7	63	0.1	6.0	3.7	1.6	89.7	22.8	0.7
89A00051	M	6	-7	34	0.2	6.0	3.2	1.2	92.3	20.2	0.7
89A00029	F	6	-7	45	0.0	5.7	3.5	1.7	86.4	12.5	0.6
89A00041	F	6	-7	57	0.0	5.4	3.2	1.5	96.4	19.7	0.8
89A00061	F	6	-7	82	0.0	5.4	3.4	1.7	104.6	27.9	0.8
Mean				52.7	0.32	5.68	3.37	1.49	93.08	19.98	0.73
Std Dev				18.5	0.63	0.27	0.21	0.22	6.58	5.23	0.08

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	TRIG	URIC	TP	ALB	A-G	GLU	BUN	CR
89A00019	M	7	-7	33	0.3	5.7	3.9	2.2	128.2	14.0	0.6
89A00043	M	7	-7	45	0.0	5.1	3.3	1.8	86.1	20.4	0.6
89A00054	M	7	-7	39	0.0	5.8	3.3	1.3	85.2	17.6	0.6
89A00030	F	7	-7	53	0.2	5.8	3.3	1.4	80.8	19.9	0.6
89A00035	F	7	-7	50	0.0	5.8	3.6	1.7	115.6	13.5	0.9
89A00070	F	7	-7	35	0.2	5.5	3.2	1.4	87.2	11.1	0.7
Mean				43.3	0.12	5.61	3.43	1.63	97.18	16.08	0.67
Std Dev				7.2	0.13	0.27	0.27	0.34	19.68	3.78	0.12
89A00001	M	8	-7	34	1.6	6.2	3.6	1.4	82.0	11.5	0.9
89A00013	M	8	-7	33	0.0	5.9	3.5	1.5	103.5	18.5	0.9
89A00053	M	8	-7	48	0.3	6.5	2.9	0.8	87.2	20.9	0.8
89A00040	F	8	-7	41	0.0	5.1	3.0	1.4	94.7	18.1	0.8
89A00062	F	8	-7	27	0.1	5.4	3.0	1.2	103.2	17.4	0.8
89A00068	F	8	-7	31	0.0	5.0	3.2	1.8	110.5	18.6	0.7
Mean				35.7	0.33	5.68	3.20	1.35	96.85	17.50	0.82
Std Dev				7.6	0.63	0.60	0.29	0.32	10.85	3.17	0.08
89A00005	M	9	-7	57	1.6	6.2	3.2	1.1	89.6	18.8	0.9
89A00049	M	9	-7	42	0.2	7.0	3.2	0.3	89.1	14.2	0.7
89A00055	M	9	-7	39	0.2	5.9	3.2	1.2	79.1	14.5	0.6
89A00026	F	9	-7	37	0.0	5.8	3.7	1.8	83.9	11.1	0.6
89A00037	F	9	-7	28	0.0	5.5	3.3	1.5	116.2	10.9	0.9
89A00060	F	9	-7	52	0.1	5.1	3.2	1.7	111.4	19.5	0.7
Mean				42.5	0.35	5.92	3.30	1.35	94.88	14.83	0.73
Std Dev				10.5	0.62	0.65	0.20	0.38	15.22	3.67	0.14

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	CAL	PHOS	NA	CL	K	IRON	MAG
89A0C006	M	10	-7	10.8	5.5	156.3	106	4.4	98.8	1.68
89A0C044	M	10	-7	11.0	7.2	153.3	112	4.8	123.3	1.63
89A0C057	M	10	-7	9.9	4.9	154.6	116	4.8	144.6	1.89
89A00034	F	10	-7	11.0	4.8	155.9	118	4.3	109.8	1.77
89A00059	F	10	-7	9.9	5.9	150.7	109	4.4	184.1	1.65
89A00067	F	10	-7	10.4	5.3	152.1	111	5.2	162.7	1.60
Mean				10.50	5.60	153.82	112.0	4.65	137.22	1.703
Std Dev				0.51	0.88	2.19	4.4	0.34	32.63	0.108

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	CAL	PHCS	NA	CL	K	IRON	MAG
89A000012	M	1	-7	10.9	5.8	151.3	112	4.7	53.0	1.85
89A000042	M	1	-7	10.7	6.4	153.2	112	4.7	263.0	1.60
89A000058	M	1	-7	9.0	4.4	155.1	118	4.9	99.0	1.61
89A000022	F	1	-7	10.7	4.7	151.8	115	4.5	165.1	1.61
89A000038	F	1	-7	11.4	3.0	155.7	115	4.8	210.3	1.83
89A000072	F	1	-7	10.2	6.0	156.3	117	4.9	123.1	1.84
Mean				10.48	5.05	153.90	114.8	4.75	152.25	1.723
Std Dev				0.82	1.27	2.10	2.5	0.15	76.60	0.128
89A000003	M	2	-7	10.3	4.7	151.9	118	4.7	124.8	1.62
89A000009	M	2	-7	11.3	3.9	156.9	114	4.6	77.6	1.76
89A000047	M	2	-7	10.9	5.4	151.5	115	4.7	163.7	1.63
89A000031	F	2	-7	11.4	4.9	153.5	116	4.8	159.0	1.55
89A000063	F	2	-7	9.7	5.4	156.6	115	4.5	84.0	1.73
89A000066	F	2	-7	10.3	4.6	154.1	114	4.6	119.7	1.71
Mean				10.65	4.82	154.08	115.3	4.65	121.47	1.667
Std Dev				0.66	0.56	2.28	1.5	0.10	36.15	0.080
89A000002	M	3	-7	10.8	4.3	153.1	115	4.7	157.6	1.56
89A000045	M	3	-7	9.9	5.6	155.4	117	4.5	90.0	1.60
89A000052	M	3	-7	10.2	4.3	156.6	116	4.7	104.0	1.71
89A000025	F	3	-7	11.5	4.9	155.3	119	4.7	131.1	1.76
89A000033	F	3	-7	11.2	5.7	153.9	115	5.2	123.8	1.83
89A000064	F	3	-7	9.4	5.3	151.7	114	4.3	96.8	1.34
Mean				10.50	5.02	154.33	116.0	4.68	117.22	1.633
Std Dev				0.80	0.62	1.78	1.8	0.30	25.29	0.175

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	CAL	PHOS	NA	CL	K	IRON	MAG
89A00018	M	4	-7	10.7	5.8	154.9	114	4.7	97.4	1.83
89A00048	M	4	-7	11.3	5.8	153.7	111	4.8	78.9	1.61
89A00056	M	4	-7	9.3	4.6	149.5	115	5.0	182.6	1.83
89A00020	F	4	-7	11.4	4.9	150.8	117	4.7	83.8	1.75
89A00039	F	4	-7	12.1	5.2	155.7	114	5.0	206.0	1.95
89A00071	F	4	-7	10.4	4.7	153.9	114	4.0	73.3	1.49
Mean				10.87	5.17	153.08	114.2	4.70	120.33	1.743
Std Dev				0.97	0.53	2.42	1.9	0.37	58.32	0.167
89A00004	M	5	-7	11.4	5.6	154.3	112	4.5	132.1	1.65
89A00011	M	5	-7	11.0	5.9	153.9	114	5.1	77.7	1.75
89A00046	M	5	-7	10.2	4.6	150.3	112	4.8	91.0	1.61
89A00027	F	5	-7	11.4	4.7	157.4	116	4.5	110.2	1.77
89A00065	F	5	-7	9.9	4.8	155.7	113	4.4	55.4	1.61
89A00069	F	5	-7	10.0	6.0	153.6	113	4.6	101.2	1.56
Mean				10.65	5.27	154.20	113.3	4.65	94.60	1.658
Std Dev				0.70	0.64	2.37	1.5	0.26	26.56	0.084
89A00007	M	6	-7	10.6	4.0	154.7	113	4.6	145.9	1.74
89A00050	M	6	-7	10.7	6.0	151.9	112	4.7	109.8	1.74
89A00051	M	6	-7	10.1	5.7	153.7	119	5.1	297.1	1.77
89A00029	F	6	-7	10.9	4.2	153.2	117	5.1	214.2	2.19
89A00041	F	6	-7	12.6	5.9	154.0	116	5.0	145.6	1.84
89A00061	F	6	-7	9.9	5.5	152.8	112	4.3	115.3	1.81
Mean				10.80	5.22	153.38	114.8	4.80	171.32	1.848
Std Dev				0.96	0.88	0.98	2.9	0.32	71.96	0.172

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	CAL	PHOS	NA	CL	K	IRON	MAG
89A00019	M	7	-7	11.4	5.7	154.7	113	4.8	85.5	1.82
89A00043	M	7	-7	10.7	6.2	153.1	116	4.9	159.3	1.64
89A00054	M	7	-7	9.7	4.8	152.6	114	5.0	221.0	1.62
89A00030	F	7	-7	11.3	4.4	156.1	118	4.7	144.1	1.59
89A00035	F	7	-7	11.3	4.4	155.3	118	4.4	118.7	1.78
89A00070	F	7	-7	10.1	5.2	151.9	113	4.7	142.8	1.64
Mean				10.75	5.12	153.95	115.3	4.75	145.23	1.682
Std Dev				0.71	0.73	1.66	2.3	0.21	45.21	0.094
89A00001	M	8	-7	10.1	5.1	155.8	113	4.1	128.2	1.66
89A00013	M	8	-7	10.9	5.6	155.3	114	4.6	129.6	1.80
89A00053	M	8	-7	9.0	4.6	150.9	116	4.8	234.1	1.59
89A00040	F	8	-7	11.3	3.5	155.5	113	4.2	73.7	1.64
89A00062	F	8	-7	10.4	6.1	153.6	114	4.5	267.2	1.69
89A00068	F	8	-7	10.0	5.7	155.7	117	4.4	265.6	2.07
Mean				10.28	5.10	154.47	114.5	4.43	183.07	1.742
Std Dev				0.80	0.94	1.93	1.6	0.26	82.85	0.175
89A00005	M	9	-7	10.9	4.6	154.2	119	5.0	132.4	1.42
89A00049	M	9	-7	9.6	5.2	152.9	114	4.6	86.6	1.57
89A00055	M	9	-7	9.8	5.6	153.6	117	4.7	111.9	1.78
89A00026	F	9	-7	11.1	4.3	156.9	118	5.0	129.5	1.92
89A00037	F	9	-7	11.5	3.9	155.7	118	4.7	115.1	1.66
89A00060	F	9	-7	10.3	5.3	155.1	117	4.8	184.2	1.80
Mean				10.53	4.90	154.73	117.2	4.80	126.62	1.692
Std Dev				0.76	0.61	1.46	1.7	0.17	32.58	0.180

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	ALT	AST	ALK	LDH	GGT	CK	BILI	CHOL
89A00006	M	10	0	22.7	25.1	45.7	82.6	4.4	198.42	0.00	201.7
89A00044	M	10	0	34.5	35.1	105.5	260.4	3.4	200.39	0.00	211.5
89A00057	M	10	0	41.5	24.0	54.1	88.6	4.0	292.80	0.00	129.7
89A00034	F	10	0	23.7	23.9	40.0	85.9	7.7	87.99	0.00	154.9
89A00059	F	10	0	25.3	31.7	77.7	196.2	5.6	193.72	0.00	113.0
89A00067	F	10	0	29.5	41.2	52.6	472.7	2.7	792.24	0.00	223.9
Mean				29.53	30.17	62.60	197.73	4.30	294.26	0.000	172.45
Std Dev				7.30	7.09	24.65	153.11	1.76	252.44	0.000	46.25

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	ALT	AST	ALK	LDH	GGT	CK	BILI	CHOL
89A000012	M	1	0	35.9	22.5	68.2	66.0	1.1	98.92	0.00	154.8
89A000042	M	1	0	21.7	26.9	66.6	61.8	3.9	142.39	0.00	167.1
89A000058	M	1	0	31.7	32.8	66.6	121.1	3.7	406.06	0.00	219.7
89A000022	F	1	0	28.3	23.4	48.9	113.9	4.2	206.43	0.00	150.5
89A000038	F	1	0	12.9	27.9	50.8	251.7	2.6	297.52	0.00	231.2
89A000072	F	1	0	26.6	36.6	60.4	204.3	0.6	259.66	0.00	128.4
Mean				26.18	28.35	60.25	136.47	2.68	235.16	0.000	175.28
Std Dev				8.08	5.46	8.51	76.38	1.53	111.08	0.000	40.98
89A000003	M	2	0	25.8	29.8	49.7	150.2	6.5	144.12	0.01	155.4
89A000009	M	2	0	21.0	18.4	39.3	58.2	0.7	94.95	0.00	185.2
89A000047	M	2	0	24.3	23.0	39.6	110.2	2.1	122.28	0.00	142.3
89A000031	F	2	0	30.1	37.5	62.2	91.3	5.5	1024.68	0.00	165.7
89A000063	F	2	0	21.0	26.2	62.5	130.5	5.8	158.27	0.00	169.9
89A000066	F	2	0	25.1	37.1	41.8	383.3	1.0	307.68	0.00	174.3
Mean				24.55	28.67	49.18	153.95	3.60	308.66	0.002	165.47
Std Dev				3.40	7.67	10.87	116.77	2.62	358.55	0.004	15.00
89A000002	M	3	0	24.9	28.2	56.0	102.2	2.5	159.29	0.32	170.2
89A000045	M	3	0	25.6	25.4	48.4	82.3	3.6	136.46	0.00	176.6
89A000052	M	3	0	26.7	36.0	50.3	119.6	3.1	208.10	0.00	178.3
89A000025	F	3	0	30.4	36.7	35.9	141.5	3.9	192.61	0.32	189.6
89A000033	F	3	0	29.8	31.9	56.3	157.5	3.4	245.45	0.00	164.4
89A000064	F	3	0	23.9	37.8	44.7	221.1	5.2	229.58	0.00	182.0
Mean				26.88	32.67	48.60	137.37	3.62	195.25	0.107	176.85
Std Dev				2.66	5.04	7.66	49.03	0.91	41.52	0.165	8.84

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	ALT	AST	ALK	LDH	GGT	CK	BILI	CHOL
89A000018	M	4	0	19.6	23.7	65.1	114.1	2.3	140.06	0.00	227.8
89A000048	M	4	0	32.3	34.9	90.1	195.3	1.7	482.52	0.00	208.0
89A000056	M	4	0	30.8	32.2	61.1	120.3	4.1	509.90	0.00	117.3
89A000020	F	4	0	29.6	25.8	42.1	47.7	4.4	99.75	0.00	135.8
89A000039	F	4	0	37.7	30.3	75.0	152.7	2.8	144.31	0.00	184.9
89A000071	F	4	0	24.5	35.2	64.9	196.1	1.4	205.32	0.00	113.6
Mean				29.08	30.35	66.38	137.70	2.78	263.64	0.000	164.57
Std Dev				6.30	4.74	15.86	56.41	1.24	183.48	0.000	48.90
89A000004	M	5	0	15.0	24.6	75.0	68.9	4.0	145.24	0.00	181.9
89A000011	M	5	0	31.3	29.1	56.3	149.5	0.9	247.34	0.00	152.1
89A000046	M	5	0	26.2	24.6	43.1	122.6	4.2	130.11	0.00	140.3
89A000027	F	5	0	22.9	21.7	53.5	41.7	4.3	98.89	0.00	168.0
89A000065	F	5	0	20.8	55.8	102.1	275.8	4.2	761.53	0.00	129.1
89A000069	F	5	0	19.4	27.1	58.4	158.4	0.4	194.55	0.00	167.8
Mean				22.60	30.48	64.73	136.15	3.00	262.94	0.000	156.53
Std Dev				5.66	12.65	21.01	82.22	1.83	249.77	0.000	19.69
89A000007	M	6	0	18.6	31.1	58.3	171.5	5.7	268.14	0.12	234.1
89A000050	M	6	0	37.8	34.0	62.5	215.4	4.0	411.49	0.00	206.2
89A000051	M	6	0	32.4	38.7	46.3	147.5	4.4	787.77	0.00	137.1
89A000029	F	6	0	37.4	24.3	43.6	45.2	4.8	104.51	0.45	148.7
89A000041	F	6	0	27.3	37.1	52.6	85.9	5.2	297.10	0.00	190.1
89A000061	F	6	0	15.7	20.9	57.7	112.5	4.0	135.17	0.00	175.3
Mean				28.20	31.02	53.50	129.67	4.68	334.03	0.095	181.92
Std Dev				9.42	7.11	7.38	61.26	0.68	248.92	0.180	36.15

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	ALT	AST	ALK	LDH	GGT	CK	BILI	CHOL
89A000019	M	7	0	19.6	21.6	81.1	100.3	4.4	100.64	0.00	149.1
89A000043	M	7	0	55.6	30.6	61.0	132.6	7.3	243.95	0.00	110.3
89A000054	M	7	0	30.1	30.6	49.1	97.8	3.8	272.24	0.00	197.7
89A000030	F	7	0	27.9	24.3	44.0	30.5	4.5	93.57	0.00	217.4
89A000035	F	7	0	23.0	39.4	44.2	343.6	4.0	789.98	0.00	170.3
89A000070	F	7	0	23.5	24.2	49.9	89.2	0.6	103.80	0.00	117.1
Mean				29.95	28.45	54.88	132.33	4.10	267.36	0.000	160.32
Std Dev				13.11	6.50	14.25	108.70	2.14	267.75	0.000	43.01
89A000001	M	8	0	27.5	24.7	57.4	79.7	4.0	203.83	0.07	210.1
89A000013	M	8	0	38.2	31.3	63.4	93.5	4.0	160.14	0.00	179.7
89A000053	M	8	0	25.0	34.8	53.8	162.5	3.8	357.49	0.00	195.9
89A000040	F	8	0	17.1	23.4	49.3	175.5	5.3	188.53	0.00	147.4
89A000062	F	8	0	25.0	30.2	40.2	133.0	5.1	162.54	0.00	164.9
89A000068	F	8	0	31.0	31.2	60.4	129.5	1.1	214.69	0.01	119.6
Mean				27.30	29.27	54.08	128.95	3.88	214.54	0.013	169.60
Std Dev				7.03	4.35	8.41	37.39	1.50	73.33	0.028	33.01
89A000005	M	9	0	21.9	20.7	72.0	74.2	4.6	101.96	0.00	167.9
89A000049	M	9	0	23.1	34.4	52.0	301.6	3.3	257.42	0.00	128.9
89A000055	M	9	0	21.1	25.8	47.8	112.1	4.2	90.03	0.00	144.7
89A000026	F	9	0	24.7	18.3	69.4	28.3	5.8	78.87	0.00	174.3
89A000037	F	9	0	26.6	27.1	39.5	272.1	3.5	269.17	0.00	191.9
89A000060	F	9	0	29.3	38.5	57.0	405.0	4.6	566.17	0.00	173.1
Mean				24.45	27.47	56.28	198.88	4.33	227.27	0.000	163.47
Std Dev				3.09	7.78	12.58	148.71	0.90	186.59	0.000	22.74

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	TRIG	URIC	TP	ALB	A-G	GLU	BUN	CR
89A00006	M	10	0	27	0.1	6.0	3.1	1.1	89.3	11.5	0.7
89A00044	M	10	0	68	0.1	6.7	3.2	0.9	91.5	27.2	0.7
89A00057	M	10	0	29	0.2	5.7	3.6	1.7	104.9	15.9	0.7
89A00034	F	10	0	34	0.1	5.9	3.8	1.9	93.5	14.2	0.7
89A00059	F	10	0	24	0.0	6.0	3.5	1.4	79.1	13.2	0.7
89A00067	F	10	0	90	0.1	6.1	3.2	1.1	75.1	23.0	0.6
Mean				45.3	0.10	6.06	3.40	1.36	88.90	17.50	0.68
Std Dev				27.2	0.06	0.32	0.28	0.38	10.68	6.20	0.04

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	TRIG	URIC	TP	ALB	A-G	GLU	BUN	CR
89A00012	M	1	0	27	0.2	5.2	2.9	1.3	85.5	12.2	0.9
89A00042	M	1	0	47	0.0	5.7	3.2	1.3	98.6	18.3	0.6
89A00058	M	1	0	50	0.2	6.0	3.2	1.1	105.5	19.5	0.8
89A00022	F	1	0	24	1.6	6.3	3.3	1.1	90.8	15.0	1.0
89A00038	F	1	0	32	0.1	6.8	3.3	0.9	82.6	15.7	0.7
89A00072	F	1	0	50	0.0	5.6	3.2	1.3	79.6	23.0	0.6
Mean				38.3	0.35	5.93	3.18	1.17	90.43	17.28	0.77
Std Dev				12.0	0.62	0.57	0.15	0.16	9.97	3.80	0.16
89A00003	M	2	0	30	0.0	5.7	3.3	1.4	89.4	13.7	0.8
89A00009	M	2	0	31	0.4	5.7	3.1	1.2	86.1	12.4	0.7
89A00047	M	2	0	51	0.0	6.0	3.5	1.4	104.0	18.0	0.7
89A00031	F	2	0	46	1.6	5.3	3.5	1.8	93.3	9.5	0.8
89A00063	F	2	0	45	0.0	6.8	3.5	1.1	74.0	16.4	0.7
89A00066	F	2	0	55	0.1	6.4	3.4	1.2	76.4	24.4	0.7
Mean				43.0	0.35	5.98	3.38	1.35	87.20	15.73	0.73
Std Dev				10.3	0.63	0.54	0.16	0.26	11.10	5.19	0.05
89A00002	M	3	0	29	0.0	5.9	3.2	1.2	79.2	15.3	0.7
89A00045	M	3	0	48	0.2	6.2	3.2	1.1	86.0	16.9	0.7
89A00052	M	3	0	43	0.3	6.2	3.5	1.3	96.1	16.1	0.7
89A00025	F	3	0	38	1.6	6.0	3.6	1.5	103.6	17.2	0.8
89A00033	F	3	0	22	0.0	5.9	3.6	1.5	87.4	14.8	0.9
89A00064	F	3	0	80	0.3	5.2	3.1	1.5	76.4	16.2	0.7
Mean				43.3	0.40	5.90	3.37	1.34	88.12	16.08	0.75
Std Dev				20.3	0.60	0.37	0.23	0.19	10.25	0.92	0.08

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	TRIG	URIC	TP	ALB	A-G	GLU	BUN	CR
89A00018	M	4	0	36	0.2	5.9	3.4	1.3	79.9	12.4	0.7
89A00048	M	4	0	47	0.1	5.7	3.3	1.4	95.1	19.8	0.7
89A00056	M	4	0	54	0.3	6.6	3.6	1.2	96.9	15.0	0.7
89A00020	F	4	0	21	1.6	5.6	3.7	2.0	104.2	11.0	0.6
89A00039	F	4	0	29	0.1	6.0	3.9	1.9	80.7	12.6	0.7
89A00071	F	4	0	48	0.3	5.2	3.0	1.4	80.2	17.2	0.7
Mean				39.2	0.43	5.84	3.48	1.52	89.50	14.67	0.68
Std Dev				12.7	0.58	0.45	0.32	0.34	10.57	3.34	0.04
89A00004	M	5	0	26	0.0	5.7	3.1	1.2	96.1	10.1	0.8
89A00011	M	5	0	22	0.2	5.4	3.0	1.3	88.6	10.1	0.8
89A00046	M	5	0	32	0.0	5.8	3.0	1.1	92.9	19.6	0.7
89A00027	F	5	0	56	1.6	6.1	3.7	1.5	96.5	15.0	0.7
89A00065	F	5	0	48	0.3	5.6	3.4	1.5	88.1	21.7	0.8
89A00069	F	5	0	59	0.2	5.7	3.3	1.4	84.4	33.6	0.6
Mean				40.5	0.38	5.73	3.25	1.32	91.10	18.35	0.73
Std Dev				15.9	0.61	0.23	0.27	0.16	4.85	8.86	0.08
89A00007	M	6	0	24	0.0	5.6	3.1	1.3	81.0	12.2	0.7
89A00050	M	6	0	53	0.0	6.2	3.6	1.4	101.6	23.7	0.7
89A00051	M	6	0	43	0.2	6.0	3.6	1.5	101.0	18.6	0.8
89A00029	F	6	0	42	1.6	5.7	3.3	1.4	93.5	12.2	0.8
89A00041	F	6	0	38	0.0	5.8	4.0	2.2	90.8	16.3	0.8
89A00061	F	6	0	39	0.0	5.7	3.7	1.9	78.5	24.2	0.8
Mean				39.8	0.30	5.83	3.55	1.61	91.07	17.87	0.77
Std Dev				9.4	0.64	0.23	0.31	0.36	9.75	5.32	0.05

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	TRIG	URIC	TP	ALB	A-G	GLU	BUN	CR
89A00019	M	7	0	28	0.3	5.6	3.6	1.8	111.5	9.1	0.7
89A00043	M	7	0	40	0.0	5.1	3.1	1.6	95.5	18.7	0.6
89A00054	M	7	0	39	0.1	5.8	3.2	1.3	95.8	15.4	0.7
89A00030	F	7	0	66	1.6	5.6	3.6	1.8	97.4	15.0	1.0
89A00035	F	7	0	36	0.1	5.5	4.0	2.7	82.6	17.8	0.8
89A00070	F	7	0	35	0.3	5.8	3.4	1.4	73.5	17.2	0.7
Mean				40.7	0.40	5.57	3.48	1.76	92.72	15.53	0.75
Std Dev				13.1	0.60	0.24	0.33	0.51	13.14	3.45	0.14
89A00001	M	8	0	35	0.0	5.9	3.4	1.4	101.4	10.3	0.8
89A00013	M	8	0	34	0.2	5.3	3.3	1.6	101.6	15.3	0.9
89A00053	M	8	0	46	0.3	6.7	3.0	0.8	87.7	18.0	0.7
89A00040	F	8	0	24	0.0	5.3	3.2	1.5	75.3	15.3	0.8
89A00062	F	8	0	25	0.2	5.5	3.3	1.4	61.2	20.7	0.8
89A00068	F	8	0	35	0.2	5.7	3.6	1.7	97.2	16.2	0.7
Mean				33.2	0.15	5.73	3.30	1.41	87.40	15.97	0.78
Std Dev				8.0	0.12	0.52	0.20	0.31	16.29	3.45	0.08
89A00005	M	9	0	35	0.0	6.0	3.1	1.1	80.6	15.9	0.8
89A00049	M	9	0	34	0.1	6.9	3.2	0.9	106.0	16.0	0.7
89A00055	M	9	0	41	0.0	6.0	3.3	1.2	97.0	16.6	0.7
89A00026	F	9	0	52	1.6	5.3	3.7	2.2	99.9	14.4	0.7
89A00037	F	9	0	45	0.0	5.9	3.4	1.4	92.9	14.0	0.7
89A00060	F	9	0	70	0.1	5.5	3.5	1.7	85.6	19.3	0.7
Mean				46.2	0.30	5.93	3.37	1.42	93.67	16.03	0.72
Std Dev				13.4	0.64	0.55	0.22	0.47	9.36	1.89	0.04

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	CAL	PHOS	NA	CL	K	IRON	MAG
89A00006	M	10	0	10.3	4.3	154.1	116	5.4	99.7	1.66
89A00044	M	10	0	11.6	6.9	163.4	120	5.0	167.5	1.85
89A00057	M	10	0	9.6	5.5	147.5	116	4.6	171.7	1.81
89A00034	F	10	0	10.5	4.4	154.5	118	4.4	135.1	1.73
89A00059	F	10	0	10.4	4.9	150.6	112	4.3	179.9	1.38
89A00067	F	10	0	10.8	5.7	157.2	117	5.1	297.4	2.09
Mean				10.53	5.28	154.55	116.5	4.80	175.22	1.753
Std Dev				0.66	0.97	5.49	2.7	0.43	66.84	0.234

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	CAL	PHOS	NA	CL	K	IRON	MAG
89A000012	M	1	0	10.9	5.2	153.8	115	4.8	46.8	1.65
89A000042	M	1	0	10.5	6.5	155.9	117	4.8	331.2	1.58
89A000058	M	1	0	9.0	4.7	154.6	119	4.5	113.4	1.55
89A000022	F	1	0	10.7	4.4	154.0	115	4.6	122.9	1.58
89A000038	F	1	0	10.4	4.8	153.7	113	4.7	115.4	1.78
89A000072	F	1	0	9.4	4.8	150.1	116	4.9	139.0	1.75
Mean				10.15	5.07	153.68	115.8	4.72	144.78	1.648
Std Dev				0.77	0.75	1.93	2.0	0.15	96.66	0.097
89A000003	M	2	0	10.2	4.7	152.8	113	4.4	106.4	1.60
89A000009	M	2	0	10.9	4.0	153.6	117	4.1	45.2	1.72
89A000047	M	2	0	10.5	4.8	153.2	117	4.8	161.7	1.64
89A000031	F	2	0	10.6	5.4	154.2	115	4.7	108.7	1.67
89A000063	F	2	0	10.4	4.9	155.3	115	4.6	136.3	1.61
89A000066	F	2	0	10.2	5.0	159.9	120	5.1	97.3	1.72
Mean				10.47	4.80	154.83	116.2	4.62	109.27	1.660
Std Dev				0.27	0.46	2.63	2.4	0.34	39.34	0.053
89A000002	M	3	0	10.5	5.6	154.9	114	4.5	80.4	1.61
89A000045	M	3	0	9.8	5.1	154.6	118	4.9	154.0	1.62
89A000052	M	3	0	9.2	4.7	148.6	109	4.9	119.1	1.59
89A000025	F	3	0	11.0	4.5	154.7	117	4.5	127.7	1.72
89A000033	F	3	0	10.7	4.6	154.9	116	5.8	126.6	1.74
89A000064	F	3	0	9.9	5.8	147.5	113	4.7	161.0	1.68
Mean				10.18	5.05	152.53	114.5	4.88	128.13	1.660
Std Dev				0.67	0.55	3.49	3.3	0.48	28.68	0.062

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	CAL	PHOS	NA	CL	K	IRON	MAG
89A00018	M	4	0	10.6	4.7	155.9	117	4.5	68.5	1.76
89A00048	M	4	0	11.1	6.0	154.9	120	4.7	260.4	1.76
89A00056	M	4	0	9.6	4.6	155.7	119	5.2	73.7	1.57
89A00020	F	4	0	10.9	4.8	152.1	115	5.1	117.8	1.70
89A00039	F	4	0	11.2	5.5	154.5	116	4.8	94.8	1.62
89A00071	F	4	0	9.7	4.2	150.9	116	4.5	114.3	1.50
Mean				10.52	4.97	154.00	117.2	4.80	121.58	1.652
Std Dev				0.70	0.66	2.04	1.9	0.30	70.94	0.106
89A00004	M	5	0	10.8	5.7	154.3	114	4.3	112.8	1.57
89A00011	M	5	0	10.9	5.3	153.2	115	4.8	51.3	1.64
89A00046	M	5	0	9.9	4.5	153.6	118	4.7	91.7	1.60
89A00027	F	5	0	10.8	4.6	155.6	115	4.4	82.4	1.63
89A00065	F	5	0	10.2	4.5	155.4	118	4.6	104.7	1.63
89A00069	F	5	0	9.8	4.8	146.5	112	4.6	211.0	1.67
Mean				10.40	4.90	153.10	115.3	4.57	108.98	1.623
Std Dev				0.49	0.49	3.37	2.3	0.19	54.36	0.034
89A00007	M	6	0	9.8	5.3	153.3	115	4.8	160.4	1.74
89A00050	M	6	0	10.3	5.7	153.8	114	5.1	324.2	1.72
89A00051	M	6	0	9.9	4.8	153.6	117	5.0	131.7	1.68
89A00029	F	6	0	10.1	4.7	151.7	112	4.9	94.1	1.66
89A00041	F	6	0	11.0	6.4	151.5	114	5.0	210.4	1.70
89A00061	F	6	0	10.0	4.8	151.6	112	4.1	113.9	1.66
Mean				10.18	5.28	152.58	114.0	4.82	172.45	1.693
Std Dev				0.44	0.67	1.09	1.9	0.37	84.67	0.033

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	CAL	PHOS	NA	CL	K	IRON	MAG
89A000019	M	7	0	10.7	4.6	156.6	119	4.0	48.8	1.75
89A000043	M	7	0	10.2	5.6	152.4	118	4.9	189.6	1.58
89A000054	M	7	0	10.1	5.2	154.2	116	5.2	78.8	1.42
89A000030	F	7	0	11.0	4.8	154.0	120	4.9	170.9	1.64
89A000035	F	7	0	10.6	4.7	151.0	118	5.2	158.8	1.80
89A000070	F	7	0	10.0	4.7	153.9	120	5.2	217.3	1.95
Mean				10.43	4.93	153.68	118.5	4.90	144.03	1.690
Std Dev				0.39	0.39	1.89	1.5	0.46	65.89	0.185
89A000001	M	8	0	10.6	4.7	155.3	115	4.2	111.8	1.67
89A000013	M	8	0	11.1	5.1	154.6	117	4.4	58.9	1.67
89A000053	M	8	0	9.1	4.8	149.7	111	4.9	81.5	1.42
89A000040	F	8	0	10.7	4.9	152.2	119	5.5	87.0	1.71
89A000062	F	8	0	10.3	4.4	149.7	114	4.2	79.8	1.56
89A000068	F	8	0	10.0	4.0	159.5	121	4.5	125.2	1.78
Mean				10.30	4.65	153.50	116.2	4.62	90.70	1.635
Std Dev				0.70	0.39	3.77	3.6	0.50	23.93	0.127
89A000005	M	9	0	10.8	4.6	155.0	115	4.5	99.7	1.69
89A000049	M	9	0	9.5	5.1	157.6	118	4.9	110.0	1.59
89A000055	M	9	0	9.8	5.7	152.9	115	4.7	131.2	1.58
89A000026	F	9	0	10.5	5.3	154.9	117	5.1	150.7	1.85
89A000037	F	9	0	10.8	4.5	154.6	115	5.2	141.2	1.78
89A000060	F	9	0	10.6	5.3	150.5	113	4.9	144.8	1.82
Mean				10.33	5.08	154.25	115.5	4.88	129.60	1.718
Std Dev				0.55	0.46	2.38	1.8	0.26	20.45	0.117

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	ALT	AST	ALK	LDH	GGT	CK	BILI	CHOL
89A00006	M	10	1	32.3	29.9	36.4	178.7	N ^T	192.41	0.00	195.3
89A00044	M	10	1	49.6	33.1	106.6	151.8	3.4	179.04	0.00	169.4
89A00057	M	10	1	37.0	20.1	54.9	96.4	1.6	127.27	0.00	143.4
89A00034	F	10	1	24.0	24.5	40.8	86.4	8.7	68.78	0.00	164.1
89A00059	F	10	1	33.5	31.4	75.2	197.7	0.3	184.36	0.00	110.9
89A00067	F	10	1	44.6	27.0	58.0	124.7	3.0	242.14	0.00	212.1
Mean				36.83	27.67	61.98	139.28	3.40	165.67	0.000	165.87
Std Dev				9.16	4.82	25.82	44.66	3.21	59.92	0.000	36.18

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	ALT	AST	ALK	LDH	GGT	CK	BILI	CHOL
89A00012	M	1	1	128.9	96.2	174.5	46.5	6.8	100.75	0.00	132.5
89A00042	M	1	1	39.4	81.9	202.1	68.6	4.9	166.36	0.00	157.8
89A00058	M	1	1	34.6	69.8	168.7	151.8	0.8	194.22	0.00	217.9
89A00022	F	1	1	27.5	61.0	138.4	68.5	3.7	98.32	0.00	140.5
89A00038	F	1	1	23.8	69.3	100.7	137.8	3.8	115.70	0.00	200.4
89A00072	F	1	1	180.0	176.9	158.0	61.8	6.6	153.07	0.00	120.4
Mean				72.37	92.52	157.07	89.17	4.43	138.07	0.000	161.58
Std Dev				65.83	43.12	34.62	44.06	2.22	39.12	0.000	39.19
89A00003	M	2	1	134.1	118.1	122.6	104.2	5.3	102.49	0.00	138.1
89A00009	M	2	1	23.4	60.5	106.7	88.9	5.0	91.23	0.00	173.2
89A00047	M	2	1	98.3	152.4	124.7	58.0	3.4	203.81	0.00	122.9
89A00031	F	2	1	83.2	93.5	168.0	52.7	6.3	114.54	0.00	177.4
89A00063	F	2	1	80.8	112.1	184.4	63.0	1.6	124.29	0.00	145.8
89A00066	F	2	1	112.1	116.0	120.8	192.3	4.2	211.48	0.00	147.2
Mean				88.65	108.77	137.87	93.18	4.30	141.31	0.000	150.77
Std Dev				37.57	30.39	30.80	52.44	1.65	52.63	0.000	20.91
89A00002	M	3	1	100.5	107.7	184.3	75.2	5.0	116.47	0.00	149.2
89A00045	M	3	1	119.0	160.6	136.1	156.6	5.9	305.95	0.00	170.8
89A00052	M	3	1	259.6	380.1	160.1	162.3	4.3	697.28	0.00	172.1
89A00025	F	3	1	51.1	95.8	99.2	65.0	3.0	162.99	0.00	174.7
89A00033	F	3	1	205.7	157.6	150.7	153.6	5.8	471.54	0.00	138.4
89A00064	F	3	1	48.0	106.9	141.6	172.9	1.5	166.70	0.00	181.1
Mean				130.65	168.12	145.33	130.93	4.50	320.16	0.000	164.38
Std Dev				85.40	107.45	28.26	47.69	1.72	225.87	0.000	16.69

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	ALT	AST	ALK	LDH	GGT	CK	BILI	CHOL
89A00018	M	4	1	38.5	21.7	67.3	34.1	6.6	93.31	0.00	210.4
89A00048	M	4	1	227.1	37.4	110.0	169.2	6.4	192.28	0.00	202.6
89A00056	M	4	1	28.2	25.2	63.4	128.6	0.7	111.80	0.00	137.0
89A00020	F	4	1	42.3	27.8	43.5	101.0	4.9	146.32	0.00	144.6
89A00039	F	4	1	42.5	33.0	73.7	167.5	2.2	230.77	0.00	170.0
89A00071	F	4	1	29.2	30.1	68.2	130.2	4.8	161.33	0.00	123.2
Mean				67.97	29.20	71.02	121.77	4.27	155.97	0.000	164.63
Std Dev				78.21	5.60	21.74	50.15	2.35	50.82	0.000	35.91
89A00004	M	5	1	126.6	33.2	70.7	120.0	1.3	192.31	0.00	190.3
89A00011	M	5	1	59.8	27.4	59.7	102.5	4.9	148.04	0.00	166.6
89A00046	M	5	1	99.2	28.1	41.4	180.7	3.5	152.31	0.00	149.7
89A00027	F	5	1	30.4	27.6	49.2	187.0	1.3	210.50	0.00	171.3
89A00065	F	5	1	45.5	41.2	110.2	163.1	0.5	342.61	0.00	127.8
89A00069	F	5	1	121.4	31.4	68.8	101.2	4.0	195.36	0.00	175.2
Mean				80.48	31.48	66.67	142.42	2.58	206.86	0.000	163.48
Std Dev				40.77	5.30	24.12	39.18	1.78	71.02	0.000	21.87
89A00007	M	6	1	24.3	34.8	53.2	92.3	2.2	189.02	0.00	207.7
89A00050	M	6	1	257.8	39.8	63.6	248.7	5.8	297.26	0.00	200.5
89A00051	M	6	1	646.7	75.1	85.4	118.5	12.5	137.18	0.00	160.2
89A00029	F	6	1	32.5	22.6	38.5	107.9	3.1	105.77	0.00	154.0
89A00041	F	6	1	169.1	40.1	56.9	77.0	5.0	146.08	0.00	186.2
89A00061	F	6	1	32.6	28.9	61.8	121.1	4.1	335.06	0.00	185.5
Mean				193.83	40.22	59.90	127.58	5.45	201.73	0.000	182.35
Std Dev				241.06	18.36	15.36	61.62	3.69	93.31	0.000	21.41

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	ALT	AST	ALK	LDH	GGT	CK	BILI	CHOL
89A000019	M	7	1	19.8	51.1	277.0	54.8	8.9	85.08	0.00	132.4
89A000043	M	7	1	24.6	77.0	130.6	320.0	2.6	428.03	0.00	120.7
89A000054	M	7	1	31.0	84.2	160.0	134.6	0.9	390.66	0.00	193.0
89A000030	F	7	1	21.8	65.8	113.1	78.0	4.7	111.22	0.00	190.4
89A000035	F	7	1	21.5	61.7	114.3	211.4	4.9	261.23	0.00	153.0
89A000070	F	7	1	22.4	64.4	139.3	60.9	3.6	80.42	0.00	100.1
Mean				23.52	67.37	155.72	143.28	4.27	226.11	0.000	148.27
Std Dev				3.98	11.70	61.90	104.71	2.71	157.10	0.000	37.76
89A000001	M	8	1	29.2	67.2	169.9	78.3	5.9	141.36	0.00	198.7
89A000013	M	8	1	33.7	66.0	205.6	40.9	7.7	99.10	0.00	147.0
89A000053	M	8	1	25.4	71.2	142.1	208.0	1.5	209.59	0.00	188.7
89A000040	F	8	1	18.3	58.4	139.3	52.1	5.8	146.43	0.00	120.8
89A000062	F	8	1	23.3	74.5	115.0	145.3	4.5	304.73	0.00	132.6
89A000068	F	8	1	29.0	70.6	183.4	60.7	4.4	133.03	0.03	104.8
Mean				26.48	67.98	159.22	97.55	4.97	172.37	0.005	148.77
Std Dev				5.37	5.59	33.15	65.55	2.08	74.10	0.012	37.60
89A000005	M	9	1	23.7	59.7	176.9	66.0	1.7	118.37	0.00	144.8
89A000049	M	9	1	64.0	104.6	146.0	122.6	10.5	158.90	0.00	100.0
89A000055	M	9	1	21.6	63.3	114.3	129.4	2.3	96.04	0.00	129.7
89A000026	F	9	1	18.5	67.3	156.2	52.3	5.8	92.27	0.00	145.2
89A000037	F	9	1	22.9	49.7	94.3	81.5	4.9	140.60	0.00	162.4
89A000060	F	9	1	31.2	79.5	156.2	514.4	0.7	610.99	0.00	159.9
Mean				30.32	70.68	140.65	161.03	4.32	202.86	0.000	140.33
Std Dev				17.03	19.26	30.56	175.80	3.60	201.57	0.000	23.04

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	TRIG	URIC	TP	ALB	A-G	GLU	BUN	CR
89A00006	M	10	1	27	0.2	5.6	3.3	1.5	93.3	14.4	0.8
89A00044	M	10	1	50	0.1	5.9	2.8	0.9	97.2	17.3	0.7
89A00057	M	10	1	40	0.3	5.4	3.3	1.6	84.7	17.5	0.2
89A00034	F	10	1	63	0.2	6.1	3.5	1.3	99.6	13.5	0.7
89A00059	F	10	1	30	0.3	6.0	3.2	1.2	78.5	15.5	0.6
89A00067	F	10	1	77	0.1	6.0	3.2	1.1	105.7	14.0	0.6
Mean				47.8	0.20	5.84	3.22	1.26	93.17	15.37	0.60
Std Dev				19.5	0.09	0.27	0.23	0.26	10.02	1.71	0.21

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	TRIG	URIC	TP	ALB	A-G	GLU	BUN	CR
89A00012	M	1	1	45	0.2	4.8	2.6	1.2	93.8	17.8	0.8
89A00042	M	1	1	21	0.0	5.6	3.1	1.3	100.8	12.0	0.7
89A00058	M	1	1	63	0.3	6.1	2.7	0.8	94.8	23.2	0.7
89A00022	F	1	1	NT	0.0	5.8	3.4	1.5	91.4	12.4	0.8
89A00038	F	1	1	106	0.3	6.3	2.6	0.7	81.9	13.7	0.6
89A00072	F	1	1	44	0.0	6.0	3.0	1.0	103.1	18.8	0.7
Mean				55.8	0.13	5.76	2.90	1.08	94.30	16.32	0.72
Std Dev				31.8	0.15	0.53	0.32	0.30	7.51	4.39	0.08
89A00003	M	2	1	17	0.3	5.0	3.0	1.5	101.4	11.9	0.7
89A00009	M	2	1	64	0.2	5.4	2.8	1.1	90.7	17.8	0.6
89A00047	M	2	1	32	0.0	6.4	3.2	1.0	97.7	14.5	0.8
89A00031	F	2	1	14	0.0	5.5	3.5	1.8	96.0	9.0	0.8
89A00063	F	2	1	58	0.3	7.0	2.9	0.7	73.4	16.1	0.6
89A00066	F	2	1	51	0.0	6.6	3.1	0.9	95.1	22.2	0.7
Mean				39.3	0.13	5.98	3.08	1.17	92.38	15.25	0.70
Std Dev				21.4	0.15	0.78	0.25	0.40	9.93	4.61	0.09
89A00002	M	3	1	30	0.1	5.1	3.0	1.4	86.1	11.0	0.7
89A00045	M	3	1	70	0.2	7.1	3.2	0.8	83.6	14.0	0.7
89A00052	M	3	1	42	0.3	7.2	3.4	0.9	91.1	15.7	0.6
89A00025	F	3	1	17	0.0	5.6	3.4	1.5	101.4	12.0	0.8
89A00033	F	3	1	40	0.2	5.1	2.6	1.1	84.2	12.3	0.9
89A00064	F	3	1	75	0.3	6.8	3.0	0.8	80.8	14.0	0.6
Mean				45.7	0.18	6.16	3.10	1.08	87.87	13.17	0.72
Std Dev				22.7	0.12	1.00	0.30	0.31	7.46	1.71	0.12

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	TRIG	URIC	TP	ALB	A-G	GLU	BUN	CR
89A00018	M	4	1	61	0.1	5.5	3.3	1.5	96.1	15.3	0.7
89A00048	M	4	1	45	0.2	5.8	3.2	1.2	102.0	15.4	0.7
89A00056	M	4	1	53	0.4	6.2	3.1	1.0	81.8	21.9	0.6
89A00020	F	4	1	17	0.0	5.7	3.8	1.9	99.9	8.1	0.6
89A00039	F	4	1	64	0.2	5.8	3.3	1.3	94.1	12.3	0.7
89A00071	F	4	1	48	0.0	5.4	3.1	1.4	99.3	14.5	0.7
Mean				48.0	0.15	5.74	3.30	1.38	95.53	14.58	0.67
Std Dev				16.9	0.15	0.27	0.26	0.30	7.29	4.52	0.05
89A00004	M	5	1	37	0.1	5.5	3.5	1.7	90.5	11.3	0.8
89A00011	M	5	1	51	0.2	5.7	3.1	1.2	93.7	10.6	0.7
89A00046	M	5	1	31	0.3	5.9	3.1	1.1	96.7	18.7	0.6
89A00027	F	5	1	54	0.0	6.3	3.8	1.5	87.6	14.4	0.6
89A00065	F	5	1	53	0.3	5.9	3.2	1.2	91.4	25.2	0.7
89A00069	F	5	1	76	0.0	6.3	3.6	1.4	108.8	28.7	0.7
Mean				50.3	0.15	5.92	3.38	1.35	94.78	18.15	0.68
Std Dev				15.7	0.14	0.31	0.29	0.23	7.52	7.47	0.08
89A00007	M	6	1	25	0.1	5.0	3.0	1.5	95.8	13.7	0.7
89A00050	M	6	1	62	0.1	6.0	3.4	1.3	90.0	19.4	0.8
89A00051	M	6	1	50	0.3	6.3	3.7	1.4	89.7	18.9	0.7
89A00029	F	6	1	15	0.2	6.0	3.7	1.5	95.1	10.2	0.8
89A00041	F	6	1	49	0.1	5.6	3.3	1.5	82.8	12.3	0.8
89A00061	F	6	1	62	0.3	6.2	3.5	1.3	88.4	19.3	0.7
Mean				43.8	0.18	5.84	3.43	1.42	90.30	15.63	0.75
Std Dev				19.5	0.10	0.47	0.27	0.09	4.77	4.07	0.05

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	TRIG	URIC	TP	ALB	A-G	GLU	BUN	CR
89A00019	M	7	1	49	0.2	4.9	3.3	2.0	125.8	16.3	0.7
89A00043	M	7	1	29	0.3	6.9	3.0	0.8	100.3	20.3	0.6
89A00054	M	7	1	49	0.3	5.9	3.1	1.1	98.1	16.8	0.6
89A00030	F	7	1	16	0.1	5.3	3.4	1.8	89.4	15.1	0.8
89A00035	F	7	1	37	0.2	4.9	2.7	1.3	93.9	17.6	0.7
89A00070	F	7	1	43	0.0	5.7	3.2	1.3	94.4	14.8	0.7
Mean				37.2	0.18	5.60	3.12	1.37	100.32	16.82	0.68
Std Dev				12.9	0.12	0.75	0.25	0.46	13.04	2.00	0.08
89A00001	M	8	1	22	0.2	5.5	3.4	1.6	103.4	12.8	0.8
89A00013	M	8	1	36	0.1	4.8	2.9	1.5	112.6	21.3	0.8
89A00053	M	8	1	62	0.3	6.9	3.0	0.8	81.3	18.3	0.6
89A00040	F	8	1	23	0.1	4.7	2.4	1.1	85.2	12.2	0.8
89A00062	F	8	1	29	0.2	6.0	2.6	0.8	76.4	17.2	0.7
89A00068	F	8	1	37	0.1	6.3	3.2	1.1	108.7	14.3	0.8
Mean				34.8	0.17	5.69	2.92	1.14	94.60	16.02	0.75
Std Dev				14.7	0.08	0.86	0.37	0.34	15.47	3.53	0.08
89A00005	M	9	1	31	0.3	5.3	3.0	1.3	97.9	16.2	0.8
89A00049	M	9	1	32	0.1	6.2	2.7	0.8	103.0	19.4	0.6
89A00055	M	9	1	46	0.3	7.2	2.9	0.7	78.8	13.4	0.6
89A00026	F	9	1	NT	0.0	4.8	3.1	1.8	90.5	12.0	0.7
89A00037	F	9	1	48	0.1	5.3	2.7	1.1	108.2	16.5	0.8
89A00060	F	9	1	69	0.1	6.7	2.8	0.7	83.7	21.2	0.6
Mean				45.2	0.15	5.91	2.87	1.07	93.68	16.45	0.68
Std Dev				15.4	0.12	0.93	0.16	0.43	11.37	3.48	0.10

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	CAL	PHOS	NA	CL	K	IRON	MAG
89A00006	M	10	1	10.8	4.6	155.1	118	4.9	136.0	1.74
89A00044	M	10	1	9.9	6.2	153.4	113	5.4	92.1	1.64
89A00057	M	10	1	10.2	4.8	148.5	115	4.6	142.8	1.56
89A00034	F	10	1	10.3	4.4	152.3	117	4.0	96.8	1.60
89A00059	F	10	1	10.3	5.3	153.2	116	4.9	270.8	1.71
89A00067	F	10	1	9.9	4.5	156.5	119	5.0	115.5	1.79
Mean				10.23	4.97	153.17	116.3	4.80	142.33	1.673
Std Dev				0.33	0.68	2.74	2.2	0.47	66.12	0.088

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	CAL	PHOS	NA	CL	K	IRON	MAG
89A00012	M	1	1	10.8	6.8	152.8	117	5.0	267.2	1.67
89A00042	M	1	1	9.9	6.6	154.2	115	4.4	85.3	1.45
89A00058	M	1	1	9.6	4.7	150.3	118	5.0	111.7	1.37
89A00022	F	1	1	10.0	5.6	151.5	117	4.6	85.7	1.56
89A00038	F	1	1	9.9	3.6	152.9	116	4.2	81.2	1.38
89A00072	F	1	1	9.8	4.8	155.9	117	4.5	128.3	1.48
Mean				10.00	5.35	152.93	116.7	4.62	126.57	1.485
Std Dev				0.41	1.23	1.97	1.0	0.33	71.32	0.114
89A00003	M	2	1	10.0	4.7	152.3	119	4.1	55.8	1.52
89A00009	M	2	1	10.7	6.0	151.2	119	4.6	108.4	1.66
89A00047	M	2	1	9.6	5.3	149.1	114	4.6	70.0	1.46
89A00031	F	2	1	10.5	6.1	157.4	121	4.8	92.7	1.57
89A00063	F	2	1	9.4	4.5	155.9	118	4.8	83.4	1.61
89A00066	F	2	1	9.8	4.4	155.5	123	4.8	79.2	1.67
Mean				10.00	5.17	153.57	119.0	4.62	81.58	1.582
Std Dev				0.51	0.75	3.19	3.0	0.27	18.17	0.082
89A00002	M	3	1	10.4	5.6	153.8	115	4.4	103.5	1.59
89A00045	M	3	1	8.8	4.8	154.6	116	4.4	88.6	1.57
89A00052	M	3	1	10.3	3.8	153.1	121	4.2	68.7	1.42
89A00025	F	3	1	10.7	4.9	156.8	123	4.8	63.0	1.44
89A00033	F	3	1	9.6	4.8	151.4	119	4.3	151.8	1.62
89A00064	F	3	1	10.4	5.7	165.6	126	5.0	221.7	1.85
Mean				10.03	4.93	155.88	120.0	4.52	116.22	1.582
Std Dev				0.71	0.69	5.08	4.2	0.31	60.67	0.155

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	CAL	PHOS	NA	CL	K	IRON	MAG
89A00018	M	4	1	10.6	6.0	154.1	116	4.6	270.0	1.57
89A00048	M	4	1	10.2	5.1	154.1	115	4.5	110.2	1.48
89A00056	M	4	1	10.1	4.5	151.7	117	4.9	212.8	1.73
89A00020	F	4	1	10.3	4.8	149.3	119	4.8	136.2	1.71
89A00039	F	4	1	10.5	5.4	152.3	118	4.8	251.1	1.61
89A00071	F	4	1	10.7	5.2	158.1	116	4.7	130.7	1.48
Mean				10.40	5.17	153.27	116.8	4.72	185.17	1.597
Std Dev				0.24	0.52	2.96	1.5	0.15	68.25	0.108
89A00004	M	5	1	10.5	5.5	154.6	119	4.1	105.4	1.71
89A00011	M	5	1	11.9	6.0	153.1	115	4.6	309.3	1.61
89A00046	M	5	1	9.2	4.3	154.1	117	4.2	64.9	1.58
89A00027	F	5	1	10.5	5.5	153.3	114	4.7	86.5	1.70
89A00065	F	5	1	9.8	4.6	157.9	120	5.0	247.2	1.70
89A00069	F	5	1	10.9	5.8	158.5	117	5.1	229.4	1.68
Mean				10.47	5.28	155.25	117.0	4.62	173.78	1.663
Std Dev				0.93	0.68	2.36	2.3	0.41	100.99	0.055
89A00007	M	6	1	10.7	4.9	153.0	122	4.5	237.8	1.75
89A00050	M	6	1	9.9	5.6	144.5	115	4.9	140.4	1.64
89A00051	M	6	1	11.2	4.1	158.7	122	4.7	114.1	1.70
89A00029	F	6	1	9.9	5.1	150.1	116	4.6	136.7	1.68
89A00041	F	6	1	10.8	4.7	151.2	120	4.7	172.8	1.57
89A00061	F	6	1	10.2	4.8	162.8	120	4.4	145.6	1.75
Mean				10.45	4.87	153.38	119.2	4.63	157.90	1.682
Std Dev				0.53	0.49	6.50	3.0	0.18	43.43	0.069

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	CAL	PHOS	NA	CL	K	IRON	MAG
89A00019	M	7	1	10.8	6.1	155.3	115	4.3	276.9	1.65
89A00043	M	7	1	8.9	5.4	153.1	116	4.4	62.2	1.55
89A00054	M	7	1	10.8	5.2	151.3	119	5.3	141.8	1.45
89A00030	F	7	1	10.1	4.4	150.0	114	4.2	105.6	1.54
89A00035	F	7	1	10.3	4.6	151.5	118	4.7	97.1	1.75
89A00070	F	7	1	9.6	5.2	148.8	116	5.0	92.5	1.64
Mean				10.08	5.15	151.67	116.3	4.65	129.35	1.597
Std Dev				0.74	0.61	2.30	1.9	0.43	76.68	0.105
89A00001	M	8	1	10.6	5.0	155.2	121	4.1	117.3	1.64
89A00013	M	8	1	10.8	6.6	154.1	117	4.2	224.3	1.62
89A00053	M	8	1	9.8	4.8	149.3	115	4.8	133.6	1.51
89A00040	F	8	1	9.8	5.3	151.0	119	4.8	107.9	1.58
89A00062	F	8	1	9.5	4.2	151.0	116	4.5	34.1	1.62
89A00068	F	8	1	9.8	3.7	158.1	122	4.3	62.6	1.53
Mean				10.05	4.93	153.12	118.3	4.45	113.30	1.583
Std Dev				0.52	1.00	3.28	2.8	0.30	65.76	0.053
89A00005	M	9	1	10.3	4.5	153.2	115	4.3	11.9	1.64
89A00049	M	9	1	9.0	5.4	153.2	116	4.7	96.4	1.62
89A00055	M	9	1	11.7	4.8	162.7	122	4.7	77.6	1.54
89A00026	F	9	1	9.8	5.3	152.9	117	4.6	64.2	1.69
89A00037	F	9	1	10.4	4.9	150.5	120	4.5	65.2	1.63
89A00060	F	9	1	10.0	5.5	155.0	117	5.3	113.9	1.97
Mean				10.20	5.07	154.58	117.8	4.68	71.53	1.682
Std Dev				0.89	0.39	4.23	2.6	0.34	34.93	0.149

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	ALT	AST	ALK	LDH	GGT	CK	BILI	CHOL
89A00006	M	10	2	30.1	26.3	43.3	106.8	4.9	175.70	0.00	195.8
89A00044	M	10	2	40.7	68.3	237.9	91.7	3.3	139.45	0.00	170.9
89A00057	M	10	2	36.9	18.4	49.8	50.0	3.2	86.19	0.00	154.6
89A00034	F	10	2	23.5	20.1	35.6	44.9	6.5	49.43	0.00	170.5
89A00059	F	10	2	25.1	30.6	78.3	107.4	1.2	324.71	0.00	118.6
89A00067	F	10	2	37.9	22.4	56.3	145.8	1.8	156.04	0.00	226.1
Mean				32.37	31.02	83.53	91.10	3.48	155.25	0.000	172.75
Std Dev				7.17	18.79	77.01	38.28	1.96	95.24	0.000	36.46

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	ALT	AST	ALK	LDH	GGT	CK	BILI	CHOL
89A000012	M	1	2	91.2	90.8	213.4	89.7	3.8	118.61	0.00	125.4
89A000042	M	1	2	39.4	93.5	299.0	65.3	6.2	317.26	0.00	166.1
89A000058	M	1	2	34.8	85.7	217.9	64.1	2.2	114.02	0.00	217.6
89A000022	F	1	2	28.5	77.2	174.3	108.3	4.2	127.40	0.00	133.6
89A000038	F	1	2	22.9	78.4	131.1	153.3	4.1	99.61	0.00	194.8
89A000072	F	1	2	129.7	143.7	196.3	113.4	5.6	206.70	0.00	103.0
Mean				57.75	94.88	205.33	99.02	4.35	163.93	0.000	156.75
Std Dev				42.96	24.78	55.77	33.71	1.41	84.09	0.000	43.92
89A000003	M	2	2	111.7	109.7	152.8	85.7	7.5	82.22	0.00	116.7
89A000009	M	2	2	26.7	77.0	136.2	89.9	2.8	104.41	0.00	161.8
89A000047	M	2	2	89.1	333.2	185.3	62.6	0.6	560.31	0.00	117.1
89A000031	F	2	2	68.7	81.6	196.1	54.0	6.0	95.63	0.00	164.6
89A000063	F	2	2	67.3	107.3	229.8	84.7	3.5	110.68	0.00	137.8
89A000066	F	2	2	106.9	109.2	160.4	146.7	5.2	128.65	0.00	137.8
Mean				78.40	136.33	176.77	87.27	4.27	180.32	0.000	139.30
Std Dev				31.39	97.53	33.90	32.45	2.47	186.80	0.000	20.76
89A000002	M	3	2	159.8	147.4	249.9	83.7	3.7	123.38	0.00	123.7
89A000045	M	3	2	116.6	153.6	173.9	133.2	0.1	183.94	0.00	155.8
89A000052	M	3	2	277.0	267.0	214.2	48.7	8.9	114.18	0.00	159.2
89A000025	F	3	2	43.2	98.4	118.7	52.9	3.7	86.19	0.00	145.0
89A000033	F	3	2	186.0	133.6	222.2	58.4	6.4	146.77	0.00	126.8
89A000064	F	3	2	65.6	130.9	160.1	134.4	3.0	211.19	0.00	144.6
Mean				141.37	155.15	189.83	85.22	4.30	144.28	0.000	142.52
Std Dev				85.70	58.04	47.85	39.55	3.02	46.42	0.000	14.60

Appendix C (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	ALT	AST	ALK	LDH	GGT	CK	BILI	CHOL
89A00018	M	4	2	33.4	20.1	52.4	96.2	4.2	116.34	0.00	205.8
89A00048	M	4	2	165.8	30.0	103.1	242.8	NT	319.22	0.00	217.5
89A00056	M	4	2	34.1	26.3	63.8	82.7	4.7	97.14	0.00	134.9
89A00020	F	4	2	39.1	23.6	37.8	79.0	4.3	104.90	0.00	151.3
89A00039	F	4	2	38.8	26.5	74.3	82.7	3.0	96.82	0.00	172.2
89A00071	F	4	2	27.3	31.3	63.4	117.9	2.6	154.87	0.00	126.8
Mean				56.42	26.30	65.80	116.88	3.76	148.22	0.000	168.08
Std Dev				53.76	4.11	22.08	63.33	0.91	86.52	0.000	37.33
89A00004	M	5	2	92.2	20.6	73.3	63.1	5.0	149.65	0.00	176.7
89A00011	M	5	2	48.5	23.1	51.0	121.6	2.9	136.60	0.00	174.1
89A00046	M	5	2	98.2	28.3	54.0	145.5	0.4	191.20	0.00	170.8
89A00027	F	5	2	33.9	26.5	40.8	70.8	2.2	126.61	0.00	169.4
89A00065	F	5	2	35.6	35.6	94.7	141.9	2.0	200.35	0.00	121.3
89A00069	F	5	2	103.0	26.3	62.1	74.1	4.1	138.18	0.00	171.6
Mean				68.57	26.73	62.65	102.83	2.77	157.10	0.000	163.98
Std Dev				32.60	5.14	19.13	37.76	1.63	30.97	0.000	21.07
89A00007	M	6	2	28.7	32.6	56.9	99.5	5.2	181.53	0.00	209.8
89A00050	M	6	2	195.5	42.8	65.0	329.9	3.2	458.46	0.00	220.5
89A00051	M	6	2	478.8	35.4	80.9	107.8	13.1	130.47	0.00	147.7
89A00029	F	6	2	47.5	23.8	37.4	71.3	4.4	91.84	0.00	164.6
89A00041	F	6	2	120.4	30.2	52.3	76.3	4.1	123.46	0.00	204.1
89A00061	F	6	2	37.3	19.4	52.1	54.9	2.5	121.68	0.00	175.1
Mean				151.37	30.70	57.43	123.28	5.42	184.57	0.000	186.97
Std Dev				172.61	8.34	14.59	103.04	3.88	137.29	0.000	28.71

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	ALT	AST	ALK	LDH	GGT	CK	BILI	CHOL
89A000019	M	7	2	18.0	74.1	353.3	103.1	7.9	100.30	0.00	114.2
89A000043	M	7	2	27.1	93.1	201.6	191.6	4.4	173.17	0.00	131.9
89A000054	M	7	2	34.5	108.4	244.5	104.4	4.5	223.23	0.00	192.9
89A000030	F	7	2	23.9	88.7	156.5	149.0	4.6	171.16	0.00	177.0
89A000035	F	7	2	24.8	74.9	167.6	170.1	5.3	151.16	0.00	148.2
89A000070	F	7	2	23.6	81.7	183.7	52.6	4.8	73.37	0.00	96.7
Mean				25.32	86.82	217.87	128.47	5.25	148.73	0.000	143.49
Std Dev				5.41	12.95	73.18	51.22	1.34	54.19	0.000	36.79
89A000001	M	8	2	26.1	82.6	229.6	105.3	3.8	133.88	0.00	169.9
89A000013	M	8	2	32.2	86.1	253.6	55.4	5.8	112.99	0.00	133.7
89A000053	M	8	2	24.9	89.6	183.5	89.3	4.0	134.12	0.00	176.2
89A000040	F	8	2	18.5	82.8	186.0	86.7	5.3	137.11	0.00	112.5
89A000062	F	8	2	21.1	85.6	145.7	58.6	2.5	102.27	0.00	112.5
89A000068	F	8	2	28.9	85.4	222.3	53.1	4.7	105.03	0.00	88.9
Mean				25.28	85.35	203.45	74.73	4.35	120.90	0.000	132.35
Std Dev				5.00	2.56	38.97	21.87	1.18	15.92	0.000	34.63
89A000005	M	9	2	19.8	79.1	228.3	54.8	5.6	71.30	0.00	134.6
89A000049	M	9	2	75.9	150.8	197.0	128.7	7.4	182.08	0.00	89.7
89A000055	M	9	2	19.7	76.1	130.8	81.7	3.7	71.63	0.00	106.5
89A000026	F	9	2	18.9	44.4	189.0	19.4	5.3	60.19	0.00	119.3
89A000037	F	9	2	22.9	60.7	118.1	36.8	4.0	54.21	0.00	130.8
89A000060	F	9	2	29.4	85.0	202.3	299.4	3.7	357.93	0.00	133.6
Mean				31.10	82.68	177.58	103.47	4.95	132.89	0.000	119.08
Std Dev				22.29	36.47	43.40	103.33	1.45	120.07	0.000	17.95

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	TRIG	URIC	TP	ALB	A-G	GLU	BUN	CR
89A00006	M	10	2	61	0.2	5.6	3.3	1.4	109.1	20.7	0.7
89A00044	M	10	2	79	0.3	5.8	2.8	0.9	75.7	25.8	0.6
89A00057	M	10	2	37	0.2	5.6	3.8	2.1	110.2	20.7	0.6
89A00034	F	10	2	46	0.0	6.2	3.5	1.4	113.1	20.5	0.7
89A00059	F	10	2	31	0.2	6.0	3.2	1.2	82.6	19.8	0.7
89A00067	F	10	2	63	0.1	6.1	3.3	1.2	94.7	21.0	0.7
Mean				52.8	0.17	5.87	3.32	1.36	97.57	21.42	0.67
Std Dev				18.0	0.10	0.25	0.33	0.41	15.78	2.18	0.05

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	TRIG	URIC	TP	ALB	A-G	GLU	BUN	CR
89A000012	M	1	2	41	0.2	4.9	2.5	1.0	93.5	18.2	0.7
89A000042	M	1	2	53	0.2	6.6	3.3	1.0	91.7	21.1	0.5
89A000058	M	1	2	62	0.3	6.5	3.0	0.8	117.0	27.6	0.7
89A000022	F	1	2	35	0.0	5.6	3.0	1.1	102.5	13.2	0.9
89A000038	F	1	2	32	0.2	5.8	2.5	0.7	97.9	14.9	0.7
89A000072	F	1	2	31	0.0	6.1	2.6	0.8	86.2	17.8	0.8
Mean				42.3	0.15	5.92	2.82	0.89	98.13	18.80	0.72
Std Dev				12.6	0.12	0.63	0.33	0.16	10.77	5.11	0.13
89A000003	M	2	2	46	0.2	4.5	2.7	1.5	111.1	19.6	0.6
89A000009	M	2	2	41	0.2	5.3	2.7	1.0	85.4	13.7	0.6
89A000047	M	2	2	38	0.2	6.9	3.2	0.9	97.8	17.9	0.7
89A000031	F	2	2	96	0.1	5.2	2.9	1.3	101.7	13.1	0.6
89A000063	F	2	2	37	0.1	7.4	3.1	0.7	84.6	15.3	0.7
89A000066	F	2	2	50	0.2	6.8	2.8	0.7	88.6	20.5	0.8
Mean				51.3	0.17	6.02	2.90	1.02	94.87	16.68	0.67
Std Dev				22.4	0.05	1.17	0.21	0.32	10.52	3.11	0.08
89A000002	M	3	2	52	0.1	4.8	2.7	1.3	102.5	19.1	0.6
89A000045	M	3	2	74	0.3	7.3	2.9	0.6	87.1	17.9	0.5
89A000052	M	3	2	39	0.3	7.4	3.0	0.7	105.1	16.1	0.7
89A000025	F	3	2	48	0.2	5.2	2.8	1.1	101.0	14.4	0.7
89A000033	F	3	2	39	0.0	4.9	2.7	1.2	97.8	17.8	0.8
89A000064	F	3	2	82	0.2	6.7	2.5	0.6	86.3	16.1	0.6
Mean				55.7	0.18	6.05	2.77	0.92	96.63	16.90	0.65
Std Dev				18.2	0.12	1.22	0.18	0.32	8.05	1.68	0.10

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	TRIG	URIC	TP	ALB	A-G	GLU	BUN	CR
89A00018	M	4	2	69	0.2	5.8	3.3	1.3	87.4	17.1	0.7
89A00048	M	4	2	87	0.3	5.7	3.2	1.3	93.5	21.1	0.7
89A00056	M	4	2	58	0.3	6.9	3.6	1.1	104.7	17.7	0.7
89A00020	F	4	2	53	0.1	6.0	3.5	1.4	98.0	12.0	0.5
89A00039	F	4	2	79	0.0	5.7	3.4	1.5	103.8	17.8	0.8
89A00071	F	4	2	61	0.2	5.5	2.8	1.1	101.0	21.1	0.7
Mean				67.8	0.18	5.94	3.30	1.28	98.07	17.80	0.68
Std Dev				13.1	0.12	0.50	0.28	0.17	6.63	3.34	0.10
89A00004	M	5	2	46	0.1	5.4	3.1	1.4	109.8	16.7	0.7
89A00011	M	5	2	74	0.1	6.1	3.1	1.0	88.5	13.0	0.8
89A00046	M	5	2	44	0.3	6.2	3.2	1.1	82.3	14.6	0.5
89A00027	F	5	2	84	0.1	6.5	3.7	1.3	97.6	18.0	0.7
89A00065	F	5	2	49	0.3	5.7	3.2	1.3	88.0	19.0	0.8
89A00069	F	5	2	66	0.2	6.0	3.4	1.3	108.3	27.4	0.8
Mean				60.5	0.18	5.99	3.28	1.22	95.75	18.12	0.72
Std Dev				16.6	0.10	0.39	0.23	0.14	11.42	5.05	0.12
89A00007	M	6	2	47	0.2	4.8	3.0	1.7	99.7	19.0	0.6
89A00050	M	6	2	71	0.2	6.3	3.9	1.6	87.0	26.1	0.7
89A00051	M	6	2	45	0.3	6.3	3.5	1.3	99.2	16.2	0.7
89A00029	F	6	2	44	0.2	6.5	3.2	1.0	96.9	12.2	0.8
89A00041	F	6	2	83	0.0	5.8	3.3	1.3	106.2	14.7	0.7
89A00061	F	6	2	55	0.2	5.9	3.4	1.3	91.6	23.7	0.7
Mean				57.5	0.18	5.94	3.38	1.37	96.77	18.65	0.70
Std Dev				16.0	0.10	0.62	0.31	0.25	6.72	5.37	0.06

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	TRIG	URIC	TP	ALB	A-G	GLU	BUN	CR
89A00019	M	7	2	44	0.3	4.9	3.0	1.6	119.6	10.8	0.6
89A00043	M	7	2	42	0.4	8.0	3.1	0.6	111.7	15.4	0.5
89A00054	M	7	2	56	0.2	7.0	3.1	0.8	107.1	18.4	0.6
89A00030	F	7	2	35	0.1	5.4	2.6	0.9	93.1	17.2	0.7
89A00035	F	7	2	33	0.0	5.0	3.0	1.5	104.6	22.0	0.8
89A00070	F	7	2	25	0.2	6.3	2.9	0.9	100.6	18.5	0.9
Mean				39.2	0.20	6.09	2.95	1.04	106.15	17.05	0.68
Std Dev				10.7	0.14	1.23	0.19	0.41	9.18	3.75	0.15
89A00001	M	8	2	98	0.1	4.7	2.9	1.6	102.3	19.5	0.6
89A00013	M	8	2	42	0.2	4.5	2.5	1.3	108.5	23.6	0.7
89A00053	M	8	2	51	0.3	7.3	2.6	0.6	101.8	22.1	0.6
89A00040	F	8	2	36	0.0	4.5	2.4	1.1	98.2	15.2	0.6
89A00062	F	8	2	18	0.1	6.2	2.5	0.7	94.5	16.3	0.8
89A00068	F	8	2	27	0.2	6.3	2.8	0.8	100.7	15.7	0.8
Mean				45.3	0.15	5.59	2.62	1.01	101.00	18.73	0.68
Std Dev				28.2	0.10	1.19	0.19	0.39	4.66	3.56	0.10
89A00005	M	9	2	50	0.2	4.8	2.5	1.1	102.9	20.3	0.7
89A00049	M	9	2	33	0.2	6.5	2.6	0.7	101.6	14.0	0.5
89A00055	M	9	2	26	0.2	7.4	2.5	0.5	104.6	15.4	0.6
89A00026	F	9	2	21	0.0	4.6	2.5	1.2	100.2	10.9	0.7
89A00037	F	9	2	19	0.0	5.0	1.9	0.6	103.0	13.3	0.8
89A00060	F	9	2	38	0.0	7.2	3.0	0.7	105.7	19.3	0.6
Mean				31.2	0.10	5.92	2.50	0.80	103.00	15.53	0.65
Std Dev				11.7	0.11	1.27	0.35	0.28	1.98	3.63	0.10

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	CAL	PHOS	NA	CL	K	IRON	MAG
89A00006	M	10	2	10.6	6.6	155.9	113	4.3	302.7	1.74
89A00044	M	10	2	10.9	6.3	150.9	114	4.9	100.2	1.75
89A00057	M	10	2	10.7	5.4	151.0	117	4.9	101.1	1.72
89A00034	F	10	2	10.7	5.3	156.4	119	4.2	94.5	1.91
89A00059	F	10	2	10.2	4.5	155.1	116	5.0	86.3	1.73
89A00067	F	10	2	11.1	5.7	154.8	116	4.6	126.8	1.73
Mean				10.70	5.63	154.02	115.8	4.65	135.27	1.763
Std Dev				0.30	0.75	2.44	2.1	0.34	83.14	0.073

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	CAL	PHOS	NA	CL	K	IRON	MAG
89A000012	M	1	2	9.0	5.7	150.6	117	4.8	135.8	1.55
89A000042	M	1	2	11.4	6.1	151.3	119	4.7	382.9	1.63
89A000058	M	1	2	10.0	4.6	153.7	122	4.8	55.7	1.58
89A000022	F	1	2	9.7	4.2	150.5	111	4.4	120.3	1.46
89A000038	F	1	2	9.8	4.2	151.9	115	4.3	32.5	1.48
89A000072	F	1	2	9.8	5.6	150.3	115	4.5	87.6	1.55
Mean				9.95	5.07	151.38	116.5	4.58	135.80	1.542
Std Dev				0.79	0.83	1.28	3.8	0.21	127.05	0.063
89A000003	M	2	2	9.8	5.3	151.7	115	4.3	104.3	1.51
89A000009	M	2	2	8.7	5.2	151.6	114	4.4	106.0	1.61
89A000047	M	2	2	10.2	4.2	150.9	119	4.7	75.1	1.46
89A000031	F	2	2	9.9	5.8	151.4	121	4.9	189.6	1.53
89A000063	F	2	2	9.3	4.8	153.8	120	4.5	80.3	1.52
89A000066	F	2	2	10.0	4.6	151.8	119	5.0	92.4	1.48
Mean				9.65	4.98	151.87	118.0	4.63	107.95	1.518
Std Dev				0.55	0.57	1.00	2.8	0.28	41.88	0.052
89A000002	M	3	2	9.6	6.5	153.3	114	4.6	140.1	1.67
89A000045	M	3	2	9.0	4.5	150.1	119	4.3	130.6	1.59
89A000052	M	3	2	10.2	4.4	150.8	112	4.5	70.5	1.47
89A000025	F	3	2	10.2	4.9	150.6	120	4.3	130.7	1.55
89A000033	F	3	2	9.9	5.6	152.2	118	4.7	86.2	1.80
89A000064	F	3	2	9.1	4.8	152.1	119	4.9	101.4	1.74
Mean				9.67	5.12	151.52	117.0	4.55	109.92	1.637
Std Dev				0.53	0.80	1.21	3.2	0.23	28.14	0.123

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	CAL	PHOS	NA	CL	K	IRON	MAG
89A000018	M	4	2	10.3	5.2	154.2	113	4.6	280.5	1.64
89A000048	M	4	2	11.5	4.0	150.1	113	4.8	192.8	2.00
89A000056	M	4	2	11.3	4.2	162.0	124	5.0	139.9	1.67
89A000020	F	4	2	10.5	5.0	149.9	115	4.6	212.8	1.66
89A000039	F	4	2	11.0	5.4	152.5	115	4.6	201.0	1.85
89A000071	F	4	2	11.1	5.7	152.0	114	5.0	174.7	1.77
Mean				10.95	4.92	153.45	115.7	4.77	200.28	1.765
Std Dev				0.46	0.68	4.48	4.2	0.20	46.79	0.140
89A000004	M	5	2	11.0	6.7	152.0	114	4.6	267.7	1.60
89A000011	M	5	2	9.5	5.5	154.9	111	4.5	275.0	1.59
89A000046	M	5	2	10.7	3.8	151.4	115	4.7	33.2	1.68
89A000027	F	5	2	10.8	5.3	152.9	115	4.6	150.7	1.54
89A000065	F	5	2	9.6	3.4	155.0	119	4.8	105.5	1.55
89A000069	F	5	2	11.0	6.5	153.3	114	5.1	226.9	1.61
Mean				10.43	5.20	153.25	114.7	4.72	176.50	1.595
Std Dev				0.69	1.36	1.48	2.6	0.21	96.75	0.050
89A000007	M	6	2	10.1	5.5	153.0	117	4.8	255.3	1.66
89A000050	M	6	2	11.1	5.8	155.3	117	5.4	200.4	1.86
89A000051	M	6	2	11.1	4.7	159.5	122	5.0	185.2	1.47
89A000029	F	6	2	10.5	4.7	152.2	117	4.8	266.2	1.61
89A000041	F	6	2	11.0	4.9	150.6	114	4.8	239.1	1.81
89A000061	F	6	2	9.8	5.3	154.0	116	4.4	171.9	1.78
Mean				10.60	5.15	154.10	117.2	4.87	219.68	1.698
Std Dev				0.56	0.45	3.09	2.6	0.33	39.12	0.146

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	CAL	PHOS	NA	CL	K	IRON	MAG
89A000019	M	7	2	9.6	4.3	154.7	115	4.2	48.0	1.65
89A000043	M	7	2	10.6	4.6	159.1	124	4.7	48.0	1.56
89A000054	M	7	2	11.5	5.6	158.6	121	5.5	135.7	1.48
89A000030	F	7	2	10.0	4.9	151.2	119	4.5	127.7	1.53
89A000035	F	7	2	10.4	5.4	153.5	117	4.7	77.7	1.93
89A000070	F	7	2	10.0	5.2	151.1	119	4.9	90.3	1.63
Mean				10.35	5.00	154.70	119.2	4.75	87.90	1.630
Std Dev				0.66	0.49	3.50	3.1	0.44	37.85	0.160
89A000001	M	8	2	10.2	6.6	150.8	115	4.3	215.3	1.81
89A000013	M	8	2	9.1	5.1	152.7	115	4.2	65.2	1.56
89A000053	M	8	2	10.3	5.5	151.6	117	5.0	132.9	1.43
89A000040	F	8	2	10.1	5.5	149.4	118	4.8	76.8	1.69
89A000062	F	8	2	9.2	3.9	150.7	116	4.5	47.0	1.53
89A000068	F	8	2	9.7	4.3	152.6	117	4.3	28.1	1.54
Mean				9.77	5.15	151.30	116.3	4.52	94.22	1.593
Std Dev				0.52	0.96	1.26	1.2	0.32	69.14	0.135
89A000005	M	9	2	10.2	5.3	152.1	115	4.7	93.8	1.60
89A000049	M	9	2	9.3	4.4	149.6	117	4.7	63.1	1.54
89A000055	M	9	2	10.4	5.4	154.1	120	4.3	74.7	1.48
89A000026	F	9	2	9.5	5.2	151.9	120	4.6	86.7	1.44
89A000037	F	9	2	10.3	4.8	152.9	118	4.9	70.4	1.53
89A000060	F	9	2	9.8	5.5	160.5	122	5.1	82.7	1.71
Mean				9.92	5.10	153.52	118.7	4.72	78.57	1.550
Std Dev				0.45	0.42	3.73	2.5	0.27	11.28	0.095

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	ALT	AST	ALK	LDH	GGT	CK	BILI	CHOL
89A00006	M	10	3	29.4	26.4	31.7	162.1	3.0	166.46	0.00	198.8
89A00044	M	10	3	40.0	79.1	254.8	134.5	0.7	127.64	0.00	178.6
89A00057	M	10	3	35.2	19.3	52.3	39.1	5.3	84.52	0.00	152.1
89A00034	F	10	3	26.1	24.1	38.1	59.2	7.1	89.36	0.00	161.1
89A00059	F	10	3	29.5	30.8	73.4	112.8	2.4	147.85	0.00	113.0
89A00067	F	10	3	34.6	31.1	59.4	315.2	3.3	249.86	0.00	207.8
Mean				32.47	35.13	84.95	137.15	3.63	144.28	0.000	168.57
Std Dev				5.05	21.99	84.54	98.60	2.26	60.85	0.000	34.55

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	ALT	AST	ALK	LDH	GGT	CK	BILI	CHOL
89A000012	M	1	3	77.7	89.3	241.6	46.9	5.3	86.43	0.00	132.6
89A000042	M	1	3	30.3	91.5	310.4	55.7	3.5	105.07	0.00	151.6
89A000058	M	1	3	37.0	109.6	229.5	71.3	4.4	171.71	0.00	193.5
89A000022	F	1	3	25.6	77.0	180.0	185.1	1.9	148.34	0.00	127.5
89A000038	F	1	3	39.8	94.7	147.7	121.5	5.6	192.78	0.00	169.4
89A000072	F	1	3	113.2	130.9	215.4	148.4	4.4	150.49	0.00	99.7
Mean				53.93	98.83	220.77	104.82	4.18	142.47	0.000	145.72
Std Dev				34.42	18.88	55.81	55.70	1.34	40.06	0.000	33.17
89A000003	M	2	3	121.0	118.8	167.1	111.9	7.2	93.96	0.00	126.6
89A000009	M	2	3	30.0	84.1	159.1	44.0	3.2	73.59	0.00	152.1
89A000047	M	2	3	77.8	259.9	184.5	62.5	2.8	255.38	0.00	113.6
89A000031	F	2	3	56.7	67.9	211.9	69.8	4.5	76.40	0.00	160.7
89A000063	F	2	3	54.8	99.3	238.3	86.7	4.5	96.43	0.00	130.2
89A000066	F	2	3	96.0	98.4	172.5	274.0	5.8	170.72	0.00	132.8
Mean				72.72	121.40	188.90	108.15	4.67	127.75	0.000	136.00
Std Dev				32.56	69.94	30.40	84.44	1.64	71.87	0.000	17.34
89A000002	M	3	3	133.4	131.4	251.8	115.0	3.5	153.47	0.00	123.0
89A000045	M	3	3	104.2	125.4	185.5	104.5	4.2	90.63	0.00	154.1
89A000052	M	3	3	199.0	164.6	228.3	26.1	9.1	82.03	0.00	158.3
89A000025	F	3	3	38.4	89.7	125.9	47.9	3.8	90.64	0.00	148.4
89A000033	F	3	3	203.9	136.2	214.4	65.2	7.2	188.98	0.00	106.7
89A000064	F	3	3	80.5	135.9	167.8	191.1	3.5	132.28	0.00	142.2
Mean				126.57	130.53	195.62	91.63	5.22	123.01	0.000	138.78
Std Dev				65.83	24.15	45.42	59.18	2.36	42.76	0.000	19.99

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	ALT	AST	ALK	LDH	GGT	CK	BILI	CHOL
89A000018	M	4	3	28.2	20.7	59.6	66.0	6.0	122.22	0.00	227.2
89A000048	M	4	3	123.8	25.2	99.0	136.6	4.3	165.93	0.00	112.8
89A000056	M	4	3	31.9	25.0	63.7	100.3	4.0	93.05	0.00	133.4
89A000020	F	4	3	38.1	23.8	37.5	68.8	3.0	84.11	0.00	166.6
89A000039	F	4	3	36.6	28.2	74.6	93.9	2.9	188.18	0.00	183.5
89A000071	F	4	3	26.7	32.3	65.3	194.3	5.6	162.62	0.00	129.0
Mean				47.55	25.87	66.62	109.98	4.30	136.02	0.000	175.42
Std Dev				37.62	3.97	20.10	48.58	1.29	42.55	0.000	40.35
89A000004	M	5	3	74.3	19.4	63.5	50.0	4.9	107.36	0.00	202.2
89A000011	M	5	3	42.4	21.8	55.7	86.7	4.0	125.64	0.00	187.7
89A000046	M	5	3	74.0	23.4	47.9	139.2	1.3	124.47	0.00	174.2
89A000027	F	5	3	30.2	24.1	48.8	91.3	2.0	117.70	0.00	169.2
89A000065	F	5	3	31.9	37.8	93.3	158.9	2.1	334.62	0.00	118.9
89A000069	F	5	3	78.0	31.8	60.4	161.4	0.9	170.11	0.00	170.4
Mean				55.13	26.38	61.60	114.58	2.53	163.32	0.000	170.43
Std Dev				22.67	6.98	16.71	45.28	1.58	86.64	0.000	28.21
89A000007	M	6	3	26.8	35.9	42.8	275.2	1.4	318.40	0.00	228.7
89A000050	M	6	3	273.4	33.4	64.5	128.5	5.0	219.85	0.00	220.1
89A000051	M	6	3	381.2	29.8	80.4	103.9	12.6	109.35	0.00	146.4
89A000029	F	6	3	322.0	33.4	45.9	63.7	2.3	88.35	0.00	161.8
89A000041	F	6	3	89.7	27.6	54.4	60.5	5.3	127.89	0.00	190.9
89A000061	F	6	3	40.9	21.4	48.9	90.7	2.0	113.18	0.00	173.7
Mean				189.00	30.25	56.15	120.42	4.77	162.84	0.000	186.13
Std Dev				154.83	5.24	14.12	79.98	4.17	88.93	0.000	32.59

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	ALT	AST	ALP	LDH	GGT	CK	BILI	CHOL
89A00019	M	7	3	23.9	81.6	383.3	45.1	9.1	103.33	0.00	111.2
89A00043	M	7	3	23.3	76.3	183.8	125.8	2.4	104.54	0.00	110.5
89A00054	M	7	3	34.2	106.1	255.5	51.4	4.9	166.45	0.00	171.5
89A00030	F	7	3	23.7	82.9	172.0	53.2	5.0	56.58	0.00	182.3
89A00035	F	7	3	24.1	80.5	176.1	129.6	5.4	327.15	0.00	126.4
89A00070	F	7	3	24.1	88.3	199.2	119.7	3.5	89.18	0.00	88.0
Mean				25.55	85.95	224.98	87.47	5.05	141.21	0.000	131.65
Std Dev				4.25	10.61	80.91	41.36	2.28	97.84	0.000	37.29
89A00001	M	8	3	24.8	93.7	285.2	64.1	4.1	141.60	0.00	168.2
89A00013	M	8	3	34.0	94.9	273.0	34.1	7.0	99.92	0.00	126.7
89A00053	M	8	3	23.0	90.4	194.4	117.6	5.1	120.91	0.00	148.4
89A00040	F	8	3	19.1	95.2	187.0	79.6	5.3	274.73	0.00	106.9
89A00062	F	8	3	20.4	94.6	154.2	65.8	3.5	94.40	0.00	101.5
89A00068	F	8	3	25.4	95.0	233.3	120.5	6.4	137.34	0.00	88.7
Mean				24.45	93.97	221.18	80.28	5.23	144.82	0.000	123.40
Std Dev				5.28	1.83	51.58	35.51	1.33	66.44	0.000	30.33
89A00005	M	9	3	22.5	85.0	243.2	57.9	4.2	130.39	0.00	127.5
89A00049	M	9	3	70.8	149.9	198.8	86.1	9.9	158.13	0.00	82.0
89A00055	M	9	3	17.6	74.3	129.9	54.0	4.8	50.52	0.00	95.0
89A00026	F	9	3	20.0	92.6	203.2	27.0	5.0	44.69	0.00	119.6
89A00037	F	9	3	24.6	75.9	135.3	112.2	5.1	120.86	0.00	120.4
89A00060	F	9	3	28.5	77.3	196.8	128.4	5.2	118.01	0.00	115.6
Mean				30.67	92.50	184.53	77.60	5.70	103.77	0.000	110.02
Std Dev				20.02	28.94	43.71	38.35	2.09	45.79	0.000	17.59

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	TRIG	URIC	TP	ALB	A-G	GLU	BUN	CR
89A00006	M	10	3	49	0.2	5.7	3.1	1.2	91.4	16.3	0.7
89A00044	M	10	3	74	0.3	5.5	2.7	0.9	86.3	24.3	0.5
89A00057	M	10	3	42	0.2	5.6	3.4	1.6	97.0	16.5	0.7
89A00034	F	10	3	45	0.0	5.8	3.2	1.2	109.5	14.5	0.8
89A00059	F	10	3	24	0.2	5.7	3.0	1.1	83.9	15.8	0.7
89A00067	F	10	3	102	0.2	5.9	3.1	1.2	87.8	19.3	0.8
Mean				56.0	0.18	5.70	3.08	1.19	92.65	17.78	0.70
Std Dev				27.7	0.10	0.13	0.23	0.23	9.43	3.56	0.11

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	W ¹ RIG	URIC	TP	ALB	A-G	GLU	BUN	CR
89A000012	M	1	3	50	0.1	4.8	2.9	1.5	85.7	21.8	0.8
89A000042	M	1	3	57	0.3	6.7	3.0	0.8	96.5	22.0	0.6
89A000058	M	1	3	45	0.3	6.7	2.9	0.7	103.7	23.7	0.7
89A000022	F	1	3	44	0.0	4.8	2.6	1.2	101.7	23.8	0.7
89A000038	F	1	3	41	0.0	5.4	2.7	1.0	91.1	10.8	0.8
89A000072	F	1	3	60	0.0	6.4	2.7	0.7	85.9	22.1	0.8
Mean				49.5	0.12	5.80	2.80	0.99	94.10	20.70	0.73
Std Dev				7.6	0.15	0.91	0.15	0.31	7.78	4.93	0.08
89A000003	M	2	3	48	0.2	4.8	2.8	1.4	104.6	20.5	0.6
89A000009	M	2	3	74	0.2	5.1	2.8	1.2	90.7	17.4	0.6
89A000047	M	2	3	39	0.2	7.0	2.6	0.6	102.1	16.8	0.7
89A000031	F	2	3	76	0.0	4.8	2.9	1.5	105.4	21.2	0.6
89A000063	F	2	3	39	0.2	7.6	2.6	0.5	85.1	14.4	0.7
89A000066	F	2	3	62	0.3	7.2	2.7	0.6	71.2	25.3	0.8
Mean				56.3	0.18	6.08	2.73	0.97	93.18	19.27	0.67
Std Dev				16.7	0.10	1.31	0.12	0.45	13.52	3.87	0.08
89A000002	M	3	3	39	0.1	4.8	2.6	1.2	92.0	14.9	0.6
89A000045	M	3	3	61	0.3	7.5	2.7	0.6	90.1	20.3	0.6
89A000052	M	3	3	35	0.3	8.4	3.0	0.6	96.1	15.4	0.7
89A000025	F	3	3	52	0.0	5.2	2.9	1.2	113.2	19.8	0.7
89A000033	F	3	3	36	0.0	4.5	2.4	1.1	93.0	16.2	0.8
89A000064	F	3	3	43	0.1	7.4	2.6	0.5	110.6	13.9	0.7
Mean				44.3	0.13	6.30	2.70	0.87	99.17	16.75	0.68
Std Dev				10.2	0.14	1.66	0.22	0.33	10.09	2.67	0.08

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	TRIG	URIC	TP	ALB	A-G	GLU	BUN	CR
89A00018	M	4	3	73	0.0	5.9	3.5	1.4	91.8	16.6	0.7
89A00048	M	4	3	54	0.3	5.6	2.9	1.1	102.7	18.9	0.6
89A00056	M	4	3	48	0.3	6.5	3.4	1.1	87.9	18.6	0.7
89A00020	F	4	3	76	0.1	5.5	3.4	1.6	100.3	19.7	0.6
39A00039	F	4	3	65	0.0	5.9	3.8	1.8	87.8	14.4	0.8
39A00071	F	4	3	51	0.3	5.4	2.8	1.0	86.0	15.6	0.8
Mean				61.2	0.17	5.80	3.30	1.34	92.75	17.30	0.70
Std Dev				11.9	0.15	0.40	0.38	0.31	7.08	2.09	0.09
89A00004	M	5	3	52	0.1	6.8	3.6	1.1	100.6	15.0	0.8
89A00011	M	5	3	88	0.1	5.9	3.5	1.5	92.8	18.2	0.8
89A00046	M	5	3	64	0.5	6.1	3.1	1.0	82.0	22.6	0.6
89A00027	F	5	3	91	0.0	6.1	3.5	1.4	100.9	19.7	0.7
89A00065	F	5	3	97	0.3	5.6	3.0	1.2	86.2	31.3	0.8
89A00069	F	5	3	111	0.3	5.9	3.4	1.3	84.5	30.2	0.7
Mean				83.8	0.22	6.07	3.35	1.25	91.17	22.83	0.73
Std Dev				21.8	0.18	0.40	0.24	0.19	8.24	6.61	0.08
89A00007	M	6	3	51	0.1	5.2	3.3	1.8	95.3	16.1	0.7
89A00050	M	6	3	89	0.2	6.1	3.7	1.6	98.7	21.9	0.7
89A00051	M	6	3	44	0.3	6.0	3.4	1.4	89.4	19.1	0.7
89A00029	F	6	3	85	0.2	6.0	3.3	1.2	102.5	18.1	0.7
89A00041	F	6	3	58	0.0	5.7	3.3	1.4	87.5	13.5	0.8
89A00061	F	6	3	62	0.2	5.8	3.5	1.5	101.7	18.7	0.7
Mean				64.8	0.17	5.81	3.42	1.48	95.85	17.90	0.72
Std Dev				18.3	0.10	1.33	0.16	0.20	6.30	2.85	0.04

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	TRIG	URIC	TP	ALB	A-G	GLU	BUN	CR
89A000019	M	7	3	39	0.2	4.8	3.3	2.1	121.9	10.0	0.5
89A000043	M	7	3	39	0.3	6.9	2.4	0.5	100.4	21.0	0.5
89A000054	M	7	3	38	0.2	6.3	2.6	0.7	94.3	16.4	0.7
89A000030	F	7	3	31	0.0	5.2	3.1	1.5	110.9	20.8	0.8
89A000035	F	7	3	35	0.0	4.5	2.7	1.6	106.6	15.4	0.9
89A000070	F	7	3	38	0.3	6.3	2.7	0.8	83.4	19.0	0.7
Mean				36.7	0.17	5.66	2.80	1.20	102.92	17.10	0.68
Std Dev				3.1	0.14	0.96	0.33	0.63	13.41	4.15	0.16
89A000001	M	8	3	38	0.1	5.1	3.4	2.1	99.7	13.9	0.6
89A000013	M	8	3	38	0.0	4.4	2.5	1.3	99.0	24.4	0.8
89A000053	M	8	3	47	0.3	7.1	2.5	0.5	93.3	21.2	0.6
89A000040	F	8	3	43	0.0	4.1	2.3	1.3	95.3	14.3	0.6
89A000062	F	8	3	20	0.1	6.7	2.2	0.5	94.2	18.8	0.8
89A000068	F	8	3	22	0.1	6.8	2.7	0.7	84.3	16.6	0.7
Mean				34.7	0.10	5.71	2.60	1.06	94.30	18.20	0.68
Std Dev				11.1	0.11	1.33	0.43	0.63	5.54	4.10	0.10
89A000005	M	9	3	37	0.2	4.8	2.6	1.1	86.1	20.6	0.6
89A000049	M	9	3	27	0.2	6.3	2.2	0.5	106.3	13.5	0.6
89A000055	M	9	3	25	0.2	7.2	2.3	0.5	91.3	17.4	0.7
89A000026	F	9	3	20	0.0	4.7	2.7	1.4	110.9	13.3	0.6
89A000037	F	9	3	24	0.0	4.9	2.6	1.1	103.3	15.0	0.8
89A000060	F	9	3	43	0.0	7.3	2.4	0.5	109.5	21.0	0.7
Mean				29.3	0.10	5.87	2.47	0.85	101.23	16.80	0.67
Std Dev				8.8	0.11	1.23	0.20	0.40	10.19	3.43	0.08

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	CAL	PHOS	NA	CL	K	IRON	MAG
89A00006	M	10	3	9.3	4.8	153.8	117	4.9	147.1	1.65
89A00044	M	10	3	10.5	5.9	147.0	113	4.4	71.8	1.65
89A00057	M	10	3	10.5	5.2	151.2	116	4.9	118.9	1.71
89A00034	F	10	3	10.5	4.3	154.8	116	5.0	91.6	1.94
89A00059	F	10	3	10.7	5.0	152.4	114	4.5	82.2	1.50
89A00067	F	10	3	10.6	4.3	153.5	112	5.0	118.2	1.78
Mean				10.35	4.92	152.12	114.7	4.78	104.97	1.705
Std Dev				0.52	0.60	2.79	2.0	0.26	28.08	0.148

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	CAL	PHOS	NA	CL	K	IRON	MAG
89A00012	M	1	3	9.9	5.3	155.6	116	5.0	123.9	1.80
89A00042	M	1	3	11.0	6.0	151.4	115	4.8	66.6	1.58
89A00058	M	1	3	9.4	4.4	151.6	121	4.8	71.4	1.51
89A00022	F	1	3	10.0	6.7	147.1	115	4.6	151.1	1.76
89A00038	F	1	3	9.9	4.4	153.5	116	4.9	45.7	1.66
89A00072	F	1	3	9.8	4.7	149.9	113	4.2	120.6	1.75
Mean				10.00	5.25	151.52	116.0	4.72	96.55	1.677
Std Dev				0.53	0.94	2.92	2.7	0.29	41.03	0.114
89A00003	M	2	3	9.3	5.3	154.4	117	4.4	83.1	1.61
89A00009	M	2	3	9.2	4.7	149.6	113	4.6	92.2	1.69
89A00047	M	2	3	10.5	5.1	151.1	116	4.5	70.2	1.36
89A00031	F	2	3	10.6	7.6	153.5	117	5.4	156.2	1.90
89A00063	F	2	3	9.5	5.2	153.2	116	4.4	52.5	1.43
89A00066	F	2	3	10.0	4.8	151.2	116	4.9	70.2	1.66
Mean				9.85	5.45	152.17	115.8	4.70	87.40	1.608
Std Dev				0.61	1.08	1.82	1.5	0.39	36.29	0.194
89A00002	M	3	3	9.3	5.8	152.4	114	4.5	51.0	1.58
89A00045	M	3	3	9.3	5.8	151.4	116	4.8	146.5	1.59
89A00052	M	3	3	9.8	4.2	152.3	117	4.8	86.8	1.52
89A00025	F	3	3	10.3	5.2	152.3	117	4.8	62.9	1.65
89A00033	F	3	3	9.7	5.6	150.1	115	4.9	76.2	1.68
89A00064	F	3	3	9.2	5.5	150.3	116	4.7	116.9	1.66
Mean				9.60	5.35	151.47	115.8	4.75	90.05	1.613
Std Dev				0.42	0.61	1.05	1.2	0.14	35.70	0.061

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	CAL	PHOS	NA	CL	K	IRON	MAG
89A000018	M	4	3	10.1	4.8	157.2	114	4.7	196.4	1.63
89A000048	M	4	3	11.1	5.1	152.9	116	4.7	118.3	1.40
89A000056	M	4	3	10.6	5.7	150.8	119	5.0	165.9	1.78
89A000020	F	4	3	10.3	5.0	149.5	114	4.8	192.5	2.03
89A000039	F	4	3	11.0	5.6	151.2	113	5.1	108.9	1.88
89A000071	F	4	3	10.8	5.5	152.1	114	4.9	111.0	1.61
Mean				10.65	5.28	152.28	115.0	4.87	148.83	1.722
Std Dev				0.39	0.37	2.67	2.2	0.16	41.03	0.223
89A000004	M	5	3	10.4	6.1	156.5	114	4.3	195.7	1.58
89A000011	M	5	3	10.7	5.9	157.2	116	5.2	157.6	1.71
89A000046	M	5	3	10.3	3.8	152.4	114	4.5	123.8	1.74
89A000027	F	5	3	10.9	5.9	152.1	110	4.7	140.8	1.84
89A000065	F	5	3	10.5	5.0	153.6	117	4.9	157.9	1.86
89A000069	F	5	3	11.1	5.6	153.0	115	5.0	149.3	1.75
Mean				10.65	5.38	154.13	114.3	4.77	154.18	1.747
Std Dev				0.31	0.87	2.18	2.4	0.33	23.98	0.101
89A000007	M	6	3	9.2	4.6	151.0	116	4.8	207.8	1.81
89A000050	M	6	3	10.9	5.4	154.8	113	4.7	267.7	1.69
89A000051	M	6	3	10.9	4.7	155.6	118	5.0	239.1	1.69
89A000029	F	6	3	10.5	6.0	151.9	116	5.0	239.5	2.17
89A000041	F	6	3	10.9	4.7	150.6	111	5.0	110.5	1.78
89A000061	F	6	3	10.5	5.5	154.1	113	4.2	130.2	1.69
Mean				10.48	5.15	153.00	114.5	4.78	199.13	1.805
Std Dev				0.66	0.57	2.11	2.6	0.31	64.20	0.186

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	CAL	PHOS	NA	CL	K	IRON	MAG
89A00019	M	7	3	9.6	4.2	155.9	115	4.2	109.3	1.61
89A00043	M	7	3	9.2	5.4	151.0	119	5.0	60.1	1.46
89A00054	M	7	3	10.3	4.8	148.8	116	4.9	90.3	1.40
89A00030	F	7	3	10.5	4.9	156.9	120	4.6	26.2	1.90
89A00035	F	7	3	9.9	4.6	150.6	119	4.8	54.1	1.90
89A00070	F	7	3	9.8	6.8	149.4	115	4.9	89.0	1.80
Mean				9.88	5.12	152.10	117.3	4.73	71.50	1.678
Std Dev				0.47	0.91	3.44	2.3	0.29	30.24	0.220
89A00001	M	8	3	10.4	6.9	153.3	125	4.5	125.3	1.73
89A00013	M	8	3	9.1	5.1	152.7	114	4.5	77.4	1.52
89A00053	M	8	3	9.2	5.8	146.6	115	4.8	75.7	1.43
89A00040	F	8	3	9.6	5.2	147.2	115	5.1	79.8	1.51
89A00062	F	8	3	9.8	4.8	151.2	119	4.6	42.3	1.44
89A00068	F	8	3	9.5	4.6	152.1	115	4.1	57.5	1.55
Mean				9.60	5.40	150.52	117.2	4.60	76.33	1.547
Std Dev				0.47	0.84	2.89	4.2	0.33	28.02	0.113
89A00005	M	9	3	9.3	4.7	152.7	117	4.6	63.8	1.56
89A00049	M	9	3	8.9	4.4	145.4	114	4.3	78.9	1.35
89A00055	M	9	3	9.7	5.7	130.0	115	3.9	87.0	1.48
89A00026	F	9	3	10.1	5.5	154.4	119	4.7	52.8	1.75
89A00037	F	9	3	10.0	5.7	153.9	121	5.2	49.6	1.66
89A00060	F	9	3	9.8	6.2	151.3	116	4.8	74.9	1.54
Mean				9.63	5.37	147.95	117.0	4.58	67.83	1.557
Std Dev				0.45	0.68	9.38	2.6	0.44	14.93	0.139

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	ALT	AST	ALK	LDH	GGT	CK	BILI	CHOL
89A00006	M	10	7	33.0	24.9	37.2	81.9	2.9	163.01	0.00	195.1
89A00044	M	10	7	34.1	30.7	100.4	132.3	1.1	162.95	0.00	188.4
89A00057	M	10	7	39.2	20.1	46.1	112.5	4.7	123.18	0.00	171.0
89A00034	F	10	7	23.9	20.4	40.2	96.7	6.4	98.12	0.00	176.2
89A00059	F	10	7	26.2	30.7	83.4	115.6	2.9	163.83	0.00	130.0
89A00067	F	10	7	27.1	32.1	55.2	261.0	3.9	477.51	0.00	210.0
Mean				30.58	26.48	60.42	133.33	3.65	198.10	0.000	178.45
Std Dev				5.80	5.43	25.72	64.86	1.81	139.51	0.000	27.49

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	ALT	AST	ALK	LDH	GGT	CK	BILI	CHOL
89A000012	M	1	7	38.9	83.6	195.4	58.4	4.1	81.17	0.00	90.4
89A000042	M	1	7	22.6	98.4	273.2	108.0	5.9	172.46	0.00	112.0
89A000058	M	1	7	31.7	95.1	187.9	108.4	6.5	177.19	0.00	155.0
89A000022	F	1	7	20.9	75.0	152.5	14.5	6.1	56.05	0.00	116.1
89A000038	F	1	7	29.8	81.1	145.1	96.9	3.6	102.70	0.00	131.3
89A000072	F	1	7	80.3	108.3	187.2	53.9	5.1	105.96	0.00	76.8
Mean				37.37	90.25	190.22	73.35	5.22	115.92	0.000	113.60
Std Dev				22.02	12.46	45.58	37.55	1.16	49.02	0.000	28.03
89A000003	M	2	7	104.4	101.3	154.7	67.7	5.7	73.68	0.00	77.0
89A000009	M	2	7	36.4	80.3	148.2	76.4	1.6	66.47	0.00	112.1
89A000047	M	2	7	50.8	101.9	156.5	212.3	2.5	366.24	0.00	90.0
89A000031	F	2	7	35.2	63.3	158.4	22.6	8.4	68.45	0.00	150.5
89A000063	F	2	7	28.4	88.1	211.5	62.5	7.1	84.95	0.00	115.3
89A000066	F	2	7	72.1	99.7	148.7	350.3	5.7	293.77	0.00	102.1
Mean				54.55	89.10	163.00	131.97	5.17	158.93	0.000	107.83
Std Dev				28.96	15.29	24.12	125.00	2.63	134.64	0.000	25.28
89A000002	M	3	7	52.9	96.1	182.2	48.7	2.7	71.28	0.00	80.5
89A000045	M	3	7	80.0	93.0	140.8	64.4	6.3	83.05	0.00	118.7
89A000052	M	3	7	118.3	100.8	175.3	54.0	10.9	95.86	0.00	96.8
89A000025	F	3	7	25.2	86.7	109.6	99.1	5.4	114.08	0.12	124.4
89A000033	F	3	7	265.7	127.8	213.1	95.8	9.6	115.88	0.00	71.2
89A000064	F	3	7	54.8	124.4	151.8	63.3	8.3	142.13	0.00	117.4
Mean				99.48	104.80	162.13	70.88	7.20	103.71	0.020	101.50
Std Dev				87.23	17.16	36.04	21.42	3.00	25.58	0.049	22.16

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	ALT	AST	ALK	LDH	GGT	CK	BILI	CHOL
89A00018	M	4	7	28.4	22.5	49.2	88.3	4.1	120.11	0.00	201.7
89A00048	M	4	7	67.1	30.3	81.7	272.5	4.6	203.72	0.00	195.7
89A00056	M	4	7	36.7	23.4	64.4	190.3	4.0	111.23	0.00	154.3
89A00020	F	4	7	28.1	22.0	43.6	52.4	6.3	93.73	0.00	162.0
89A00039	F	4	7	29.9	26.7	67.7	150.7	2.5	156.99	0.00	182.2
89A00071	F	4	7	25.6	39.2	60.6	214.3	2.9	332.08	0.00	124.9
Mean				35.97	27.35	61.20	161.42	4.07	169.64	0.000	170.13
Std Dev				15.70	6.59	13.62	81.63	1.35	88.70	0.000	28.84
89A00004	M	5	7	46.7	22.5	64.8	36.6	2.6	106.63	0.00	205.1
89A00011	M	5	7	32.1	24.1	52.3	155.8	2.6	156.52	0.00	179.9
89A00046	M	5	7	135.3	35.5	40.0	276.3	3.5	257.98	0.00	164.7
89A00027	F	5	7	29.2	69.3	155.2	102.1	5.6	132.00	0.00	185.5
89A00065	F	5	7	25.7	42.2	94.8	163.2	4.7	259.59	0.00	134.9
89A00069	F	5	7	43.5	26.1	52.3	87.8	0.5	233.58	0.00	155.1
Mean				52.08	36.62	76.57	136.97	3.25	191.05	0.000	170.88
Std Dev				41.59	17.70	42.82	82.66	1.79	67.52	0.000	24.70
89A00007	M	6	7	35.2	34.6	52.4	116.0	2.8	213.01	0.29	218.1
89A00050	M	6	7	105.2	28.8	46.9	247.9	4.9	231.07	0.00	217.7
89A00051	M	6	7	269.9	34.5	70.5	151.8	14.5	178.82	0.00	167.6
89A00029	F	6	7	158.6	25.9	48.1	64.4	5.4	108.55	0.00	198.0
89A00041	F	6	7	74.3	34.9	48.9	235.8	3.4	289.99	0.00	195.1
89A00061	F	6	7	33.9	34.2	52.4	101.2	3.5	436.20	0.00	191.1
Mean				112.85	32.15	53.20	152.85	5.75	242.94	0.048	197.93
Std Dev				90.07	3.84	8.77	74.52	4.40	112.05	0.118	18.83

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	ALT	AST	ALK	LDH	GGT	CK	BILI	CHOL
89A00019	M	7	7	18.5	74.3	291.8	96.9	6.9	105.06	0.00	89.3
89A00043	M	7	7	20.4	81.6	140.5	144.8	2.9	149.27	0.00	84.2
89A00054	M	7	7	31.6	96.9	171.0	84.6	6.1	149.29	0.00	147.7
89A00030	F	7	7	19.1	78.5	136.6	120.5	7.9	122.78	0.00	137.6
89A00035	F	7	7	22.2	78.0	147.4	139.8	5.0	148.91	0.00	98.9
89A00070	F	7	7	22.7	95.8	157.6	37.2	5.1	100.34	0.00	76.9
Mean				22.42	84.18	174.15	103.97	5.65	129.28	0.000	105.77
Std Dev				4.79	9.71	58.96	40.27	1.74	23.03	0.000	29.63
89A00001	M	8	7	21.8	101.2	206.1	53.1	1.4	154.45	0.00	115.2
89A00013	M	8	7	28.0	110.5	201.3	67.9	4.9	215.02	0.00	85.2
89A00053	M	8	7	23.9	92.1	162.0	101.8	5.6	113.92	0.00	117.9
89A00040	F	8	7	18.4	102.1	153.9	264.8	2.8	234.75	0.00	74.3
89A00062	F	8	7	17.6	97.2	132.7	48.1	4.4	77.05	0.00	85.0
89A00068	F	8	7	21.7	92.9	191.9	55.7	6.2	126.39	0.00	78.1
Mean				21.90	99.33	174.65	98.57	4.22	153.60	0.000	92.28
Std Dev				3.79	6.84	29.49	83.71	1.80	60.88	0.000	19.20
89A00005	M	9	7	18.2	71.2	161.6	40.1	2.6	45.26	0.00	98.0
89A00049	M	9	7	83.2	154.0	155.3	83.7	10.4	143.98	0.00	57.3
89A00055	M	9	7	19.3	83.4	105.5	58.5	5.5	55.19	0.00	74.3
89A00026	F	9	7	14.2	83.9	152.4	28.4	7.5	64.08	0.05	83.7
89A00037	F	9	7	22.8	73.8	110.8	111.8	3.6	126.12	0.00	91.3
89A00060	F	9	7	22.7	70.4	138.5	81.9	7.2	83.68	0.00	95.5
Mean				30.07	89.45	137.52	67.40	6.13	86.39	0.008	83.35
Std Dev				26.22	32.17	24.03	30.96	2.85	40.16	0.020	15.40

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	TRIG	URIC	TP	ALB	A-G	GLU	BUN	CR
89A00006	M	10	7	51	0.3	5.6	3.3	1.4	95.2	17.2	0.7
89A00044	M	10	7	91	1.8	6.2	3.1	1.0	73.1	24.9	0.8
89A00057	M	10	7	38	1.7	6.0	3.6	1.5	86.1	16.9	0.6
89A00034	F	10	7	65	0.2	5.7	3.2	1.3	98.0	16.7	0.8
89A00059	F	10	7	49	0.0	6.0	3.6	1.5	88.1	21.0	0.6
89A00067	F	10	7	53	0.1	6.1	3.5	1.3	83.0	17.0	0.8
Mean				57.8	0.68	5.95	3.38	1.33	87.25	18.95	0.72
Std Dev				18.4	0.83	0.24	0.21	0.18	8.93	3.34	0.10

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	TRIG	URIC	TP	ALB	A-G	GLU	BUN	CR
89A00012	M	1	7	27	0.2	4.5	2.4	1.1	97.2	18.6	0.8
89A00042	M	1	7	38	1.5	7.3	3.1	0.7	106.1	17.9	0.7
89A00058	M	1	7	46	1.7	6.9	2.5	0.6	96.2	14.6	0.8
89A00022	F	1	7	47	0.0	4.9	2.4	1.0	108.6	19.3	0.7
89A00038	F	1	7	27	0.1	4.8	2.2	0.8	101.5	12.5	0.8
89A00072	F	1	7	43	0.0	7.0	2.6	0.6	110.5	21.9	0.9
Mean				38.0	0.58	5.90	2.53	0.80	103.35	17.47	0.78
Std Dev				9.1	0.79	1.29	0.31	0.21	5.98	3.39	0.08
89A00003	M	2	7	21	0.3	4.5	2.5	1.3	116.9	15.4	0.6
89A00009	M	2	7	45	0.2	4.9	2.4	1.0	95.3	20.7	0.6
89A00047	M	2	7	31	1.7	7.3	3.1	0.8	90.8	15.8	0.7
89A00031	F	2	7	37	0.0	5.2	2.9	1.3	113.6	17.2	0.6
89A00063	F	2	7	40	0.0	7.6	2.7	0.6	92.1	17.6	0.7
89A00066	F	2	7	47	0.1	7.8	3.0	0.6	101.2	21.7	0.7
Mean				36.8	0.38	6.22	2.77	0.93	101.65	18.07	0.65
Std Dev				9.6	0.66	1.51	0.28	0.33	11.18	2.58	0.05
89A00002	M	3	7	27	0.2	4.5	2.4	1.1	102.6	17.3	0.6
89A00045	M	3	7	49	1.8	7.6	2.5	0.5	95.0	18.4	0.7
89A00052	M	3	7	36	1.5	8.4	2.9	0.5	95.2	16.0	0.8
89A00025	F	3	7	33	0.0	4.8	2.4	1.0	126.3	19.3	0.6
89A00033	F	3	7	28	0.2	4.5	1.9	0.8	96.2	14.9	0.9
89A00064	F	3	7	57	0.1	7.9	2.4	0.4	105.2	14.8	0.7
Mean				38.3	0.63	6.28	2.42	0.72	103.42	16.78	0.72
Std Dev				12.1	0.80	1.86	0.32	0.29	11.98	1.86	0.12

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	TRIG	URIC	TP	ALB	A-G	GLU	BUN	CR
89A00018	M	4	7	63	0.2	6.1	3.6	1.5	88.4	15.0	0.7
89A00048	M	4	7	42	1.8	5.6	3.1	1.3	83.2	13.1	0.8
89A00056	M	4	7	68	1.9	6.8	3.3	1.0	88.9	32.7	0.8
89A00020	F	4	7	51	0.0	5.8	3.3	1.3	78.5	15.8	0.5
89A00039	F	4	7	57	0.2	5.3	3.2	1.6	94.5	14.1	0.8
89A00071	F	4	7	47	0.3	5.7	3.5	1.5	93.5	18.4	0.8
Mean				54.7	0.73	5.89	3.33	1.37	87.83	18.18	0.73
Std Dev				9.9	0.87	0.52	0.19	0.22	6.11	7.34	0.12
89A00004	M	5	7	66	0.2	5.8	3.3	1.3	107.8	15.4	0.7
89A00011	M	5	7	45	0.2	6.3	3.7	1.4	96.2	18.1	0.8
89A00046	M	5	7	51	1.8	6.7	3.2	0.9	86.0	17.0	0.7
89A00027	F	5	7	77	0.0	6.2	3.4	1.2	94.1	17.3	0.6
89A00065	F	5	7	89	0.3	5.8	3.3	1.4	84.1	35.1	0.7
89A00069	F	5	7	46	0.3	6.0	3.6	1.5	101.2	23.9	0.8
Mean				62.3	0.47	6.12	3.42	1.27	94.90	21.13	0.72
Std Dev				18.1	0.66	0.36	0.19	0.21	8.99	7.44	0.08
89A00007	M	6	7	49	0.4	5.2	2.9	1.2	95.6	16.4	0.5
89A00050	M	6	7	78	1.6	6.5	3.8	1.5	76.9	15.7	0.8
89A00051	M	6	7	48	1.7	6.3	3.6	1.3	90.7	14.8	0.8
89A00029	F	6	7	89	0.1	6.5	3.6	1.2	100.2	15.7	0.7
89A00041	F	6	7	94	0.2	5.5	3.7	2.0	87.4	17.8	0.8
89A00061	F	6	7	64	0.1	6.2	3.7	1.5	103.8	24.8	0.8
Mean				70.3	0.68	5.99	3.55	1.45	92.43	17.53	0.73
Std Dev				19.8	0.76	0.52	0.33	0.30	9.69	3.70	0.12

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	TRIG	URIC	TP	ALB	A-G	GLU	BUN	CR
89A000019	M	7	7	31	0.3	4.5	2.6	1.4	114.0	13.0	0.5
89A000043	M	7	7	46	1.8	7.7	2.5	0.5	88.6	19.0	0.6
89A000054	M	7	7	48	1.5	6.7	2.5	0.6	89.8	19.8	0.7
89A000030	F	7	7	24	0.1	4.5	2.6	1.4	102.8	20.3	0.7
89A000035	F	7	7	40	0.2	4.0	2.4	1.4	100.1	18.0	0.9
89A000070	F	7	7	26	0.3	6.9	2.8	0.7	101.0	15.5	0.9
Mean				35.8	0.70	5.71	2.57	1.00	99.38	17.60	0.72
Std Dev				10.3	0.75	1.55	0.14	0.45	9.34	2.82	0.16
89A000001	M	8	7	34	0.2	4.4	2.4	1.2	107.4	10.4	0.5
89A000013	M	8	7	20	0.2	4.3	2.5	1.3	109.2	21.9	0.8
89A000053	M	8	7	36	1.7	7.3	2.4	0.5	63.2	20.1	0.7
89A000040	F	8	7	27	0.2	3.5	2.0	1.4	83.5	12.7	0.6
89A000062	F	8	7	35	0.0	7.5	2.3	0.4	102.2	20.8	0.7
89A000068	F	8	7	19	0.2	7.9	2.8	0.5	113.0	15.2	0.8
Mean				28.5	0.42	5.81	2.40	0.90	96.42	16.85	0.68
Std Dev				7.7	0.63	1.94	0.26	0.45	19.30	4.76	0.12
89A000005	M	9	7	43	0.2	4.1	2.3	1.2	101.1	24.7	0.7
89A000049	M	9	7	19	1.6	7.0	2.1	0.4	98.2	11.7	0.6
89A000055	M	9	7	28	1.5	8.4	2.6	0.4	90.5	14.9	0.7
89A000026	F	9	7	10	0.0	4.3	2.4	1.3	97.9	9.4	0.6
89A000037	F	9	7	30	0.2	4.5	2.2	1.0	108.2	21.0	0.8
89A000060	F	9	7	29	0.0	7.9	2.6	0.5	108.8	19.8	0.7
Mean				26.5	0.58	6.04	2.37	0.80	100.78	16.92	0.68
Std Dev				11.1	0.75	1.95	0.21	0.42	6.93	5.89	0.08

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	CAL	PHOS	NA	CL	K	IRON	MAG
89A00006	M	10	7	10.3	5.6	153.3	117	4.4	235.2	1.53
89A00044	M	10	7	12.3	9.2	155.6	120	5.2	115.9	2.08
89A00057	M	10	7	11.8	7.3	153.2	120	4.8	107.8	1.83
89A00034	F	10	7	11.6	4.5	156.2	117	4.3	60.9	1.87
89A00059	F	10	7	10.8	5.7	153.3	112	4.8	86.5	1.64
89A00067	F	10	7	10.6	5.1	155.9	115	5.0	148.2	1.78
Mean				11.23	6.23	154.58	116.8	4.75	125.75	1.788
Std Dev				0.78	1.73	1.46	3.1	0.34	61.07	0.191

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	CAL	PHOS	NA	CL	K	IRON	MAG
89A00012	M	1	7	9.8	6.3	147.9	114	4.5	82.9	1.38
89A00042	M	1	7	11.9	8.2	156.8	119	4.5	76.3	1.68
89A00058	M	1	7	10.1	5.7	150.9	121	4.3	42.4	1.44
89A00022	F	1	7	9.7	4.8	153.9	115	4.2	68.6	1.43
89A00038	F	1	7	9.9	3.9	152.7	115	4.3	1.2	1.44
89A00072	F	1	7	9.1	5.4	153.4	114	4.6	77.6	1.71
Mean				10.08	5.72	152.60	116.3	4.40	58.17	1.513
Std Dev				0.95	1.47	3.00	2.9	0.15	31.37	0.143
89A00003	M	2	7	9.3	5.2	150.2	120	4.2	71.7	1.25
89A00009	M	2	7	9.5	7.7	149.1	117	4.4	56.7	1.67
89A00047	M	2	7	10.7	6.5	152.0	117	4.9	82.1	1.65
89A00031	F	2	7	9.8	6.4	155.0	117	4.1	110.7	1.63
89A00063	F	2	7	9.4	5.1	152.9	118	4.6	73.3	1.52
89A00066	F	2	7	8.9	5.6	150.8	115	4.6	110.5	1.48
Mean				9.60	6.10	151.67	117.3	4.47	84.17	1.533
Std Dev				0.61	0.97	2.11	1.6	0.29	22.04	0.158
89A00002	M	3	7	8.8	5.7	146.8	114	4.4	73.5	1.46
89A00045	M	3	7	9.8	5.7	151.5	117	4.6	130.2	1.62
89A00052	M	3	7	10.5	6.7	155.5	117	4.9	70.7	1.65
89A00025	F	3	7	9.8	5.2	152.2	117	4.7	49.0	1.47
89A00033	F	3	7	8.4	4.9	151.7	118	4.2	27.8	1.55
89A00064	F	3	7	8.5	5.5	151.9	118	4.8	108.6	1.70
Mean				9.30	5.62	151.60	116.8	4.60	76.63	1.575
Std Dev				0.85	0.61	2.73	1.5	0.26	37.64	0.098

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	CAL	PHOS	NA	CL	K	IRON	MAG
89A000018	M	4	7	10.7	5.3	155.2	116	4.6	90.9	1.62
89A000048	M	4	7	11.8	6.4	153.1	118	4.5	79.8	1.60
89A000056	M	4	7	11.4	6.3	154.5	123	5.0	63.5	2.04
89A000020	F	4	7	11.0	5.9	152.9	115	4.5	168.6	1.91
89A000039	F	4	7	11.1	4.9	153.1	116	4.6	70.8	1.76
89A000071	F	4	7	10.1	5.0	156.4	114	4.8	97.7	1.74
Mean				11.02	5.63	154.20	117.0	4.67	95.22	1.778
Std Dev				0.58	0.66	1.42	3.2	0.20	38.08	0.170
89A000004	M	5	7	10.9	6.2	151.4	112	4.7	135.8	1.47
89A000011	M	5	7	10.8	5.8	155.5	116	5.0	168.8	1.71
89A000046	M	5	7	11.5	5.1	153.4	114	4.9	88.5	1.37
89A000027	F	5	7	10.9	6.0	157.6	112	4.4	73.9	1.58
89A000065	F	5	7	10.4	5.7	157.6	120	4.8	287.2	1.87
89A000069	F	5	7	10.1	5.7	150.7	111	4.7	160.2	1.48
Mean				10.77	5.75	154.37	114.2	4.75	152.40	1.663
Std Dev				0.48	0.37	3.01	3.4	0.21	76.19	0.182
89A000007	M	6	7	10.3	4.3	144.5	113	4.3	187.1	1.55
89A000050	M	6	7	12.0	6.3	154.1	116	5.5	140.0	1.85
89A000051	M	6	7	11.8	5.6	158.7	123	5.2	170.2	1.83
89A000029	F	6	7	11.1	5.4	155.2	113	5.2	200.1	1.99
89A000041	F	6	7	12.1	5.6	154.8	114	4.7	341.8	2.00
89A000061	F	6	7	10.6	5.5	156.2	113	4.3	149.0	1.82
Mean				11.32	5.45	153.92	115.3	4.87	198.03	1.940
Std Dev				0.76	0.65	4.88	3.9	0.51	73.95	0.163

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	CAL	PHOS	NA	CL	K	IRON	MAG
89A000019	M	7	7	9.4	5.2	148.5	115	3.9	83.8	1.39
89A000043	M	7	7	9.9	7.3	152.1	121	4.9	94.0	1.65
89A000054	M	7	7	11.1	7.6	153.3	115	5.0	135.0	1.52
89A000030	F	7	7	9.8	5.1	153.8	118	4.3	73.4	1.58
89A000035	F	7	7	9.8	4.9	152.1	116	4.4	NT	1.63
89A000070	F	7	7	9.3	5.3	151.0	117	5.0	65.5	1.66
Mean				9.88	5.92	151.86	117.7	4.58	90.34	1.572
Std Dev				0.64	1.20	1.90	2.2	0.45	27.18	0.103
89A000001	M	9	7	9.4	6.3	148.5	121	4.1	96.8	1.39
89A000013	M	8	7	9.9	5.8	151.5	117	4.2	73.0	1.38
89A000053	M	8	7	9.8	6.3	148.8	121	4.7	50.5	1.50
89A000040	F	8	7	9.0	4.8	151.0	118	4.8	19.0	1.61
89A000062	F	8	7	9.5	5.4	151.7	121	4.6	54.5	1.47
89A000068	F	8	7	9.5	5.0	160.4	119	4.3	53.2	1.63
Mean				9.52	5.60	151.98	119.5	4.45	57.83	1.497
Std Dev				0.32	0.64	4.34	1.8	0.29	25.86	0.106
89A000005	M	9	7	9.5	5.7	147.5	116	4.3	63.4	1.54
89A000049	M	9	7	9.7	5.8	147.7	119	4.2	66.2	1.40
89A000055	M	9	7	10.7	7.3	155.5	124	4.7	56.8	1.55
89A000026	F	9	7	9.7	5.8	151.9	116	4.4	46.6	1.59
89A000037	F	9	7	9.5	4.9	152.7	120	4.4	NT	1.46
89A000060	F	9	7	9.5	5.8	154.1	117	4.5	81.0	1.48
Mean				9.77	5.88	151.57	118.7	4.42	62.80	1.505
Std Dev				0.47	0.78	3.31	3.1	0.17	12.66	0.071

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	ALT	AST	ALK	LDH	GGT	CK	BILI	CHOL
89A00006	M	10	14	30.2	25.3	44.1	64.2	4.0	139.81	0.00	201.7
89A00044	M	10	14	26.5	33.1	88.9	377.4	3.4	280.47	0.00	334.9
89A00057	M	10	14	35.5	24.0	51.9	106.1	5.6	105.99	0.00	318.5
89A00034	F	10	14	20.7	22.9	30.4	128.9	7.0	105.75	0.00	199.6
89A00059	F	10	14	34.6	27.5	82.3	120.2	2.8	140.99	0.00	133.6
89A00067	F	10	14	34.1	34.6	54.9	334.9	5.0	265.61	0.00	218.1
Mean				30.27	27.90	58.75	188.62	4.63	173.10	0.000	234.40
Std Dev				5.77	4.88	22.56	132.34	1.55	79.08	0.000	77.30

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	ALT	AST	ALK	LDH	GGT	CK	BILI	CHOL
89A00012	M	1	14	35.5	95.0	190.9	85.1	4.8	171.18	0.00	79.5
89A00042	M	1	14	16.8	90.4	202.3	117.3	6.2	170.03	0.00	182.8
89A00058	M	1	14	28.1	98.2	161.7	197.7	4.6	285.15	0.00	294.6
89A00022	F	1	14	20.9	76.5	105.5	250.7	3.4	187.51	0.00	87.9
89A00038	F	1	14	16.5	84.6	114.1	87.6	5.6	80.09	0.00	111.2
89A00072	F	1	14	40.4	97.9	150.8	187.5	8.6	201.00	0.00	71.1
Mean				26.37	90.43	154.22	154.32	5.53	182.49	0.000	137.85
Std Dev				10.02	8.55	39.26	67.65	1.78	65.84	0.000	86.78
89A00003	M	2	14	47.1	93.2	128.6	97.4	5.3	77.64	0.00	54.4
89A00009	M	2	14	27.3	77.2	134.6	184.5	3.8	132.79	0.00	91.5
89A00047	M	2	14	32.2	84.7	126.0	61.2	5.7	68.20	0.00	128.5
89A00031	F	2	14	47.0	81.1	133.2	78.7	6.2	91.59	0.00	123.3
89A00063	F	2	14	19.6	96.9	170.5	104.9	5.9	89.57	0.00	87.6
89A00066	F	2	14	117.5	131.6	124.8	592.1	5.6	357.70	0.00	77.1
Mean				48.45	94.12	136.28	186.47	5.42	136.25	0.000	93.73
Std Dev				35.54	19.79	17.20	203.19	0.85	110.72	0.000	28.10
89A00002	M	3	14	47.0	121.2	141.6	175.4	2.4	173.80	0.00	71.5
89A00045	M	3	14	37.4	102.8	108.3	199.3	6.0	436.66	0.00	160.3
89A00052	M	3	14	78.0	103.8	133.1	311.9	10.7	350.85	0.00	137.0
89A00025	F	3	14	32.7	102.9	79.5	116.9	3.6	155.48	0.08	91.6
89A00033	F	3	14	99.7	102.4	128.8	271.2	7.4	261.03	0.00	61.7
89A00064	F	3	14	113.7	130.9	119.8	75.9	9.9	70.50	0.00	102.1
Mean				68.08	110.67	118.52	191.77	6.67	241.39	0.013	104.03
Std Dev				34.11	12.31	22.27	89.55	3.33	135.39	0.033	38.11

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	ALT	AST	ALK	LDH	GGT	CK	BILI	CHOL
89A00018	M	4	14	52.3	24.6	57.4	139.4	4.3	242.87	0.00	202.0
89A00048	M	4	14	75.3	36.2	73.9	352.4	3.3	286.94	0.00	373.1
89A00056	M	4	14	39.6	28.5	71.4	216.0	5.1	166.69	0.00	309.7
89A00020	F	4	14	33.2	35.0	30.5	242.8	3.5	209.81	0.00	167.5
89A00039	F	4	14	28.5	29.0	56.9	199.1	3.1	187.65	0.07	177.0
89A00071	F	4	14	28.2	39.8	59.0	169.1	6.7	268.36	0.00	127.3
Mean				42.85	32.18	58.18	219.80	4.33	227.05	0.012	226.10
Std Dev				18.26	5.71	15.43	74.28	1.38	46.98	0.029	94.64
89A00004	M	5	14	26.8	28.1	73.0	93.6	3.0	156.98	0.00	203.2
89A00011	M	5	14	34.7	27.4	60.7	305.5	4.4	247.16	0.02	192.6
89A00046	M	5	14	75.3	37.8	31.7	439.7	4.6	324.20	0.00	286.1
89A00027	F	5	14	20.9	27.7	37.0	241.1	1.9	277.38	0.00	180.0
89A00065	F	5	14	34.1	33.3	80.6	78.1	3.9	222.89	0.03	132.0
89A00069	F	5	14	30.9	30.2	54.1	131.4	6.4	200.93	0.00	179.3
Mean				37.12	30.75	56.18	214.90	4.03	238.26	0.008	195.53
Std Dev				19.40	4.10	19.35	141.30	1.53	58.71	0.013	50.62
89A00007	M	6	14	109.4	36.5	81.3	227.4	3.6	254.52	0.07	257.3
89A00050	M	6	14	55.0	32.9	41.4	221.6	5.3	288.50	0.00	400.8
89A00051	M	6	14	84.6	36.0	52.6	333.9	11.0	254.50	0.00	357.4
89A00029	F	6	14	256.9	43.8	41.5	375.1	2.4	302.39	0.00	193.4
89A00041	F	6	14	75.9	29.5	39.2	151.6	4.6	198.04	0.00	198.5
89A00061	F	6	14	22.9	16.6	33.6	80.4	3.6	128.13	0.00	179.9
Mean				100.78	32.55	48.27	231.67	5.08	237.68	0.012	264.55
Std Dev				81.84	9.14	17.32	109.94	3.06	64.67	0.029	93.63

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	ALT	AST	ALK	LDH	GGT	CK	BILI	CHOL
89A00019	M	7	14	34.4	85.2	234.1	124.9	7.7	124.83	0.00	91.3
89A00043	M	7	14	20.8	97.1	113.6	410.9	5.0	289.00	0.00	151.6
89A00054	M	7	14	27.6	91.8	151.5	76.5	5.8	165.01	0.00	202.8
89A00030	F	7	14	18.5	85.2	96.1	187.4	4.7	162.62	0.00	86.0
89A00035	F	7	14	20.5	83.3	94.3	274.6	5.1	205.16	0.00	90.9
89A00070	F	7	14	21.7	101.3	130.7	72.9	7.9	87.05	0.00	68.4
Mean				23.92	90.65	136.72	191.20	6.03	172.28	0.000	115.17
Std Dev				5.99	7.35	52.39	131.75	1.42	69.81	0.000	51.39
89A00001	M	8	14	22.3	87.5	159.3	78.1	2.3	113.70	0.00	84.6
89A00013	M	8	14	25.9	121.3	172.3	39.1	5.1	98.07	0.00	69.4
89A00053	M	8	14	21.3	103.2	133.8	177.3	5.7	168.20	0.00	172.4
89A00040	F	8	14	17.0	103.7	107.3	311.4	6.3	234.98	0.00	59.4
89A00062	F	8	14	16.8	94.1	80.1	212.5	4.3	187.04	0.00	74.2
89A00068	F	8	14	17.5	90.4	120.2	132.4	8.5	135.85	0.00	61.1
Mean				20.13	100.03	128.83	158.47	5.37	156.31	0.000	86.85
Std Dev				3.67	12.34	33.93	98.03	2.07	50.80	0.000	42.91
89A00005	M	9	14	17.3	97.8	128.9	73.8	3.0	105.95	0.00	67.2
89A00049	M	9	14	79.2	147.1	122.7	186.2	11.1	230.05	0.00	90.9
89A00055	M	9	14	15.0	85.0	78.3	119.8	5.1	73.25	0.00	108.8
89A00026	F	9	14	11.9	101.3	97.3	87.1	3.7	92.75	0.00	71.5
89A00037	F	9	14	17.4	85.1	84.4	108.5	4.9	120.08	0.00	61.4
89A00060	F	9	14	23.0	75.0	78.4	93.0	4.4	109.61	0.00	83.8
Mean				27.30	98.55	98.33	111.40	5.37	121.95	0.000	80.60
Std Dev				25.68	25.63	22.46	40.04	2.91	55.36	0.000	17.56

Appendix G (cont): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	TRIG	URIC	TP	ALB	A-G	GLU	BUN	CR
89A00006	M	10	14	59	0.2	5.9	3.2	1.2	97.9	13.8	0.9
89A00044	M	10	14	49	0.2	6.1	2.9	0.9	85.4	17.1	0.8
89A00057	M	10	14	61	0.2	5.6	3.1	1.2	86.9	21.8	0.8
89A00034	F	10	14	61	0.3	5.8	3.7	1.7	92.4	17.2	0.8
89A00059	F	10	14	55	1.8	5.8	3.2	1.2	70.4	17.5	0.7
89A00067	F	10	14	94	1.6	6.3	3.9	1.7	90.7	18.1	0.9
Mean				64.8	0.72	5.92	3.33	1.32	87.28	17.58	0.82
Std Dev				15.8	0.77	0.25	0.38	0.32	9.37	2.56	0.08

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	TRIG	URIC	TP	ALB	A-G	GLU	BUN	CR
89A00012	M	1	14	84	0.0	4.3	2.5	1.4	87.0	18.3	1.0
89A00042	M	1	14	32	0.1	7.0	2.6	0.6	103.3	13.9	0.7
89A00058	M	1	14	52	0.2	6.6	2.0	0.4	97.6	18.2	0.7
89A00022	F	1	14	25	0.2	4.5	2.3	1.0	81.7	15.0	0.7
89A00038	F	1	14	119	0.1	4.8	2.5	1.1	95.0	18.6	0.8
89A00072	F	1	14	43	1.5	6.9	2.5	0.6	97.7	26.7	0.9
Mean				59.2	0.35	5.68	2.40	0.85	93.72	18.45	0.80
Std Dev				35.8	0.57	1.28	0.22	0.38	7.92	4.49	0.13
89A00003	M	2	14	23	0.1	4.2	2.3	1.2	100.3	12.1	0.7
89A00009	M	2	14	44	0.1	4.7	2.4	1.1	92.9	23.0	0.9
89A00047	M	2	14	33	0.0	7.7	2.6	0.5	111.4	18.6	0.8
89A00031	F	2	14	33	0.3	5.0	2.7	1.2	103.3	14.3	0.7
89A00063	F	2	14	26	1.8	8.7	2.8	0.5	131.5	16.4	0.8
89A00066	F	2	14	32	1.7	9.0	2.9	0.5	100.4	25.5	0.6
Mean				31.8	0.67	6.55	2.62	0.83	106.63	18.32	0.75
Std Dev				7.3	0.85	2.16	0.23	0.37	13.56	5.14	0.10
89A00002	M	3	14	36	0.0	4.9	2.2	0.8	92.6	15.9	0.7
89A00045	M	3	14	41	0.1	7.5	2.0	0.4	88.2	14.0	0.5
89A00052	M	3	14	38	0.5	7.3	2.4	0.5	95.3	17.1	0.6
89A00025	F	3	14	27	0.2	4.8	2.2	0.9	128.0	19.7	0.7
89A00033	F	3	14	24	0.3	4.6	2.1	0.8	82.5	16.6	0.9
89A00064	F	3	14	39	1.7	7.6	2.0	0.4	104.4	15.0	0.8
Mean				34.2	0.47	6.12	2.15	0.63	98.50	16.38	0.70
Std Dev				7.0	0.63	1.49	0.15	0.23	16.20	1.97	0.14

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	TRIG	URIC	TP	ALB	A-G	GLU	BUN	CR
89A000018	M	4	14	72	0.0	6.2	3.6	1.4	81.3	18.1	0.9
89A000048	M	4	14	50	0.1	5.5	3.3	1.5	106.2	17.0	0.7
89A000056	M	4	14	62	0.4	6.8	3.2	0.9	77.1	24.7	0.7
89A000020	F	4	14	68	0.3	6.4	3.8	1.5	71.5	16.9	0.7
89A000039	F	4	14	48	0.1	5.6	3.5	1.7	84.5	13.8	0.9
89A000071	F	4	14	59	1.1	6.0	3.8	1.7	96.1	15.6	0.9
Mean				59.8	0.33	6.08	3.53	1.45	86.12	17.68	0.80
Std Dev				9.6	0.40	0.49	0.25	0.29	12.84	3.74	0.11
89A000004	M	5	14	65	0.0	6.2	3.6	1.4	92.4	15.3	0.9
89A000011	M	5	14	69	0.1	6.6	3.5	1.2	76.8	13.4	1.1
89A000046	M	5	14	68	0.3	6.3	3.1	1.0	84.7	22.7	0.6
89A000027	F	5	14	98	0.2	6.1	3.7	1.6	83.5	15.5	0.8
89A000065	F	5	14	59	1.9	6.0	3.2	1.2	115.8	20.7	0.9
89A000069	F	5	14	69	1.8	6.9	4.2	1.5	104.4	27.0	1.0
Mean				71.3	0.72	6.35	3.55	1.32	92.93	19.10	0.88
Std Dev				13.6	0.88	0.34	0.39	0.22	14.64	5.25	0.17
89A000007	M	6	14	47	0.0	5.6	3.3	1.4	81.9	21.9	0.8
89A000050	M	6	14	83	0.0	6.3	3.9	1.6	100.9	21.1	0.8
89A000051	M	6	14	69	0.4	6.8	4.0	1.4	86.4	17.9	0.9
89A000029	F	6	14	69	0.2	6.5	3.7	1.4	88.1	15.5	0.6
89A000041	F	6	14	53	0.2	5.8	3.8	1.8	74.3	20.2	1.0
89A000061	F	6	14	71	1.7	6.2	3.3	1.2	95.0	19.3	0.9
Mean				65.3	0.42	6.20	3.67	1.47	87.77	19.32	0.83
Std Dev				13.1	0.65	0.44	0.30	0.21	9.41	2.33	0.14

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	TRIG	URIC	TP	ALB	A-G	GLU	BUN	CR
89A00019	M	7	14	38	0.1	4.3	2.7	1.7	122.7	13.1	0.7
89A00043	M	7	14	32	0.3	7.1	2.3	0.5	97.3	15.2	0.6
89A00054	M	7	14	39	0.1	6.5	2.3	0.5	87.2	26.1	0.7
89A00030	F	7	14	14	0.2	4.5	2.4	1.1	93.9	15.5	0.8
89A00035	F	7	14	29	0.2	3.6	2.6	2.5	95.2	22.9	0.8
89A00070	F	7	14	31	1.8	7.2	2.6	0.6	92.2	12.0	0.8
Mean				30.5	0.45	5.53	2.48	1.15	98.08	17.47	0.73
Std Dev				9.0	0.67	1.58	0.17	0.81	12.53	5.69	0.08
89A00001	M	8	14	26	0.3	4.0	2.2	1.2	94.6	11.1	0.7
89A00013	M	8	14	23	0.0	4.1	2.1	1.1	109.6	18.8	1.0
89A00053	M	8	14	37	0.0	7.7	2.0	0.4	89.7	20.6	0.7
89A00040	F	8	14	19	0.0	3.4	1.9	1.3	85.5	21.0	0.7
89A00062	F	8	14	17	2.0	7.5	1.8	0.3	90.4	17.1	0.8
89A00068	F	8	14	19	1.7	7.7	2.4	0.5	105.6	16.8	0.7
Mean				23.5	0.67	5.73	2.07	0.80	95.90	17.57	0.77
Std Dev				7.4	0.93	2.10	0.22	0.45	9.59	3.61	0.12
89A00005	M	9	14	24	0.2	4.4	2.0	0.8	105.3	19.3	0.9
89A00049	M	9	14	25	0.0	7.2	1.8	0.3	107.8	15.1	0.6
89A00055	M	9	14	29	0.0	7.5	2.0	0.4	92.1	17.7	0.7
89A00026	F	9	14	13	0.1	5.1	2.4	0.8	112.7	13.7	0.6
89A00037	F	9	14	22	0.1	4.0	2.2	1.3	114.5	15.1	0.7
89A00060	F	9	14	26	1.6	7.7	2.2	0.4	106.7	17.8	0.6
Mean				23.2	0.33	6.03	2.10	0.67	106.52	16.45	0.68
Std Dev				5.5	0.63	1.64	0.21	0.38	7.91	2.13	0.12

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	CAL	PHOS	NA	CL	K	IRON	MAG
89A00006	M	10	14	10.4	5.7	152.3	117	5.1	151.2	1.51
89A00044	M	10	14	10.4	5.5	154.6	114	4.6	118.2	1.67
89A00057	M	10	14	10.6	4.6	148.4	118	4.7	133.9	1.80
89A00034	F	10	14	10.3	4.3	152.7	114	4.9	97.5	1.84
89A00059	F	10	14	11.3	5.8	148.6	115	4.8	80.8	1.63
89A00067	F	10	14	12.5	4.8	157.1	117	5.3	166.8	2.13
Mean				10.92	5.12	152.28	115.8	4.90	124.73	1.763
Std Dev				0.86	0.63	3.39	1.7	0.26	32.46	0.216

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	CAL	PHOS	NA	CL	K	IRON	MAG
89A00012	M	1	14	9.3	6.4	150.9	118	4.9	52.2	1.67
89A00042	M	1	14	9.8	5.8	150.2	114	4.3	44.4	1.35
89A00058	M	1	14	9.1	4.6	151.4	119	4.7	36.1	1.44
89A00022	F	1	14	9.0	4.9	140.3	108	4.2	41.0	1.26
89A00038	F	1	14	9.6	4.9	149.0	115	4.6	51.8	1.48
89A00072	F	1	14	10.0	6.2	148.6	117	4.5	53.6	1.80
Mean				9.47	5.47	148.40	115.2	4.53	46.52	1.500
Std Dev				0.40	0.76	4.11	4.0	0.26	7.12	0.201
89A00003	M	2	14	9.3	5.2	147.8	119	4.2	78.5	1.25
89A00009	M	2	14	8.9	4.7	155.3	123	4.6	88.3	1.74
89A00047	M	2	14	9.7	4.7	150.4	115	4.7	44.4	1.47
89A00031	F	2	14	9.4	6.8	156.4	119	4.4	62.6	1.52
89A00063	F	2	14	10.2	6.5	150.3	118	4.2	63.5	1.55
89A00066	F	2	14	10.6	7.1	155.8	119	4.6	77.4	1.77
Mean				9.68	5.85	152.67	118.8	4.45	69.12	1.550
Std Dev				0.62	1.10	3.61	2.6	0.22	15.55	0.191
89A00002	M	3	14	8.5	6.5	152.7	117	4.5	85.3	1.53
89A00045	M	3	14	8.3	4.9	148.7	114	4.5	91.5	1.60
89A00052	M	3	14	8.6	4.8	147.5	116	4.9	77.1	1.65
89A00025	F	3	14	9.5	4.2	150.6	116	4.7	53.0	1.44
89A00033	F	3	14	8.7	4.6	150.6	119	4.2	63.9	1.50
89A00064	F	3	14	9.8	6.3	154.1	123	4.8	80.3	1.66
Mean				8.90	5.22	150.70	117.5	4.60	75.18	1.563
Std Dev				0.60	0.95	2.44	3.1	0.25	14.27	0.088

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	CAL	PHOS	NA	CL	K	IRON	MAG
39A00018	M	4	14	10.5	5.7	156.4	114	4.7	133.3	1.77
89A00048	M	4	14	11.1	5.3	153.5	116	4.7	99.5	1.73
89A00056	M	4	14	10.2	3.9	151.9	116	4.8	147.0	1.81
89A00020	F	4	14	11.2	5.3	155.0	117	5.1	128.6	1.90
89A00039	F	4	14	11.0	4.6	151.2	115	4.8	176.1	1.56
89A00071	F	4	14	12.7	6.0	159.7	121	5.0	208.7	1.79
Mean				11.12	5.13	154.62	116.5	4.85	148.88	1.760
Std Dev				0.87	0.77	3.15	2.4	0.16	38.48	0.113
89A00004	M	5	14	10.8	5.9	154.6	112	4.7	199.9	1.60
89A00011	M	5	14	11.0	5.1	155.8	117	5.1	149.8	1.66
89A00046	M	5	14	10.3	4.8	149.5	109	5.3	115.5	1.84
89A00027	F	5	14	11.2	4.5	151.8	109	4.5	88.5	1.60
89A00065	F	5	14	11.4	5.2	152.6	118	4.7	102.8	1.68
89A00069	F	5	14	12.9	6.3	161.2	117	5.5	196.6	1.93
Mean				11.27	5.30	154.25	113.7	4.97	142.18	1.718
Std Dev				0.88	0.68	4.05	4.2	0.39	47.95	0.136
89A00007	M	6	14	10.2	5.1	149.8	113	5.0	270.7	1.62
89A00050	M	6	14	11.2	5.2	155.0	113	5.1	166.9	1.96
89A00051	M	6	14	10.6	4.1	157.0	116	5.0	200.6	1.92
89A00029	F	6	14	10.7	4.8	151.3	110	5.3	230.3	2.10
89A00041	F	6	14	11.6	6.5	152.0	111	4.9	220.9	1.86
89A00061	F	6	14	11.8	5.4	153.1	114	4.8	106.0	1.81
Mean				11.02	5.18	153.03	112.8	5.02	199.23	1.878
Std Dev				0.62	0.79	2.61	2.1	0.17	57.06	0.161

Appendix G (cont.): SERUM CHEMISTRY

Animal Number	Sex	Group	Day	CAL	PHOS	NA	CL	K	IRON	MAG
89A00019	M	7	14	9.6	5.1	150.4	118	4.4	85.4	1.37
89A00043	M	7	14	8.9	5.0	150.8	116	4.4	80.6	1.50
89A00054	M	7	14	9.7	5.2	146.9	114	5.0	64.9	1.47
89A00030	F	7	14	9.0	4.5	146.4	118	4.5	72.3	1.27
89A00035	F	7	14	9.2	5.1	148.4	118	4.5	81.8	1.59
89A00070	F	7	14	10.5	5.4	151.9	119	4.7	46.6	1.54
Mean				9.48	5.05	149.13	117.2	4.58	71.93	1.457
Std Dev				0.59	0.30	2.24	1.8	0.23	14.46	0.118
89A00001	M	8	14	9.4	6.5	148.9	119	4.4	93.9	1.43
89A00013	M	8	14	8.8	5.2	150.2	121	4.1	50.8	1.31
89A00053	M	8	14	8.7	5.4	150.8	118	4.5	75.5	1.45
89A00040	F	8	14	9.5	5.2	149.8	117	4.6	41.9	1.45
89A00062	F	8	14	9.9	5.1	150.3	120	4.6	35.0	1.50
89A00068	F	8	14	10.6	5.9	157.0	122	4.4	58.1	1.64
Mean				9.48	5.55	151.17	119.5	4.43	59.20	1.463
Std Dev				0.71	0.55	2.93	1.9	0.19	22.03	0.107
89A00005	M	9	14	9.1	5.6	149.6	116	4.9	89.1	1.44
89A00049	M	9	14	8.5	5.5	148.0	119	4.6	69.3	1.34
89A00055	M	9	14	8.9	4.7	151.0	119	4.5	65.5	1.49
89A00026	F	9	14	9.0	4.7	151.3	118	4.4	47.9	1.44
89A00037	F	9	14	9.4	5.0	147.9	119	4.5	55.0	1.43
89A00060	F	9	14	10.0	7.0	149.6	120	4.8	81.9	1.59
Mean				9.15	5.42	149.57	118.5	4.62	68.12	1.455
Std Dev				0.51	0.87	1.43	1.4	0.19	15.62	0.082

Appendix H: HEMATOLOGY

List of Hematology Abbreviations/Units

WBC	Total Leukocyte Count ($\times 10^3/\mu\text{l}$)
RBC	Erythrocytes ($\times 10^6/\mu\text{l}$)
HGB	Hemoglobin (g/dl)
HCT	Hematocrit (%)
MCV	Mean Corpuscular Volume (femtoliters)
MCH	Mean Corpuscular Hemoglobin (picograms)
MCHC	Mean Corpuscular Hemoglobin Concentration (g/dl)
PLT	Platelets ($\times 10^3/\mu\text{l}$)
RET	Reticulocytes (%)
SEG	Polymorphonuclear Granulocytes (%)
BAN	Immature Neutrophils (%)
EOS	Eosinophils (%)
BAS	Basophils (%)
LYM	Lymphocytes (%)
MCN	Monocytes (%)
ATL	Atypical Lymphocytes (%)
NRBC	Nucleated Red Blood Cell (#/100 WBC)
PT	Prothrombin Time (seconds)
APPT	Activated Partial Thromboplastin Time (seconds)
NT	Not Taken
TNTC	Designates PT or APTT value which exceeded measuring instrument's range of 150 seconds

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	WBC	RBC	HGB	HCT	MCV	MCH	MCHC	PLT	RET
89A00006	M	10	-21	8.7	6.55	15.3	44.6	68.1	23.4	34.3	479	1.1
89A00044	M	10	-19	14.9	7.05	16.3	49.9	70.8	23.1	32.7	356	1.2
89A00057	M	10	-20	12.3	7.69	17.7	51.9	67.5	23.0	34.1	227	0.9
89A00034	F	10	-15	13.4	8.07	18.2	54.9	68.0	22.6	33.2	533	1.6
89A00059	F	10	-12	9.9	7.28	15.6	47.0	64.5	21.4	33.2	241	4.1
89A00067	F	10	-13	9.2	7.10	16.7	48.8	68.8	23.5	34.2	346	1.2
Mean				11.40	7.290	16.63	49.52	67.95	22.83	33.62	363.7	1.68
Std Dev				2.51	0.531	1.14	3.63	2.05	0.77	0.67	123.3	1.21

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	WBC	REC	HGB	HCT	MCV	MCH	MCHC	PLT	RET
89A000012	M	1	-22	12.1	7.62	16.4	50.2	65.9	21.5	32.7	276	2.0
89A000042	M	1	-19	12.7	7.54	17.1	52.4	69.5	22.7	32.6	416	1.7
89A000058	M	1	-20	9.8	7.42	16.8	50.0	67.4	22.6	33.6	351	2.1
89A000022	F	1	-14	9.8	7.62	16.8	49.6	65.1	22.0	33.9	379	2.8
89A000038	F	1	-15	16.4	6.54	16.3	47.7	72.9	24.9	34.2	496	1.5
89A000072	F	1	-13	12.1	7.95	18.0	52.7	66.3	22.6	34.2	368	1.1
Mean				12.15	7.448	16.90	50.43	67.85	22.72	33.53	381.0	1.87
Std Dev				2.43	0.479	0.61	1.87	2.90	1.17	0.72	72.9	0.58
89A000003	M	2	-21	10.7	7.28	15.9	49.0	67.3	21.8	32.4	335	1.8
89A000009	M	2	-22	16.2	6.68	15.9	47.5	71.1	23.8	33.5	515	3.4
89A000047	M	2	-19	11.8	7.74	16.9	51.0	65.9	21.8	33.1	453	1.3
89A000031	F	2	-14	10.5	7.41	17.2	51.1	68.9	23.2	33.7	422	1.4
89A000063	F	2	-12	16.0	7.64	16.6	49.1	64.3	21.7	33.8	372	0.6
89A000066	F	2	-13	10.5	7.62	17.6	52.0	68.3	23.1	33.8	443	0.9
Mean				12.62	7.395	16.68	49.95	67.63	22.57	33.38	423.3	1.57
Std Dev				2.74	0.388	0.69	1.69	2.38	0.91	0.55	63.4	0.99
89A000002	M	3	-21	18.7	6.73	15.3	47.2	70.1	22.7	32.4	523	3.4
89A000045	M	3	-19	7.5	8.22	18.6	57.5	69.9	22.6	32.3	449	1.4
89A000052	M	3	-20	12.2	7.03	16.0	48.1	68.4	22.8	33.3	426	2.6
89A000025	F	3	-14	9.0	7.59	17.3	52.1	68.6	22.8	33.2	510	1.5
89A000033	F	3	-15	18.0	7.69	17.3	52.2	67.9	22.5	33.1	417	2.1
89A000064	F	3	-12	16.8	7.79	17.6	52.3	67.2	22.6	33.7	385	1.4
Mean				13.70	7.508	17.02	51.57	68.68	22.67	33.00	451.7	2.07
Std Dev				4.81	0.540	1.18	3.67	1.13	0.12	0.54	54.4	0.81

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	WBC	RBC	HGB	HCT	MCV	MCH	MCHC	PLT	RET
89A000018	M	4	-22	13.4	6.08	14.6	43.4	71.3	24.0	33.6	458	1.7
89A000048	M	4	-19	16.0	7.56	16.6	50.1	66.3	22.0	33.1	464	2.4
89A000056	M	4	-20	9.5	7.19	15.7	47.7	66.3	21.8	32.9	540	1.1
89A000020	F	4	-14	9.9	8.16	17.5	53.6	65.7	21.4	32.6	462	1.8
89A000039	F	4	-15	11.5	7.54	16.8	49.9	66.2	22.3	33.7	434	1.8
89A000071	F	4	-13	14.7	7.38	16.3	49.6	67.2	22.1	32.9	367	0.9
Mean				12.50	7.318	16.25	49.05	67.17	22.27	33.13	454.2	1.62
Std Dev				2.63	0.688	1.00	3.36	2.08	0.90	0.43	55.8	0.54
89A000004	M	5	-21	11.1	6.91	16.8	49.5	71.7	24.3	33.9	338	2.7
89A000011	M	5	-22	10.4	7.38	17.0	50.3	68.1	23.0	33.8	412	1.2
89A000046	M	5	-19	13.6	7.15	15.7	48.1	67.3	22.0	32.6	480	0.7
89A000027	F	5	-14	12.6	7.52	18.2	54.2	72.1	24.2	33.6	382	1.2
89A000065	F	5	-12	16.2	7.06	16.3	48.5	68.7	23.1	33.6	430	1.0
89A000069	F	5	-13	11.1	7.61	16.8	50.2	66.0	22.1	33.5	356	1.5
Mean				12.50	7.272	16.80	50.13	68.98	23.12	33.50	399.7	1.38
Std Dev				2.16	0.275	0.83	2.18	2.44	0.99	0.46	52.1	0.70
89A000007	M	6	-21	10.3	7.46	16.4	49.4	66.2	22.0	33.2	520	2.3
89A000050	M	6	-19	9.3	6.48	15.4	46.3	71.5	23.8	33.3	343	1.0
89A000051	M	6	-20	12.2	7.99	17.9	54.3	67.9	22.4	33.0	362	0.7
89A000029	F	6	-14	15.2	6.82	15.6	46.4	68.1	22.9	33.6	445	0.9
89A000041	F	6	-15	11.6	7.41	16.4	49.1	66.3	22.1	33.4	402	0.7
89A000061	F	6	-12	9.9	7.64	17.5	52.6	68.9	22.9	33.3	302	1.4
Mean				11.42	7.300	16.53	49.68	68.15	22.68	33.30	394.0	1.17
Std Dev				2.14	0.554	1.00	3.24	1.95	0.67	0.20	79.7	0.61

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	WBC	RBC	HGB	HCT	MCV	MCH	MCHC	PLT	RET
89A000019	M	7	-22	31.2	6.93	15.8	47.1	68.0	22.8	33.5	438	2.1
89A000043	M	7	-19	13.9	6.36	15.0	44.8	70.4	23.6	33.5	496	1.2
89A000054	M	7	-20	11.5	6.93	14.7	45.3	65.3	21.2	32.5	353	1.4
89A000030	F	7	-14	9.1	8.43	18.5	55.9	66.3	21.9	33.1	327	1.5
89A000035	F	7	-15	11.8	7.16	17.1	50.8	70.9	23.9	33.7	354	1.5
89A000070	F	7	-13	17.0	6.93	16.5	47.6	68.7	23.8	34.7	395	0.7
Mean				15.75	7.123	16.27	48.58	68.27	22.87	33.50	393.8	1.40
Std Dev				8.02	0.693	1.42	4.16	2.21	1.11	0.73	63.4	0.46
89A000001	M	8	-21	7.7	7.12	15.5	46.4	65.2	21.8	33.4	346	0.7
89A000013	M	8	-22	17.7	7.41	17.0	50.5	68.1	22.9	33.7	449	1.9
89A000053	M	8	-20	10.1	6.34	14.7	43.7	68.9	23.2	33.6	505	1.1
89A000040	F	8	-15	17.0	6.59	15.4	45.3	68.7	23.4	34.0	622	1.0
89A000062	F	8	-12	12.3	7.55	16.7	50.6	67.0	22.1	33.0	393	2.5
89A000068	F	8	-13	14.0	7.38	16.9	50.0	67.8	22.9	33.8	352	1.0
Mean				13.13	7.065	16.03	47.75	67.62	22.72	33.58	444.5	1.37
Std Dev				3.90	0.491	0.96	3.00	1.36	0.63	0.35	105.9	0.69
89A000005	M	9	-21	16.0	7.03	15.9	47.9	68.2	22.6	33.2	347	2.1
89A000049	M	9	-19	9.2	7.74	17.8	53.7	69.4	23.0	33.1	467	1.5
89A000055	M	9	-20	13.5	7.62	17.5	52.2	68.5	23.0	33.5	299	1.7
89A000026	F	9	-14	10.4	7.62	16.4	49.1	64.5	21.5	33.4	518	1.3
89A000037	F	9	-15	12.1	7.09	17.1	50.4	71.1	24.1	33.9	545	1.7
89A000060	F	9	-12	12.9	7.00	16.6	49.6	70.9	23.7	33.5	438	1.1
Mean				12.35	7.350	16.88	50.48	68.77	22.98	33.43	455.7	1.57
Std Dev				2.40	0.344	0.71	2.13	2.41	0.91	0.28	96.2	0.35

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	SEG	BAN	EOS	BAS	LYM	MON	ATL	NRBC	PT	APPT
89A00006	M	10	-21	76	0	2	0	17	4	1	0	NT	NT
89A00044	M	10	-19	53	0	5	0	35	6	1	0	NT	NT
89A00057	M	10	-20	67	0	0	0	25	7	1	0	NT	NT
89A00034	F	10	-15	76	0	0	0	21	2	1	0	NT	NT
89A00059	F	10	-12	57	0	6	0	33	4	0	0	NT	NT
89A00067	F	10	-13	71	0	1	0	25	3	0	0	NT	NT
Mean				66.7	0.0	2.3	0.0	26.0	4.3	0.7	0.0	-	-
Std Dev				9.7	0.0	2.6	0.0	6.9	1.9	0.5	0.0	-	-

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	SEG	BAN	EOS	BAS	LYM	MON	ATL	NRBC	PT	APPT
89A00012	M	1	-22	68	1	3	0	20	6	2	2	NT	NT
89A00042	M	1	-19	57	0	2	0	27	9	5	0	NT	NT
89A00058	M	1	-20	72	0	1	0	25	2	0	0	NT	NT
89A00022	F	1	-14	68	0	4	0	25	1	2	0	NT	NT
89A00038	F	1	-15	78	0	1	0	17	3	1	0	NT	NT
89A00072	F	1	-13	71	0	4	0	23	1	1	0	NT	NT
Mean				69.0	0.2	2.5	0.0	22.8	3.7	1.8	0.3	-	-
Std Dev				6.9	0.4	1.4	0.0	3.7	3.2	1.7	0.8	-	-
89A00003	M	2	-21	62	0	4	0	29	5	0	0	NT	NT
89A00009	M	2	-22	73	0	2	0	19	4	2	0	NT	NT
89A00047	M	2	-19	73	1	1	0	21	4	0	1	NT	NT
89A00031	F	2	-14	58	1	4	0	31	5	1	0	NT	NT
89A00063	F	2	-12	72	0	1	0	20	7	0	0	NT	NT
89A00066	F	2	-13	67	0	3	0	28	0	2	0	NT	NT
Mean				67.5	0.3	2.5	0.0	24.7	4.2	0.8	0.2	-	-
Std Dev				6.3	0.5	1.4	0.0	5.2	2.3	1.0	0.4	-	-
89A00002	M	3	-21	82	0	0	0	16	2	0	3	NT	NT
89A00045	M	3	-19	77	1	0	0	16	5	1	0	NT	NT
89A00052	M	3	-20	75	0	1	0	18	5	1	0	NT	NT
89A00025	F	3	-14	71	0	2	0	16	4	7	0	NT	NT
89A00033	F	3	-15	71	0	1	0	14	9	5	0	NT	NT
89A00064	F	3	-12	59	0	0	0	37	2	2	0	NT	NT
Mean				72.5	0.2	0.7	0.0	19.5	4.5	2.7	0.6	-	-
Std Dev				7.8	0.4	0.8	0.0	8.7	2.6	2.7	1.4	-	-

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	SEG	BAN	EOS	BAS	LYM	MON	ATL	NRBC	PT	APPT
89A00018	M	4	-22	59	0	2	0	31	4	4	0	NT	NT
89A00048	M	4	-19	71	0	0	0	26	2	1	0	NT	NT
89A00056	M	4	-20	64	0	4	1	28	3	0	0	NT	NT
89A00020	F	4	-14	49	0	1	0	37	7	5	0	NT	NT
89A00039	F	4	-15	77	0	1	0	20	1	1	0	NT	NT
89A00071	F	4	-13	61	0	2	0	37	0	0	0	NT	NT
Mean				63.5	0.0	1.7	0.2	29.8	2.8	1.8	0.0	-	-
Std Dev				9.8	0.0	1.4	0.4	6.6	2.5	2.1	0.0	-	-
89A00004	M	5	-21	56	0	0	0	40	0	4	2	NT	NT
89A00011	M	5	-22	64	0	3	0	25	7	1	0	NT	NT
89A00046	M	5	-19	66	0	2	0	29	3	0	1	NT	NT
89A00027	F	5	-14	85	0	0	0	8	5	1	0	NT	NT
89A00065	F	5	-12	62	0	2	0	32	2	2	0	NT	NT
89A00069	F	5	-13	53	0	1	0	44	2	0	0	NT	NT
Mean				64.3	0.0	1.3	0.0	29.7	3.2	1.3	0.5	-	-
Std Dev				11.3	0.0	1.2	0.0	12.7	2.5	1.5	0.8	-	-
89A00007	M	6	-21	70	0	1	0	18	4	7	0	NT	NT
89A00050	M	6	-19	62	0	0	0	35	3	0	0	NT	NT
89A00051	M	6	-20	61	0	3	0	27	5	4	0	NT	NT
89A00029	F	6	-14	57	1	2	0	37	2	1	0	NT	NT
89A00041	F	6	-15	60	2	3	0	31	2	2	0	NT	NT
89A00061	F	6	-12	73	1	1	0	19	5	1	0	NT	NT
Mean				63.8	0.7	1.7	0.0	27.8	3.5	2.5	0.0	-	-
Std Dev				6.2	0.8	1.2	0.0	8.0	1.4	2.6	0.0	-	-

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	SEG	BAN	EOS	BAS	LYM	MON	ATL	NREC	PT	APPT
89A000019	M	7	-22	68	0	3	0	16	8	5	0	NT	NT
89A000043	M	7	-19	70	1	6	0	21	2	0	0	NT	NT
89A000054	M	7	-20	61	1	2	0	33	3	0	0	NT	NT
89A000030	F	7	-14	63	0	5	0	25	2	5	0	NT	NT
89A000035	F	7	-15	55	0	5	0	30	7	3	0	NT	NT
89A000070	F	7	-13	76	0	0	0	22	2	0	0	NT	NT
Mean				65.5	0.3	3.5	0.0	24.5	4.0	2.2	0.0	-	-
Std Dev				7.4	0.5	2.3	0.0	6.2	2.8	2.5	0.0	-	-
89A000001	M	8	-21	55	1	2	0	33	6	3	2	NT	NT
89A000013	M	8	-22	64	0	2	0	28	3	3	0	NT	NT
89A000053	M	8	-20	72	2	4	0	21	1	0	0	NT	NT
89A000040	F	8	-15	78	1	0	0	17	3	1	0	NT	NT
89A000062	F	8	-12	67	0	0	0	28	5	0	0	NT	NT
89A000068	F	8	-13	68	0	0	0	26	3	3	1	NT	NT
Mean				67.3	0.7	1.3	0.0	25.5	3.5	1.7	0.5	-	-
Std Dev				7.7	0.8	1.6	0.0	5.7	1.8	1.5	0.8	-	-
89A000005	M	9	-21	63	0	2	0	28	2	5	0	NT	NT
89A000049	M	9	-19	67	1	1	0	22	5	4	0	NT	NT
89A000055	M	9	-20	71	0	0	0	25	1	3	0	NT	NT
89A000026	F	9	-14	78	0	1	0	13	5	3	2	NT	NT
89A000037	F	9	-15	57	0	0	0	32	6	5	0	NT	NT
89A000060	F	9	-12	76	0	2	0	19	2	1	1	NT	NT
Mean				68.7	0.2	1.0	0.0	23.2	3.5	3.5	0.5	-	-
Std Dev				8.0	0.4	0.9	0.0	6.7	2.1	1.5	0.8	-	-

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	WBC	RBC	HGB	HCT	MCV	MCH	MCHC	PLT	RET
89A00006	M	10	-7	6.1	7.72	17.3	51.7	67.0	22.4	33.5	419	1.4
89A00044	M	10	-7	13.7	6.91	16.0	47.3	69.2	23.2	33.5	342	1.1
89A00057	M	10	-7	7.5	7.61	17.2	51.6	67.8	22.6	33.3	257	0.6
89A00034	F	10	-7	13.3	7.75	17.6	52.1	67.2	22.7	33.8	428	1.3
89A00059	F	10	-7	13.8	6.97	15.2	45.2	64.8	21.8	33.6	282	1.3
89A00067	F	10	-7	10.5	7.77	17.8	53.1	68.3	22.9	33.5	326	1.4
Mean				10.82	7.455	16.85	50.25	67.38	22.60	33.53	342.3	1.18
Std Dev				3.37	0.403	1.02	3.07	1.49	0.48	0.16	69.9	0.31

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	WBC	RBC	HGB	HCT	MCV	MCH	MCHC	PLT	RET
89A00012	M	1	-7	17.6	7.85	17.0	50.6	64.5	21.7	33.6	285	2.1
89A00042	M	1	-7	10.4	7.02	16.0	47.9	68.3	22.8	33.4	357	1.4
89A00058	M	1	-7	8.0	6.86	15.5	45.8	66.8	22.6	33.8	303	1.3
89A00022	F	1	-7	11.7	7.26	15.7	47.4	65.3	21.6	33.1	316	1.2
89A00038	F	1	-7	15.7	6.76	16.5	48.8	72.2	24.4	33.8	522	4.1
89A00072	F	1	-7	11.6	8.22	18.1	55.0	66.9	22.0	32.9	380	0.5
Mean				12.50	7.328	16.47	49.25	67.33	22.52	33.43	360.5	1.77
Std Dev				3.53	0.585	0.97	3.23	2.73	1.04	0.37	86.6	1.25
89A00003	M	2	-7	7.5	7.66	17.0	51.4	67.1	22.0	33.1	326	2.3
89A00009	M	2	-7	11.3	7.45	17.9	51.4	69.0	24.0	34.8	556	1.9
89A00047	M	2	-7	9.6	7.90	17.3	51.6	65.3	21.9	33.5	387	1.7
89A00031	F	2	-7	13.9	6.49	14.7	44.3	68.3	22.7	33.2	380	
89A00063	F	2	-7	10.5	7.55	16.3	48.2	63.9	21.6	33.8	391	0.7
89A00066	F	2	-7	12.5	7.87	17.7	53.3	67.7	22.5	33.2	364	1.7
Mean				10.88	7.487	16.82	50.03	66.88	22.45	33.60	400.7	1.66
Std Dev				2.24	0.519	1.18	3.26	1.93	0.86	0.64	79.7	0.59
89A00002	M	3	-7	11.2	7.10	16.4	49.2	69.3	23.1	33.3	476	1.8
89A00045	M	3	-7	9.2	7.32	16.8	49.9	68.2	23.0	33.7	471	2.2
89A00052	M	3	-7	10.0	6.34	14.3	42.7	67.3	22.6	33.5	371	1.3
89A00025	F	3	-7	10.1	7.52	17.3	51.7	68.7	23.0	33.5	352	4.4
89A00033	F	3	-7	12.2	7.45	16.6	50.4	67.7	22.3	32.9	358	2.9
89A00064	F	3	-7	9.5	7.01	16.2	46.6	66.5	23.1	34.8	240	0.8
Mean				10.37	7.123	16.27	48.42	67.95	22.85	33.62	384.7	2.23
Std Dev				1.13	0.431	1.03	3.27	1.00	0.33	0.64	86.8	1.28

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	WBC	RBC	HGB	HCT	MCV	MCH	MCHC	PLT	RET
89A000018	M	4	-7	11.3	6.40	15.2	45.1	70.4	23.8	33.7	356	1.3
89A000048	M	4	-7	11.6	7.48	16.3	49.1	65.7	21.8	33.2	434	1.9
89A000056	M	4	-7	11.8	6.42	14.0	41.4	64.5	21.8	33.8	423	2.3
89A000020	F	4	-7	13.4	7.82	16.2	51.0	65.2	20.7	31.8	365	2.9
89A000039	F	4	-7	10.4	7.91	17.6	52.8	66.8	22.3	33.3	415	1.6
89A000071	F	4	-7	11.6	6.66	14.7	44.6	67.0	22.1	33.0	156	1.0
Mean				11.68	7.115	15.67	47.33	66.60	22.08	33.13	358.2	1.83
Std Dev				0.98	0.702	1.29	4.34	2.09	1.01	0.72	104.0	0.69
89A000004	M	5	-7	10.5	7.71	18.4	54.3	70.4	23.9	33.9	269	1.8
89A000011	M	5	-7	10.6	7.05	15.6	46.8	66.4	22.1	33.3	353	0.8
89A000046	M	5	-7	8.8	6.36	14.4	42.4	66.7	22.6	34.0	372	1.2
89A000027	F	5	-7	10.6	7.64	18.1	54.5	71.4	23.7	33.2	253	3.0
89A000065	F	5	-7	12.5	6.91	15.8	46.8	67.7	22.9	33.8	418	1.4
89A000069	F	5	-7	13.3	7.25	15.8	47.4	65.4	21.8	33.3	281	1.1
Mean				11.05	7.153	16.35	48.70	68.00	22.83	33.53	324.3	1.55
Std Dev				1.61	0.501	1.56	4.77	2.38	0.84	0.35	66.2	0.78
89A000007	M	6	-7	8.9	7.54	16.7	49.3	65.4	22.1	33.9	458	1.0
89A000050	M	6	-7	12.2	7.20	17.1	50.7	70.4	23.8	33.7	299	3.3
89A000051	M	6	-7	11.7	7.15	15.9	47.2	66.0	22.2	33.7	328	1.5
89A000029	F	6	-7	17.3	7.02	15.8	48.2	68.6	22.5	32.8	438	3.2
89A000041	F	6	-7	10.3	7.61	16.9	50.5	66.4	22.2	33.5	376	2.3
89A000061	F	6	-7	9.2	7.78	17.8	52.8	67.9	22.9	33.7	326	1.4
Mean				11.60	7.383	16.70	49.78	67.45	22.62	33.55	370.8	2.12
Std Dev				3.09	0.301	0.76	1.99	1.88	0.65	0.39	65.0	0.97

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	WBC	RBC	HGB	HCT	MCV	MCH	MCHC	PLT	RET
89A00019	M	7	-7	15.2	7.51	16.8	49.3	65.7	22.4	34.1	353	1.2
89A00043	M	7	-7	6.9	7.46	17.1	51.1	68.5	22.9	33.5	353	0.6
89A00054	M	7	-7	11.1	6.52	13.9	40.4	62.0	21.3	34.4	346	0.5
89A00030	F	7	-7	10.2	7.95	17.7	52.6	66.2	22.3	33.7	363	1.5
89A00035	F	7	-7	9.2	7.36	17.5	51.6	70.1	23.8	33.9	346	4.8
89A00070	F	7	-7	13.3	6.93	15.7	47.6	68.7	22.7	33.0	332	1.0
Mean				10.98	7.288	16.45	48.77	66.87	22.57	33.77	348.8	1.60
Std Dev				2.95	0.498	1.43	4.47	2.90	0.82	0.49	10.3	1.61
89A00001	M	8	-7	7.1	7.82	17.2	50.5	64.6	22.0	34.1	285	0.5
89A00013	M	8	-7	12.3	7.93	17.9	53.2	67.1	22.6	33.6	392	1.0
89A00053	M	8	-7	9.3	6.17	14.1	42.0	68.0	22.9	33.6	517	1.1
89A00040	F	8	-7	16.4	6.96	15.8	47.9	68.8	22.7	33.0	576	1.7
89A00062	F	8	-7	10.5	7.79	17.0	51.6	66.2	21.8	32.9	379	1.2
89A00068	F	8	-7	11.4	7.68	17.1	51.8	67.5	22.3	33.0	269	0.8
Mean				11.17	7.392	16.52	49.50	67.03	22.38	33.37	403.0	1.05
Std Dev				3.14	0.692	1.36	4.08	1.48	0.43	0.48	122.9	0.40
89A00005	M	9	-7	12.6	7.64	17.3	52.0	68.1	22.6	33.3	358	2.7
89A00049	M	9	-7	15.9	6.30	14.7	44.1	70.0	23.3	33.3	464	0.8
89A00055	M	9	-7	15.7	7.35	17.0	49.6	67.5	23.1	34.3	257	0.5
89A00026	F	9	-7	6.9	7.95	16.8	51.8	65.1	21.1	32.4	356	0.9
89A00037	F	9	-7	12.2	7.03	17.1	50.1	71.2	24.3	34.1	587	2.6
89A00060	F	9	-7	12.9	7.20	17.1	50.6	70.3	23.8	33.8	433	1.5
Mean				12.70	7.245	16.67	49.70	68.70	23.03	33.53	409.7	1.50
Std Dev				3.26	0.567	0.98	2.90	2.25	1.11	0.69	113.0	0.95

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	SEG	BAN	EOS	BAS	LYM	MON	ATL	NRBC	PT	APPT
89A00006	M	10	-7	65	0	2	0	23	3	2	2	7.5	14.5
89A00044	M	10	-7	54	0	2	0	40	4	0	0	9.0	14.2
89A00057	M	10	-7	80	0	1	0	14	2	3	0	9.8	13.8
89A00034	F	10	-7	66	0	1	0	27	2	4	0	8.2	16.0
89A00059	F	10	-7	72	0	2	0	20	3	3	0	8.0	18.3
89A00067	F	10	-7	78	0	3	0	11	3	5	0	9.8	20.6
Mean				69.2	0.0	1.8	0.0	23.3	2.8	2.8	0.3	8.72	16.23
Std Dev				9.6	0.0	0.8	0.0	10.6	0.8	1.7	0.8	0.97	2.70

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	SEG	BAN	EOS	BAS	LYM	MON	ATL	NRBC	PT	APPT
89A000012	M	1	-7	69	0	0	0	25	6	0	0	6.5	16.0
89A000042	M	1	-7	55	0	6	0	37	2	0	0	10.5	14.8
89A000058	M	1	-7	73	0	1	0	24	1	1	0	9.3	15.0
89A000022	F	1	-7	73	0	1	0	20	4	2	0	8.4	13.0
89A000038	F	1	-7	76	0	2	0	18	2	2	0	8.5	15.2
89A000072	F	1	-7	79	0	2	0	18	0	1	0	8.8	19.3
Mean				70.8	0.0	2.0	0.0	23.7	2.5	1.0	0.0	8.67	15.55
Std Dev				8.4	0.0	2.1	0.0	7.2	2.2	0.9	0.0	1.31	2.09
89A000003	M	2	-7	56	0	7	0	24	7	6	1	7.8	16.0
89A000009	M	2	-7	66	0	5	0	22	2	5	1	7.5	16.8
89A000047	M	2	-7	67	0	1	0	25	6	1	0	9.0	13.8
89A000031	F	2	-7	61	0	1	0	33	4	1	1	7.8	16.0
89A000063	F	2	-7	71	0	3	0	21	5	0	0	7.3	15.0
89A000066	F	2	-7	66	0	2	0	25	4	3	0	9.3	16.5
Mean				64.5	0.0	3.2	0.0	25.0	4.7	2.7	0.5	8.12	15.68
Std Dev				5.2	0.0	2.4	0.0	4.2	1.8	2.4	0.5	0.83	1.11
89A000002	M	3	-7	68	1	2	0	28	1	0	0	8.0	15.5
89A000045	M	3	-7	63	0	6	0	23	3	5	2	8.8	14.8
89A000052	M	3	-7	75	0	2	0	16	6	1	0	12.6	17.6
89A000025	F	3	-7	60	0	2	0	37	1	0	0	8.2	14.3
89A000033	F	3	-7	61	1	1	0	31	3	3	0	7.2	15.6
89A000064	F	3	-7	79	0	1	0	16	2	2	1	7.8	14.5
Mean				67.7	0.3	2.3	0.0	25.2	2.7	1.8	0.5	8.77	15.55
Std Dev				7.8	0.5	1.9	0.0	8.4	1.9	1.9	0.8	1.95	1.29

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	SEG	BAN	EOS	BAS	LYM	MON	ATL	NRBC	PT	APPT
89A000018	M	4	-7	55	0	3	0	38	3	1	0	6.0	20.6
89A000048	M	4	-7	68	0	2	0	25	3	2	0	8.8	15.7
89A000056	M	4	-7	57	1	9	0	29	2	2	0	10.0	17.2
89A000020	F	4	-7	68	0	5	0	23	4	0	0	7.4	16.2
89A000039	F	4	-7	74	0	5	0	20	1	0	0	8.2	14.8
89A000071	F	4	-7	72	0	2	1	19	4	2	0	8.8	23.3
Mean				65.7	0.2	4.3	0.2	25.7	2.8	1.2	0.0	8.20	17.97
Std Dev				7.9	0.4	2.7	0.4	7.0	1.2	1.0	0.0	1.37	3.29
89A000004	M	5	-7	55	1	1	0	37	4	2	0	12.8	23.8
89A000011	M	5	-7	76	0	3	0	19	0	2	0	6.7	16.0
89A000046	M	5	-7	46	1	4	0	47	1	1	2	8.8	14.0
89A000027	F	5	-7	88	0	0	0	7	3	2	1	7.2	13.8
89A000065	F	5	-7	72	0	2	0	25	1	0	0	7.5	16.2
89A000069	F	5	-7	73	0	2	0	23	2	0	0	8.8	22.8
Mean				68.3	0.3	2.0	0.0	26.3	1.8	1.2	0.5	8.63	17.77
Std Dev				15.2	0.5	1.4	0.0	14.0	1.5	1.0	0.8	2.21	4.41
89A000007	M	6	-7	70	0	0	0	23	4	3	0	7.8	16.2
89A000050	M	6	-7	76	0	0	0	18	5	1	1	8.7	14.2
89A000051	M	6	-7	66	0	6	0	24	3	1	0	10.3	16.0
89A000029	F	6	-7	66	0	2	0	31	1	0	0	8.8	15.2
89A000041	F	6	-7	75	0	2	0	22	0	1	0	7.5	14.5
89A000061	F	6	-7	75	0	1	0	18	6	0	0	7.5	15.6
Mean				71.3	0.0	1.8	0.0	22.7	3.2	1.0	0.2	8.43	15.28
Std Dev				4.6	0.0	2.2	0.0	4.8	2.3	1.1	0.4	1.08	0.81

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	SEG	BAN	EOS	BAS	LYM	MON	ATL	NRBC	PT	APPT
89A000019	M	7	-7	56	0	9	0	28	7	0	0	6.8	18.0
89A000043	M	7	-7	61	0	4	0	32	3	0	0	10.0	14.2
89A000054	M	7	-7	70	0	4	0	24	0	2	0	10.5	16.0
89A000030	F	7	-7	52	0	0	0	40	5	3	1	7.8	17.4
89A000035	F	7	-7	75	0	1	0	22	2	0	0	8.5	14.2
89A000070	F	7	-7	68	0	5	0	23	2	2	0	9.8	19.8
Mean				63.7	0.0	3.8	0.0	28.2	3.2	1.2	0.2	8.90	16.60
Std Dev				8.8	0.0	3.2	0.0	6.9	2.5	1.3	0.4	1.44	2.22
89A000001	M	8	-7	48	0	5	0	42	3	2	0	8.1	15.0
89A000013	M	8	-7	68	0	3	0	24	4	1	0	6.8	15.8
89A000053	M	8	-7	63	0	3	0	29	4	1	0	10.6	15.4
89A000040	F	8	-7	81	0	0	0	16	2	1	0	8.0	17.4
89A000062	F	8	-7	67	0	1	0	25	3	4	0	7.8	13.3
89A000068	F	8	-7	80	0	0	0	17	3	0	0	9.2	20.4
Mean				67.8	0.0	2.0	0.0	25.5	3.2	1.5	0.0	8.42	16.22
Std Dev				12.2	0.0	2.0	0.0	9.5	0.8	1.4	0.0	1.32	2.44
89A000005	M	9	-7	57	0	2	0	37	2	2	0	7.7	15.2
89A000049	M	9	-7	68	0	3	0	28	1	0	0	8.8	15.3
89A000055	M	9	-7	56	0	1	0	31	8	4	0	10.4	12.0
89A000026	F	9	-7	69	0	0	0	28	2	1	0	7.5	14.8
89A000037	F	9	-7	67	1	0	0	25	4	3	0	7.8	13.2
89A000060	F	9	-7	82	0	1	0	10	4	3	0	8.0	15.3
Mean				66.5	0.2	1.2	0.0	26.5	3.5	2.2	0.0	8.37	14.30
Std Dev				9.5	0.4	1.2	0.0	9.0	2.5	1.5	0.0	1.09	1.38

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	WBC	RBC	HGB	HCT	MCV	MCH	MCHC	PLT	RET
89A00006	M	10	0	5.9	7.08	15.9	46.9	66.2	22.5	33.9	327	1.0
89A00044	M	10	0	14.4	6.78	15.7	47.7	70.3	23.2	32.9	323	1.4
89A00057	M	10	0	6.6	7.46	17.2	51.0	68.4	23.1	33.7	233	0.5
89A00034	F	10	0	14.2	7.12	16.5	47.1	66.2	23.2	35.0	406	1.0
89A00059	F	10	0	11.2	6.83	15.1	45.2	66.2	22.1	33.4	259	0.5
89A00067	F	10	0	10.3	7.56	17.8	51.9	68.6	23.5	34.3	334	1.3
Mean				10.43	7.138	16.37	48.30	67.65	22.93	33.87	313.7	0.95
Std Dev				3.63	0.319	1.00	2.59	1.72	0.52	0.73	61.2	0.38

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	WBC	RBC	HGB	HCT	MCV	MCH	MCHC	PLT	RET
89A00012	M	1	0	10.5	7.56	16.5	49.4	65.4	21.8	33.4	240	1.3
89A00042	M	1	0	11.8	6.55	14.9	44.7	68.2	22.7	33.3	285	2.1
89A00058	M	1	0	7.1	6.64	15.2	44.2	66.6	22.9	34.4	309	0.5
89A00022	F	1	0	8.7	7.66	16.8	50.2	65.6	21.9	33.5	345	1.0
89A00038	F	1	0	15.4	5.95	14.9	43.2	72.6	25.0	34.5	549	0.5
89A00072	F	1	0	12.0	7.52	16.9	49.6	65.9	22.5	34.1	400	1.0
Mean				10.92	6.980	15.87	46.88	67.38	22.80	33.87	354.7	1.07
Std Dev				2.89	0.700	0.96	3.17	2.75	1.16	0.53	109.5	0.60
89A00003	M	2	0	9.0	7.43	16.7	50.3	67.7	22.5	33.2	287	2.3
89A00009	M	2	0	16.9	6.06	14.5	42.5	70.1	23.9	34.1	364	1.2
89A00047	M	2	0	8.1	7.64	17.0	49.8	65.2	22.3	34.1	335	1.5
89A00031	F	2	0	11.8	7.03	16.2	47.9	68.1	23.0	33.8	347	0.5
89A00063	F	2	0	12.2	7.38	15.8	47.0	63.7	21.4	33.6	407	0.5
89A00066	F	2	0	10.9	7.36	17.0	49.5	67.3	23.1	34.3	508	1.9
Mean				11.48	7.150	16.20	47.83	67.02	22.70	33.85	374.7	1.15
Std Dev				3.10	0.569	0.96	2.89	2.26	0.85	0.40	76.1	0.69
89A00002	M	3	0	11.7	7.13	16.5	49.8	69.9	23.1	33.1	427	2.0
89A00045	M	3	0	11.3	7.12	16.4	48.6	68.2	23.0	33.7	439	1.3
89A00052	M	3	0	11.5	7.22	16.8	49.5	68.5	23.3	33.9	416	2.9
89A00025	F	3	0	9.0	7.59	17.5	52.1	68.7	23.1	33.6	413	1.7
89A00033	F	3	0	10.9	7.33	16.8	48.9	66.7	22.9	34.4	371	0.5
89A00064	F	3	0	13.8	7.62	17.0	51.0	66.9	22.3	33.3	376	0.5
Mean				11.37	7.335	16.83	49.98	68.15	22.95	33.67	407.0	1.48
Std Dev				1.54	0.223	0.39	1.33	1.20	0.34	0.46	77.6	0.93

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	WBC	RBC	HGB	HCT	MCV	MCH	MCHC	PLT	RET
89A00018	M	4	0	9.1	6.41	15.7	44.9	70.1	24.5	35.0	376	1.4
89A00048	M	4	0	12.4	7.48	16.3	48.9	65.4	21.8	33.3	397	1.7
89A00056	M	4	0	9.1	6.56	14.5	42.8	65.3	22.1	33.9	423	2.3
89A00020	F	4	0	8.3	6.73	14.5	43.9	65.2	21.5	33.0	367	2.1
89A00039	F	4	0	10.1	7.22	16.3	47.3	65.5	22.6	34.5	391	0.7
89A00071	F	4	0	14.5	6.61	14.5	44.1	66.7	21.9	32.9	306	1.0
Mean				10.58	6.835	15.30	45.32	66.37	22.40	33.77	376.7	1.53
Std Dev				2.39	0.420	0.90	2.31	1.91	1.09	0.85	39.6	0.62
89A00004	M	5	0	8.7	6.86	16.8	48.8	71.1	24.5	34.4	261	1.1
89A00011	M	5	0	9.3	6.45	14.6	43.3	67.1	22.6	33.7	288	1.1
89A00046	M	5	0	9.5	6.88	15.4	46.0	66.8	22.4	33.5	366	1.6
89A00027	F	5	0	11.5	7.18	17.3	51.5	71.7	24.1	33.6	317	1.6
89A00065	F	5	0	15.6	7.16	16.6	48.7	68.0	23.2	34.1	353	0.5
89A00069	F	5	0	9.1	7.45	16.5	48.4	64.9	22.1	34.1	350	1.9
Mean				10.62	6.997	16.20	47.78	68.27	23.15	33.90	322.5	1.30
Std Dev				2.63	0.346	1.00	2.81	2.64	0.97	0.35	41.4	0.50
89A00007	M	6	0	7.2	7.22	15.9	47.4	65.7	22.0	33.5	463	1.5
89A00050	M	6	0	11.1	7.28	17.5	51.0	70.0	24.0	34.3	299	2.4
89A00051	M	6	0	11.3	7.10	16.2	47.9	67.5	22.8	33.8	351	0.8
89A00029	F	6	0	12.7	6.44	14.5	43.9	68.1	22.5	33.0	417	1.3
89A00041	F	6	0	8.9	7.38	16.6	48.6	65.9	22.5	34.2	357	0.8
89A00061	F	6	0	11.3	7.35	16.8	50.3	68.5	22.9	33.4	292	0.5
Mean				10.42	7.128	16.25	48.18	67.62	22.78	33.70	363.2	1.22
Std Dev				1.99	0.352	1.02	2.52	1.63	0.67	0.50	66.7	0.69

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	WBC	RBC	HGB	HCT	MCV	MCH	MCHC	PLT	RET
89A000019	M	7	0	12.1	7.15	16.2	48.5	67.8	22.7	33.4	186	2.3
89A000043	M	7	0	7.0	6.88	15.9	47.3	68.7	23.1	33.6	380	0.7
89A000054	M	7	0	12.7	6.89	14.5	43.5	63.2	21.0	33.3	346	1.2
89A000030	F	7	0	10.4	7.79	17.1	51.6	66.3	22.0	33.1	356	2.5
89A000035	F	7	0	8.8	6.99	16.8	49.8	71.2	24.0	33.7	338	2.5
89A000070	F	7	0	13.4	6.88	15.8	47.1	68.5	23.0	33.5	370	0.6
Mean				10.73	7.097	16.05	47.97	67.62	22.63	33.43	329.3	1.63
Std Dev				2.48	0.355	0.91	2.76	2.69	1.03	0.22	71.9	0.90
89A000001	M	8	0	7.6	7.29	16.0	47.5	65.2	21.9	33.7	274	0.6
89A000013	M	8	0	11.7	7.71	17.2	52.0	67.4	22.3	33.1	282	1.9
89A000053	M	8	0	9.9	6.51	15.1	44.1	67.7	23.2	34.2	474	0.6
89A000040	F	8	0	11.8	5.77	13.6	39.0	67.6	23.6	34.9	493	0.5
89A000062	F	8	0	18.2	7.42	17.0	49.5	66.7	22.9	34.3	353	1.5
89A000068	F	8	0	9.7	6.91	15.9	45.7	66.2	23.0	34.8	321	0.6
Mean				11.48	6.935	15.80	46.30	66.80	22.82	34.17	366.2	0.95
Std Dev				3.63	0.707	1.33	4.53	0.97	0.62	0.68	95.4	0.60
89A000005	M	9	0	11.5	6.99	16.2	47.7	68.2	23.2	34.0	276	0.8
89A000049	M	9	0	12.3	6.52	15.2	45.9	70.4	23.3	33.1	450	1.1
89A000055	M	9	0	16.2	7.26	16.8	49.1	67.6	23.1	34.2	293	0.8
89A000026	F	9	0	6.8	7.55	15.9	49.2	65.1	21.1	32.3	387	0.9
89A000037	F	9	0	12.3	6.34	15.6	45.0	71.0	24.6	34.7	593	0.6
89A000060	F	9	0	9.8	7.10	16.6	49.9	70.3	23.4	33.3	241	0.8
Mean				11.48	6.960	16.05	47.80	68.77	23.12	33.60	373.3	0.83
Std Dev				3.11	0.455	0.61	1.98	2.24	1.13	0.87	132.5	0.16

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	SEG	BAN	EOS	BAS	LYM	MON	ATL	NRBC	Pt	APPT
89A00006	M	10	0	69	0	3	0	26	1	1	1	6.2	14.0
89A00044	M	10	0	77	0	2	0	11	7	3	0	8.7	14.8
89A00057	M	10	0	74	0	6	0	16	3	1	0	8.4	15.8
89A00034	F	10	0	76	0	0	0	21	3	0	2	6.7	14.8
89A00059	F	10	0	70	0	0	0	30	0	0	0	8.6	16.2
89A00067	F	10	0	72	1	3	0	17	3	4	0	9.8	13.5
Mean				73.0	0.2	2.3	0.0	20.2	2.8	1.5	0.5	8.07	14.85
Std Dev				3.2	0.4	2.3	0.0	7.0	2.4	1.6	0.8	1.35	1.03

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	SEG	BAN	EOS	BAS	LYM	MON	ATL	NRBC	PT	APPT
89A000012	M	1	0	61	0	2	0	31	4	2	0	8.7	12.6
89A000042	M	1	0	69	0	2	0	22	1	6	0	9.6	16.9
89A000058	M	1	0	76	0	0	0	22	2	0	0	8.2	14.8
89A000022	F	1	0	74	0	0	0	24	2	0	0	1.2	1.8
89A000038	F	1	0	72	0	1	0	25	1	1	0	6.8	18.8
89A000072	F	1	0	67	0	1	0	31	1	0	1	9.0	12.8
Mean				69.8	0.0	1.0	0.0	25.8	1.8	1.5	0.2	7.25	12.95
Std Dev				5.4	0.0	0.9	0.0	4.2	1.2	2.3	0.4	3.11	5.96
89A000003	M	2	0	68	0	4	0	21	5	2	1	7.0	15.1
89A000009	M	2	0	71	0	1	0	24	4	0	0	8.2	16.5
89A000047	M	2	0	58	0	0	0	39	1	2	0	9.4	15.2
89A000031	F	2	0	63	0	9	0	27	1	0	0	7.2	19.8
89A000063	F	2	0	78	0	1	0	21	0	0	0	8.0	15.4
89A000066	F	2	0	76	0	0	0	19	3	2	0	9.0	15.6
Mean				69.0	0.0	2.5	0.0	25.2	2.3	1.0	0.2	8.13	16.27
Std Dev				7.6	0.0	3.5	0.0	7.3	2.0	1.1	0.4	0.95	1.80
89A000002	M	3	0	69	1	3	0	21	2	4	1	6.8	16.6
89A000045	M	3	0	69	0	0	0	27	4	0	0	8.8	16.8
89A000052	M	3	0	64	1	1	0	30	4	0	2	9.2	14.7
89A000025	F	3	0	62	0	1	0	28	5	4	0	7.2	14.2
89A000033	F	3	0	67	1	1	0	28	3	0	0	6.8	14.8
89A000064	F	3	0	57	0	2	0	32	3	6	3	9.2	15.7
Mean				64.7	0.5	1.3	0.0	27.7	3.5	2.3	1.0	8.00	15.47
Std Dev				4.7	0.5	1.0	0.0	3.7	1.0	2.7	1.3	1.19	1.07

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	WBC	HGB	EOS	BAS	LYM	MON	ATL	NRBC	PT	APPT
89A00018	M	4	0	66	1	1	0	27	4	1	0	7.9	20.5
89A00048	M	4	0	64	0	1	0	31	2	2	0	9.5	16.2
89A00056	M	4	0	62	1	6	0	28	2	1	0	8.8	19.0
89A00020	F	4	0	57	1	4	0	32	2	4	0	7.8	16.8
89A00039	F	4	0	57	0	1	0	38	4	0	0	7.2	15.2
89A00071	F	4	0	68	0	1	0	22	4	5	3	9.0	14.0
Mean				62.3	0.5	2.3	0.0	29.7	3.0	2.2	0.5	8.32	16.95
Std Dev				4.6	0.5	2.2	0.0	5.4	1.1	1.9	1.2	0.80	2.41
89A00004	M	5	0	50	0	2	0	37	4	7	0	6.2	15.4
89A00011	M	5	0	79	0	9	0	19	1	1	0	8.2	14.7
89A00046	M	5	0	56	0	6	0	35	2	1	0	8.6	16.8
89A00027	F	5	0	79	0	0	0	16	4	1	0	7.2	16.0
89A00065	F	5	0	77	0	1	0	22	0	0	0	8.0	15.5
89A00069	F	5	0	69	0	1	0	28	0	2	0	8.2	14.0
Mean				68.3	0.0	1.7	0.0	26.2	1.8	2.0	0.0	7.73	15.28
Std Dev				12.6	0.0	2.3	0.0	8.6	1.8	2.5	0.0	0.88	1.11
89A00007	M	6	0	72	0	3	0	22	3	0	0	7.2	16.6
89A00050	M	6	0	72	0	1	0	18	4	5	0	7.5	14.8
89A00051	M	6	0	70	0	7	0	21	2	0	0	8.2	14.2
89A00029	F	6	0	64	0	1	0	34	1	0	0	6.8	16.8
89A00041	F	6	0	47	0	0	0	45	6	2	0	6.7	19.4
89A00061	F	6	0	77	1	0	0	20	2	0	0	8.8	16.2
Mean				67.0	0.2	2.0	0.0	26.7	3.0	1.2	0.0	7.95	16.12
Std Dev				10.7	0.4	2.7	0.0	10.6	1.8	2.0	0.0	0.8	1.03

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	SEG	BAN	EOS	BAS	LYM	MON	ATL	NRBC	PT	APPT
89A000019	M		0	57	0	7	0	30	6	0	0	7.7	14.5
89A000043	M		0	62	1	3	0	30	3	1	0	9.8	17.6
89A000054	M		0	62	0	1	0	31	3	3	0	8.5	18.2
89A000030	F		0	62	0	1	0	35	1	1	0	7.6	15.3
89A000035	F		0	54	0	2	0	33	8	3	0	7.0	13.4
89A000070	F		0	67	0	4	0	27	2	0	0	9.3	14.3
Mean				60.7	0.2	3.0	0.0	31.0	3.8	1.3	0.0	8.52	15.55
Std Dev				4.5	0.4	2.3	0.0	2.8	2.6	1.4	0.0	1.08	1.93
89A000001	M		0	66	0	6	0	21	6	1	0	7.4	17.0
89A000013	M		0	61	0	3	0	32	4	0	0	8.2	20.2
89A000053	M		0	74	0	1	0	20	5	0	0	8.2	18.0
89A000040	F		0	75	2	0	0	21	2	0	0	7.2	16.0
89A000062	F		0	73	0	0	0	21	6	0	1	9.3	14.3
89A000068	F		0	74	0	1	0	23	2	0	0	9.3	15.3
Mean				70.5	0.3	1.8	0.0	23.0	4.2	0.2	0.2	8.27	16.63
Std Dev				5.7	0.8	2.3	0.0	4.5	1.8	0.4	0.4	0.90	2.37
89A000005	M		0	64	0	1	0	26	4	5	1	6.4	17.2
89A000049	M		0	48	0	8	0	40	3	1	0	9.0	17.3
89A000055	M		0	59	0	2	0	33	6	0	0	8.2	12.6
89A000026	F		0	56	0	3	0	40	1	0	0	7.0	16.3
89A000037	F		0	61	1	0	0	36	2	0	0	6.4	15.4
89A000060	F		0	71	0	5	0	21	3	0	0	8.6	15.0
Mean				59.8	0.2	3.2	0.0	32.7	3.2	1.0	0.2	7.60	15.63
Std Dev				7.7	0.4	2.9	0.0	7.7	1.7	2.0	0.4	1.15	1.75

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	WBC	RBC	HGB	HCT	MCV	MCH	MCHC	PLT	RET
89A00006	M	10	1	6.7	6.69	15.4	44.8	67.0	23.0	34.4	326	1.0
89A00044	M	10	1	12.8	6.44	15.3	43.9	68.2	23.8	34.9	277	0.5
89A00057	M	10	1	9.0	7.44	16.9	50.3	67.6	22.7	33.6	268	0.5
89A00034	F	10	1	19.4	7.49	17.0	50.0	66.8	22.7	34.0	423	2.5
89A00059	F	10	1	12.1	6.66	14.9	43.0	64.6	22.4	34.7	265	1.9
89A00067	F	10	1	10.4	7.56	17.7	51.7	68.4	23.4	34.2	302	1.6
Mean				11.73	7.047	16.20	47.28	67.10	23.00	34.30	310.2	1.33
Std Dev				4.35	0.502	1.14	3.79	1.38	0.52	0.47	59.9	0.81

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	WBC	RBC	HGB	HCT	MCV	MCH	MCHC	PLT	RET
89A000012	M	1	1	14.5	7.28	15.9	47.5	65.3	21.8	33.5	203	1.3
89A000042	M	1	1	10.3	6.41	14.5	43.4	67.7	22.6	33.4	269	1.0
89A000058	M	1	1	7.9	6.64	14.9	43.8	66.0	22.4	34.0	303	0.5
89A000022	F	1	1	8.8	6.88	15.4	43.9	63.8	22.4	35.1	323	0.5
89A000038	F	1	1	22.3	6.17	15.3	44.7	72.5	24.8	34.2	589	3.5
89A000072	F	1	1	11.2	7.45	16.7	49.6	66.6	22.4	33.7	351	1.0
Mean				12.50	6.805	15.45	45.48	66.98	22.73	33.98	339.7	1.30
Std Dev				5.32	0.497	0.77	2.50	3.00	1.05	0.62	132.4	1.12
89A000003	M	2	1	9.1	6.92	15.4	46.4	67.1	22.3	33.2	254	1.0
89A000009	M	2	1	15.7	6.13	14.6	43.2	70.4	23.8	33.8	378	1.0
89A000047	M	2	1	8.2	7.62	16.6	49.7	65.2	21.8	33.4	292	1.3
89A000031	F	2	1	8.9	6.71	15.6	45.4	67.7	23.2	34.4	331	0.8
89A000063	F	2	1	12.1	6.92	15.2	43.9	63.5	22.0	34.6	339	0.7
89A000066	F	2	1	10.3	7.10	16.2	48.2	67.9	22.8	33.6	450	0.5
Mean				10.72	6.900	15.60	46.13	66.97	22.65	33.83	340.7	0.88
Std Dev				2.80	0.487	0.72	2.50	2.38	0.76	0.56	68.3	0.28
89A000002	M	3	1	9.5	6.79	15.4	46.8	68.9	22.7	32.9	342	1.1
89A000045	M	3	1	8.7	7.10	16.3	48.0	67.6	23.0	34.0	345	2.0
89A000052	M	3	1	11.2	5.60	12.9	38.0	67.8	23.0	33.9	299	1.2
89A000025	F	3	1	7.8	6.71	15.8	45.2	67.4	23.5	35.0	373	0.7
89A000033	F	3	1	11.1	6.81	15.5	46.1	67.7	22.8	33.6	293	1.2
89A000064	F	3	1	14.6	7.06	16.0	46.7	66.2	22.7	34.3	335	0.9
Mean				10.48	6.678	15.32	45.13	67.60	22.95	33.95	331.2	1.18
Std Dev				2.42	0.551	1.23	3.61	0.86	0.30	0.70	30.2	0.44

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	WBC	RBC	HGB	HCT	MCV	MCH	MCHC	PLT	RET
89A000018	M	4	1	12.0	6.40	15.5	45.5	71.1	24.2	34.1	391	1.2
89A000048	M	4	1	10.5	6.89	15.5	44.7	64.9	22.5	34.7	416	0.6
89A000056	M	4	1	10.6	6.26	13.9	40.4	64.6	22.2	34.4	462	1.8
89A000020	F	4	1	13.7	5.92	13.2	38.5	65.0	22.3	34.3	438	1.2
89A000039	F	4	1	10.4	7.32	16.4	48.2	65.8	22.4	34.0	376	1.6
89A000071	F	4	1	12.9	6.56	14.9	43.8	66.7	22.7	34.0	318	1.0
Mean				11.68	6.558	14.90	43.52	66.35	22.72	34.25	400.2	1.23
Std Dev				1.40	0.492	1.17	3.53	2.45	0.75	0.27	50.8	0.43
89A000004	M	5	1	8.7	6.79	16.6	47.3	69.7	24.4	35.1	247	0.5
89A000011	M	5	1	10.4	7.12	16.3	47.8	67.1	22.9	34.1	286	1.4
89A000046	M	5	1	19.0	6.81	15.3	45.5	66.8	22.5	33.6	353	0.6
89A000027	F	5	1	8.8	7.22	17.6	50.8	70.4	24.4	34.6	287	1.0
89A000065	F	5	1	13.9	6.79	15.4	46.4	68.4	22.7	33.2	395	0.5
89A000069	F	5	1	9.3	7.51	17.0	49.6	66.0	22.6	34.3	322	2.2
Mean				11.68	7.040	16.37	47.90	68.07	23.25	34.15	315.0	1.03
Std Dev				4.07	0.296	0.90	1.98	1.73	0.90	0.68	53.2	0.67
89A000007	M	6	1	7.3	6.52	14.3	42.6	65.3	21.9	33.6	427	1.0
89A000050	M	6	1	10.7	6.62	15.9	45.8	69.2	24.0	34.7	317	1.4
89A000051	M	6	1	13.3	7.04	16.2	47.7	67.8	23.0	34.0	321	1.0
89A000029	F	6	1	9.9	6.26	14.3	42.3	67.6	22.8	33.8	391	1.4
89A000041	F	6	1	9.1	7.02	16.3	46.8	66.6	23.2	34.8	346	0.8
89A000061	F	6	1	7.8	7.32	17.0	50.4	66.9	23.2	33.7	303	1.0
Mean				9.68	6.797	15.67	45.93	67.57	23.02	34.10	350.8	1.10

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	WBC	RBC	HGB	HCT	MCV	MCH	MCHC	PLT	RET
89A000019	M	7	1	15.5	7.06	15.9	48.1	68.1	22.5	33.1	178	2.4
89A000043	M	7	1	14.3	5.96	14.1	41.7	70.0	23.7	33.8	389	0.7
89A000054	M	7	1	12.3	6.37	13.4	39.0	61.3	21.0	34.4	288	0.5
89A000030	F	7	1	8.1	7.26	16.6	47.3	65.1	22.9	35.1	324	1.4
89A000035	F	7	1	8.8	5.96	14.4	41.9	70.3	24.2	34.4	294	1.6
89A000070	F	7	1	14.5	6.66	15.7	45.7	68.6	23.6	34.4	338	0.5
Mean				12.25	6.545	15.02	43.95	67.23	22.98	34.20	301.8	1.18
Std Dev				3.13	0.549	1.23	3.61	3.45	1.14	0.68	70.7	0.76
89A000001	M	8	1	6.1	7.30	15.9	47.4	64.9	21.8	33.5	251	0.5
89A000013	M	8	1	14.7	7.38	16.4	49.6	67.2	22.2	33.1	287	1.1
89A000053	M	8	1	10.4	6.06	13.6	40.7	67.2	22.4	33.4	464	0.5
89A000040	F	8	1	12.1	5.80	13.2	39.6	68.2	22.8	33.3	439	1.0
89A000062	F	8	1	12.0	6.96	15.8	46.6	66.9	22.7	33.9	308	1.0
89A000068	F	8	1	9.8	6.83	15.3	45.8	67.1	22.4	33.4	318	0.5
Mean				10.85	6.722	15.03	44.95	66.92	22.38	33.43	344.5	0.77
Std Dev				2.88	0.652	1.32	3.94	1.09	0.36	0.27	86.4	0.29
89A000005	M	9	1	10.0	6.69	15.5	44.9	67.1	23.2	34.5	229	1.6
89A000049	M	9	1	7.0	7.15	16.4	49.0	68.6	22.9	33.5	350	0.5
89A000055	M	9	1	12.7	6.87	15.9	46.0	67.0	23.1	34.6	246	0.8
89A000026	F	9	1	7.2	6.75	14.2	43.2	64.0	21.0	32.9	310	0.5
89A000037	F	9	1	11.6	6.27	14.9	44.3	70.7	23.8	33.6	581	1.5
89A000060	F	9	1	8.7	6.69	16.2	46.4	69.3	24.2	34.9	404	0.5
Mean				9.53	6.737	15.52	45.63	67.78	23.03	34.00	353.3	0.90
Std Dev				2.33	0.287	0.84	2.01	2.32	1.11	0.78	129.0	0.52

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	SEG	BAN	EOS	BAS	LYM	MON	ATL	NRBC	Pt	APPT
89A00006	M	10	1	64	0	2	0	28	6	0	0	6.7	14.5
89A00044	M	10	1	58	0	3	0	35	2	2	0	8.5	14.4
89A00057	M	10	1	74	0	1	0	22	2	1	0	8.0	16.0
89A00034	F	10	1	79	0	0	0	16	2	3	0	9.8	14.2
89A00059	F	10	1	49	0	3	0	46	2	0	0	9.2	15.5
89A00067	F	10	1	77	0	5	0	16	1	1	0	6.8	17.8
Mean				66.8	0.0	2.3	0.0	27.2	2.5	1.2	0.0	8.17	15.40
Std Dev				11.9	0.0	1.8	0.0	11.8	1.8	1.2	0.0	1.26	1.37

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	SEG	BAN	EOS	BAS	LYM	MON	ATL	NRBC	PT	APPT
89A000012	M	1	1	63	0	1	0	32	3	1	0	7.0	15.0
89A000042	M	1	1	66	0	2	0	28	4	0	0	8.5	14.5
89A000058	M	1	1	73	0	0	0	26	1	0	0	8.6	15.5
89A000022	F	1	1	70	0	5	0	23	1	1	0	6.8	16.4
89A000038	F	1	1	79	0	1	0	14	5	1	0	10.0	14.2
89A000072	F	1	1	71	0	1	0	25	3	0	0	7.2	15.6
Mean				70.3	0.0	1.7	0.0	24.7	2.8	0.5	0.0	8.02	15.20
Std Dev				5.6	0.0	1.8	0.0	6.1	1.6	0.5	0.0	1.24	0.80
89A000003	M	2	1	65	0	3	0	31	0	1	0	7.7	19.8
89A000009	M	2	1	73	0	0	0	23	2	2	0	6.8	16.5
89A000047	M	2	1	64	0	0	0	29	3	4	0	9.0	15.6
89A000031	F	2	1	61	0	6	0	29	4	0	0	7.5	17.0
89A000063	F	2	1	71	0	4	0	25	0	0	0	8.8	17.5
89A000066	F	2	1	77	0	1	0	20	2	0	0	7.0	17.0
Mean				68.5	0.0	2.3	0.0	26.2	1.8	1.2	0.0	7.80	17.23
Std Dev				6.1	0.0	2.4	0.0	4.2	1.6	1.6	0.0	0.91	1.41
89A000002	M	3	1	70	1	6	0	18	4	2	0	8.0	19.0
89A000045	M	3	1	77	0	2	0	17	4	0	0	8.2	15.9
89A000052	M	3	1	76	0	6	0	16	2	0	0	10.0	14.8
89A000025	F	3	1	71	0	1	0	24	3	1	0	7.0	16.4
89A000033	F	3	1	65	0	0	0	22	11	2	0	9.7	13.4
89A000064	F	3	1	61	0	0	0	26	9	4	0	9.2	17.0
Mean				70.0	0.2	2.5	0.0	20.5	5.5	1.5	0.0	8.68	16.08
Std Dev				6.2	0.4	2.8	0.0	4.1	3.6	1.5	0.0	1.15	1.91

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	SEG	BAN	EOS	BAS	LYM	MON	ATL	NRBC	PT	APPT
89A000018	M	4	1	41	0	3	0	47	6	3	2	6.2	15.0
89A000048	M	4	1	68	0	1	0	27	2	2	0	8.2	14.7
89A000056	M	4	1	61	0	5	0	32	2	0	0	8.2	17.8
89A000020	F	4	1	58	0	1	0	40	1	0	0	8.0	15.8
89A000039	F	4	1	55	0	2	0	37	4	2	0	10.4	14.8
89A000071	F	4	1	68	0	2	0	24	4	2	0	7.2	16.7
Mean				58.5	0.0	2.3	0.0	34.5	3.2	1.5	0.3	8.03	15.80
Std Dev				10.1	0.0	1.5	0.0	8.5	1.8	1.2	0.8	1.39	1.24
89A000004	M	5	1	68	0	1	0	29	1	1	0	8.0	18.4
89A000011	M	5	1	75	0	0	0	22	2	1	1	7.0	14.0
89A000046	M	5	1	66	0	4	0	28	2	0	0	6.6	13.2
89A000027	F	5	1	74	0	0	0	15	8	3	2	6.2	14.5
89A000065	F	5	1	52	0	1	0	44	1	2	0	8.2	16.2
89A000069	F	5	1	61	0	2	0	30	5	2	0	6.8	16.0
Mean				66.0	0.0	1.3	0.0	28.0	3.2	1.5	0.5	7.13	15.38
Std Dev				8.6	0.0	1.5	0.0	9.7	2.8	1.0	0.8	0.80	1.88
89A000007	M	6	1	74	0	1	0	21	3	1	0	7.0	16.0
89A000050	M	6	1	79	0	1	0	16	2	2	0	5.4	12.8
89A000051	M	6	1	82	0	4	0	12	1	1	0	9.2	13.6
89A000029	F	6	1	67	0	0	0	30	3	0	0	6.8	20.0
89A000041	F	6	1	68	0	1	0	25	4	2	0	9.4	13.2
89A000061	F	6	1	72	0	3	0	17	4	4	0	9.6	15.8
Mean				73.7	0.0	1.7	0.0	20.2	2.8	1.7	0.0	7.90	15.23
Std Dev				6.0	0.0	1.5	0.0	6.6	1.2	1.4	0.0	1.74	2.70

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	SEG	BAN	EOS	BAS	LYM	MON	A ^W L	NRBC	P ^T	APPT
89A000019	M	7	1	66	0	3	0	27	4	0	0	7.0	14.2
89A000043	M	7	1	68	0	5	0	23	4	0	0	8.0	17.8
89A000054	M	7	1	76	0	3	0	20	1	0	0	8.8	16.7
89A000030	F	7	1	64	0	2	0	32	2	0	0	7.0	17.2
89A000035	F	7	1	71	0	4	0	22	2	1	0	9.8	13.0
89A000070	F	7	1	59	0	2	0	35	4	0	0	7.8	16.7
Mean				67.3	0.0	3.2	0.0	26.5	2.8	0.2	0.0	8.07	15.93
Std Dev				5.9	0.0	1.2	0.0	6.0	1.3	0.4	0.0	1.09	1.89
89A000001	M	8	1	48	0	8	0	37	4	3	0	8.0	20.7
89A000013	M	8	1	59	0	1	0	32	3	5	0	7.5	14.8
89A000053	M	8	1	71	0	3	0	24	2	0	0	9.0	17.2
89A000040	F	8	1	70	0	0	0	26	2	2	0	10.0	13.2
89A000062	F	8	1	75	0	0	0	18	7	0	0	8.8	15.5
89A000068	F	8	1	76	0	0	0	23	1	0	0	7.7	16.5
Mean				66.5	0.0	2.0	0.0	26.7	3.2	1.7	0.0	8.50	16.32
Std Dev				10.9	0.0	3.2	0.0	6.8	2.1	2.1	0.0	0.95	2.56
89A000005	M	9	1	56	0	4	0	37	2	1	0	7.0	21.7
89A000049	M	9	1	71	0	0	0	21	3	5	0	8.8	18.6
89A000055	M	9	1	66	0	4	0	26	3	1	0	8.5	13.0
89A000026	F	9	1	60	0	2	0	36	2	0	2	7.0	18.0
89A000037	F	9	1	70	0	1	0	23	2	4	0	9.8	14.7
89A000060	F	9	1	86	1	1	0	8	3	1	0	9.8	15.4
Mean				68.2	0.2	2.0	0.0	25.2	2.5	2.0	0.3	8.48	16.90
Std Dev				10.5	0.4	1.7	0.0	10.7	0.5	2.0	0.8	1.26	3.14

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	WBC	RBC	HGB	HCT	MCV	MCH	MCHC	PLT	RET
89A00006	M	10	2	8.0	6.86	15.7	46.3	67.5	22.9	33.9	411	1.8
89A00044	M	10	2	16.4	6.41	14.9	44.2	69.0	23.2	33.7	278	0.8
89A00057	M	10	2	8.2	7.29	16.9	49.1	67.3	23.2	34.4	246	0.2
89A00034	F	10	2	18.5	7.13	16.4	48.3	67.8	23.0	34.0	380	1.0
89A00059	F	10	2	14.1	6.76	15.0	44.8	66.2	22.2	33.5	257	1.0
89A00067	F	10	2	9.8	7.66	17.5	52.2	68.1	22.8	33.5	325	0.7
Mean				12.50	7.018	16.07	47.48	67.65	22.88	33.83	316.2	0.92
Std Dev				4.47	0.438	1.05	3.00	0.93	0.37	0.34	67.9	0.52

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	WBC	RBC	HGB	HCT	MCV	MCH	MCHC	PLT	RET
89A00012	M	1	2	12.3	7.03	15.5	46.2	65.7	22.0	33.5	190	1.6
89A00042	M	1	2	11.6	6.85	15.4	46.9	68.5	22.5	32.8	270	0.8
89A00058	M	1	2	11.1	6.54	15.4	43.6	66.7	23.5	35.3	285	0.4
89A00022	F	1	2	8.6	7.00	15.7	45.5	65.0	22.4	34.5	183	1.5
89A00038	F	1	2	24.1	5.72	14.4	41.7	72.9	25.2	34.5	492	2.1
89A00072	F	1	2	11.3	6.98	15.8	45.9	65.8	22.6	34.4	322	1.4
Mean				13.17	6.687	15.37	44.97	67.43	23.03	34.17	290.3	1.30
Std Dev				5.50	0.507	0.50	1.95	2.94	1.17	0.88	112.9	0.61
89A00003	M	2	2	10.0	6.93	15.8	46.6	67.3	22.8	33.9	223	1.2
89A00009	M	2	2	10.7	5.84	13.9	41.5	71.0	23.8	33.5	324	1.3
89A00047	M	2	2	7.2	7.20	15.5	46.7	64.9	21.5	33.2	273	0.8
89A00031	F	2	2	9.0	6.65	15.1	45.4	68.3	22.7	33.3	289	0.8
89A00063	F	2	2	13.3	7.02	15.5	45.2	64.4	22.1	34.3	316	0.3
89A00066	F	2	2	9.5	6.88	15.8	46.7	67.9	23.0	33.8	413	1.7
Mean				9.95	6.753	15.27	45.35	67.30	22.65	33.67	306.3	1.02
Std Dev				2.02	0.482	0.72	2.00	2.42	0.79	0.41	63.5	0.49
89A00002	M	3	2	9.8	6.82	15.5	47.3	69.4	22.7	32.8	320	0.5
89A00045	M	3	2	8.5	6.91	15.8	47.1	68.1	22.9	33.5	304	0.9
89A00052	M	3	2	12.0	6.52	15.4	43.7	67.0	23.6	35.2	328	0.9
89A00025	F	3	2	8.7	6.83	15.8	46.9	68.6	23.1	33.7	328	1.9
89A00033	F	3	2	10.0	6.54	15.1	44.5	68.0	23.1	33.9	321	1.0
89A00064	F	3	2	14.0	6.81	15.7	45.8	67.2	23.1	34.3	253	0.5
Mean				10.50	6.738	15.55	45.88	68.05	23.08	33.90	309.0	0.95
Std Dev				2.12	0.165	0.27	1.50	0.89	0.30	0.81	28.8	0.51

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	WBC	RBC	HGB	HCT	MCV	MCH	MCHC	PLT	RET
89A00018	M	4	2	14.6	6.34	15.3	44.8	70.7	24.1	34.2	386	2.0
89A00048	M	4	2	10.8	7.87	17.0	51.7	65.7	21.6	32.9	245	2.7
89A00056	M	4	2	10.0	6.38	14.2	41.0	64.3	22.3	34.6	424	0.6
89A00020	F	4	2	10.3	7.32	15.8	47.7	65.2	21.6	33.1	388	1.3
89A00039	F	4	2	10.4	7.42	16.7	49.5	66.7	22.5	33.7	394	1.1
89A00071	F	4	2	14.3	7.03	15.7	47.0	66.8	22.3	33.4	343	0.5
Mean				11.73	7.060	15.78	46.95	66.57	22.40	33.65	363.3	1.37
Std Dev				2.12	0.606	1.01	3.73	2.23	0.92	0.65	63.5	0.85
89A00004	M	5	2	10.9	7.03	16.9	50.0	71.1	24.0	33.8	242	1.2
89A00011	M	5	2	10.2	6.86	15.6	46.0	67.0	22.7	33.9	292	2.4
89A00046	M	5	2	14.3	6.75	15.0	44.6	66.0	22.2	33.6	326	0.9
89A00027	F	5	2	9.4	7.02	17.0	49.9	71.1	24.2	34.1	277	1.0
89A00065	F	5	2	14.3	6.98	16.0	47.5	68.1	22.9	33.7	355	1.6
89A00069	F	5	2	9.3	7.13	15.9	46.8	65.6	22.3	34.0	318	0.5
Mean				11.40	6.962	16.07	47.47	68.15	23.05	33.85	301.7	1.27
Std Dev				2.32	0.136	0.77	2.15	2.44	0.85	0.19	39.9	0.66
89A00007	M	6	2	8.7	6.68	14.9	44.2	66.2	22.3	33.7	422	1.6
89A00050	M	6	2	11.5	7.02	16.6	48.9	69.6	23.6	33.9	333	1.4
89A00051	M	6	2	11.3	6.95	15.8	46.6	67.0	22.7	33.9	307	1.5
89A00029	F	6	2	13.1	6.64	15.2	45.4	68.3	22.9	33.5	350	1.0
89A00041	F	6	2	9.9	7.25	16.4	48.1	66.4	22.6	34.1	367	1.0
89A00061	F	6	2	8.9	7.30	17.2	50.0	68.5	23.6	34.4	320	0.6
Mean				10.57	6.973	16.02	47.20	67.67	22.95	33.92	349.8	1.18
Std Dev				1.70	0.277	0.88	2.20	1.34	0.54	0.31	41.3	0.38

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	WBC	RBC	HGB	HCT	MCV	MCH	MCHC	PLT	RET
89A000019	M	7	2	13.0	6.86	15.4	46.1	67.2	22.4	33.4	153	2.9
89A000043	M	7	2	11.3	5.96	13.9	41.5	69.7	23.3	33.5	354	1.0
89A000054	M	7	2	11.5	6.32	13.9	39.4	62.3	22.0	35.3	284	0.2
89A000030	F	7	2	8.9	7.35	16.3	48.2	65.6	22.2	33.8	228	2.0
89A000035	F	7	2	8.2	6.72	15.9	47.8	71.1	23.7	33.3	305	1.7
89A000070	F	7	2	12.8	6.42	14.6	43.8	68.2	22.7	33.3	322	1.1
Mean				10.95	6.605	15.00	44.47	67.35	22.72	33.77	274.3	1.48
Std Dev				1.99	0.483	1.02	3.54	3.13	0.66	0.77	72.8	0.93
89A000001	M	8	2	7.8	6.82	15.0	44.2	64.8	22.0	33.9	124	1.0
89A000013	M	8	2	15.2	7.08	15.6	47.3	66.8	22.0	33.0	269	1.7
89A000053	M	8	2	10.0	5.84	13.7	38.0	65.1	23.5	36.1	399	1.6
89A000040	F	8	2	16.0	5.73	13.3	38.8	67.7	23.2	34.3	307	1.0
89A000062	F	8	2	8.3	6.73	15.2	45.0	66.8	22.6	33.8	295	1.2
89A000068	F	8	2	11.3	6.40	14.6	42.8	66.9	22.8	34.1	266	2.1
Mean				11.43	6.433	14.57	42.68	66.35	22.68	34.20	276.7	1.43
Std Dev				3.47	0.548	0.90	3.63	1.14	0.61	1.03	89.1	0.44
89A000005	M	9	2	12.3	6.75	15.5	45.7	67.7	23.0	33.9	209	1.5
89A000049	M	9	2	6.4	6.28	14.4	43.1	68.6	22.9	33.4	294	0.5
89A000055	M	9	2	9.9	6.81	16.0	46.2	67.8	23.5	34.6	197	1.0
89A000026	F	9	2	6.4	6.51	14.0	42.2	64.8	21.5	33.2	275	0.7
89A000037	F	9	2	7.8	5.62	13.8	40.4	71.9	24.6	34.2	475	1.3
89A000060	F	9	2	9.1	6.30	14.9	44.1	70.0	23.7	33.8	324	0.5
Mean				8.65	6.378	14.77	43.62	68.47	23.20	33.85	295.7	0.92
Std Dev				2.28	0.432	0.86	2.18	2.39	1.03	0.51	100.6	0.42

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	SEG	HAN	EOS	BAS	LYM	MON	ATL	NRBC	PT	APPT
89A000006	M	10	2	65	0	5	0	26	4	0	0	1.2	15.0
89A000044	M	10	2	77	0	4	0	14	3	2	0	9.5	15.4
89A000057	M	10	2	75	0	6	0	14	1	4	0	7.5	17.8
89A000034	F	10	2	79	0	3	0	15	0	3	0	9.2	13.5
89A000059	F	10	2	55	0	3	0	34	7	1	0	68.0	18.0
89A000067	F	10	2	70	1	0	0	26	1	2	3	6.7	14.7
Mean				70.2	0.2	3.5	0.0	21.5	2.7	2.0	0.5	18.02	15.73
Std Dev				9.0	0.4	2.1	0.0	8.4	2.6	1.4	1.2	24.51	1.80

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	SEG	BAN	FOS	BAS	LYM	MON	ATL	NRBC	PT	APPT
89A000012	M	1	2	70	0	3	0	23	3	1	0	6.8	19.5
89A000042	M	1	2	68	0	2	0	21	6	3	0	9.8	15.3
89A000058	M	1	2	83	0	0	0	14	1	2	0	7.5	16.8
89A000022	F	1	2	71	0	1	0	23	5	0	1	10.0	16.5
89A000038	F	1	2	84	0	1	0	8	7	0	1	9.2	14.8
89A000072	F	1	2	69	0	7	0	22	1	1	0	7.0	15.2
Mean				74.2	0.0	2.3	0.0	18.5	3.8	1.2	0.3	8.38	16.35
Std Dev				7.3	0.0	2.5	0.0	6.2	2.6	1.2	0.5	1.45	1.73
89A000003	M	2	2	64	0	4	0	29	2	1	0	7.2	19.5
89A000009	M	2	2	71	1	5	0	15	8	0	0	7.0	18.0
89A000047	M	2	2	69	0	3	0	26	2	1	0	9.5	15.6
89A000031	F	2	2	67	0	9	0	20	3	1	0	10.2	16.2
89A000063	F	2	2	78	0	6	0	13	3	0	0	6.2	16.2
89A000066	F	2	2	74	0	0	0	25	1	0	1	7.0	15.2
Mean				70.5	0.2	4.5	0.0	21.3	3.2	0.5	0.2	7.85	16.78
Std Dev				5.0	0.4	3.0	0.0	6.4	2.5	0.5	0.4	1.60	1.64
89A000002	M	3	2	66	0	1	0	29	4	0	0	6.2	18.8
89A000045	M	3	2	72	0	4	0	22	2	0	0	9.2	17.2
89A000052	M	3	2	78	0	0	0	15	6	1	0	9.0	17.0
89A000025	F	3	2	61	0	1	0	33	2	3	1	10.4	18.7
89A000033	F	3	2	76	0	0	0	24	0	0	0	10.0	15.2
89A000064	F	3	2	81	0	1	0	17	1	0	0	7.3	18.2
Mean				72.3	0.0	1.2	0.0	23.3	2.5	0.7	0.2	8.68	17.52
Std Dev				7.6	0.0	1.5	0.0	6.9	2.2	1.2	0.4	1.6	1.36

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	SEG	BAN	EOS	BAS	LYM	MON	ATL	NRBC	PT	APPT
89A000018	M	4	2	73	0	1	0	23	2	1	1	6.2	18.2
89A000048	M	4	2	60	0	0	0	28	10	2	0	TNTC	TNTC
89A000056	M	4	2	66	0	8	0	24	2	0	0	7.6	20.8
89A000020	F	4	2	57	0	2	0	35	3	3	0	10.0	18.2
89A000039	F	4	2	59	0	1	0	39	1	0	0	8.8	14.5
89A000071	F	4	2	68	0	1	0	31	0	0	0	6.8	16.8
Mean				63.8	0.0	2.2	0.0	30.0	3.0	1.0	0.2	7.88	17.70
Std Dev				6.2	0.0	2.9	0.0	6.3	3.6	1.3	0.4	1.53	2.30
89A000004	M	5	2	47	0	0	0	49	3	1	0	7.2	17.0
89A000011	M	5	2	72	0	1	0	26	1	0	0	7.0	17.2
89A000046	M	5	2	75	0	4	0	18	3	0	1	9.0	17.3
89A000027	F	5	2	68	0	1	0	23	3	5	2	10.5	15.2
89A000065	F	5	2	73	0	4	0	20	3	0	0	6.7	17.0
89A000069	F	5	2	70	0	1	0	27	2	0	0	6.2	16.2
Mean				67.5	0.0	1.8	0.0	27.2	2.5	1.0	0.5	7.77	16.65
Std Dev				10.3	0.0	1.7	0.0	11.2	0.8	2.0	0.8	1.64	0.81
89A000007	M	6	2	67	0	1	0	28	2	2	1	7.2	16.2
89A000050	M	6	2	88	0	1	0	9	1	1	0	8.6	14.0
89A000051	M	6	2	72	0	3	0	18	5	2	2	6.3	20.0
89A000029	F	6	2	63	0	2	0	31	2	3	0	10.5	18.8
89A000041	F	6	2	65	0	0	0	30	1	3	0	8.8	14.0
89A000061	F	6	2	69	0	3	0	24	4	0	0	6.8	17.5
Mean				70.7	0.0	1.7	0.0	23.3	2.5	1.8	0.5	8.03	16.75
Std Dev				9.0	0.0	1.2	0.0	8.5	1.6	1.2	0.8	1.56	2.48

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	SEG	BAN	EOS	BAS	LYM	MON	ATL	NRBC	PT	APPT
89A000019	M	7	2	66	0	4	0	22	7	1	0	6.9	18.5
89A000043	M	7	2	76	0	6	0	14	4	0	0	9.8	17.5
89A000054	M	7	2	77	0	1	0	21	1	0	0	8.4	24.8
89A000030	F	7	2	73	0	1	0	24	2	0	0	10.0	15.0
89A000035	F	7	2	64	0	5	0	25	4	2	0	9.0	14.5
89A000070	F	7	2	67	1	3	0	27	2	0	0	7.2	16.2
Mean				70.5	0.2	3.3	0.0	22.2	3.3	0.5	0.0	8.55	17.75
Std Dev				5.5	0.4	2.1	0.0	4.5	2.2	0.8	0.0	1.30	3.76
89A000001	M	8	2	66	2	3	0	24	3	2	0	6.7	18.8
89A000013	M	8	2	58	0	2	0	34	6	0	0	7.0	20.2
89A000053	M	8	2	70	0	6	0	20	3	1	0	8.8	19.7
89A000040	F	8	2	67	1	3	0	26	3	0	0	14.0	20.7
89A000062	F	8	2	68	0	0	0	28	2	2	0	7.2	17.4
89A000068	F	8	2	75	0	0	0	25	0	0	0	7.8	21.8
Mean				67.3	0.5	2.3	0.0	26.2	2.8	0.8	0.0	8.58	19.77
Std Dev				5.6	0.8	2.3	0.0	4.7	1.9	1.0	0.0	2.76	1.53
89A000005	M	9	2	61	0	1	0	31	4	3	0	7.2	21.5
89A000049	M	9	2	88	0	0	0	10	2	0	0	10.0	16.0
89A000055	M	9	2	58	0	3	0	34	3	2	0	8.4	15.0
89A000026	F	9	2	71	0	4	0	22	2	1	0	10.0	19.2
89A000037	F	9	2	62	0	0	0	24	14	0	0	8.8	15.7
89A000060	F	9	2	72	0	1	0	22	2	3	0	7.7	16.6
Mean				68.7	0.0	1.5	0.0	23.8	4.5	1.5	0.0	8.68	17.33
Std Dev				11.0	0.0	1.6	0.0	8.4	4.7	1.4	0.0	1.16	2.50

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	WBC	RBC	HGB	HCT	MCV	MCH	MCHC	PLT	RET
89A00006	M	10	3	8.0	6.73	15.4	45.4	67.4	22.9	33.9	283	0.7
89A00044	M	10	3	16.1	5.88	14.6	40.0	68.1	24.8	36.5	264	0.7
89A00057	M	10	3	7.0	7.08	16.2	48.5	68.5	22.9	33.4	224	0.1
89A00034	F	10	3	14.2	7.23	16.6	48.5	67.1	23.0	34.2	410	1.1
89A00059	F	10	3	12.2	6.41	14.0	42.0	65.6	21.8	33.3	258	0.9
89A00067	F	10	3	10.2	7.75	18.0	53.5	69.0	23.2	33.6	351	3.9
Mean				11.28	6.847	15.80	46.32	67.62	23.10	34.15	299.2	1.23
Std Dev				3.55	0.657	1.45	4.91	1.21	0.97	1.20	68.8	1.35

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	WBC	RBC	HGB	HCT	MCV	MCH	MCHC	PLT	RET
89A000012	M	1	3	12.0	7.14	15.3	45.6	63.8	21.4	33.6	189	1.0
89A000042	M	1	3	10.3	6.66	15.7	45.1	67.7	23.6	34.8	251	0.3
89A000058	M	1	3	8.1	6.52	14.7	43.9	67.4	22.5	33.5	254	0.5
89A000022	F	1	3	10.2	7.20	15.8	47.7	66.2	21.9	33.1	233	2.0
89A000038	F	1	3	12.8	5.66	14.1	41.2	72.8	24.9	34.2	459	1.6
89A000072	F	1	3	11.1	7.26	16.6	48.6	67.0	22.9	34.2	345	1.1
Mean				10.75	6.740	15.37	45.35	67.48	22.87	33.90	288.5	1.08
Std Dev				1.64	0.610	0.88	2.67	2.96	1.26	0.61	97.8	0.64
89A000003	M	2	3	9.5	6.66	14.9	44.1	66.2	22.4	33.8	223	2.4
89A000009	M	2	3	11.8	6.28	14.6	43.2	68.8	23.2	33.8	332	0.8
89A000047	M	2	3	6.9	7.00	15.6	45.6	65.1	22.3	34.2	259	0.2
89A000031	F	2	3	9.5	6.64	15.4	44.6	67.1	23.2	34.5	293	0.7
89A000063	F	2	3	12.9	6.78	14.7	43.5	64.1	21.7	33.9	291	0.8
89A000066	F	2	3	13.9	6.86	15.6	46.9	68.3	22.7	33.3	380	0.8
Mean				10.75	6.703	15.13	44.65	66.60	22.58	33.92	296.3	0.95
Std Dev				2.59	0.246	0.45	1.39	1.82	0.58	0.41	54.9	0.75
89A000002	M	3	3	9.6	6.33	14.7	43.7	69.1	23.2	33.6	289	1.2
89A000045	M	3	3	7.1	6.47	15.3	43.4	67.1	23.6	35.3	394	0.2
89A000052	M	3	3	8.6	6.84	15.4	46.6	68.2	22.5	33.0	264	1.0
89A000025	F	3	3	7.8	6.44	15.2	43.5	67.5	23.6	34.9	301	0.8
89A000033	F	3	3	9.4	6.45	14.3	43.9	68.0	22.2	32.6	290	0.7
89A000064	F	3	3	10.3	6.72	15.5	44.8	66.6	23.1	34.6	209	0.8
Mean				8.80	6.542	15.07	44.32	67.75	23.03	34.00	291.2	0.78
Std Dev				1.20	0.195	0.47	1.23	0.88	0.58	1.09	60.3	0.34

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	WBC	RBC	HGB	HCT	MCV	MCH	MCHC	PLT	RET
89A000018	M	4	3	13.6	6.30	15.0	44.0	69.8	23.8	34.1	413	1.0
89A000048	M	4	3	11.6	7.03	15.4	44.6	63.4	21.9	34.5	409	0.4
89A000056	M	4	3	8.9	6.59	14.4	43.4	65.8	21.9	33.2	433	1.7
89A000020	F	4	3	11.5	6.88	15.1	44.8	65.1	21.9	33.7	406	1.8
89A000039	F	4	3	9.8	7.32	16.4	49.0	66.9	22.4	33.5	418	1.3
89A000071	F	4	3	12.6	6.69	15.3	45.2	67.6	22.9	33.8	301	2.3
Mean				11.33	6.802	15.27	45.17	66.43	22.47	33.80	396.7	1.42
Std Dev				1.74	0.357	0.66	1.98	2.20	0.77	0.46	47.8	0.67
89A000004	M	5	3	10.1	6.96	16.6	49.1	70.5	23.9	33.8	215	1.6
89A000011	M	5	3	13.3	6.66	14.7	44.0	66.1	22.1	33.4	286	1.2
89A000046	M	5	3	16.6	6.40	14.6	42.2	65.9	22.8	34.6	341	0.5
89A000027	F	5	3	10.2	6.98	16.9	49.4	70.8	24.2	34.2	279	1.2
89A000065	F	5	3	15.7	6.66	15.1	45.0	67.5	22.7	33.6	376	0.5
89A000069	F	5	3	9.9	7.23	16.4	47.9	66.2	22.7	34.2	310	2.1
Mean				12.63	6.815	15.72	46.27	67.83	23.07	33.97	301.2	1.18
Std Dev				3.01	0.297	1.03	2.96	2.26	0.81	0.45	55.5	0.62
89A000007	M	6	3	8.3	6.32	14.2	41.3	65.3	22.5	34.4	437	1.8
89A000050	M	6	3	10.9	7.05	17.2	48.1	68.2	24.4	35.8	346	1.5
89A000051	M	6	3	10.8	6.69	15.4	45.8	68.5	23.0	33.6	286	1.7
89A000029	F	6	3	13.6	6.30	14.3	42.1	66.8	22.7	34.0	434	1.9
89A000041	F	6	3	8.8	7.23	16.2	48.4	66.9	22.4	33.5	348	0.8
89A000061	F	6	3	11.1	7.02	16.2	47.2	67.2	23.1	34.3	272	1.0
Mean				10.58	6.768	15.58	45.48	67.15	23.02	34.27	353.8	1.45
Std Dev				1.89	0.396	1.18	3.08	1.14	0.73	0.83	70.3	0.45

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	WBC	RBC	HGB	HCT	MCV	MCH	MCHC	PLT	RET
89A00019	M	7	3	13.6	6.71	14.9	44.6	66.4	22.2	33.4	154	1.0
89A00043	M	7	3	9.6	5.60	13.7	38.4	68.6	24.5	35.7	301	0.7
89A00054	M	7	3	11.5	6.30	13.2	39.8	63.1	21.0	33.2	243	0.4
89A00030	F	7	3	15.6	6.96	15.8	45.7	65.7	22.7	34.6	303	1.3
89A00035	F	7	3	7.5	5.88	14.0	41.7	70.9	23.8	33.6	257	0.8
89A00070	F	7	3	11.5	6.08	14.4	41.8	68.7	23.7	34.4	278	1.0
Mean				11.55	6.255	14.33	42.00	67.23	22.98	34.15	256.0	0.87
Std Dev				2.86	0.511	0.92	2.77	2.74	1.27	0.94	55.3	0.31
89A00001	M	8	3	7.0	7.25	15.8	46.9	64.7	21.8	33.7	228	1.0
89A00013	M	8	3	14.5	6.87	15.3	45.8	66.6	22.3	33.4	229	0.8
89A00053	M	8	3	9.8	5.95	13.7	40.2	67.5	23.0	34.1	376	0.5
89A00040	F	8	3	15.5	5.36	12.4	36.8	68.7	23.1	33.7	361	0.8
89A00062	F	8	3	7.0	6.44	14.5	42.6	66.2	22.5	34.0	263	0.5
89A00068	F	8	3	8.2	6.30	14.5	42.5	67.4	23.0	34.1	254	0.7
Mean				10.33	6.362	14.37	42.47	66.85	22.62	33.83	285.2	0.72
Std Dev				3.77	0.668	1.21	3.69	1.36	0.51	0.28	66.2	0.19
89A00005	M	9	3	12.9	6.45	14.5	43.6	67.6	22.5	33.3	196	1.0
89A00049	M	9	3	6.9	5.93	14.0	40.1	67.7	23.6	34.9	309	0.2
89A00055	M	9	3	10.6	6.38	14.5	42.9	67.2	22.7	33.8	181	0.7
89A00026	F	9	3	6.8	6.45	13.8	41.1	63.7	21.4	33.6	261	0.7
89A00037	F	9	3	10.3	5.72	14.1	40.8	71.4	24.7	34.6	422	1.2
89A00060	F	9	3	8.0	6.32	14.9	44.3	70.1	23.6	33.6	287	1.0
Mean				9.25	6.208	14.30	42.13	67.95	23.08	33.97	276.0	0.80
Std Dev				2.42	0.308	0.40	1.70	2.66	1.14	0.63	87.4	0.35

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	SEG	BAN	EOS	BAS	LYM	MON	ATL	NRBC	PT	APPT
89A00006	M	10	3	70	0	4	0	18	6	2	0	6.7	16.8
89A00044	M	10	3	67	0	3	0	24	6	0	0	9.0	15.2
89A00057	M	10	3	65	0	1	0	33	0	1	0	9.3	18.6
89A00034	F	10	3	72	0	1	0	25	1	1	0	8.8	16.5
89A00059	F	10	3	69	0	2	0	27	1	1	0	7.6	16.5
89A00067	F	10	3	58	0	3	0	37	2	0	0	8.8	15.0
Mean				66.8	0.0	2.3	0.0	27.3	2.7	0.8	0.0	8.37	16.43
Std Dev				5.0	0.0	1.2	0.0	6.8	2.7	0.8	0.0	1.00	1.30

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	SEG	BAN	EOS	BAS	LYM	MON	ATL	NRBC	PT	APPT
89A00012	M	1	3	73	2	1	0	20	2	2	0	7.2	14.7
89A00042	M	1	3	68	0	2	0	27	3	0	0	8.2	14.2
89A00058	M	1	3	62	0	1	0	33	3	1	1	9.2	20.0
89A00022	F	1	3	65	0	2	0	29	2	2	0	9.2	14.8
89A00038	F	1	3	73	0	1	0	24	2	0	0	8.4	17.2
89A00072	F	1	3	78	0	1	0	17	4	0	0	8.5	18.0
Mean				69.8	0.3	1.3	0.0	25.0	2.7	0.8	0.2	8.45	16.48
Std Dev				5.9	0.8	0.5	0.0	5.9	0.8	1.0	0.4	0.74	2.30
89A00003	M	2	3	75	0	2	0	15	4	4	1	6.8	20.2
89A00009	M	2	3	72	2	5	0	14	3	4	0	7.0	16.8
89A00047	M	2	3	68	0	4	0	18	6	4	0	6.9	17.2
89A00031	F	2	3	60	0	7	0	21	3	1	0	10.8	16.6
89A00063	F	2	3	75	1	2	0	21	1	0	0	6.8	17.2
89A00066	F	2	3	85	1	0	0	14	0	0	0	8.7	18.8
Mean				73.8	0.7	3.3	0.0	17.2	2.8	2.2	0.2	7.83	17.80
Std Dev				6.3	0.8	2.5	0.0	3.3	2.1	2.0	0.4	1.63	1.41
89A00002	M	3	3	79	0	1	0	17	3	0	0	18.6	TNTC
89A00045	M	3	3	73	0	2	0	16	5	4	2	7.4	22.0
89A00052	M	3	3	62	0	1	0	30	5	2	1	10.5	18.8
89A00025	F	3	3	63	0	4	0	23	5	5	0	10.2	15.6
89A00033	F	3	3	77	0	0	0	16	5	2	0	9.4	20.3
89A00064	F	3	3	79	1	1	0	16	2	1	0	7.5	18.0
Mean				72.2	0.2	1.5	0.0	19.7	4.2	2.3	0.5	10.60	18.94
Std Dev				7.8	0.4	1.4	0.0	5.8	1.3	1.9	0.8	4.13	2.41

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	SEG	BAN	EOS	BAS	LYM	MON	ATL	NRBC	PT	APPT
89A000018	M	4	3	57	0	2	0	36	4	1	2	7.0	15.2
89A000048	M	4	3	74	0	1	0	20	3	2	0	8.0	16.5
89A000056	M	4	3	49	1	2	0	44	3	1	0	8.8	20.0
89A000020	F	4	3	49	1	1	0	39	5	5	0	10.0	15.3
89A000039	F	4	3	74	0	1	0	22	2	1	0	8.8	16.2
89A000071	F	4	3	67	1	1	0	29	1	1	0	8.8	17.0
Mean				61.7	0.5	1.3	0.0	31.7	3.0	1.8	0.3	8.57	16.70
Std Dev				11.6	0.5	0.5	0.0	9.6	1.4	1.6	0.8	1.00	1.76
89A000004	M	5	3	52	0	3	0	38	5	2	1	6.2	17.0
89A000011	M	5	3	70	0	1	0	22	2	5	1	6.5	13.3
89A000046	M	5	3	74	0	2	0	15	6	3	0	1.2	17.2
89A000027	F	5	3	82	1	0	0	14	1	2	1	10.5	14.5
89A000065	F	5	3	72	0	1	0	26	1	0	0	6.5	16.0
89A000069	F	5	3	63	0	0	0	36	1	0	0	8.2	17.6
Mean				68.8	0.2	1.2	0.0	25.2	2.7	2.0	0.5	6.52	15.93
Std Dev				10.3	0.4	1.2	0.0	10.2	2.3	1.9	0.5	3.07	1.70
89A000007	M	6	3	72	0	0	0	25	3	0	0	7.2	17.2
89A000050	M	6	3	75	0	3	0	14	7	1	0	10.0	16.0
89A000051	M	6	3	69	0	1	0	26	3	1	0	7.6	14.6
89A000029	F	6	3	70	0	2	0	25	0	3	0	9.2	15.2
89A000041	F	6	3	70	0	0	0	26	1	3	0	8.3	15.5
89A000061	F	6	3	76	0	6	0	13	5	0	0	6.8	14.2
Mean				72.0	0.0	2.0	0.0	21.5	3.2	1.3	0.0	8.18	15.45
Std Dev				2.9	0.0	2.3	0.0	6.2	2.6	1.4	0.0	1.73	1.07

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	SEG	BAN	EOS	BAS	LYM	MON	ATL	NRBC	PT	APPT
89A000019	M	7	3	66	1	8	0	16	8	1	1	7.5	15.7
89A000043	M	7	3	77	0	7	0	11	5	0	1	7.1	16.6
89A000054	M	7	3	71	0	1	0	24	3	1	0	8.8	23.8
89A000030	F	7	3	88	0	1	0	6	5	0	0	9.4	14.4
89A000035	F	7	3	61	0	7	0	29	1	2	0	9.2	16.0
89A000070	F	7	3	59	1	2	0	35	3	0	0	9.2	17.8
Mean				70.3	0.3	4.3	0.0	20.2	4.2	0.7	0.3	8.53	17.38
Std Dev				10.9	0.5	3.3	0.0	11.1	2.4	0.8	0.5	0.98	3.33
89A000001	M	8	3	65	0	7	0	22	4	2	0	7.5	21.0
89A000013	M	8	3	66	0	3	0	25	5	1	0	7.8	15.5
89A000053	M	8	3	68	0	5	0	26	1	0	0	9.7	21.4
89A000040	F	8	3	75	0	1	0	22	2	0	0	9.2	15.5
89A000062	F	8	3	63	0	0	0	35	2	0	0	7.2	17.6
89A000068	F	8	3	74	0	0	0	19	7	0	0	9.0	24.9
Mean				68.5	0.0	2.7	0.0	24.8	3.5	0.5	0.0	8.40	19.32
Std Dev				4.9	0.0	2.9	0.0	5.6	2.3	0.8	0.0	1.03	3.75
89A000005	M	9	3	63	0	3	0	25	7	2	0	6.2	23.5
89A000049	M	9	3	69	0	1	0	22	7	1	0	7.2	20.5
89A000055	M	9	3	59	0	1	0	38	2	0	0	9.5	24.0
89A000026	F	9	3	81	2	0	0	14	2	1	1	11.0	17.8
89A000037	F	9	3	79	0	0	0	20	1	0	0	9.5	17.2
89A000060	F	9	3	80	0	0	0	19	1	0	0	7.7	17.7
Mean				71.8	0.3	0.8	0.0	23.0	3.3	0.7	0.2	8.52	20.12
Std Dev				9.5	0.8	1.2	0.0	8.2	2.9	0.8	0.4	1.78	3.05

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	WBC	RBC	HGB	HCT	MCV	MCH	MCHC	PLT	RET
89A00006	M	10	7	8.2	6.27	14.4	42.0	67.0	23.0	34.3	318	2.1
89A00044	M	10	7	16.7	6.42	15.4	44.3	69.0	24.0	34.8	328	0.4
89A00057	M	10	7	8.7	7.62	17.3	52.5	68.9	22.7	33.0	220	0.6
89A00034	F	10	7	11.3	7.03	15.9	47.0	66.9	22.6	33.8	445	1.6
89A00059	F	10	7	13.3	7.02	15.6	46.5	66.3	22.2	33.5	311	1.7
89A00067	F	10	7	8.9	6.92	16.5	46.7	67.5	23.8	35.3	323	1.4
Mean				11.18	6.880	15.85	46.50	67.60	23.05	34.12	324.2	1.30
Std Dev				3.32	0.485	0.99	3.50	1.11	0.71	0.85	71.7	0.66

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	WBC	RBC	HGB	HCT	MCV	MCH	MCHC	PLT	RET
89A00012	M	1	7	9.3	6.85	14.7	44.7	65.2	21.5	32.9	156	1.1
89A00042	M	1	7	8.9	6.15	14.1	41.8	68.0	22.9	33.7	180	0.8
89A00058	M	1	7	11.2	5.93	13.6	39.6	66.8	22.9	34.3	224	0.3
89A00022	F	1	7	9.2	6.61	14.5	43.2	65.3	21.9	33.6	212	1.0
89A00038	F	1	7	9.1	5.24	12.8	37.0	70.6	24.4	34.6	330	0.6
89A00072	F	1	7	9.5	6.66	15.4	44.2	66.3	23.1	34.8	324	0.5
Mean				9.53	6.240	14.18	41.75	67.03	22.78	33.98	237.7	0.72
Std Dev				0.84	0.598	0.91	2.97	2.03	1.02	0.71	73.2	0.31
89A00003	M	2	7	7.8	6.23	14.0	41.8	67.1	22.5	33.5	163	1.7
89A00009	M	2	7	12.5	6.15	14.3	43.0	69.9	23.3	33.3	248	1.0
89A00047	M	2	7	5.8	7.46	16.3	48.4	64.9	21.8	33.7	213	0.9
89A00031	F	2	7	9.2	6.52	15.4	44.5	68.2	23.6	34.6	227	0.5
89A00063	F	2	7	8.1	6.54	14.1	41.6	63.6	21.6	33.9	220	0.6
89A00066	F	2	7	8.1	6.54	15.2	44.3	67.8	23.2	34.3	268	1.3
Mean				8.58	6.573	14.88	43.93	66.92	22.67	33.88	223.2	1.00
Std Dev				2.22	0.467	0.91	2.50	2.30	0.83	0.49	35.7	0.45
89A00002	M	3	7	8.9	5.95	13.3	41.2	69.2	22.4	32.3	207	1.0
89A00045	M	3	7	6.6	6.75	15.2	45.9	68.0	22.5	33.1	355	3.3
89A00052	M	3	7	5.8	6.55	15.2	44.2	67.5	23.2	34.4	275	0.9
89A00025	F	3	7	7.7	5.89	13.8	40.3	68.4	23.4	34.2	263	0.7
89A00033	F	3	7	6.7	5.68	12.9	38.3	67.4	22.7	33.7	186	1.0
89A00064	F	3	7	9.1	6.66	15.2	44.1	66.2	22.8	34.5	226	0.5
Mean				7.47	6.247	14.27	42.33	67.78	22.83	33.70	252.0	1.23
Std Dev				1.33	0.459	1.06	2.86	1.02	0.39	0.86	60.5	1.03

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	WBC	RBC	HGB	HCT	MCV	MCH	MCHC	PIT	RET
89A00018	M	4	7	12.8	6.15	15.0	43.7	71.0	24.4	34.3	363	2.7
89A00048	M	4	7	11.5	6.86	15.4	44.7	65.1	22.4	34.5	429	1.4
89A00056	M	4	7	12.4	6.21	13.8	40.9	65.8	22.2	33.7	463	1.6
89A00020	F	4	7	12.9	6.56	14.6	43.3	66.0	22.3	33.7	402	2.0
89A00039	F	4	7	9.1	6.42	14.4	42.7	66.5	22.4	33.7	387	1.2
89A00071	F	4	7	13.5	6.89	15.5	46.2	67.0	22.5	33.5	347	1.0
Mean				12.03	6.515	14.78	43.58	66.90	22.70	33.90	398.5	1.65
Std Dev				1.58	0.315	0.65	1.80	2.11	0.84	0.40	42.8	0.62
83A00004	M	5	7	10.5	6.71	16.2	47.9	71.4	24.1	33.8	250	1.3
89A00011	M	5	7	10.5	6.59	14.7	44.3	67.2	22.3	33.2	321	2.2
89A00046	M	5	7	10.0	7.28	16.7	48.8	67.0	22.9	34.2	456	0.7
89A00027	F	5	7	10.0	6.86	16.8	49.3	71.8	24.5	34.1	248	0.6
89A00065	F	5	7	24.9	6.61	15.4	45.3	68.6	23.3	34.0	376	1.6
89A00069	F	5	7	8.9	7.12	15.8	46.6	65.4	22.2	33.9	311	1.2
Mean				12.47	6.862	15.93	47.03	68.57	23.22	33.87	327.0	1.27
Std Dev				6.12	0.284	0.80	1.98	2.56	0.94	0.36	79.4	0.59
89A00007	M	6	7	16.7	6.07	13.7	40.4	66.5	22.6	33.9	437	1.9
89A00050	M	6	7	11.2	7.02	16.6	49.2	70.1	23.6	33.7	327	1.5
89A00051	M	5	7	9.2	7.08	16.2	48.1	68.0	22.9	33.7	350	1.1
89A00029	F	6	7	14.2	6.19	14.2	42.8	69.2	22.9	33.2	447	1.2
89A00041	F	6	7	10.1	7.22	16.2	48.4	67.0	22.4	33.5	364	1.8
89A00061	F	6	7	8.9	6.93	16.4	47.5	68.5	23.7	34.5	332	0.8
Mean				11.72	6.752	15.55	46.07	68.22	23.02	33.75	376.2	1.48
Std Dev				3.10	0.492	1.26	3.58	1.35	0.53	0.44	92.8	0.43

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	WBC	RBC	HGB	HCT	MCV	MCH	MCHC	PLT	RET
89A000019	M	7	7	12.6	6.26	14.1	42.1	67.2	22.5	33.5	147	1.7
89A000043	M	7	7	10.3	5.66	13.3	39.5	69.8	23.5	33.7	281	1.4
89A000054	M	7	7	10.5	6.03	12.6	38.0	63.0	20.9	33.2	204	0.5
89A000030	F	7	7	7.1	6.21	14.1	40.9	65.9	22.7	34.5	320	0.6
89A000035	F	7	7	5.8	5.02	12.2	35.3	70.4	24.3	34.6	189	1.0
89A000070	F	7	7	9.2	5.87	13.7	39.6	67.5	23.3	34.6	257	0.5
Mean				9.25	5.842	13.33	39.23	67.30	22.87	34.02	233.0	0.95
Std Dev				2.47	0.459	0.79	2.37	2.70	1.16	0.62	64.2	0.51
89A000001	M	8	7	6.8	6.25	13.7	40.9	65.4	21.9	33.5	155	0.5
89A000013	M	8	7	10.3	6.72	15.1	44.8	66.7	22.5	33.7	166	1.4
89A000053	M	8	7	8.7	5.53	12.6	37.0	66.9	22.8	34.1	320	0.5
89A000040	F	8	7	9.6	5.09	11.9	34.6	68.0	23.4	34.4	282	0.7
89A000062	F	8	7	7.1	6.13	13.8	40.7	66.4	22.5	33.9	242	1.0
89A000068	F	8	7	7.2	6.00	13.7	39.8	66.4	22.8	34.4	199	0.5
Mean				8.28	5.953	13.47	39.63	66.63	22.65	34.00	227.3	0.77
Std Dev				1.47	0.572	1.10	3.51	0.85	0.49	0.37	65.7	0.37
89A000005	M	9	7	12.2	5.87	13.3	39.9	67.9	22.7	33.3	149	1.0
89A000049	M	9	7	5.0	5.50	12.8	37.6	68.4	23.3	34.0	201	0.5
89A000055	M	9	7	7.5	6.29	14.4	42.0	66.8	22.9	34.3	133	0.4
89A000026	F	9	7	5.6	5.73	12.4	37.0	64.6	21.6	33.5	193	1.0
89A000037	F	9	7	6.0	5.00	12.4	35.1	70.2	24.8	35.3	204	1.0
89A000060	F	9	7	6.9	5.57	13.1	38.8	69.6	23.5	33.8	247	0.3
Mean				7.20	5.660	13.07	38.40	67.92	23.13	34.03	187.8	0.70
Std Dev				2.61	0.428	0.75	2.40	2.03	1.05	0.71	41.2	0.33

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	SEG	BAN	EOS	BAS	LYM	MON	ATL	NRBC	PT	APPT
89A00006	M	10	7	71	2	1	0	23	3	0	0	13.4	18.2
89A00044	M	10	7	59	0	1	0	35	5	0	0	9.0	17.3
89A00057	M	10	7	66	0	1	0	26	3	4	0	8.6	17.8
89A00034	F	10	7	76	0	0	0	22	2	0	0	7.8	12.8
89A00059	F	10	7	65	0	5	0	23	3	4	1	9.0	17.0
89A00067	F	10	7	73	0	2	0	19	4	2	0	8.7	15.7
Mean				68.3	0.3	1.7	0.0	24.7	3.3	1.7	0.2	9.42	16.47
Std Dev				6.2	0.8	1.8	0.0	5.5	1.0	2.0	0.4	2.00	1.99

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	SEG	BAN	EOS	BAS	LYM	MON	ATL	NRBC	PT	APPT
89A00012	M	1	7	69	1	1	0	25	4	0	0	8.5	18.3
89A00042	M	1	7	67	0	2	0	27	3	1	0	9.8	15.6
89A00058	M	1	7	75	0	1	0	22	1	1	0	8.0	18.7
89A00022	F	1	7	76	0	1	0	16	5	2	1	7.2	16.0
89A00038	F	1	7	72	0	0	0	22	6	0	0	7.0	22.8
89A00072	F	1	7	75	0	5	0	15	4	1	0	8.5	17.5
Mean				72.3	0.2	1.7	0.0	21.2	3.8	0.8	0.2	8.17	18.15
Std Dev				3.7	0.4	1.8	0.0	4.8	1.7	0.8	0.4	1.02	2.59
89A00003	M	2	7	71	0	3	0	23	3	0	0	10.0	32.4
89A00009	M	2	7	74	0	1	0	17	6	2	0	8.4	21.0
89A00047	M	2	7	58	0	0	0	34	4	4	0	12.0	19.4
89A00031	F	2	7	74	0	5	0	18	2	1	0	8.7	21.2
89A00063	F	2	7	71	0	3	0	21	5	0	0	9.0	22.8
89A00066	F	2	7	68	0	1	0	27	4	0	0	10.0	18.6
Mean				69.3	0.0	2.2	0.0	23.3	4.0	1.2	0.0	9.68	22.57
Std Dev				6.0	0.0	1.8	0.0	6.3	1.4	1.6	0.0	1.32	5.04
89A00002	M	3	7	79	0	2	0	15	4	0	1	7.8	22.5
89A00045	M	3	7	65	0	0	0	31	4	0	0	10.5	22.0
89A00052	M	3	7	65	0	5	0	24	4	2	0	12.2	20.3
89A00025	F	3	7	76	0	1	0	18	4	1	0	8.8	19.0
89A00033	F	3	7	78	0	0	0	15	7	0	0	11.2	24.4
89A00064	F	3	7	80	0	1	0	15	4	0	0	12.0	24.6
Mean				73.8	0.0	1.5	0.0	19.7	4.5	0.5	0.2	10.42	21.80
Std Dev				7.0	0.0	1.9	0.0	6.6	1.2	0.8	0.4	1.78	1.81

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	SEG	BAN	EOS	BAS	LYM	MON	ATL	NRBC	PT	APPT
89A00018	M	4	7	53	0	0	0	40	5	2	2	7.2	16.8
89A00048	M	4	7	63	0	3	0	30	2	2	0	9.8	17.8
89A00056	M	4	7	56	0	2	0	39	2	1	0	7.6	21.5
89A00020	F	4	7	59	0	1	0	34	2	4	3	6.6	16.0
89A00039	F	4	7	72	0	2	0	23	1	2	2	7.2	16.5
89A00071	F	4	7	62	0	1	0	28	3	6	0	9.2	15.5
Mean				60.8	0.0	1.5	0.0	32.3	2.5	2.8	1.2	7.93	17.35
Std Dev				6.6	0.0	1.0	0.0	6.6	1.4	1.8	1.3	1.27	2.18
89A00004	M	5	7	47	1	0	0	50	2	0	0	6.8	18.2
89A00011	M	5	7	60	1	0	0	36	1	2	0	6.8	14.8
89A00046	M	5	7	63	0	4	0	25	5	3	2	8.5	17.8
89A00027	F	5	7	70	0	1	0	22	4	3	0	7.2	19.2
89A00065	F	5	7	80	0	0	0	18	2	0	0	9.2	19.2
89A00069	F	5	7	67	1	1	0	30	1	0	1	12.4	15.6
Mean				64.5	0.5	1.0	0.0	30.2	2.5	1.3	0.5	8.48	17.47
Std Dev				11.0	0.5	1.5	0.0	11.6	1.6	1.5	0.8	2.15	1.86
89A00007	M	6	7	73	1	4	0	21	1	0	2	6.4	18.6
89A00050	M	6	7	77	0	1	0	18	4	0	3	8.3	22.0
89A00051	M	6	7	61	0	4	0	25	4	6	0	7.6	14.5
89A00029	F	6	7	68	0	2	0	24	3	3	1	7.5	22.8
89A00041	F	6	7	55	2	0	0	37	3	3	0	5.8	14.5
89A00061	F	6	7	73	1	3	0	17	6	0	0	8.4	17.5
Mean				67.8	0.7	2.3	0.0	23.7	3.5	2.0	1.0	7.33	18.32
Std Dev				8.4	0.8	1.6	0.0	7.3	1.6	2.4	1.3	1.04	3.57

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	SEG	BAN	EOS	BAS	LYM	MON	ATL	NRBC	PT	APPT
89A000019	M	7	7	49	0	7	0	40	4	0	0	7.8	19.8
89A000043	M	7	7	54	0	9	0	34	3	0	0	8.6	19.9
89A000054	M	7	7	65	0	4	0	28	3	0	0	8.7	25.4
89A000030	F	7	7	70	0	4	0	24	2	0	0	9.0	26.0
89A000035	F	7	7	62	0	6	0	26	5	1	0	9.0	20.4
89A000070	F	7	7	67	1	3	0	27	2	0	0	8.7	17.8
Mean				61.2	0.2	5.5	0.0	29.8	3.2	0.2	0.0	8.63	21.55
Std Dev				8.1	0.4	2.3	0.0	6.0	1.2	0.4	0.0	0.44	3.34
89A000001	M	8	7	49	1	7	0	35	8	0	0	10.5	22.0
89A000013	M	8	7	52	3	6	0	37	1	1	0	9.5	28.5
89A000053	M	8	7	69	1	3	0	22	3	2	0	9.8	21.4
89A000040	F	8	7	71	0	1	0	26	1	1	0	9.4	23.5
89A000062	F	8	7	75	0	1	0	20	3	1	0	9.7	20.0
89A000068	F	8	7	83	0	0	0	14	3	0	0	8.5	28.0
Mean				66.5	0.8	3.0	0.0	25.7	3.2	0.8	0.0	9.57	23.90
Std Dev				13.3	1.2	2.9	0.0	8.9	2.6	0.8	0.0	0.65	3.56
89A000005	M	9	7	54	1	1	0	40	1	3	1	7.6	22.5
89A000049	M	9	7	69	1	5	0	22	2	1	0	12.0	27.8
89A000055	M	9	7	61	0	2	0	34	1	2	0	10.5	20.5
89A000026	F	9	7	72	0	6	0	18	4	0	0	13.5	42.9
89A000037	F	9	7	65	0	0	0	27	8	0	0	8.8	26.5
89A000060	F	9	7	79	0	3	0	15	3	0	0	11.2	22.2
Mean				66.7	0.3	2.8	0.0	26.0	3.2	1.0	0.2	10.60	27.07
Std Dev				8.7	0.5	2.3	0.0	9.6	2.6	1.3	0.4	2.14	8.24

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	WBC	RBC	HGB	HCT	MCV	MCH	MCHC	PLT	RET
89A00006	M	10	14	9.1	6.56	15.0	45.0	68.6	22.9	33.3	445	2.9
89A00044	M	10	14	12.1	6.18	14.6	43.9	71.1	23.6	33.3	347	2.6
89A00057	M	10	14	8.1	7.72	17.7	53.5	69.3	22.9	33.1	248	0.5
89A00034	F	10	14	9.7	7.62	17.5	52.7	69.1	23.0	33.2	528	4.1
89A00059	F	10	14	10.5	7.10	16.0	47.7	67.2	22.5	33.5	281	2.6
89A00067	F	10	14	8.6	7.99	18.5	55.1	69.0	23.2	33.6	300	2.9
Mean				9.68	7.195	16.55	49.65	69.05	23.02	33.33	358.2	2.60
Std Dev				1.45	0.711	1.58	4.74	1.26	0.37	0.19	107.7	1.17

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	WBC	RBC	HGB	HCT	MCV	MCH	MCHC	PLT	RET
89A000012	M	1	14	10.8	7.08	15.4	46.7	65.9	21.8	33.0	216	1.8
89A000042	M	1	14	6.8	6.00	13.9	41.4	69.0	23.2	33.6	259	2.5
89A000058	M	1	14	10.1	5.01	11.5	33.4	66.6	23.0	34.4	275	0.5
89A000022	F	1	14	11.5	6.54	14.4	43.4	66.4	22.0	33.2	316	2.4
89A000038	F	1	14	10.3	5.49	13.6	40.4	73.6	24.8	33.7	378	2.0
89A000072	F	1	14	9.3	7.06	16.0	47.3	67.0	22.7	33.8	417	1.3
Mean				9.80	6.197	14.13	42.10	68.08	22.92	33.62	310.2	1.75
Std Dev				1.64	0.847	1.58	5.08	2.91	1.07	0.49	75.9	0.75
89A000003	M	2	14	6.9	5.52	12.4	37.1	67.2	22.5	33.4	182	1.0
89A000009	M	2	14	14.7	5.61	13.6	39.9	71.1	24.2	34.1	399	1.1
89A000047	M	2	14	5.7	7.38	16.4	48.0	65.0	22.2	34.2	275	1.3
89A000031	F	2	14	15.7	6.49	15.1	45.3	69.8	23.3	33.3	276	1.2
89A000063	F	2	14	8.2	6.91	15.0	44.6	64.5	21.7	33.6	251	1.7
89A000066	F	2	14	8.1	6.88	15.7	46.4	67.4	22.8	33.8	264	1.2
Mean				9.88	6.465	14.70	43.55	67.50	22.78	33.73	274.5	1.25
Std Dev				4.23	0.753	1.46	4.17	2.59	0.88	0.37	70.3	0.24
89A000002	M	3	14	6.4	7.69	18.0	53.7	69.8	23.4	33.5	205	0.9
89A000045	M	3	14	7.5	6.32	14.5	43.1	68.2	22.9	33.6	204	1.6
89A000052	M	3	14	8.6	5.48	12.8	37.5	68.4	23.4	34.1	242	0.7
89A000025	F	3	14	7.7	6.37	15.1	44.3	69.6	23.7	34.1	342	2.8
89A000033	F	3	14	8.1	5.80	13.2	39.5	68.1	22.8	33.4	295	1.2
89A000064	F	3	14	6.2	4.86	10.9	32.8	67.5	22.4	33.2	171	1.1
Mean				7.42	6.087	14.08	41.82	68.60	23.10	33.65	243.2	1.38
Std Dev				0.95	0.965	2.41	7.13	0.91	0.48	0.37	64.3	0.76

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	WBC	RBC	HGB	HCT	MCV	MCH	MCHC	PLT	RET
89A000018	M	4	14	12.3	6.86	16.6	50.1	73.0	24.2	33.1	457	2.7
89A000048	M	4	14	10.8	7.51	16.6	49.3	65.7	22.1	33.7	331	2.6
89A000056	M	4	14	12.8	6.25	14.0	41.7	66.7	22.4	33.6	510	2.1
89A000020	F	4	14	11.4	8.01	17.5	53.3	66.5	21.8	32.8	479	4.2
89A000039	F	4	14	8.8	7.54	16.9	51.0	67.7	22.4	33.1	421	2.2
89A000071	F	4	14	13.4	7.35	16.5	50.3	68.4	22.4	32.8	350	2.8
Mean				11.58	7.253	16.35	49.28	68.00	22.55	33.18	424.7	2.77
Std Dev				1.65	0.615	1.21	3.96	2.63	0.84	0.39	71.6	0.76
89A000004	M	5	14	11.4	7.26	17.7	52.4	72.2	24.4	33.8	335	1.8
89A000011	M	5	14	8.3	7.72	17.3	52.3	67.8	22.4	33.1	379	1.0
89A000046	M	5	14	12.5	7.30	16.4	49.6	68.0	22.5	33.1	437	2.3
89A000027	F	5	14	9.5	7.12	17.3	52.6	73.9	24.3	32.9	261	2.2
89A000065	F	5	14	12.7	7.18	16.4	49.5	68.9	22.8	33.1	413	2.3
89A000069	F	5	14	8.2	7.84	17.5	52.8	67.3	22.3	33.1	333	2.4
Mean				10.43	7.403	17.10	51.53	69.68	23.12	33.18	359.7	2.00
Std Dev				2.04	0.301	0.56	1.55	2.71	0.97	0.31	63.6	0.53
89A000007	M	6	14	11.0	6.95	15.6	46.8	67.3	22.4	33.3	530	3.6
89A000050	M	6	14	9.2	7.54	18.0	53.7	71.2	23.9	33.5	361	2.9
89A000051	M	6	14	11.4	7.58	17.6	52.6	69.4	23.2	33.5	425	4.3
89A000029	F	6	14	16.1	6.62	15.4	46.1	69.7	23.3	33.4	465	7.0
89A000041	F	6	14	9.3	7.58	17.3	51.9	68.5	22.8	33.3	321	1.9
89A000061	F	6	14	7.8	7.35	16.8	50.9	69.3	22.9	33.0	333	1.1
Mean				10.80	7.270	16.78	50.33	69.23	23.08	33.33	405.8	3.47
Std Dev				2.91	0.399	1.07	3.15	1.30	0.51	0.19	82.2	1.08

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	WBC	RBC	HGB	HCT	MCV	MCH	MCHC	PLT	RET
89A00019	M	7	14	18.4	6.26	13.9	42.1	67.3	22.2	33.0	186	2.3
89A00043	M	7	14	11.4	4.79	11.6	33.8	70.6	24.2	34.3	318	0.5
89A00054	M	7	14	10.5	5.22	11.3	33.3	63.7	21.6	33.9	223	0.6
89A00030	F	7	14	7.0	6.52	14.7	43.6	66.9	22.5	33.7	110	1.8
89A00035	F	7	14	6.7	5.64	13.8	40.7	72.1	24.5	33.9	235	2.3
89A00070	F	7	14	9.1	6.07	14.0	41.7	68.7	23.1	33.6	275	0.8
Mean				10.52	5.750	13.22	39.20	68.22	23.02	33.73	224.5	1.38
Std Dev				4.29	0.659	1.41	4.48	2.97	1.14	0.43	72.1	0.85
89A00001	M	8	14	9.0	5.83	12.8	38.8	66.5	22.0	33.0	218	1.0
89A00013	M	8	14	9.5	6.26	14.1	41.9	67.0	22.5	33.7	192	1.5
89A00053	M	8	14	7.5	4.63	10.7	31.0	66.9	23.1	34.5	328	0.5
89A00040	F	8	14	15.2	4.75	10.8	32.6	68.6	22.7	33.1	358	1.5
89A00062	F	8	14	10.4	5.72	13.0	37.9	66.3	22.7	34.3	217	0.8
89A00068	F	8	14	7.2	5.32	11.8	35.6	66.9	22.2	33.1	197	0.6
Mean				9.80	5.418	12.20	36.30	67.03	22.53	33.62	251.7	0.98
Std Dev				2.91	0.640	1.34	4.06	0.81	0.39	0.66	72.1	0.44
89A00005	M	9	14	8.2	5.65	13.1	38.6	68.4	23.2	33.9	178	1.6
89A00049	M	9	14	8.9	5.18	11.9	35.8	69.1	23.0	33.2	175	0.5
89A00055	M	9	14	9.1	5.52	12.9	37.1	67.3	23.4	34.8	153	1.0
89A00026	F	9	14	8.0	5.57	12.1	36.0	64.7	21.7	33.6	235	1.4
89A00037	F	9	14	8.1	5.13	12.7	37.3	72.8	24.8	34.0	303	2.8
89A00060	F	9	14	7.2	5.58	13.3	38.9	69.8	23.8	34.2	247	0.4
Mean				8.25	5.438	12.67	37.28	68.68	23.32	33.95	215.2	1.28
Std Dev				0.68	0.224	0.56	1.28	2.69	1.02	0.54	56.5	0.88

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	SEG	BAN	EOS	BAS	LYM	MON	ATL	NRBC	PT	APPT
89A00006	M	10	14	63	0	4	0	26	7	0	3	8.2	14.8
89A00044	M	10	14	68	0	6	0	22	4	0	0	10.2	22.2
89A00057	M	10	14	66	0	4	0	27	3	0	0	6.8	18.5
89A00034	F	10	14	56	1	1	1	29	5	7	1	9.8	13.3
89A00059	F	10	14	50	0	2	0	42	6	0	0	8.5	16.8
89A00067	F	10	14	71	0	0	0	23	3	3	0	9.2	14.5
Mean				62.3	0.2	2.8	0.2	28.2	4.7	1.7	0.7	8.78	16.68
Std Dev				7.9	0.4	2.2	0.4	7.3	1.6	2.9	1.2	1.23	3.27

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	SEG	BAN	EOS	BAS	LYM	MON	ATL	NRBC	PT	APPT
89A000012	M	1	14	77	0	2	0	20	1	0	1	9.2	16.8
89A000042	M	1	14	73	0	5	0	16	6	0	0	11.0	35.0
89A000058	M	1	14	83	0	0	0	13	4	0	0	7.2	18.8
89A000022	F	1	14	74	0	0	0	20	4	2	1	7.4	18.8
89A000038	F	1	14	77	0	1	0	18	3	1	0	11.5	17.2
89A000072	F	1	14	86	0	0	0	9	3	2	0	9.8	19.2
Mean				78.3	0.0	1.3	0.0	16.0	3.5	0.8	0.3	9.35	20.97
Std Dev				5.1	0.0	2.0	0.0	4.3	1.6	1.0	0.5	1.79	6.94
89A000003	M	2	14	66	0	8	0	21	5	0	1	13.5	25.0
89A000009	M	2	14	77	1	4	0	13	4	1	1	9.8	26.4
89A000047	M	2	14	72	0	0	0	26	1	1	1	13.2	40.0
89A000031	F	2	14	87	0	5	0	6	2	0	1	9.3	18.5
89A000063	F	2	14	82	0	1	0	12	5	0	0	10.2	26.6
89A000066	F	2	14	68	0	2	0	23	6	1	0	14.9	24.1
Mean				75.3	0.2	3.3	0.0	16.8	3.8	0.5	0.7	11.82	26.77
Std Dev				8.2	0.4	2.9	0.0	7.7	1.9	0.5	0.5	2.34	7.13
89A000002	M	3	14	59	0	4	0	18	3	1	1	11.4	25.0
89A000045	M	3	14	81	0	0	0	15	4	0	0	23.4	TNTC
89A000052	M	3	14	76	0	2	0	13	8	1	2	16.7	15.0
89A000025	F	3	14	75	0	0	0	19	4	2	2	10.5	22.0
89A000033	F	3	14	80	2	2	0	14	0	2	0	9.5	20.8
89A000064	F	3	14	84	0	1	0	14	1	0	0	11.8	26.2
Mean				75.8	0.3	1.5	0.0	15.5	3.3	1.0	0.8	13.88	21.80
Std Dev				8.9	0.8	1.5	0.0	2.4	2.8	0.9	1.0	5.29	4.38

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	SEG	BAN	EOS	BAS	LYM	MON	ATL	NRBC	PT	APPT
89A000018	M	4	14	62	0	3	0	28	6	1	0	6.8	15.4
89A000048	M	4	14	75	0	0	0	22	3	0	0	11.8	25.0
89A000056	M	4	14	67	0	4	0	19	9	1	0	6.5	21.6
89A000020	F	4	14	49	1	3	0	40	5	2	4	7.1	16.4
89A000039	F	4	14	64	0	2	0	27	3	4	0	9.2	14.2
89A000071	F	4	14	76	0	1	0	20	1	2	0	8.5	17.0
Mean				65.5	0.2	2.2	0.0	26.0	4.5	1.7	0.7	8.32	18.27
Std Dev				9.9	0.4	1.5	0.0	7.8	2.8	1.4	1.6	2.00	4.15
89A000004	M	5	14	48	0	2	0	35	8	7	1	7.6	16.6
89A000011	M	5	14	75	1	2	0	17	3	2	2	7.0	14.0
89A000046	M	5	14	61	0	2	0	35	2	0	2	10.0	24.8
89A000027	F	5	14	68	0	0	0	26	5	1	2	9.0	14.8
89A000065	F	5	14	70	0	0	0	27	3	0	2	7.0	22.0
89A000069	F	5	14	68	0	1	0	20	5	6	0	8.5	17.0
Mean				65.0	0.2	1.2	0.0	26.7	4.3	2.7	1.5	8.18	18.20
Std Dev				9.5	0.4	1.0	0.0	7.4	2.2	3.1	0.8	1.70	4.27
89A000007	M	6	14	66	0	3	0	24	6	1	3	8.2	15.4
89A000050	M	6	14	76	0	0	0	19	4	1	0	10.8	25.8
89A000051	M	6	14	77	0	1	0	14	6	2	0	8.4	17.0
89A000029	F	6	14	65	0	1	0	30	4	0	6	6.8	18.5
89A000041	F	6	14	67	0	2	0	26	4	1	0	8.7	13.5
89A000061	F	6	14	70	0	2	0	20	8	0	0	7.5	18.3
Mean				70.2	0.0	1.5	0.0	22.2	5.3	0.8	1.5	8.40	17.75
Std Dev				5.2	0.0	1.0	0.0	5.7	1.6	0.8	2.5	1.36	3.51

Appendix H (cont.): HEMATOLOGY

Animal Number	Sex	Group	Day	SEG	BAN	EOS	BAS	LYM	MON	ATL	NRBC	P/T	APPT
89A00019	M	7	14	61	0	7	0	25	7	0	0	7.8	18.4
89A00043	M	7	14	66	0	9	0	24	1	0	0	10.8	56.0
89A00054	M	7	14	81	0	1	0	17	1	0	0	8.5	25.3
89A00030	F	7	14	70	0	1	0	26	3	0	0	16.2	TNTC
89A00035	F	7	14	67	0	8	0	21	2	2	1	13.5	34.8
89A00070	F	7	14	70	0	0	0	24	5	1	0	11.2	18.1
Mean				69.2	0.0	4.3	0.0	22.8	3.2	0.5	0.2	11.33	30.52
Std Dev				6.7	0.0	4.1	0.0	3.3	2.4	0.8	0.4	3.14	15.78
89A00001	M	8	14	62	0	3	0	29	5	1	0	12.0	25.5
89A00013	M	8	14	66	1	4	0	24	3	2	1	11.5	34.0
89A00053	M	8	14	64	0	8	0	23	5	0	0	9.5	25.2
89A00040	F	8	14	84	0	3	0	12	1	0	0	11.5	24.7
89A00062	F	8	14	82	0	2	0	12	4	0	0	11.0	27.0
89A00068	F	8	14	82	0	0	0	16	0	2	0	15.0	35.3
Mean				73.3	0.2	3.3	0.0	19.3	3.0	0.8	0.2	11.75	28.62
Std Dev				10.3	0.4	2.7	0.0	7.0	2.1	1.0	0.4	1.81	4.75
89A00005	M	9	14	59	0	4	0	36	1	0	1	10.2	39.0
89A00049	M	9	14	80	0	4	0	13	3	0	0	16.2	TNTC
89A00055	M	9	14	72	0	4	0	22	1	1	0	18.4	TNTC
89A00026	F	9	14	70	1	5	0	20	3	1	1	12.2	56.0
89A00037	F	9	14	68	1	2	0	25	3	1	0	16.2	TNTC
89A00060	F	9	14	79	0	2	0	16	2	1	0	12.5	20.0
Mean				71.3	0.3	3.5	0.0	22.0	2.2	0.7	0.3	14.28	38.33
Std Dev				7.7	0.5	1.2	0.0	8.1	1.0	0.5	0.5	3.11	18.01

Appendix I: PATHOLOGY REPORT

GLP Study #88008

Principal Investigator: Denzil F. Frost, MS, DVM, CPT, VC
Co-Principal Investigator: Gary M. Zaucha, DVM, CPT, VC

I. INTRODUCTION

Study: 14-Day Canine Subacute Toxicity Study.
Test Compound: Hypertonic Saline / Dextran 70® (HSD)
Animal: Canis familiaris, Beagle, 8 - 9 months, Male
and Female.

Dosage Groups:

	Agent	Dose
Group 1	HSD	12 ml/kg
Group 2	HSD	16 ml/kg
Group 3	HSD	20 ml/kg
Group 4	HS ¹	12 ml/kg
Group 5	HS	16 ml/kg
Group 6	HS	20 ml/kg
Group 7	D70 ²	12 ml/kg
Group 8	D70	16 ml/kg
Group 9	D70	20 ml/kg
(Control) Group 10	RL ³	20 ml/kg

¹ - Hypertonic Saline
² - Dextran 70®
³ - Ringer's Lactate Solution

Reference: SOP-OP-STX-107

II. SUMMARY OF PROCEDURES

Euthanasia: Sodium Pentobarbital, Intravenous.
Fixative: 10% Neutral Buffered Formalin.
Histopathology: Routine.
Clinical Lab: Hematology, Serology.
Other Procedures: Organ Weights.

III. GROSS FINDINGS: Incidence summary reports of gross lesions for all deaths are listed in Pathology Tables 1 and 2 for females and males, respectively. In these and other Pathology Tables, data are listed as being in two Xybion studies on the computer: 88008F for the females; 88008M for the males. No gross lesions were significantly more frequent in a treated group than in the control group. Lesions in the heart, trachea and spleen were considered to

Appendix I (cont.): PATHOLOGY REPORT

be congenital findings, lesions in the skin to be sequelae of multiple injections, and lesions in the lymph nodes, pancreas, kidney, and tonsils to be incidental findings of little or no clinical significance and probably unrelated to administration of any of the test compounds. The cause of the reported abnormal pigmentation, a slight red-brown mottling, of the liver of female 89A00040 was not determined, but may have been related to increased hepatocyte size from glycogen storage (see section VI), resulting in narrowed sinusoids and subsequently less blood retention.

IV. MICROSCOPIC FINDINGS: Tissues saved for microscopic examination from all groups were: Brain (to include cerebrum, thalamus, hippocampus, cerebellum, and medulla oblongata), tonsil, trachea, thyroid and parathyroid glands, esophagus, lacrimal gland, salivary gland, heart, lung, thymus, spleen, liver, gall bladder, kidneys, ureter, urinary bladder, gonads, uterus from females, epididymis and prostate gland from males, duodenum, jejunum, ileum, pancreas, stomach, cecum, colon, skeletal muscle from the thigh, sciatic nerve, skin, mammary gland, adrenal glands, pituitary gland, eye, mesenteric lymph node, and diaphragm. The right cephalic vein and skin from the anterior surface of the right antebrachium overlying the cephalic vein were also examined, as were all lesions noted at gross necropsy.

All tissues were examined from all groups. Lesions were graded on a subjective severity scale of 1 = slight, 2 = mild, 3 = moderate, 4 = marked, and 5 = severe.

Pathology Tables 3 and 4 list the incidence summary of all microscopic observations of tissues from females and males, respectively. Based on results of Kolmogorov-Smirnov two-tailed analysis (95% confidence level) of microscopic findings, only one lesion was significantly more frequent in a treated group than in the control group, from either sex. That lesion was congestion and hemorrhage of the medulla of the mesenteric lymph node, in Group 3 males. The average severity was 1.3, slight. Pathology Tables 5 and 6 list all microscopic findings with average severity grades. Note that the average severity grade is the sum of the severity grades divided by the total number of animals in the group. Most lesions were graded as either slight or mild. Hepatocellular vacuolation was observed in almost all of the animals of each sex. Vacuoles were poorly delimited and probably represented intracellular glycogen storage, a normal finding in well-fed animals. The degree of vacuolation was subjectively graded (see Annex C), but did not correlate with treatment or dosage

Appendix I (cont.): PATHOLOGY REPORT

group. Sections of antebrachial skin and the subjacent cephalic vein from all treatment and dosage groups had lesions which resulted from repeated intravenous injections; qualitative or quantitative differences among the groups were not observed.

Pathology Annex A contains the Individual Animal Reports, with body and organ weight data, and gross and microscopic findings, for all females. Pathology Annex B contains similar information for the males. Pathology Annex C contains a glossary of microscopic diagnoses.

V. ORGAN WEIGHTS: Liver, kidneys, heart, brain, adrenal glands, gonads and spleen were weighed from each animal. Pathology Tables 7 and 8 have absolute organ weights, by group mean, for the males and females, respectively. Data for percent organ weight to brain weight ratio are listed in Pathology Tables 9 and 10. Data were assessed for homogeneity by Bartlett's test, the F-statistic was calculated, and differences in group means from the control group were assessed by Fisher's least significance difference test, when the F-statistic was significant. For all tests, significance was defined as $p < 0.05$. Analysis of variance resulted in a significant F-statistic for liver ($F = 0.010$ for the organ to brain weight ratio, $F = 0.007$ for absolute organ weight) and spleen ($F = 0.004$ for the organ to brain weight ratio, $F = 0.003$ for absolute organ weight) from the females, but for no tissues from the males. Females from groups 1, 2 and 3 (all of the HSD groups) had significantly increased absolute liver weights, but only in group 1, the low dose HSD group, were the livers heavier as a percent organ to brain weight ratio. Absolute spleen weights from the females were increased in groups 2, 3 and 8. Spleen weights as percent organ to brain weight ratio was increased in groups 2, 3, 7, and 8 (the intermediate and high dose HSD and D70 groups).

VI. SUMMARY COMMENTS: No unique morphologic observation correlated with the increased weights of the liver and spleen in some of the groups of females given D70. The cause of the mild hepatomegaly was not determined, but possible explanations might include increased hepatocellular glycogen storage following repeated administration of high doses of the carbohydrate dextran. Splenomegaly usually results from an increase of one or more of the cellular constituents, i. e. lymphoid hyperplasia, so-called reticuloendothelial hyperplasia, smooth muscle hyperplasia, congestion. No increase in these elements or other morphologic alteration

Appendix I (cont.): PATHOLOGY REPORT

was observed to account for the increase in splenic weight. Lesions observed in these dogs were interpreted as incidental findings of little or no clinical significance. Weight changes in the liver and spleens of females after repeated administration of Dextran 70, both in combination with hypertonic saline and alone, were observed, but were not associated with any evidence of tissue injury. No morphologic evidence of toxicity due to the test compound was found.



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MAJ, MC

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Division of Military Trauma Research

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Incidence Summary Report for Gross Necropsy Observations
Study Number: 88008f
Report includes all dead animals
Study Start Date: 31-Jan-89

PRINTED: 04-Oct-89
Page: 1

SUB-ACUTE/

.. Females ..

Ctts	1	2	3	4	5	6	7	8	9
3	3	3	3	3	3	3	3	3	3

KIDNEY									
FIBROUS SCAR(S)	0	0	0	0	0	0	1	0	0
HYDRONEPHROSIS	0	0	0	0	0	0	1	0	0
LIVER									
ABNORMAL PIGMENTATION	0	0	0	0	0	0	0	1	0
LYMPH NODES									
HEMORRHAGE(S)	0	0	0	1	0	0	0	0	0
LUNGS									
CONSOLIDATION	1	0	0	1	0	0	0	0	1
PLEURAL ADHESIONS	0	0	0	0	0	0	0	1	0
SKIN									
DERMATITIS	0	0	0	0	0	0	0	1	0
TONSIL(S)									
FOREIGN MATERIAL IN CRYPT	0	0	0	0	0	1	0	0	1
WHOLE BODY									
NO LESIONS RECOGNIZED	2	3	3	2	2	3	1	3	2

PATHOLOGY TABLE 1

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
 DIV OF RES SUPP, PATH SERV GP
 PRESIDIO OF SAN FRANCISCO, CA 94129
 DOG/BEAGLE

Incidence Summary Report for Gross Necropsy Observations
 Study Number: 88008M
 Report includes all dead animals
 Study Start Date: 07-Feb-89

PRINTED: 04-Oct-89
 Page: 1
 SUB-ACUTE/

	Male									
	1	2	3	4	5	6	7	8	9	
CHS	3	3	3	3	3	3	3	3	3	
HEART										
HEMATOCYST(S)	1	0	0	0	0	0	0	0	0	0
ENDOCARDIOSIS	1	0	0	0	0	0	0	0	0	0
KIDNEY										
FIBROUS SCAR(S)	0	0	0	0	0	0	0	0	0	1
LUNGS										
CONSOLIDATION	0	1	0	0	0	0	0	0	0	0
PANCREAS										
CONGESTION	0	1	0	0	0	0	0	0	0	0
SKIN										
DERMATITIS	0	0	1	0	0	0	0	0	0	0
SPLEEN										
ACCESSORY SPLEENS	0	1	0	0	0	0	0	0	0	0
TRACHEA										
DEFORMED TRACHEAL RING(S)	0	0	0	0	1	0	0	0	0	0
WHOLE BODY										
NO LESIONS RECOGNIZED	2	2	2	3	2	3	3	3	3	2

PATHOLOGY TABLE 2

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Incidence Summary of Microscopic Observations
Study Number: 88008f

All Diagnoses

Study Start Date: 31-Jan-89

PRINTED: 04-Oct-89
Page: 2

SUB-ACUTE/

Notes: Animals = all dead animals Controls from group(s): 10		-- Animals Affected --	
		-- Females --	
Tissues With Diagnoses	Animal sex: Dosage group: No. in group:	Ct's	1 2 3 4 5 6 7 8 9
ESOPHAGUS	Number examined:	3 3 3 3 3 3 3 3 3 3	3 3 3 3 3 3 3 3 3
Inflammation of Submucosal Glands, Acute		0 0 0 0 1 0 0 0 0 0	0 0 0 0 0 0 0 0 0
EYE	Number examined:	3 3 3 3 3 3 3 3 3 3	3 3 3 3 3 3 3 3 3
GALL BLADDER	Number examined:	3 3 3 3 3 3 3 3 3 3	3 3 3 3 3 3 3 3 3
HEART	Number examined:	3 3 3 3 3 3 3 3 3 3	3 3 3 3 3 3 3 3 3
Thrombosis, Valvular		0 1 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0
Epicarditis, Subacute		0 1 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0
ILEUM	Number examined:	3 3 3 3 3 3 3 3 3 3	3 3 3 3 3 3 3 3 3
JEJUNUM	Number examined:	3 3 3 3 3 3 3 3 3 3	3 3 3 3 3 3 3 3 3
Nematodiasis		0 0 1 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0
Cyst, Glandular, Mucosal		0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0
KIDNEY	Number examined:	3 3 3 3 3 3 3 3 3 3	3 3 3 3 3 3 3 3 3
Inflammation, Interstitial, Subacute		0 0 0 0 0 0 1 1 0 0	0 0 0 0 0 0 0 0 0
Proteinaceous Casts		0 1 1 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0
Nephrocalcinosis		0 0 0 0 1 0 0 0 0 0	0 0 0 0 0 0 0 0 0
LACRIMAL GLAND	Number examined:	3 3 3 3 3 3 3 3 3 3	3 3 3 3 3 3 3 3 3
Duct Ectasia		1 1 0 1 1 1 0 1 0 0	0 0 0 0 0 0 0 0 0
Acinar Atrophy		1 0 0 0 1 0 0 0 2 0	0 0 0 0 0 0 0 0 0
Lymphocytic Infiltration		1 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0
LIVER	Number examined:	3 3 3 3 3 3 3 3 3 3	3 3 3 3 3 3 3 3 3
Hepatocellular Vacuolation, Coarse Type		2 2 3 3 3 2 3 3 3 3	3 3 3 3 3 3 3 3 3
Extramedullary Hematopoiesis		1 1 0 1 1 1 2 0 0 0	0 0 0 0 0 0 0 0 0
Thrombosis, Portal Vein		0 0 0 0 0 0 0 1 0 0	0 0 0 0 0 0 0 0 0
Inflammation, Subacute		0 1 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0

Note: Entries flagged with a - (minus) are significantly different from control at the 0.05 level using the Kolmogorov-Smirnov two tailed test.

PATHOLOGY TABLE 3 (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Incidence Summary of Microscopic Observations
Study Number: 88008f
All Diagnoses
Study Start Date: 31-Jan-89

PRINTED: 04-Oct-89
Page: 3

Tissues With Diagnoses	Animals		Affected	
	males	females	males	females
Notes: Animals = all dead animals Controls from group(s):10				
LIVER	3	3	3	3
Pigment-Laden Macrophages, Predominantly Periportal	0	0	0	0
LUNGS	3	3	3	3
Inflammation, Interstitial, Subacute Granuloma	1	0	0	0
MAMMARY GLANDS	1	2	1	0
MES. LYMPH NODE	3	3	3	3
Sinus Neutrophilia	0	1	0	0
Congestion and/or Hemorrhage of the Medulla	1	3	2	2
OVARIES	3	3	3	3
PANCREAS	3	3	3	3
Acinar Hypertrophy and Vacuolation	0	0	0	0
Acinar (Exocrine) Cell Atrophy	1	1	0	1
PITUITARY GLAND	3	3	3	3
Histiocytosis	0	0	0	0
Cyst(s)	0	1	0	0
PARATHYROID	2	3	3	3
Ultimobranchial Cyst, Ciliated or Non-Ciliated	1	0	0	1
SPINAL CORD	3	3	3	3

Note: Entries flagged with a - (minus) are significantly different from control at the 0.05 level using the Kolmogorov-Smirnov two tailed test.

PATHOLOGY TABLE 3 (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Incidence Summary of Microscopic Observations
Study Number: 88008f
All Diagnoses

Study Start Date: 31-Jan-89

PRINTED: 04-Oct-89
Page: 4

SUB-ACUTE/

Notes: Animals = all dead animals
Controls from group(s): 10

-- Animals Affected --
-- Females --

Tissues With Diagnoses	Animal sex: Dosage group: No. in group:										
		Ctts	1	2	3	4	5	6	7	8	9
		3	3	3	3	3	3	3	3	3	3
SALIVARY GLAND	Number examined:	3	3	3	3	3	3	3	3	3	2
Inflammation, Chronic		1	0	0	0	0	0	0	0	0	0
Duct Ectasia		0	0	0	0	1	0	0	0	0	0
Atrophy, Acinar		0	0	0	0	1	0	0	0	0	0
SKIN	Number examined:	3	2	3	3	3	3	3	2	3	3
Folliculitis, Subacute		1	1	0	1	1	0	0	0	0	0
Ectasia, Apocrine Glands		0	0	0	1	0	0	0	0	0	0
Dermatitis, Ulcerative		0	0	0	0	0	0	0	0	1	0
SUBMANDIBULAR LN	Number examined:	2	0	0	0	0	0	0	1	0	1
Sinus Histiocytosis		0	0	0	0	0	0	0	0	0	1
SKELETAL MUSCLE	Number examined:	2	3	3	3	3	3	3	3	3	3
Fasciitis, Chronic, with Mineralization		0	0	0	0	0	0	0	0	1	0
SCIATIC NERVE	Number examined:	3	3	3	3	3	3	3	3	2	3
SPLEEN	Number examined:	3	3	3	3	3	3	3	3	3	3
Siderotic Plaque		0	0	0	0	0	0	0	0	0	1
STOMACH	Number examined:	3	3	3	3	3	3	3	3	3	3
Lymphocyte Aggregates in Submucosa		0	0	0	1	0	0	0	0	1	1
THYROID GLAND	Number examined:	3	3	3	3	3	3	3	3	3	3
Cyst, Ciliated or Non-Ciliated		1	0	0	1	0	0	0	0	0	0
TONSIL(S)	Number examined:	3	3	2	2	3	3	3	2	2	3
Crypt Abscess		0	0	1	0	1	0	0	0	0	2

Note: Entries flagged with a - (minus) are significantly different from control at the 0.05 level using the Kolmogorov-Smirnov two tailed test.

PATHOLOGY TABLE 3 (cont.)

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOO/BEAGLE

Incidence Summary of Microscopic Observations
Study Number: 88008f
All Diagnoses
Study Start Date: 31-Jan-89

PRINTED: 04-Oct-89
Page: 5

[illegible]

Note: Entries flagged with a - (minus) are significantly different from control at the 0.05 level using the Kolmogorov-Smirnov two tailed test.

PATHOLOGY TABLE 3 (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Incidence Summary of Microscopic Observations
Study Number: 88008M
All Diagnoses

PRINTED: 04-Oct-89
Page: 1

Study Start Date: 07-Feb-89

SUB - ACUTE /

Notes: Animals = all dead animals
Controls from group(s):10

Notes: Animals = all dead animals
Controls from group(s):10

males affected -

Issues with Diagnoses

SKIN, ANTEBRACH.
Inflammation, Chronic
Hemorrhage
Folliculitis, Subacute

SKIN, ANTEBRACH. Number examined:

Inflammation, Chronic

Hemorrhage
Folliculitis, Subacute

ADRENAL GLANDS

Vacuolar Change, Cortical Cells

AORTA

BONE MARROW Number examined:

BONE MARROW

SPAIN Number examined:

Inflammation, Subacute, Choroid Plexus

Hemorrhage, Acute

Hemosiderin in Macrophages

CECUM

CERVICAL IN Number examined:

CERVICAL LN

Green Pigment in Macrophages

NO 103

Number examined:

CEPHALIC VEIN

Endophlebitis

DIAPHRAGM Number examined:

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DIAPHRAGM

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Note: Entries flagged with a - (minus) are significantly different from control at the 0.05 level using the Kolmogorov-Smirnov two tailed test.

PATHOLOGY TABLE 4

Note: Entries flagged with a - (minus) are significantly different from control at the 0.05 level using the Kolmogorov-Smirnov two tailed test.

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

PRINTED: 04-Oct-89
Page: 3

Incidence Summary of Microscopic Observations
Study Number: 88008M

All Diagnoses

Study Start Date: 07-Feb-89

SUB-ACUTE/

Notes: Animals = all dead animals Controls from group(s):10			Animal sex: Dosage group: No. in group:		-- Animals Affected -- -- Males --										
Tissues With Diagnoses					Ctls	1	2	3	3	4	5	6	7	8	9
					3	3	3	3	3	3	3	3	3	3	3
LIVER					3	3	3	3	3	3	3	3	3	3	3
Hepatocellular Vacuolation, Coarse Type					3	3	2	2	3	3	3	3	3	2	3
Extramullary Hematopoiesis					0	1	0	0	0	1	0	1	0	1	1
Inflammation, Subacute					0	0	0	0	0	0	0	0	1	1	0
LUNGS					3	3	3	3	3	3	3	3	3	3	3
Inflammation, Hemorrhagic, Acute					0	1	0	0	0	0	0	0	0	0	0
Thrombosis					0	0	0	0	0	0	0	0	0	1	0
Inflammation, Interstitial, Subacute					1	0	0	0	0	0	0	2	1	1	0
Granuloma					1	0	0	0	0	0	0	0	0	0	0
Alveolar Proteinosis					0	0	1	0	0	0	0	0	0	0	0
MAMMARY GLANDS					1	2	1	0	3	0	1	1	1	0	0
MES. LYMPH NODE					3	3	3	3	3	3	3	2	3	3	3
Congestion and/or Hemorrhage of the Medulla					0	2	2	3	0	1	1	2	2	1	1
Sinus Neutrophilia					0	0	0	0	0	0	0	0	2	1	0
PANCREAS					3	3	3	3	3	3	3	3	3	3	3
Acinar (Exocrine) Cell Atrophy					1	0	0	0	1	1	0	2	0	0	0
PITUITARY GLAND					3	3	3	3	3	3	3	3	3	3	2
Cysts(s)					0	0	0	1	0	1	1	1	0	1	0
PROSTATE					3	3	3	3	3	3	3	3	3	3	3
Interstitial Lymphocyte Infiltration					0	0	0	0	0	0	0	0	0	1	0
Inflammation, subacute					0	0	0	0	0	0	0	0	0	0	1

Note: Entries flagged with a - (minus) are significantly different from control at the 0.05 level using the Kolmogorov-Smirnov two tailed test.

PATHOLOGY TABLE 4 (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Incidence Summary of Microscopic Observations
Study Number: 88008M
All Diagnoses
Study Start Date: 07-Feb-89

PRINTED: 04-Oct-89
Page: 4

	Animals Affected									
	Males					Females				
Tissues With Diagnoses	Ctts	1	2	3	4	5	6	7	8	9
PARATHYROID	3	2	3	3	2	3	3	2	2	3
Cartilaginous Rest(s)	0	1	0	0	0	0	0	0	0	0
Cyst, Ciliated or Non-Ciliated	0	0	0	1	0	0	0	0	0	0
SPINAL CORD	3	3	3	3	3	3	3	3	3	3
SALIVARY GLAND	3	3	3	3	3	3	3	3	3	3
Atrophy, Acinar	1	0	0	0	0	0	0	0	0	0
SKIN	3	3	3	2	3	3	3	3	3	3
Folliculitis, Subacute	0	0	1	1	0	0	1	0	0	0
SKELETAL MUSCLE	3	3	3	3	3	3	3	3	3	3
SCIATIC NERVE	3	3	3	3	3	3	3	3	3	3
SPLEEN	3	3	3	3	3	3	3	3	3	3
Hemorrhage, Acute	0	1	0	0	0	0	0	0	1	0
Accessory Spleens	0	1	0	0	0	0	0	0	0	0
STOMACH	3	3	3	3	3	3	3	3	3	3
TESTIS	3	3	3	3	3	3	3	3	3	2
THYROID GLAND	3	3	3	3	3	3	3	3	3	3
TOMIL(S)	3	3	3	3	3	3	3	3	3	3
Hemorrhage/Congestion	0	0	0	0	0	0	0	1	0	0
Crypt Abscess	0	0	0	0	0	0	0	1	0	1

Note: Entries flagged with a - (minus) are significantly different from control at the 0.05 level using the Kolmogorov-Smirnov two tailed test.

PATHOLOGY TABLE 4 (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Incidence Summary of Microscopic Observations

Study Number: 88008M

All Diagnoses

Study Start Date: 07-Feb-89

PRINTED: 04-Oct-89
Page: 5

SUB-ACUTE/

	-- Animals Affected --									
	-- Males --									
	1	2	3	4	5	6	7	8	9	
Notes: Animals = all dead animals										
Controls from group(s): 10										
Animal sex:										
Usage group:										
No. in group:	3	3	3	3	3	3	3	3	3	
Tissues With Diagnoses										
THYMUS	3	3	3	2	3	3	3	2	3	
Ultimobranchial Cyst, Ciliated or Non-Ciliated	1	1	0	0	0	0	0	1	0	
TRACHEA	3	3	3	3	3	3	3	3	3	
Cartilaginous Hypoplasia	0	0	0	1	0	0	0	0	0	
URINARY BLADDER	3	3	3	3	3	3	3	3	3	
Hemorrhage, Submucosal, Acute	0	0	0	0	0	0	0	0	1	
Lymphocyte Infiltration	0	0	0	0	0	0	0	0	1	
Thrombosis	0	0	1	0	0	0	0	0	0	
URETER	3	3	3	3	3	3	3	3	3	
Lymphocyte Infiltration	0	0	0	0	0	0	0	0	1	

Note: Entries flagged with a - (minus) are significantly different from control at the 0.05 level using the Kolmogorov-Smirnov two tailed test.

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH Summary Table of Microscopic Observations With Average Severity Grade
 DIV OF RES SUPP, PATH SERV GP Study Number: 88008F PRINTED: 04-Oct-89
 PRESIDIO OF SAN FRANCISCO, CA 94129 Nonneoplastic Graded Diagnoses Page: 1
 DOG/BEAGLE Study Start Date: 31-Jan-89 SUB-ACUTE/

Notes: Animals = all dead animals Controls from group(s):10				Animal sex: Dosage group: No. in group:		-- Animals Affected -- -- Females --									
Tissues With Diagnoses				Ctls	1	2	3	4	5	6	7	8	9		
SKIN, ANTEBRACH.				3	3	3	3	3	3	3	3	3	3		
Inflammation, subcutaneous				3	3	3	2	3	3	3	3	2	3		
Number examined:				1	3	0	1	1	2	2	2	2	1		
Average severity:				0.7	2.3	0.0	2.0	0.7	1.0	1.3	2.0	3.0	1.3		
Subcutaneous Hemorrhage				2	0	2	2	1	2	1	1	2	1		
Average severity:				1.3	0.0	1.7	3.0	0.7	1.7	1.0	1.3	3.0	1.0		
Folliculitis, Subacute				0	0	0	0	0	1	0	2	0	0		
Average severity:				0.0	0.0	0.0	0.0	0.0	0.7	0.0	1.7	0.0	0.0		
ADRENAL GLANDS				3	3	3	3	3	3	3	3	3	3		
Inflammation, Subacute				0	0	1	0	0	0	0	0	0	0		
Average severity:				0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Vacuolar Change, Cortical Cells				0	0	1	1	0	0	0	0	1	1		
Average severity:				0.0	0.0	0.3	0.7	0.0	0.0	0.0	0.0	0.3	0.3		
AORTA				3	3	3	3	3	2	3	3	3	3		
BONE MARROW				3	3	3	3	3	3	2	3	3	3		
BRAIN				3	3	3	3	3	3	3	3	3	3		
CECUM				3	3	3	3	3	3	3	3	3	3		
COLON				3	3	3	3	3	3	2	3	3	3		
Granuloma, Submucosal, Foreign-Body				0	0	0	0	0	1	0	0	0	0		
Average severity:				0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0		

PATHOLOGY TABLE 5

. Number examined:

[illegible]

PATHOLOGY TABLE 5 (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH Summary Table of Microscopic Observations With Average Severity Grade
 DIV OF RES SUPP, PATH SERV GP Study Number: 88008F PRINTED: 04-Oct-89
 PRESIDIO OF SAN FRANCISCO, CA 94129 Nonneoplastic Graded Diagnoses Page: 4
 DOG/BEAGLE Study Start Date: 31-Jan-89 SUB-ACUTE/

Notes: Animals = all dead animals		-- Animals Affected --	
Controls from group(s): 10		-- Females --	
Animal sex:			
Dosage group:			
No. in group:			
Tissues With Diagnoses			
LIVER			
Thrombosis, Portal Vein			
Inflammation, Subacute			
Pigment-Laden Macrophages, Predominantly Periportal			
Inflammation, Interstitial, Subacute			
Granuloma			
MAMMARY GLANDS			
MIS. LYMPH NODE			
Sinus Neutrophilia			
Congestion and/or Hemorrhage of the Medulla			
OVARIE,			

PATHOLOGY TABLE 5 (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH Summary Table of Microscopic Observations With Average Severity Grade
 DIV OF RES SUPP, PATH SERV GP Study Number: 88008F PRINTED: 04-Oct-89
 PRESIDIO OF SAN FRANCISCO, CA 94129 Nonneoplastic Graded Diagnoses Page: 5
 DOG/BEAGLE Study Start Date: 31-Jan-89 SUB-ACUTE/

Notes: Animals = all dead animals
 Controls from group(s): 10

Animals Affected --

Tissues With Diagnoses	Males		Females		Total	
	1	2	3	4	5	6
CTLs	3	3	3	3	3	3
PANCREAS	3	3	3	3	3	3
Acinar Hypertrophy and Vacuolation	0	0	0	0	0	0
Number examined:	3	3	3	3	3	3
Average severity:	0.0	0.0	0.0	0.0	0.0	0.0
Acinar (Exocrine) Cell Atrophy	1	1	0	1	1	1
Number examined:	3	3	3	3	3	3
Average severity:	0.3	0.7	0.3	0.3	0.7	0.3
PITUITARY GLAND	3	3	3	3	3	3
Histiocytosis	0	0	0	0	0	0
Number examined:	3	3	3	3	3	3
Average severity:	0.0	0.0	0.0	0.0	0.0	0.0
Cyst(s)	0	1	0	1	0	0
Number examined:	3	3	3	3	3	3
Average severity:	0.0	0.3	0.0	0.7	0.3	0.0
PARATHYROID	2	3	3	3	3	3
Ultimobranchial Cyst, Ciliated or Non-Ciliated	1	0	0	0	1	1
Number examined:	3	3	3	3	3	3
Average severity:	1.0	0.0	0.0	0.0	0.7	0.7
SPINAL CORD	3	3	3	3	3	3
Number examined:	3	3	3	3	3	3
SALIVARY GLAND	3	3	3	3	3	3
Inflammation, Chronic	1	0	0	0	0	0
Number examined:	3	3	3	3	3	3
Average severity:	0.3	0.0	0.0	0.0	0.0	0.0
Duct Ectasia	0	0	0	0	0	0
Number examined:	3	3	3	3	3	3
Average severity:	0.0	0.0	0.0	0.0	0.0	0.0
Atrophy, Acinar	0	0	0	0	0	0
Number examined:	3	3	3	3	3	3
Average severity:	0.0	0.0	0.0	0.0	0.0	0.0

PATHOLOGY TABLE 5 (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH Summary Table of Microscopic Observations With Average Severity Grade
DIV OF RES SUPP, PATH SERV GP Study Number: 88008F
PRESIDIO OF SAN FRANCISCO, CA 94129 Wnoneoplastic Graded Diagnoses
DOG/BEAGLE Study Start Date: 31-Jan-89

PRINTED: 04-Oct-89
Page: 6

Notes: Animals = all dead animals
Controls from group(s):10

males Affected --
-- females --

Issues with Diagnoses

City	1	2	3	4	5	6	7	8	9	3
City	1	2	3	4	5	6	7	8	9	3

SKIN
Folliculitis, Subacute

Number examined:	3	2	3	3	3	3	2	3
Average severity:	1	1	0	1	1	0	0	0
	0.3	0.5	0.0	1.0	0.3	0.0	0.0	0.0

Ectasia, Apocrine Glands

Average severity:

Dermatitis, Ulcerative

[illegible]

SUBMANDIBULAR LN
Sinus histiocytosis

[illegible]

SKELETAL MUSCLE

[illegible]

SCIATIC NERVE

.Number examined:

SPLLEEN
Siderotic Plaque

[illegible]

STOMACH

.Number examined:	3	3	3	3	3	3
Average severity:	0	0	0	1	0	0
	0.0	0.0	0.0	0.3	0.0	0.0
	0.0	0.0	0.0	0.7	0.0	0.7

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH Summary Table of Microscopic Observations With Average Severity Grade
 DIV OF RES SUPP, PATH SERV GP Study Number: 88008M PRINTED: 04-Oct-89
 PRESIDIO OF SAN FRANCISCO, CA 94129 Nonneoplastic Graded Diagnoses Page: 1
 DOG/BEAGLE Study Start Date: 07-Feb-89 SUB-ACUTE/

Notes: Animals = all dead animals Controls from group(s):10		-- Animals Affected --	
		-- Males --	
Tissues With Diagnoses		Ctl's	
		1 2 3 4 5 6 7 8 9	
		3 3 3 3 3 3 3 3 3	
SKIN, ANTEBRACH.		3 3 3 3 2 3 3 3 3	
Inflammation, Chronic		2 0 0 1 1 2 2 1 1	
Number examined:		1.3 0.0 0.0 0.7 0.5 1.7 1.3 0.7 0.0	
Average severity:		2 0 2 1 0 2 3 0 0	
Hemorrhage		2.0 0.0 1.7 0.7 0.0 2.0 2.7 0.0 0.0	
Folliculitis, Subacute		1 1 1 1 0 1 1 0 0	
Average severity:		0.7 0.3 0.3 0.3 0.0 0.7 0.3 0.0 0.0	
ADRENAL GLANDS		3 3 3 3 3 3 3 3 3	
Vacuolar Change, Cortical Cells		0 1 0 1 0 1 1 0 0	
Number examined:		0.0 0.3 0.0 0.7 0.0 0.7 0.3 0.0 0.0	
Average severity:		3 3 3 3 3 3 3 3 3	
AORTA		3 3 3 3 3 3 3 3 3	
BONE MARROW		3 3 3 3 3 2 2 3 2	
BRAIN		3 3 3 3 3 3 3 3 3	
Inflammation, Subacute, Choroid Plexus		0 0 0 1 0 1 1 0 0	
Number examined:		0.0 0.0 0.0 0.7 0.0 0.7 0.3 0.0 0.0	
Average severity:		0 0 0 0 0 0 1 1 0	
Hemorrhage, Acute		0.0 0.0 0.0 0.0 0.0 0.3 0.7 0.0 0.0	
Average severity:		0 0 0 0 0 0 0 1 0	
Hemosiderin in Macrophages		0.0 0.0 0.0 0.0 0.0 0.0 0.7 0.0 0.0	
Average severity:		3 3 3 3 3 3 3 3 3	
CECUM		3 3 3 3 3 3 3 3 3	
Number examined:			

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
 DIV OF RES SUPP, PATH SERV GP
 PRESIDIO OF SAN FRANCISCO, CA 94129
 DOG/BEAGLE

Summary Table of Microscopic Observations With Average Severity Grade
 Study Number: 88008M
 Nonneoplastic Graded Diagnoses
 Study Start Date: 07-feb-89

PRINTED: 04-Oct-89
 Page: 2
 SUB-ACUTE/

Notes: Animals = all dead animals
Controls from group(s):10

-- Animals Affected --

Controls from group(s): 10

Process	No. in group:
1	3
2	3
3	3
4	3
5	3
6	3
7	3
8	3
9	3
10	3
11	3
12	3
13	3
14	3
15	3
16	3
17	3
18	3
19	3
20	3
21	3
22	3
23	3
24	3
25	3
26	3
27	3
28	3
29	3
30	3
31	3
32	3
33	3
34	3
35	3
36	3
37	3
38	3
39	3
40	3
41	3
42	3
43	3
44	3
45	3
46	3
47	3
48	3
49	3
50	3
51	3
52	3
53	3
54	3
55	3
56	3
57	3
58	3
59	3
60	3
61	3
62	3
63	3
64	3
65	3
66	3
67	3
68	3
69	3
70	3
71	3
72	3
73	3
74	3
75	3
76	3
77	3
78	3
79	3
80	3
81	3
82	3
83	3
84	3
85	3
86	3
87	3
88	3
89	3
90	3
91	3
92	3
93	3
94	3
95	3
96	3
97	3
98	3
99	3
100	3

CERVICAL LN	0	0	0	1	0	0	1	0	1	0	0
Green pigment in Macrophages	0	0	0	0	1	0	0	1	0	0	0
Average severity:	0.0	0.0	0.0	0.0	2.0	0.0	0.0	1.0	0.0	0.0	0.0

COLON Number examined:

CEPHALIC VEIN	3	3	3	2	3	3	3
Endophlebitis	1	1	0	1	2	2	1
	1.0	0.3	0.0	0.3	1.0	1.3	0.7
Average severity:							0.0

DIAPHRAGM	3	3	3	3	3	3

DUODENUM		Number examined:	3	3	3	3	3
Cyst, Glandular, Mucosal			0	1	0	0	0
		Average severity:	0.0	0.3	0.0	0.0	0.0

[illegible]

ESOPHAGUS Number examined: 3 3 3 3 3 3 3

EYE	Number examined:	3	3	3	3	3

GALL BLADDER	3	3	3	3	3	3

HEART	3	3	3	3	3	3	3
Endocardiosis, Valvular	1	0	0	0	0	0	0
Average severity:	0.7	0.0	0.0	0.0	0.0	0.0	0.0

[illegible]

ILEUM	Number examined:	3	3	3	3	3

PATHOLOGY TABLE 6 (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH Summary Table of Microscopic Observations With Average Severity Grade
 DIV OF RES SUPP, PATH SERV GP Study Number: 88008M PRINTED: 04-Oct-89
 PRESIDIO OF SAN FRANCISCO, CA 94129 Nonneoplastic Graded Diagnoses Page: 4
 DOG/BEAGLE Study Start Date: 07-Feb-89 SUB-ACUTE/

Notes: Animals = all dead animals		-- Animals Affected --		-- Males --		SUB-ACUTE/	
Controls from group(s): 10		Animal sex:		Dosage group:			
		No. in group:		Ctl's			
Tissues With Diagnoses				3 3 3 3 3 3 3 3 3 3			
LUNGS		Number examined:		3 3 3 3 3 3 3 3 3 3			
Inflammation, Hemorrhagic, Acute		Average severity:		0 1 0 0 0 0 0 0 0 0			
				0.0 1.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0			
Thrombosis		Average severity:		0 0 0 0 0 0 0 0 0 0			
				0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0			
Inflammation, Interstitial, Subacute		Average severity:		1 0 0 0 0 0 0 0 2 1			
				0.3 0.0 0.0 0.0 0.0 0.0 0.0 1.0 0.7 0.3			
Granuloma		Average severity:		1 0 0 0 0 0 0 0 0 0			
				0.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0			
Alveolar Proteinosis		Average severity:		0 0 1 0 0 0 0 0 0 0			
				0.0 0.0 0.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0			
MAMMARY GLANDS		Number examined:		1 2 1 0 3 0 1 1 0 0			
MES. LYMPH NODE		Number examined:		3 3 3 3 3 3 2 3 3 3			
Congestion and/or Hemorrhage of the Medulla		Average severity:		0 2 2 3 0 1 1 2 2 1			
				0.0 1.3 1.0 1.3 0.0 0.7 0.5 1.0 1.3 0.3			
Sinus Neutrophilia		Average severity:		0 0 0 0 0 0 0 0 2 1			
				0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.0 0.3 0.0			
PANCREAS		Number examined:		3 3 3 3 3 3 3 3 3 3			
Acinar (Exocrine) Cell Atrophy		Average severity:		1 0 0 0 1 1 0 2 0 0			
				0.3 0.0 0.0 0.0 0.7 0.3 0.0 1.3 0.0 0.0			

PATHOLOGY TABLE 6 (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH Summary Table of Microscopic Observations With Average Severity Grade
 DIV OF RES SUPP, PATH SERV GP Study Number: 88008M PRINTED: 04-Oct-89
 PRESIDIO OF SAN FRANCISCO, CA 94129 Nonneoplastic Graded Diagnoses Page: 5
 DOG/BEAGLE Study Start Date: 07-Feb-89 SUB-ACUTE/

Notes: Animals = all dead animals		Animals Affected									
Controls from group(s): 10		Males									
		Animal sex:		Dosage group:		Ctl's		1		2	
				No. in group:		3		3		3	
Tissues With Diagnoses											
PITUITARY GLAND											
Cysts(s)											
Average severity:											
PROSTATE											
Interstitial Lymphocyte Infiltration											
Average severity:											
Inflammation, subacute											
Average severity:											
PARATHYROID											
Cartilaginous Rest(s)											
Average severity:											
Cyst, Ciliated or Non-Ciliated											
Average severity:											
SPINAL CORD											
Number examined:											
SALIVARY GLAND											
Atrophy, Acinar											
Average severity:											
SKIN											
Folliculitis, Subacute											
Average severity:											
SKELETAL MUSCLE											
Number examined:											
SCIATIC NERVE											
Number examined:											

PATHOLOGY TABLE 6 (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH Summary Table of Microscopic Observations With Average Severity Grade
 DIV OF RES SUPP, PATH SERV GP Study Number: 88008M PRINTED: 04-Oct-89
 PRESIDIO OF SAN FRANCISCO, CA 94129 Mononeoplastic Graded Diagnoses Page: 6
 DOG/BEAGLE Study Start Date: 07-Feb-89 SUB-ACUTE/

Notes: Animals = all dead animals		Animals Affected	
Controls from group(s): 10		Males	
Tissues With Diagnoses		Animals	
Animal sex:			
Dosage group:			
No. in group:			
SPLEEN	3 3 3 3 3 3 3 3 3 3	3 3 3 3 3 3 3 3 3 3	3 3 3 3 3 3 3 3 3 3
Hemorrhage, Acute	0 1 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0
Average severity:	0.0 0.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
Accessory Spleens			
Average severity:			
STOMACH	3 3 3 3 3 3 3 3 3 3	3 3 3 3 3 3 3 3 3 3	3 3 3 3 3 3 3 3 3 3
Number examined:			
TESTIS	3 3 3 3 3 3 3 3 3 3	3 3 3 3 3 3 3 3 3 3	3 3 3 3 3 3 3 3 3 3
Number examined:			
THYROID GLAND	3 3 3 3 3 3 3 3 3 3	3 3 3 3 3 3 3 3 3 3	3 3 3 3 3 3 3 3 3 3
Number examined:			
TONSIL(S)	3 3 3 3 3 3 3 3 3 3	3 3 3 3 3 3 3 3 3 3	3 3 3 3 3 3 3 3 3 3
Hemorrhage/Congestion	0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0
Average severity:	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
Crypt Abscess			
Average severity:			
THYMUS	3 3 3 3 3 3 3 3 3 3	3 3 3 3 3 3 3 3 3 3	3 3 3 3 3 3 3 3 3 3
Ultimobranchial Cyst, Ciliated or Non-Ciliated	1 1 0 0 0 0 0 0 0 0	1 1 0 0 0 0 0 0 0 0	1 1 0 0 0 0 0 0 0 0
Average severity:	0.3 0.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.3 0.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.3 0.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
TRACHEA	3 3 3 3 3 3 3 3 3 3	3 3 3 3 3 3 3 3 3 3	3 3 3 3 3 3 3 3 3 3
Cartilaginous Hypoplasia	0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0
Average severity:	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

PATHOLOGY TABLE 6 (cont.)

PATHOLOGY TABLE 6 (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Group Comparison Statistics for Absolute Organ Weights (gms)
Study Number: 88008F
Report includes all dead animals (All subgroups)
Study Start Date: 31-Jan-89

PRINTED: 04-Oct-89
Page: 1

SUB-ACUTE/

Organ: LIVER	F e m a l e A n i m a l s									
	Controls from group: 10		Data homogeneous by Bartlett's test (Fisher's Lsd test)							
Group	1	2	3	4	5	6	7	8	9	
Number/group	3	3	3	3	2	3	3	3	3	
Mean	331.9	471.1	531.7	536.6	382.7	387.6	372.3	391.6	424.2	
Standard deviation	25.2	26.8	108.1	65.0	91.5	11.7	36.1	60.7	106.1	
Group diff. @ p=.05	114.2*	114.2*	114.2*	114.2	127.7	114.2	114.2	114.2	114.2	
Group diff. @ p=.01	156.1	156.1*	156.1*	156.1	174.5	156.1	156.1	156.1	156.1	

Analysis of variance: F ratio = 3.76 Df = 9/ 19 F probability = 0.007
Note: a * indicates group mean is significantly different from control at level of significance shown.

Organ: KIDNEY	F e m a l e A n i m a l s									
	Controls from group: 10		Data homogeneous by Bartlett's test (Fisher's Lsd test)							
Group	1	2	3	4	5	6	7	8	9	
Number/group	3	3	3	3	3	3	3	3	3	
Mean	48.8	55.0	60.4	53.8	50.0	52.6	45.9	52.8	55.0	
Standard deviation	2.8	5.8	5.8	7.4	4.2	8.9	3.8	9.5	8.1	
Group diff. @ p=.05	11.1	11.1*	11.1*	11.1	11.1	11.1	11.1	11.1	11.1	
Group diff. @ p=.01	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	

Analysis of variance: F ratio = 1.16 Df = 9/ 20 F probability = 0.369
Note: a * indicates group mean is significantly different from control at level of significance shown.

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH Group Comparison Statistics for Absolute Organ Weights (gms) PRINTED: 04-Oct-89
 DIV OF RES SUPP, PATH SERV GP Study Number: 88008F Page: 2
 PRESIDIO OF SAN FRANCISCO, CA 94129 Report includes all dead animals (All subgroups)
 DOG/BEAGLE Study Start Date: 31-Jan-89 SUB-ACUTE/

Organ: HEART	F e m a l e A n i m a l s									
	Controls from group: 10					Data homogeneous by Bartlett's test (Fisher's lsd test)				
Group	Control	1	2	3	4	5	6	7	8	9
Number/group	3	3	3	3	3	3	3	3	3	3
Mean	82.5	89.3	88.5	87.5	93.2	84.6	88.6	90.5	91.3	87.9
Standard deviation	8.5	4.0	2.2	3.5	7.1	9.2	11.8	12.9	13.7	9.2
Group diff. a		15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4
Group diff. a		21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0

Analysis of variance: F ratio = 0.35 Df = 9/ 20 F probability = 0.944

Note: a * indicates group mean is significantly different from control at level of significance shown.

Organ: BRAIN	F e m a l e A n i m a l s									
	Controls from group: 10					Data homogeneous by Bartlett's test (Fisher's lsd test)				
Group	Control	1	2	3	4	5	6	7	8	9
Number/group	3	3	3	3	3	3	3	3	3	3
Mean	80.	80.	77.	78.	80.	80.	78.	76.	82.	79.
Standard deviation	5.	3.	2.	8.	10.	4.	7.	10.	12.	3.
Group diff. a		12.	12.	12.	12.	12.	12.	12.	12.	12.
Group diff. a		17.	17.	17.	17.	17.	17.	17.	17.	17.

Analysis of variance: F ratio = 0.18 Df = 9/ 20 F probability = 0.993

Note: a * indicates group mean is significantly different from control at level of significance shown.

PATHOLOGY TABLE 7 (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH Group Comparison Statistics for Absolute Organ Weights (gms) PRINTED: 04-Oct-89
 DIV OF RES SUPP, PATH SERV GP Study Number: 88008F Page: 3
 PRESIDIO OF SAN FRANCISCO, CA 94129 Report includes all dead animals (All subgroups)
 DOG/BEAGLE Study Start Date: 31-Jan-89 SUB-ACUTE/

Organ: OVARIES	F e m a l e A n i m a l s									
	Controls from group: 10		Data non-homogeneous by Bartlett's test (modified t test)							
Group	1	2	3	4	5	6	7	8	9	
Number/group	3	3	3	3	3	3	3	3	3	
Mean	1.36	1.40	1.09	1.22	0.78	1.06	0.80	0.94	2.30	
Standard deviation	0.58	0.63	0.11	0.23	0.54	0.19	0.15	0.35	1.33	
Group diff. @ P=.05	2.12	1.46	1.55	1.97	1.51	1.49	1.68	1.47	3.60	
Group diff. @ P=.01	4.89	3.38	3.57	4.55	3.49	3.43	3.87	3.38	8.30	

Analysis of variance: F ratio = 1.88 Df = 9/ 20 F probability = 0.115
 Note: * indicates group mean is significantly different from control at level of significance shown.

Organ: ADRENAL GLANDS	F e m a l e A n i m a l s									
	Controls from group: 10		Data homogeneous by Bartlett's test (Fisher's lsd test)							
Group	1	2	3	4	5	6	7	8	9	
Number/group	3	3	3	3	3	3	3	3	3	
Mean	1.25	1.35	1.41	1.70	1.15	1.55	1.32	1.33	1.38	
Standard deviation	0.19	0.18	0.31	0.41	0.20	0.09	0.41	0.36	0.17	
Group diff. @ P=.05	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	
Group diff. @ P=.01	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	

Analysis of variance: F ratio = 1.08 Df = 9/ 20 F probability = 0.417
 Note: * indicates group mean is significantly different from control at level of significance shown.

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Group Comparison Statistics for Absolute Organ Weights (gms)
Study Number: 88008F
Report includes all dead animals (All subgroups)
Study Start Date: 31-Jan-89

PRINTED: 04-Oct-89
Page: 4

SUB-ACUTE/

Organ: SPLEEN	F e m a l e A n i m a l s									
	Controls from group: 10		Data homogeneous by Bartlett's test (Fisher's lsd test)							
Group	1	2	3	4	5	6	7	8	9	
Number/group	3	3	3	3	3	3	3	3	3	
Mean	57.	104.	89.	76.	72.	59.	82.	111.	66.	
Standard deviation	16.	15.	28.	14.	17.	5.	18.	2.	10.	
Group diff. @ P=.05	26.	26.*	26.*	26.	26.	26.	26.	26.*	26.	
Group diff. @ P=.01	35.	35.*	35.	35.	35.	35.	35.	35.*	35.	

Analysis of variance: F ratio = 4.25 Df = 9/ 20 F probability = 0.003

Note: a * indicates group mean is significantly different from control at level of significance shown.

PATHOLOGY TABLE 7 (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Group Comparison Statistics for Absolute Organ Weights (gms)

Study Number: 88008M

Report includes all dead animals (All subgroups)

Study Start Date: 07-Feb-89

PRINTED: 04-Oct-89
Page: 1

SUB-ACUTE/

Organ: LIVER	Male Animals									
	Controls from group: 10		Data homogeneous by Bartlett's test (Fisher's lsd test)							
Group	Control	1	2	3	4	5	6	7	8	9
Number/group	3	3	3	3	3	3	3	3	3	3
Mean	380.8	473.0	523.9	480.2	428.4	460.7	503.2	532.0	549.7	466.1
Standard deviation	59.1	17.1	65.3	85.5	51.4	89.2	34.4	101.1	147.9	91.8
Group diff. @ P=.05		140.1	140.1*	140.1	140.1	140.1	140.1	140.1*	140.1	140.1
Group diff. @ P=.01		191.1	191.1	191.1	191.1	191.1	191.1	191.1	191.1	191.1

Analysis of variance: F ratio = 1.14 Df = 9/ 20 F probability = 0.382

Note: * indicates group mean is significantly different from control at level of significance shown.

Organ: KIDNEY	Male Animals									
	Controls from group: 10		Data homogeneous by Bartlett's test (Fisher's lsd test)							
Group	Control	1	2	3	4	5	6	7	8	9
Number/group	3	3	3	3	3	3	3	3	3	3
Mean	58.7	66.8	68.9	54.8	65.5	62.9	58.1	73.5	72.9	66.4
Standard deviation	4.8	2.5	10.1	8.6	7.7	10.2	3.1	8.2	12.8	13.4
Group diff. @ P=.05		15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1
Group diff. @ P=.01		20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6

Analysis of variance: F ratio = 1.46 Df = 9/ 20 F probability = 0.221

Note: * indicates group mean is significantly different from control at level of significance shown.

PATHOLOGY TABLE 8

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

PRINTED: 04-Oct-89
Page: 2

Group Comparison Statistics for Absolute Organ Weights (gms)
Study Number: 88008M
Report includes all dead animals (All subgroups)
Study Start Date: 07-Feb-89

SUB-ACUTE/

Organ: HEART	Male Animals									
	Controls from group: 10			Data homogeneous by Bartlett's test (Fisher's lsd test)						
Group	1	2	3	4	5	6	7	8	9	
Number/group	3	3	3	3	3	3	3	3	3	
Mean	90.4	97.7	100.9	89.4	106.9	87.0	105.1	104.0	95.5	
Standard deviation	10.1	10.5	11.5	9.2	19.8	6.3	6.7	15.1	6.9	
Group diff. @ p=.05	18.6	18.6	13.6	18.6	18.6	18.6	18.6	18.6	18.6	
Group diff. @ p=.01	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4	

Analysis of variance: F ratio = 1.46 Df = 9/ 20 F probability = 0.228

Note: a * indicates group mean is significantly different from control at level of significance shown.

Organ: BRAIN	Male Animals									
	Controls from group: 10			Data homogeneous by Bartlett's test (Fisher's lsd test)						
Group	1	2	3	4	5	6	7	8	9	
Number/group	3	3	3	3	3	3	3	3	3	
Mean	84.	84.	82.	84.	81.	94.	84.	87.	85.	
Standard deviation	6.	8.	6.	10.	3.	7.	10.	4.	9.	
Group diff. @ p=.05	12.	12.	12.	12.	12.	12.	12.	12.	12.	
Group diff. @ p=.01	16.	16.	16.	16.	16.	16.	16.	16.	16.	

Analysis of variance: F ratio = 0.90 Df = 9/ 20 F probability = 0.546

Note: a * indicates group mean is significantly different from control at level of significance shown.

PATHOLOGY TABLE 8 (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH Group Comparison Statistics for Absolute Organ Weights (gms) PRINTED: 04-Oct-89
 DIV OF RES SUPP, PATH SERV GP Study Number: 88008M Page: 3
 PRESIDIO OF SAN FRANCISCO, CA 94129 Report includes all dead animals (All subgroups)
 DOG/BEAGLE Study Start Date: 07-Feb-89 SUB-ACUTE/

Organ: ADRENAL GLANDS	Male Animals									
	Controls from group: 10		Data homogeneous by Bartlett's test (Fisher's lsd test)							
Group	1	2	3	4	5	6	7	8	9	
Number/group	3	3	3	3	3	3	3	3	3	
Mean	1.63	1.22	1.34	1.56	1.48	1.75	1.39	1.68	1.60	
Standard deviation	0.25	0.19	0.12	0.17	0.08	0.81	0.41	0.24	0.31	
Group diff. @ P=.05	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	
Group diff. @ P=.01	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	

Analysis of variance: F ratio = 0.79 Df = 9/ 20 F probability = 0.630
 Note: a * indicates group mean is significantly different from control at level of significance shown.

Organ: TESTIS	Male Animals									
	Controls from group: 10		Data homogeneous by Bartlett's test (Fisher's lsd test)							
Group	1	2	3	4	5	6	7	8	9	
Number/group	3	3	3	2	3	3	3	2	3	
Mean	18.73	20.23	16.79	17.43	20.72	16.34	17.25	26.25	21.99	
Standard deviation	5.23	5.28	0.90	2.54	6.87	2.62	0.97	3.23	8.16	
Group diff. @ P=.05	8.13	8.13	8.13	9.09	8.13	8.13	8.13	9.09	8.13	
Group diff. @ P=.01	11.13	11.13	11.13	12.45	11.13	11.13	11.13	12.45	11.13	

Analysis of variance: F ratio = 0.95 Df = 9/ 18 F probability = 0.506
 Note: a * indicates group mean is significantly different from control at level of significance shown.

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Group Comparison Statistics for Absolute Organ Weights (gms)
Study Number: 88008M
Report includes all dead animals (All subgroups)
Study Start Date: 07-Feb-89

PRINTED: 04-Oct-89
Page: 4

SUB-ACUTE/

Organ: SPLEEN	Male Animals									
	Controls from group: 10		Data homogeneous by Bartlett's test (Fisher's Lsd test)							
Group	1	2	3	4	5	6	7	8	9	
Number/group	3	3	3	3	3	3	3	3	3	
Mean	93.	86.	75.	62.	83.	64.	107.	126.	105.	
Standard deviation	46.	18.	12.	17.	1.	21.	25.	47.	20.	
Group diff. @ P=.05	48.	48.	48.	48.	48.	48.	48.	48.	48.	
Group diff. @ P=.01	65.	65.	65.	65.	65.	65.	65.	65.	65.	

Analysis of variance: F ratio = 1.55 Cf = 9/ 20 F probability = 0.198
Note: a * indicates group mean is significantly different from control at level of significance shown.

PATHOLOGY TABLE 8 (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH Group Comparison Statistics for % Organ to Brain Weight Ratio PRINTED: 04-Oct-89
 DIV OF RES SUPP, PATH SERV GP Study Number: 88008F Page: 1
 PRESIDIO OF SAN FRANCISCO, CA 94129 Report includes all dead animals (All subgroups)
 DOG/BEAGLE Study Start Date: 31-Jan-89 SUB-ACUTE/

Organ: LIVER	F e m a l e A n i m a l s									
	Controls from group: 10		Data non-homogeneous by Bartlett's test (modified T test)							
Group	1	2	3	4	5	6	7	8	9	
Number/group	3	3	3	3	2	3	3	3	3	
Mean	418.	693.	695.	405.	486.	502.	491.	480.	539.	
Standard deviation	30.	134.	161.	67.	147.	37.	17.	5.	140.	
Group diff. a p=.05	81.*	341.	407.	183.	1135.	118.	85.	74.	356.	
Group diff. a p=.01	186.	786.	938.	421.	4118.	273.	196.	172.	822.	

Analysis of variance: F ratio = 3.56 Df = 9/ 19 F probability = 0.010
 Note: a * indicates group mean is significantly different from control at level of significance shown.

Organ: KIDNEY	F e m a l e A n i m a l s									
	Controls from group: 10		Data homogeneous by Bartlett's test (Fisher's lsd test)							
Group	1	2	3	4	5	6	7	8	9	
Number/group	3	3	3	3	3	3	3	3	3	
Mean	61.	79.	72.	68.	63.	68.	61.	64.	70.	
Standard deviation	1.	8.	14.	14.	7.	14.	4.	2.	12.	
Group diff. a p=.05	16.	16.*	16.	16.	16.	16.	16.	16.	16.	
Group diff. a p=.01	22.	22.	22.	22.	22.	22.	22.	22.	22.	

Analysis of variance: F ratio = 1.03 Df = 9/ 20 F probability = 0.453
 Note: a * indicates group mean is significantly different from control at level of significance shown.

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH Group Comparison Statistics for X Organ to Brain Weight Ratio PRINTED 04-Oct-89
 DIV OF RES SUPP, PATH SERV GP Study Number: 88008f Page: 2
 PRESIDIO OF SAN FRANCISCO, CA 94129 Report includes all dead animals (All subgroups)
 DOG/BEAGLE Study Start Date: 31-Jan-89 SL - ACUTE/

Organ: HEART	F e m a l e A n i m a l s									
	Controls from group: 10					Data homogeneous by Bartlett's test (Fisher's LSD test)				
Group	1	2	3	4	5	6	7	8	9	
Number/group	3	3	3	3	3	3	3	3	3	
Mean	104.	112.	116.	116.	106.	115.	119.	112.	111.	
Standard deviation	10.	7.	5.	6.	11.	16.	9.	1.	11.	
Group diff. @ P=.05	17.	17.	17.	17.	17.	17.	17.	17.	17.	
Group diff. @ P=.01	23.	23.	23.	23.	23.	23.	23.	23.	23.	

Analysis of variance: F ratio = 0.68 Df = 9/ 20 F probability = 0.717
 Note: a = indicates group mean is significantly different from control at level of significance shown.

Organ: BRAIN	F e m a l e A n i m a l s									
	Controls from group: 10					Data homogeneous by Bartlett's test (Fisher's LSD test)				
Group	1	2	3	4	5	6	7	8	9	
Number/group	3	3	3	3	3	3	3	3	3	
Mean	100.	100.	100.	100.	100.	100.	100.	100.	100.	
Standard deviation	0.	0.	0.	0.	0.	0.	0.	0.	0.	
Group diff. @ P=.05	0.	0.	0.	0.	0.	0.	0.	0.	0.	
Group diff. @ P=.01	0.	0.	0.	0.	0.	0.	0.	0.	0.	

Analysis of variance: F ratio = 0.00 Df = 9/ 20 F probability = 1.000
 Note: a = indicates group mean is significantly different from control at level of significance shown.

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Group Comparison Statistics for % Organ to Brain Weight Ratio
Study Number: 88008F
Report includes all dead animals (All subgroups)
Study Start Date: 31-Jan-89

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SUB-ACUTE/

Organ: OVARIES	Female Animals									
	Data non-homogeneous by Bartlett's test (modified T test)									
Group	1	2	3	4	5	6	7	8	9	
Number/group	3	3	3	3	3	3	3	3	3	
Mean	1.7	1.4	1.4	1.6	1.0	1.4	1.1	1.2	2.9	
Standard deviation	0.7	0.2	0.2	0.9	0.3	0.1	0.4	0.2	1.6	
Group diff. @ P=.05	2.7	1.8	1.8	2.8	1.9	1.8	2.1	1.8	4.4	
Group diff. @ P=.01	6.3	4.2	4.2	6.6	4.3	4.1	4.8	4.2	10.0	

Analysis of variance: F ratio = 1.78 Df = 9/ 20 F probability = 0.136

Note: a * indicates group mean is significantly different from control at level of significance shown.

Organ: ADRENAL GLANDS	Female Animals									
	Data homogeneous by Bartlett's test (Fisher's Lsd test)									
Group	1	2	3	4	5	6	7	8	9	
Number/group	3	3	3	3	3	3	3	3	3	
Mean	1.6	1.7	1.8	1.5	1.4	2.0	1.7	1.7	1.7	
Standard deviation	0.3	0.2	0.4	0.3	0.3	0.2	0.4	0.5	0.1	
Group diff. @ P=.05	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	
Group diff. @ P=.01	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	

Analysis of variance: F ratio = 1.10 Df = 9/ 20 F probability = 0.403

Note: a * indicates group mean is significantly different from control at level of significance shown.

PATHOLOGY TABLE 9 (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
 DIV OF RES SUPP, PATH SERV GP
 PRESIDIO OF SAN FRANCISCO, CA 94129
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Group Comparison Statistics for X Organ to Brain Weight Ratio
 Study Number: 88008f
 Report includes all dead animals (All subgroups)
 Study Start Date: 31-Jan-89

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SUB-ACUTE/

Organ: SPLEEN	Female Animals									
	Controls from group: 10		Data homogeneous by Bartlett's test (Fisher's lsd test)							
Group	1	2	3	4	5	6	7	8	9	
Number/group	3	3	3	3	3	3	3	3	3	
Mean	71.	135.	114.	96.	90.	77.	107.	138.	83.	
Standard deviation	18.	19.	38.	24.	21.	9.	14.	21.	10.	
Group diff. @ p=.05	34.	34.*	34.*	34.	34.	34.	34.*	34.*	34.	
Group diff. @ p=.01	46.	46.*	46.	46.	46.	46.	46.	46.*	46.	

Analysis of variance: F ratio = 4.06 Df = 9/ 20 F probability = 0.004
 Note: a * indicates group mean is significantly different from control at level of significance shown.

PATHOLOGY TABLE 9 (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
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Group Comparison Statistics for % Organ to Brain Weight Ratio
Study Number: 88008M
Report includes all dead animals (All subgroups)
Study Start Date: 07-Feb-89

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SUB-ACUTE/

Organ: LIVER	Male Animals									
	Controls from group: 10		Data homogeneous by Bartlett's test (Fisher's Lsd test)							
Group	1	2	3	4	5	6	7	8	9	
Number/group	3	3	3	3	3	3	3	3	3	
Mean	535.	627.	594.	510.	569.	535.	626.	640.	555.	
Standard deviation	41.	47.	134.	50.	98.	44.	51.	199.	115.	
Group diff. @ P=.05	164.	164.*	164.	164.	164.	164.	164.*	164.*	164.	
Group diff. @ P=.01	224.	224.	224.	224.	224.	224.	224.	224.	224.	

Analysis of variance: F ratio = 1.14 Df = 9/ 20 F probability = 0.380

Note: * indicates group mean is significantly different from control at level of significance shown.

Organ: KIDNEY	Male Animals									
	Controls from group: 10		Data homogeneous by Bartlett's test (Fisher's Lsd test)							
Group	1	2	3	4	5	6	7	8	9	
Number/group	3	3	3	3	3	3	3	3	3	
Mean	70.	83.	67.	78.	78.	62.	87.	85.	79.	
Standard deviation	5.	13.	11.	9.	10.	7.	7.	18.	14.	
Group diff. @ P=.05	18.	18.	18.	18.	18.	18.	18.	18.	18.	
Group diff. @ P=.01	25.	25.	25.	25.	25.	25.	25.	25.	25.	

Analysis of variance: F ratio = 1.62 Df = 9/ 20 F probability = 0.175

Note: * indicates group mean is significantly different from control at level of significance shown.

PATHOLOGY TABLE 10

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
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PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Group Comparison Statistics for % Organ to Brain Weight Ratio
Study Number: 88008M
Report includes all dead animals (All subgroups)
Study Start Date: 07-Feb-89

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SUB-ACUTE/

Organ: HEART	Male Animals									
	Controls from group: 10		Data homogeneous by Bartlett's test (Fisher's lsd test)							
Group	1	2	3	4	5	6	7	8	9	
Number/group	3	3	3	3	3	3	3	3	3	
Mean	110.	122.	107.	106.	132.	92.	125.	121.	113.	
Standard deviation	7.	23.	6.	9.	20.	2.	10.	23.	5.	
Group diff. a	23.	23.	23.	23.	23.*	23.	23.	23.	23.	
Group diff. a	31.	31.	31.	31.	31.	31.	31.	31.	31.	

Analysis of variance: F ratio = 2.23 Df = 9/ 20 F probability = 0.065
Note: a * indicates group mean is significantly different from control at level of significance shown.

Organ: BRAIN	Male Animals									
	Controls from group: 10		Data homogeneous by Bartlett's test (Fisher's lsd test)							
Group	1	2	3	4	5	6	7	8	9	
Number/group	3	3	3	3	3	3	3	3	3	
Mean	100.	100.	100.	100.	100.	100.	100.	100.	100.	
Standard deviation	0.	0.	0.	0.	0.	0.	0.	0.	0.	
Group diff. a	0.	0.	0.	0.	0.	0.	0.	0.	0.	
Group diff. a	0.	0.	0.	0.	0.	0.	0.	0.	0.	

Analysis of variance: F ratio = 0.00 Df = 9/ 20 F probability = 1.000
Note: a * indicates group mean is significantly different from control at level of significance shown.

PATHOLOGY TABLE 10 (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH Group Comparison Statistics for % Organ to Brain Weight Ratio PRINTED: 04-Oct-89
 DIV OF RES SUPP, PATH SERV GP Study Number: 88008M Page: 3
 PRESIDIO OF SAN FRANCISCO, CA 94129 Report includes all dead animals (All subgroups)
 DOG/BEAGLE Study Start Date: 07-Feb-89 SUB-ACUTE/

Organ: ADRENAL GLANDS	Controls from group: 10		Male Animals									
	Control	1	2	3	4	5	6	7	8	9	Fisher's lsd test	
Number/group	3	3	3	3	3	3	3	3	3	3		
Mean	1.6	1.8	1.5	1.7	1.9	1.8	1.9	1.7	1.9	1.9		
Standard deviation	0.1	0.4	0.1	0.2	0.4	0.1	0.9	0.5	0.3	0.3		
Group diff. @ P=.05	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7		
Group diff. @ P=.01	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9		

Analysis of variance: F ratio = 0.49 Df = 9/ 20 F probability = 0.865
 Note: a * indicates group mean is significantly different from control at level of significance shown.

Organ: TESTIS	Controls from group: 10		Male Animals									
	Control	1	2	3	4	5	6	7	8	9	Fisher's lsd test	
Number/group	3	3	3	3	2	3	3	3	2	3		
Mean	22.1	21.4	24.1	20.7	19.5	25.5	17.4	20.5	31.1	25.6		
Standard deviation	5.0	3.9	4.9	2.2	1.2	7.8	3.0	1.9	4.7	7.7		
Group diff. @ P=.05	8.3	8.3	8.3	8.3	9.3	8.3	8.3	8.3	9.3	8.3		
Group diff. @ P=.01	11.4	11.4	11.4	11.4	12.7	11.4	11.4	11.4	12.7	11.4		

Analysis of variance: F ratio = 1.57 Df = 9/ 18 F probability = 0.199
 Note: a * indicates group mean is significantly different from control at level of significance shown.

PATHOLOGY TABLE 10 (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
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Group Comparison Statistics for X Organ to Brain Weight Ratio
Study Number: 88008M
Report includes all dead animals (All subgroups)
Study Start Date: 07-Feb-89

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SUB-ACUTE/

Organ: SPLEEN	Controls from group: 10			Male Animals							
				Data homogeneous by Bartlett's test (Fisher's lsd test)							
	Control	1	2	3	4	5	6	7	8		
Group	3	3	3	3	3	3	3	3	3		
Number/group	113.	105.	105.	91.	75.	103.	69.	130.	147.		
Mean	62.	43.	31.	10.	30.	4.	26.	45.	60.		
Standard deviation		64.	64.	64.	64.	64.	64.	64.	64.		
Group diff.@ P=.05		87.	87.	87.	87.	87.	87.	87.	87.		
Group diff.@ P=.01											

Analysis of variance: F ratio = 1.22 Df = 9/ 20 F probability = 0.336
Note: a * indicates group mean is significantly different from control at level of significance shown.

PATHOLOGY TABLE 10 (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
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DOG/BEAGLE

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Individual Animal Data Dump Table
Study Number: 88008f

Study Start Date: 31-Jan-89

SUB-ACUTE/

Animal: 89A00022 Sex: Female
Day of death: 15 Status: final sacrifice

Group: 1

Dose level: 12.0 ML/KG/day
Terminal body weight (kms): 12.00

Date	Day/week of Study	Organ Name	Absolute Organ Weight (gms)	Relative % of Body Weight	Relative % of Brain Weight	Organ Status
14-Feb-89	15/3	LIVER	499.0	4.16	601.4	
14-Feb-89	15/3	KIDNEY	61.7	0.51	74.3	
14-Feb-89	15/3	HEART	89.5	0.75	107.8	High
14-Feb-89	15/3	BRAIN	83.0	0.69	100.0	
14-Feb-89	15/3	OVARIES	1.30	0.011	1.56	Low
14-Feb-89	15/3	ADRENAL GLANDS	1.26	0.010	1.52	
14-Feb-89	15/3	SPLEEN	78.2	0.65	94.3	

<< Gross Observations >>

Tissue Finding, severity
WHOLE BODY NO LESIONS RECOGNIZED

<< Necropsy Memos >>

Tissue Necropsy memos
No necropsy memos recorded on animal

<< Pathology Observations >>

Tissue Histopathologic diagnoses / Special histological comments

LACRIMAL GLAND Duct Ectasia, Slight.

LIVER Hepatocellular Vacuolation, Coarse Type, Mild, Multifocal.
Extramedullary Hematopoiesis, Mild, Multifocal.

MES. LYMPH NODE Sinus Neutrophilia, Slight.
Congestion and/or Hemorrhage of the Medulla, Mild.

SKIN Folliculitis, Subacute, Slight, Focal.

SKIN, ANTEBRACH. Inflammation, Subcutaneous, Mild, Multifocal, Chronic.

CEPHALIC VEIN Endophlebitis, Mild.

PATHOLOGY ANNEX A

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
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Individual Animal Data Dump Table
Study Number: 88008F

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Animal: 89A00038 Sex: female
Status: final sacrifice
Study Start Date: 31-Jan-89 SUB-ACUTE/

Date	Day/week of Study	Organ Name	Absolute Organ Weight (gms)	Relative % of Body Weight	Terminal body weight (kms)	Dose level: 12.0 ML/KG/day	Organ Status
<< Organ Weights >>							
15-Feb-89	16/3	LIVER	445.5	4.05	574.9		
15-Feb-89	16/3	KIDNEY	51.2	0.47	66.1		
15-Feb-89	16/3	HEART	93.3	0.85	120.3		High
15-Feb-89	16/3	BRAIN	77.5	0.70	100.0		
15-Feb-89	16/3	OVARIES	2.07	0.019	2.68		Low
15-Feb-89	16/3	ADRENAL GLANDS	1.22	0.011	1.58		
15-Feb-89	16/3	SPLEEN	62.5	0.57	80.7		

Tissue Finding, severity << Gross Observations >>
WHOLE BODY NO LESIONS RECOGNIZED Gross Free-Text Comments

Tissue Necropsy memos << Necropsy Memos >>
No necropsy memos recorded on animal

Tissue Histopathologic diagnoses / Special histological comments << Pathology Observations >>
LIVER Inflammation, Subacute, Mild, Focal.

THYMUS Required protocol tissue is missing.

MES. LYMPH NODE Congestion and/or Hemorrhage of the Medulla, Mild.

SKIN, ANTERACH. Inflammation, Subcutaneous, Mild.

PATHOLOGY ANNEX A (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
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Individual Animal Data Dump Table
Study Number: 88008F

SUB-ACUTE/

Study Start Date: 31-Jan-89

Animal: 89A00072 Sex: Female
Day of death: 15 Status: Final sacrifice

Group: 1

Dose level: 12.0 ML/KG/day
Terminal body weight (kms): 10.60

Date	Day/week of Study	Organ Name	Absolute Organ Weight (gms)	Relative % of Body Weight	Relative % of Brain Weight	Organ Status
22-Mar-89	51/8	LIVER	468.8	4.42	588.3	High
22-Mar-89	51/8	KIDNEY	52.1	0.49	55.3	
22-Mar-89	51/8	HEART	85.2	0.80	107.0	High
22-Mar-89	51/8	BRAIN	79.7	0.75	100.0	
22-Mar-89	51/8	OVARIES	0.83	0.008	1.05	Low
22-Mar-89	51/8	ADRENAL GLANDS	1.56	0.015	1.95	
22-Mar-89	51/8	SPLEEN	67.7	0.64	84.9	

<< Gross Observations >>
Gross Free-Text Comments

Tissue Finding, severity

WHOLE BODY NO LESIONS RECOGNIZED

<< Necropsy Memos >>

Tissue Necropsy memos

No necropsy memos recorded on animal

<< Pathology Observations >>
Histopathologic diagnoses / Special histological comments

PITUITARY GLAND Cyst(s), Slight.

HEART Thrombosis, Valvular, Slight, Focal.
Epicarditis, Subacute, Slight, Focal.

LIVER Hepatocellular Vacuolation, Coarse Type, Mild.

KIDNEY Proteinaceous Casts, Slight, Focal.

PANCREAS Acinar (Exocrine) Cell Atrophy, Mild.

MES. LYMPH NODE Congestion and/or Hemorrhage of the Medulla, Slight.

SKIN Required protocol tissue is missing.
PATHOLOGY ANNEX A (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
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PRESIDIO OF SAN FRANCISCO, CA 94129
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Individual Animal Data Dump Table
Study Number: 88008f

Study Start Date: 31-Jan-89

SUB-ACUTE/

Animal: 89A00072 Sex: Female
Day of death: 15 Status: Final sacrifice

Group: 1

Dose level: 12.0 ML/KG/day
Terminal body weight (kms): 10.60

<< Pathology Observations >>

Tissue Histopathologic diagnoses / Special histological comments

MAMMARY GLANDS Required protocol tissue is missing.

SKIN, ANTEBRACH. Inflammation, Subcutaneous, Moderate.

CEPHALIC VEIN Endophlebitis, Moderate.

PATHOLOGY ANNEX A (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

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Page: 1

Individual Animal Data Dump Table
Study Number: 88008f

Study Start Date: 31-Jan-89

SUB-ACUTE/

Animal: 89A00031 Sex: Female
Day of death: 15 Status: Final sacrifice

Group: 2

Dose level: 16.0 ML/KG/day
Terminal body weight (kms): 13.25

Date	Day/week of Study	Organ Name	<< Organ Weights >>		
			Absolute Organ Weight (gms)	Relative % of Body Weight	
14-Feb-89	15/3	LIVER	649.3	4.90	
14-Feb-89	15/3	KIDNEY	66.7	0.50	
14-Feb-89	15/3	HEART	90.3	0.68	
14-Feb-89	15/3	BRAIN	77.0	0.58	
14-Feb-89	15/3	OVARIES	1.03	0.008	
14-Feb-89	15/3	ADRENAL GLANDS	1.06	0.008	
14-Feb-89	15/3	SPLEEN	88.5	0.67	

<< Gross Observations >>
Gross Free-Text Comments

Tissue Finding, severity
WHOLE BODY NO LESIONS RECOGNIZED

<< Necropsy Memos >>

Tissue Necropsy memos
STOMACH GAUZE SPONGE IN STOMACH

<< Pathology Observations >>
Histopathologic diagnoses / Special histological comments

Tissue TONSIL(S) Crypt Abscess, Slight.
LIVER Hepatocellular Vacuolation, Coarse Type, Mild.
MES. LYMPH NODE Congestion and/or Hemorrhage of the Medulla, Slight.
MAMMARY GLANDS Required protocol tissue is missing.
JEJUNUM Hematodiasis, Slight, Focal.
SKIN, ANTEBRACH. Subcutaneous Hemorrhage, Mild.

PATHOLOGY ANNEX A (cont.)

Appendix I (cont.): PATHOLOGY REPORT

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 DOG/BEAGLE

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Individual Animal Data Dump Table
 Study Number: 88008f

Study Start Date: 31-Jan-89 SUB-ACUTE/

Date	Day/week of Study	Organ Name	Absolute Organ Weight (gms)	Relative % of Body Weight	Terminal body weight (kms)	Dose level: 16.0 ML/KG/day	Organ Status
21-Mar-89	50/8	LIVER	436.6	4.43	586.1	High	
21-Mar-89	50/8	KIDNEY	59.0	0.60	79.2	High	
21-Mar-89	50/8	HEART	89.2	0.91	119.8	High	
21-Mar-89	50/8	BRAIN	74.5	0.76	100.0	Low	
21-Mar-89	50/8	OVARIES	1.21	0.012	1.63	Low	
21-Mar-89	50/8	ADRENAL GLANDS	1.66	0.017	2.23	Low	
21-Mar-89	50/8	SPLEEN	103.5	1.05	138.9	Low	

Tissue Finding, severity << Gross Observations >>
 WHOLE BODY NO LESIONS RECOGNIZED Gross Free-Text Comments

Tissue Necropsy memos << Necropsy Memos >>

No necropsy memos recorded on animal

Tissue Histopathologic diagnoses / Special histological comments << Pathology Observations >>

TONSIL(S) Required protocol tissue is missing.

LUNGS Granuloma, Mild, Multifocal.

LIVER Hepatocellular Vacuolation, Coarse Type, Mild.

KIDNEY Proteinaceous Casts, Slight, Multifocal.

ADRENAL GLANDS Vacuolar Change, Cortical Cells, Slight.

MES. LYMPH NODE Congestion and/or Hemorrhage of the Medulla, Slight.

DIAPHRAGM Required protocol tissue is missing.

PATHOLOGY ANNEX A (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
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DOC/BEAGLE

Individual Animal Data Dump Table
Study Number: 88008f

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Study Start Date: 31-Jan-89

SUB-ACUTE/

Animal: 89A00053

Sex: female

Group: 2

Dose level: 16.0 ML/KG/day

Day of death: 15

Status: Final sacrifice

Terminal body weight (kms): 9.85

<< Pathology Observations >>

Tissue Histopathologic diagnoses / Special histological comments

SKIN, ANTEBRACH. Subcutaneous Hemorrhage, Moderate.

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
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DOG/BEAGLE

Individual Animal Data Dump Table
Study Number: 88008f

Animal: 89A00066
Day of death: 15
Sex: Female
Status: Final sacrifice

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Study Start Date: 31-Jan-89
Group: 2
SUB-ACUTE/

Date	Day/week of Study	Organ Name	Absolute Organ Weight (gms)	Relative % of Body Weight	Relative % of Brain Weight	Dose level: 16.0 ML/KG/day	Terminal body weight (kms): 10.90
22-Mar-89	51/8	LIVER	509.2	4.67	649.8		
22-Mar-89	51/8	KIDNEY	55.5	0.51	70.8		
22-Mar-89	51/8	HEART	86.1	0.79	109.9		
22-Mar-89	51/8	BRAIN	78.4	0.72	100.0		
22-Mar-89	51/8	OVARIES	1.01	0.009	1.29		
22-Mar-89	51/8	ADRENAL GLANDS	1.51	0.014	1.92		
22-Mar-89	51/8	SPLEEN	118.6	1.09	151.3		

<< Gross Observations >>
Gross Free-Text Comments

Tissue Finding, severity
WHOLE BODY NO LESIONS RECOGNIZED

<< Necropsy Memos >>

Tissue Necropsy memos
No necropsy memos recorded on animal

<< Pathology Observations >>
Histopathologic diagnoses / Special histological comments

LIVER Hepatocellular Vacuolation, Coarse Type, Mild.

PANCREAS Acinar (Exocrine) Cell Atrophy, Slight.

ADRENAL GLANDS Inflammation, Subacute, Mild, Multifocal.

MAMMARY GLANDS Required protocol tissue is missing.

PATHOLOGY ANNEX A (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
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DOG/PEAGLE

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Individual Animal Data Dump Table
Study Number: 88008f

Study Start Date: 31-Jan-89

SUB-ACUTE/

Animal: 89A00025 Sex: Female

Status: Final Sacrifice

Group: 3

Terminal body weight (kms): 20.0 ML/KG/day
Dose level: 10.05

Animal: 0300005		Status: final sacrifice		Terminal body weight (kms):		10.05	
Date	Day/week of Study	Organ Name	<< Organ Weights >>	Absolute Organ Weight (gms)	Relative % of Body Weight	Relative % of Brain Weight	Organ Status
14-Feb-89	15/3	LIVER		522.9	5.20	648.3	High
14-Feb-89	15/3	KIDNEY		49.7	0.49	61.6	
14-Feb-89	15/3	HEART		83.6	0.83	103.6	High
14-Feb-89	15/3	BRAIN		80.7	0.80	100.0	
14-Feb-89	15/3	OVARIES		1.22	0.012	1.51	Low
14-Feb-89	15/3	ADRENAL GLANDS		2.15	0.021	2.67	
14-Feb-89	15/3	SPLEEN		57.2	0.57	70.9	

Tissue finding, severity << Gross Observations >>
Gross free-Text Comments

WHOLE BODY NO LESIONS RECOGNIZED

<< Necropsy Memos >>

Tissue Necropsy memos

No necropsy memos recorded on animal

<< Pathology Observations >>

Tissue histopathologic diagnoses / Special histological comments

LUNGS Inflammation, Interstitial, Subacute, Slight, Focal.

LIVER Hepatocellular Vacuolation, Coarse Type, Moderate.

SKIN Ectasia, Apocrine Glands, Moderate.

MAMMARY GLANDS Required protocol tissue is missing.

SKIN, ANTEBRACH. Subcutaneous Hemorrhage, Mild.

PATHOLOGY ANNEX A (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
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DOG/BEAGLE

Individual Animal Data Dump Table
Study Number: 88008F

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Study Start Date: 31-Jan-89

SUB-ACUTE/

Animal: 89A00033 Sex: Female Group: 3 Dose level: 20.0 ML/KG/day
Day of death: 15 Status: Final sacrifice Terminal body weight (kms): 12.35

Date	Day/week of Study	Organ Name	Absolute Organ Weight (gms)	Relative % of Body Weight	Relative % of Brain Weight	Organ Status
15-Feb-89	16/3	LIVER	479.6	3.88	562.8	
15-Feb-89	16/3	KIDNEY	56.6	0.46	66.4	
15-Feb-89	16/3	HEART	90.4	0.73	106.1	High
15-Feb-89	16/3	BRAIN	85.2	0.69	100.0	
15-Feb-89	16/3	OVARIES	1.21	0.010	1.42	Low
15-Feb-89	16/3	ADRENAL GLANDS	1.37	0.011	1.61	
15-Feb-89	16/3	SPLEEN	111.1	0.90	130.4	

Tissue Finding, severity << Gross Observations >>
LUNGS CONSOLIDATION, Mild Gross free-Text Comments

VENTRAL PORTION OF LOBES ON RIGHT AND LEFT SIDES

Tissue Necropsy memos << Necropsy Memos >>

STOMACH GAUZE SPONGE IN STOMACH

Tissue Histopathologic diagnoses / Special histological comments << Pathology Observations >>

PITUITARY GLAND Cyst(s), Mild.

THYROID GLAND Cyst, Ciliated or Non-Ciliated, Slight.

LUNGS Inflammation, Interstitial, Subacute, Mild, Multifocal.

LIVER Hepatocellular Vacuolation, Coarse Type, Mild.

KIDNEY Nephrocalcinosis, Slight.

ADRENAL GLANDS Vacuolar Change, Cortical Cells, Mild, Multifocal.

PATHOLOGY ANNEX A (cont.)

Appendix I (cont.): PATHOLOGY REPORT

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Individual Animal Data Dump Table
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Study Start Date: 31-Jan-89

SUB-ACUTE/

Animal: 89A00033

Sex: Female

Group: 3

Dose level: 20.0 ML/KG/day

Terminal body weight (kms): 12.35

Day of death: 15

Status: Final sacrifice

<< Pathology Observations >>

Tissue

Histopathologic diagnoses / Special histological comments

MES. LYMPH NODE Congestion and/or Hemorrhage of the Medulla, Slight.

MAMMARY GLANDS Required protocol tissue is missing.

SKIN, ANTEBRACH. Inflammation, Subcutaneous, Marked.
Subcutaneous Hemorrhage, Marked.

CEPHALIC VEIN Endophlebitis, Slight.

PATHOLOGY ANNEX A (cont.)

Appendix I (cont.): PATHOLOGY REPORT

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DOG/BEAGLE

Individual Animal Data Dump Table
Study Number: 88008f

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Animal: 89A00064 Sex: Female
Day of death: 15 Status: final sacrifice
Study Start Date: 31-Jan-89

SUB-ACUTE/

Group: 3 Terminal body weight (kms): 11.20 Dose level: 20.0 ML/KG/day

Date	Day/week of Study	Organ Name	Absolute Organ Weight (gms)	Relative % of Body Weight	Relative % of Brain Weight	Organ Status
21-Mar-89	50/8	LIVER	607.3	5.42	874.3	High
21-Mar-89	50/8	KIDNEY	60.8	0.54	87.6	High
21-Mar-89	50/8	HEART	88.6	0.79	127.5	High
21-Mar-89	50/8	BRAIN	69.5	0.62	100.0	Low
21-Mar-89	50/8	OVARIES	0.82	0.007	1.18	Low
21-Mar-89	50/8	ADRENAL GLANDS	1.57	0.014	2.26	Low
21-Mar-89	50/8	SPLEEN	97.5	0.87	140.4	Low

Tissue Finding, severity << Gross Observations >>
Gross Free-Text Comments

WHOLE BODY NO LESIONS RECOGNIZED

<< Necropsy Memos >>

Tissue Necropsy memos

No necropsy memos recorded on animal

<< Pathology Observations >>

Tissue Histopathologic diagnoses / Special histological comments

TONSIL(S) Required protocol tissue is missing.

LACRIMAL GLAND Duct Ectasia, Slight.

ESOPHAGUS Inflammation of Submucosal Glands, Acute, Mild.

LIVER Hepatocellular Vacuolation, Coarse Type, Moderate.
Extramedullary Hematopoiesis, Slight.

THYMUS Ultimobranchial Cyst, Ciliated or Non-Ciliated, Slight.

MES. LYMPH NODE Congestion and/or Hemorrhage of the Medulla, Mild.

DIAPHRAGM Required protocol tissue is missing.

PATHOLOGY ANNEX A (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
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DOG/BEAGLE

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Study Start Date: 31-Jan-89

SUB-ACUTE/

Animal: 89A00064

Sex: Female

Status: Final sacrifice

Group: 3

Dose level: 20.0 ML/KG/day
Terminal body weight (kms): 11.20

<< Pathology Observations >>

Histopathologic diagnoses / Special histological comments

Folliculitis, Subacute, Moderate, focal.

MAMMARY GLANDS Required protocol tissue is missing.

STOMACH Lymphocyte Aggregates in Submucosa, Slight.

SKIN, ANTEBRACH. Required protocol tissue is missing.

CEPHALIC VEIN Required protocol tissue is missing.

PATHOLOGY ANNEX A (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
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DOG/BEAGLE

Individual Animal Data Dump Table
Study Number: 88008F

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Study Start Date: 31-Jan-89 SUB-ACUTE/

Animal: 89A00020 Sex: female Group: 4 Dose level: 12.0 ML/KG/day
Day of death: 15 Status: Final sacrifice Terminal body weight (kms): 10.15

Date	Day/week of Study	Organ Name	<< Organ Weights >>		Relative % of Brain Weight	Organ Status
			Absolute Organ Weight (gms)	Relative % of Body Weight		
14-Feb-89	15/3	LIVER	310.7	3.06	442.7	Low
14-Feb-89	15/3	KIDNEY	58.3	0.57	83.1	High
14-Feb-89	15/3	HEART	86.1	0.85	122.7	High
14-Feb-89	15/3	BRAIN	70.2	0.69	100.0	Low
14-Feb-89	15/3	OVARIES	1.80	0.018	2.56	
14-Feb-89	15/3	ADRENAL GLANDS	1.26	0.012	1.80	
14-Feb-89	15/3	SPLEEN	85.8	0.85	122.2	

Tissue Finding, severity << Gross Observations >>
Gross Free-Text Comments

LYMPH NODES HEMORRHAGE(S), Mild MESENTERIC AND PANCREATIC NODES

Tissue Necropsy memos << Necropsy Memos >>

No necropsy memos recorded on animal

Tissue Histopathologic diagnoses / Special histological comments << Pathology Observations >>

TONSIL(S) Crypt Abscess, Slight, Multifocal.

LIVER Hepatocellular Vacuolation, Coarse Type, Mild.
Extramedullary Hematopoiesis, Slight, Multifocal.

THYMUS Ultimobranchial Cyst, Ciliated or Non-Ciliated, Slight.

MES. LYMPH NODE Congestion and/or Hemorrhage of the Medulla, Moderate.
/Hemorrhage in the pancreatic lymph node is similar to that in the mesenteric lymph node.

MAMMARY GLANDS Required protocol tissue is missing.

COLON Granuloma, Submucosal, Foreign-Body, Slight, Focal.

PATHOLOGY ANNEX A (cont.)

Appendix I (cont.): PATHOLOGY REPORT

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Individual Animal Data Dump Table
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Study Start Date: 31-Jan-89

SUB-ACUTE/

Animal: 89A00020

Sex: Female

Day of death: 15

Status: Final sacrifice

Group: 4

Dose level:

12.0 ML/KG/day

10.15

Terminal body weight (kms):

<< Pathology Observations >>

Tissue Histopathologic diagnoses / Special histological comments

SKIN, ANTEBRACH. Subcutaneous Hemorrhage, Mild.

PATHOLOGY ANNEX A (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
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Individual Animal Data Dump Table
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Study Start Date: 31-Jan-89

SUB-ACUTE/

Animal: 89A00039 Sex: Female
Day of death: 15 Status: Final sacrifice

Group: 4

Dose level: 12.0 ML/KG/day
Terminal body weight (kms): 10.30

Date	Day/week of Study	Organ Name	Absolute Organ Weight (gms)	Relative % of Body Weight	Relative % of Brain Weight	Organ Status
15-Feb-89	16/3	LIVER	265.4	2.58	327.0	Low
15-Feb-89	16/3	KIDNEY	45.2	0.44	55.7	
15-Feb-89	16/3	HEART	93.0	0.90	114.6	High
15-Feb-89	16/3	BRAIN	81.2	0.79	100.0	
15-Feb-89	16/3	OVARIES	1.13	0.011	1.39	Low
15-Feb-89	16/3	ADRENAL GLANDS	1.29	0.012	1.59	
15-Feb-89	16/3	SPLEEN	60.2	0.58	74.2	

<< Gross Observations >>
Gross Free-Text Comments

Tissue Finding, severity

WHOLE BODY NO LESIONS RECOGNIZED

<< Necropsy Memos >>

Tissue Necropsy memos

No necropsy memos recorded on animal

<< Pathology Observations >>
Histopathologic diagnoses / Special histological comments

Tissue PITUITARY GLAND Cyst(s), Slight.

SALIVARY GLAND Atrophy, Acinar, Slight, Focal.

LACRIMAL GLAND Acinar Atrophy, Slight, Focal.

LIVER Hepatocellular Vacuolation, Coarse Type, Mild.
Pigment-laden Macrophages, Predominantly Periportal, Mild.
/The pigment is presumably bile pigment, based on color and location.

MAMMARY GLANDS Requirec protocol tissue is missing.

CEPHALIC VEIN Endophlebitis, Mild.

PATHOLOGY ANNEX A (cont.)

Appendix I (cont.): PATHOLOGY REPORT

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DOG/BEAGLE

Individual Animal Data Dump Table
Study Number: 88008f

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Study Start Date: 31-Jan-89 SUB-ACUTE/

Animal: 89A00071 Sex: Female Status: Final sacrifice Group: 4 Terminal body weight (kms): 11.40 Dose level: 12.0 ML/KG/day
Day of death: 15

Date	Day/week of Study	Organ Name	Absolute Organ Weight (gms)	Relative % of Body Weight	Relative % of Brain Weight	Organ Status
22-Mar-89	51/8	LIVER	398.8	3.50	444.6	
22-Mar-89	51/8	KIDNEY	57.7	0.51	64.3	
22-Mar-89	51/8	HEART	100.4	0.88	111.9	High
22-Mar-89	51/8	BRAIN	89.7	0.79	100.0	
22-Mar-89	51/8	OVARIES	0.72	0.006	0.80	Low
22-Mar-89	51/8	ADRENAL GLANDS	1.07	0.009	1.19	
22-Mar-89	51/8	SPLEEN	82.5	0.72	92.0	

<< Gross Observations >>
Gross Free-Text Comments

Tissue finding, severity
WHOLE BODY NO LESIONS RECOGNIZED

<< Necropsy Memos >>

Tissue Necropsy memos
No necropsy memos recorded on animal

<< Pathology Observations >>
Histopathologic diagnoses / Special histological comments

Tissue
SALIVARY GLAND Duct Ectasia, Slight.
LACRIMAL GLAND Duct Ectasia, Slight.
PANCREAS Acinar (Exocrine) Cell Atrophy, Slight, Multifocal.
MES. LYMPH NODE Congestion and/or Hemorrhage of the Medulla, Slight.
SKIN Folliculitis, Subacute, Slight, Focal.
MAMMARY GLANDS Required protocol tissue is missing.
SKIN, ANTEBRACH. Inflammation, Subcutaneous, Mild.

PATHOLOGY ANNEX A (cont.)

Appendix I (cont.): PATHOLOGY REPORT

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Individual Animal Data Dump Table
Study Number: 88008f

Study Start Date: 31-Jan-89

SUB-ACUTE/

Animal: 89A00071

Sex: Female

Status: Final sacrifice

Group: 4

Dose level: 12.0 ML/KG/day

Terminal body weight (kms): 11.40

Day of death: 15

<< Pathology Observations >>

Tissue Histopathologic diagnoses / Special histological comments

CEPHALIC VEIN Endophlebitis, Mild, focal.

PATHOLOGY ANNEX A (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
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Individual Animal Data Dump Table
Study Number: 88008F

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Animal: 89A00027 Sex: Female
Day of death: 15 Status: Final sacrifice
Study Start Date: 31-Jan-89 Group: 5

SUB-ACUTE/

Date	Day/week of Study	Organ Name	Absolute Organ Weight (gms)	Relative % of Body Weight	Relative % of Brain Weight	Dose level: Terminal body weight (kms):	Organ Status
14-Feb-89	15/3	LIVER	447.4	4.43	589.6	16.0 ML/KG/day	High
14-Feb-89	15/3	KIDNEY	50.6	0.50	66.7	10.10	High
14-Feb-89	15/3	HEART	79.5	0.79	104.8		High
14-Feb-89	15/3	BRAIN	75.9	0.75	100.0		Low
14-Feb-89	15/3	OVARIES	0.89	0.009	1.17		Low
14-Feb-89	15/3	ADRENAL GLANDS	1.32	0.013	1.74		
14-Feb-89	15/3	SPLEEN	65.9	0.65	86.8		

Tissue Finding, severity << Gross Observations >>
WHOLE BODY NO LESIONS RECOGNIZED Gross Free-Text Comments

Tissue Necropsy memos << Necropsy Memos >>

ILEUM CLOTH BANDAGE MATERIAL AT ILEO-CECO-COLIC JUNCTION

Tissue Histopathologic diagnoses / Special histological comments << Pathology Observations >>

LACRIMAL GLAND Required protocol tissue is missing.

AORTA Required protocol tissue is missing.

LIVER Hepatocellular Vacuolation, Coarse Type, Mild.
Extramedullary Hematopoiesis, Slight, Multifocal.
Thrombosis, Portal Vein, Mild.

MAMMARY GLANDS Required protocol tissue is missing.

PARATHYROID Ultimobranchial Cyst, Ciliated or Non-Ciliated, Mild.

PATHOLOGY ANNEX A (cont.)

Appendix I (cont.): PATHOLOGY REPORT

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DOG/BEAGLE

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Individual Animal Data Dump Table
Study Number: 88008f

Study Start Date: 31-Jan-89

SUB-ACUTE/

Animal: 89A00027

Sex: Female

Status: Final sacrifice

Group: 5

Dose level: 16.0 ML/KG/day

10.1%

Terminal body weight (kms):

<< Pathology Observations >>

Histopathologic diagnoses / Special histological comments

CEPHALIC VEIN Endophlebitis, Mild, focal.

PATHOLOGY ANNEX A (cont.)

Appendix I (cont.): PATHOLOGY REPORT

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DOG/BEAGLE

Individual Animal Data Dump Table
Study Number: 88008f

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Study Start Date: 31-Jan-89 SUB-ACUTE/

Date	Day/week of Study	Organ Name	Absolute Organ Weight (gms)	Relative % of Body Weight	Relative % of Brain Weight	Organ Status
21-Mar-89	50/8	LIVER	53.9	0.50	66.4	Not taken
21-Mar-89	50/8	KIDNEY	95.2	0.88	117.3	High
21-Mar-89	50/8	HEART	81.1	0.75	100.0	
21-Mar-89	50/8	BRAIN	0.89	0.008	1.10	Low
21-Mar-89	50/8	OVARIES	1.20	0.011	1.47	
21-Mar-89	50/8	ADRENAL GLANDS	90.5	0.84	111.6	
21-Mar-89	50/8	SPLEEN				

Animal: 89A00065 Sex: Female
Day of death: 15 Status: final sacrifice
Group: 5
Dose level: 16.0 ML/KG/day
Terminal body weight (kms): 10.80

Tissue Finding, severity << Gross Observations >>
Gross Free-Text Comments

WHOLE BODY NO LESIONS RECOGNIZED

Tissue Necropsy memos << Necropsy Memos >>

No necropsy memos recorded on animal

Tissue Histopathologic diagnoses / Special histological comments << Pathology Observations >>

LIVER Hepatocellular Vacuolization, Coarse Type, Slight.

THYMUS Ultimobranchial Cyst, Ciliated or Non-Ciliated, Slight.

MES. LYMPH NODE Congestion and/or Hemorrhage of the Medulla, Slight.

MAMMARY GLANDS Required protocol tissue is missing.

JEJUNUM Required protocol tissue is missing.

SKIN, ANTEBRACH. Inflammation, Subcutaneous, Mild.
Subcutaneous Hemorrhage, Moderate.
Folliculitis, Subacute, Mild.

PATHOLOGY ANNEX A (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
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DOG/BEAGLE

Individual Animal Data Dump Table
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Study Start Date: 31-Jan-89

SUB-ACUTE/

Animal: 89A00065

Sex: Female

Status: final sacrifice

Group: 5

Dose level: 16.0 ML/KG/day

Terminal body weight (kms): 10.80

Day of death: 15

<< Pathology Observations >>

Tissue Histopathologic diagnoses / Special histological comments

CEPHALIC VEIN Endophlebitis, Mild.

PATHOLOGY ANNEX A (cont.)

Appendix I (cont.): PATHOLOGY REPORT

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Individual Animal Data Dump Table
Study Number: 88008f

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Animal: 89A00069 Sex: female
Day of death: 15 Status: final sacrifice
Study Start Date: 31-Jan-89

SUB-ACUTE/

Date	Day/week of Study	Organ Name	Absolute Organ Weight (gms)	Relative % of Body Weight	Terminal body weight (kms)	Dose level: 16.0 ML/KG/day	Organ Status
<< Organ Weights >>							
22-Mar-89	51/8	LIVER	318.0	3.28			Low
22-Mar-89	51/8	KIDNEY	45.5	0.47			
22-Mar-89	51/8	HEART	79.1	0.82			High
22-Mar-89	51/8	BRAIN	83.2	0.86			
22-Mar-89	51/8	OVARIES	0.57	0.006			Low
22-Mar-89	51/8	ADRENAL GLANDS	0.93	0.010			
22-Mar-89	51/8	SPLEEN	58.4	0.60			70.1

Tissue Finding, severity << Gross Observations >>
Gross Free-Text Comments

WHOLE BODY NO LESIONS RECOGNIZED

Tissue Necropsy memos << Necropsy Memos >>

No necropsy memos recorded on animal

Tissue Histopathologic diagnoses / Special histological comments << Pathology Observations >>

LIVER Hepatocellular Vacuolation, Coarse Type, Mild.
Extramedullary Hematopoiesis, Slight, Multifocal.

KIDNEY Inflammation, Interstitial, Subacute, Slight, Focal.

PANCREAS Acinar (Exocrine) Cell Atrophy, Mild, Multifocal.

MES. LYMPH NODE Congestion and/or Hemorrhage of the Medulla, Slight.

SKIN, ANTEBRACH. Inflammation, Subcutaneous, Slight.
Subcutaneous Hemorrhage, Mild.

CEPHALIC VEIN Endophlebitis, Slight.

PATHOLOGY ANNEX A (cont.)

Appendix I (cont.): PATHOLOGY REPORT

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Individual Animal Data Dump Table
Study Number: 88008f

Study Start Date: 31-Jan-89 SUB-ACUTE/

Animal: 89A00029 Sex: female Status: final sacrifice Group: 6 Dose level: 20.0 ML/KG/day
Day of death: 15 Terminal body weight (kms): 12.50

Date	Day/week of Study	Organ Name	Absolute Organ Weight (gms)	Relative % of Body Weight	Relative % of Brain Weight	Organ Status
14-Feb-89	15/3	LIVER	397.7	3.18	525.3	Low
14-Feb-89	15/3	KIDNEY	62.8	0.50	83.0	
14-Feb-89	15/3	HEART	100.6	0.80	132.9	High
14-Feb-89	15/3	BRAIN	75.7	0.61	100.0	
14-Feb-89	15/3	OVARIES	1.15	0.009	1.52	Low
14-Feb-89	15/3	ADRENAL GLANDS	1.46	0.012	1.92	
14-Feb-89	15/3	SPLEEN	64.8	0.52	65.6	

Tissue finding, severity << Gross Observations >>
Gross Free-Text Comments

TONSIL(S) FOREIGN MATERIAL IN CRYPT, MILD BILATERAL

<< Necropsy Memos >>

Tissue Necropsy memos

No necropsy memos recorded on animal

Tissue << Pathology Observations >>
Histopathologic diagnoses / Special histological comments

LACRIMAL GLAND Required protocol tissue is missing.

LIVER Hepatocellular Vacuolation, Coarse Type, Mild.

THYMUS Ultimobranchial Cyst, Ciliated or Non-Ciliated, Slight.

MES. LYMPH NODE Congestion and/or Hemorrhage of the Medulla, Slight.

MAMMARY GLANDS Required protocol tissue is missing.

SKIN, ANTEBRACH. Inflammation, Subcutaneous, Mild.

PARATHYROID Ultimobranchial Cyst, Ciliated or Non-Ciliated, Mild.

PATHOLOGY ANNEX A (cont.)

Appendix I (cont.): PATHOLOGY REPORT

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Study Number: 88008F

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Study Start Date: 31-Jan-89

SUB-ACUTE/

Animal: 89A00029

Sex: Female

Day of death: 15

Status: final sacrifice

Group: 6

Dose level:

20.0 ML/KG/day

12.50

<< Pathology Observations >>

Tissue Histopathologic diagnoses / Special histological comments

CEPHALIC VEIN Endophlebitis, Moderate.

PATHOLOGY ANNEX A (cont.)

Appendix I (cont.): PATHOLOGY REPORT

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Individual Animal Data Dump Table
Study Number: 88008f

Study Start Date: 31-Jan-89

SUB-ACUTE/

Animal: 89A00041 Sex: Female Status: Final sacrifice Group: 6 Terminal body weight (kms): 10.80 Dose level: 20.0 ML/KG/day
Day of death: 15

Date	Day/week of Study	Organ Name	Absolute Organ Weight (gms)	Relative % of Body Weight	Relative % of Brain Weight	Organ Status
15-Feb-89	16/3	LIVER	390.3	3.61	458.8	
15-Feb-89	16/3	KIDNEY	47.2	0.44	55.5	
15-Feb-89	16/3	HEART	88.4	0.82	103.9	High
15-Feb-89	16/3	BRAIN	85.1	0.79	100.0	
15-Feb-89	16/3	OVARIES	1.15	0.011	1.35	Low
15-Feb-89	16/3	ADRENAL GLANDS	1.55	0.014	1.83	
15-Feb-89	16/3	SPLEEN	57.2	0.53	67.2	

Tissue Finding, severity << Gross Observations >>
Gross Free-Text Comments

WHOLE BODY NO LESIONS RECOGNIZED

<< Necropsy Memos >>

Tissue Necropsy memos
No necropsy memos recorded on animal

<< Pathology Observations >>

Tissue Histopathologic diagnoses / Special histological comments

BONE MARROW Required protocol tissue is missing.

LIVER Hepatocellular Vacuolation, Coarse Type, Mild.

PANCREAS Acinar (Exocrine) Cell Atrophy, Mild.

MES. LYMPH NODE Congestion and/or Hemorrhage of the Medulla, Mild.

MAMMARY GLANDS Required protocol tissue is missing.

SKIN, ANTEBRACH. Inflammation, Subcutaneous, Mild.
Subcutaneous Hemorrhage, Moderate.

PATHOLOGY ANNEX A (cont.)

Appendix I (cont.): PATHOLOGY REPORT

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Individual Animal Data Dump Table
Study Number: 88008f

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Study Start Date: 31-Jan-89

SUB-ACUTE/

Animal: 89A00041

Sex: female

Status: Final sacrifice

Group: 6

Dose level:

20.0 ML/KG/day

10.80

Terminal body weight (kms):

<< Pathology observations >>

Histopathologic diagnoses / Special histological comments

Tissue

CEPHALIC VEIN Endophlebitis, Mild.

PATHOLOGY ANNEX A (cont.)

Appendix I (cont.): PATHOLOGY REPORT

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Individual Animal Data Dump Table
Study Number: 88008f

Study Start Date: 31-Jan-89

SUB-ACUTE/

Animal: 89A00061 Sex: Female Status: Final sacrifice Group: 6 Terminal body weight (kms): 20.0 ML/KG/day
Day of death: 15 Dose level: 9.80

Date	Day/week of Study	Organ Name	Organ Weights			Relative % of Brain Weight	Organ Status
			Absolute Weight (gms)	Relative % of Body Weight	Relative % of Brain Weight		
21-Mar-89	50/8	LIVER	374.7	3.82	521.2		
21-Mar-89	50/8	KIDNEY	47.7	0.49	66.4		
21-Mar-89	50/8	HEART	76.9	0.78	106.9	High	
21-Mar-89	50/8	BRAIN	71.9	0.73	100.0		
21-Mar-89	50/8	OVARIES	0.89	0.009	1.24	Low	
21-Mar-89	50/8	ADRENAL GLANDS	1.64	0.017	2.27		
21-Mar-89	50/8	SPLEEN	56.4	0.58	78.4		

Tissue finding, severity << Gross Observations >>
KIDNEY FRIBROUS SCAR(S), Mild Gross Free-Text Comments
HYDRONEPHROSIS, Trace

Tissue Necropsy memos << Necropsy Memos >>
No necropsy memos recorded on animal

Tissue Histopathologic diagnoses / Special histological comments << Pathology Observations >>
LACRIMAL GLAND Duct Ectasia, Slight, Multifocal.

LIVER Hepatocellular Vacuolation, Coarse Type, Mild.

KIDNEY Inflammation, Interstitial, Subacute, Mild, Multifocal.

URINARY BLADDER Lymphocyte Infiltration, Slight, Multifocal.

THYMUS Ultimobranchial Cyst, Ciliated or Non-Ciliated, Slight. Atrophy, Mild.

MAMMARY GLANDS Required protocol tissue is missing.

PATHOLOGY ANNEX A (cont.)

Appendix I (cont.): PATHOLOGY REPORT

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Study Start Date: 31-Jan-89

SUB-ACUTE/

Animal: 89A00061

Sex: Female

Day of death: 15

Status: Final sacrifice

Group: 6

Dose level:

20.0 ML/KG/day

9.80

Terminal body weight (kms):

<< Pathology Observations >>

Histopathologic diagnoses / Special histological comments

Required protocol tissue is missing.

Tissue

COLON

PATHOLOGY ANNEX A (cont.)

Appendix I (cont.): PATHOLOGY REPORT

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Individual Animal Data Dump Table
Study Number: 88008F

Study Start Date: 31-Jan-89

SUB-ACUTE/

Animal: 89A00030 Sex: female Group: 7 Dose level: 12.0 ML/KG/day
Day of death: 15 Status: final sacrifice Terminal body weight (kgs): 10.60

Date	Day/week of Study	Organ Name	Absolute Organ Weight (gms)	Relative % of Body Weight	Relative % of Brain Weight	Organ Status
14-Feb-89	15/3	LIVER	332.0	3.13	508.3	Low
14-Feb-89	15/3	KIDNEY	41.6	0.39	63.7	
14-Feb-89	15/3	HEART	81.2	0.77	124.3	High
14-Feb-89	15/3	BRAIN	65.3	0.62	100.0	
14-Feb-89	15/3	OVARIES	0.63	0.006	0.96	Low
14-Feb-89	15/3	ADRENAL GLANDS	0.85	0.008	1.30	
14-Feb-89	15/3	SPLEEN	70.4	0.66	107.9	

<< Gross Observations >>
Gross Free-Text Comments

Tissue Finding, severity

WHOLE BODY NO LESIONS RECOGNIZED

<< Necropsy Memos >>

Tissue Necropsy memos

No necropsy memos recorded on animal

<< Pathology Observations >>
Histopathologic diagnoses / Special histological comments

Tissue

LIVER Hepatocellular Vacuolation, Coarse Type, Mild.

SKIN, ANTEBRACH. Inflammation, Subcutaneous, Slight.
Folliculitis, Subacute, Moderate.
/One follicle contains multiple sections of an acarid parasite, probably Demodex canis.

PATHOLOGY ANNEX A (cont.)

Appendix I (cont.): PATHOLOGY REPORT

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Animal: 89A00035 Sex: Female Study Start Date: 31-Jan-89 SUB-ACUTE/
Day of death: 15 Status: Final sacrifice Group: 7 Dose level: 12.0 ML/KG/day

Date	Day/week of Study	Organ Name	<< Organ Weight (gms)	>> Relative % of Body Weight	Relative % of Brain Weight	Organ Status
15-Feb-89	16/3	LIVER	401.6	3.67	474.2	
15-Feb-89	16/3	KIDNEY	47.2	0.43	55.8	
15-Feb-89	16/3	HEART	105.3	0.96	124.3	High
15-Feb-89	16/3	BRAIN	84.7	0.77	100.0	
15-Feb-89	16/3	OVARIES	0.57	0.005	0.68	Low
15-Feb-89	16/3	ADRENAL GLANDS	1.58	0.014	1.86	
15-Feb-89	16/3	SPLEEN	102.9	0.94	121.6	

Tissue Finding, severity << Gross Observations >>
WHOLE BODY NO LESIONS RECOGNIZED Gross Free-Text Comments

Tissue Necropsy memos << Necropsy Memos >>
PANCREAS DEPRESSION OF MESENTERIC BORDER

Tissue << Pathology Observations >>
LACRIMAL GLAND Histopathologic diagnoses / Special histological comments

LACRIMAL GLAND Acinar Atrophy, Slight, Focal.

LIVER Hepatocellular Vacuolation, Coarse Type, Mild.

PANCREAS /There is no evidence of the atrophy reported at necropsy.

MAMMARY GLANDS Required protocol tissue is missing.

DUODENUM Cyst, Glandular, Mucosal, Slight, focal.

SKIN, ANTEBRACH. Inflammation, Subcutaneous, Mild.

PATHOLOGY ANNEX A (cont.)

Appendix I (cont.): PATHOLOGY REPORT

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Study Start Date: 31-Jan-89

SUB-ACUTE/

Animal: 89A00035

Sex: female

Status: final sacrifice

Group: 7

Dose level: 12.0 ML/KG/day

10.95

Day of death: 15

<< pathology observations >>

Tissue Histopathologic diagnoses / Special histological comments

CEPHALIC VEIN Endophlebitis, slight.

PATHOLOGY ANNEX A (cont.)

Appendix I (cont.): PATHOLOGY REPORT

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Individual Animal Data Dump Table
Study Number: 88008f

Study Start Date: 31-Jan-89 SUB-ACUTE/

Animal: 89A00070 Sex: Female Status: Final sacrifice Group: 7 Terminal body weight (kms): 12.0 ML/KG/day
Day of death: 15

Date	Day/week of Study	Organ Name	Absolute Organ Weight (gms)	Relative % of Body Weight	Relative % of Brain Weight	Organ Status
22-Mar-89	51/8	LIVER	383.4	4.12	490.9	
22-Mar-89	51/8	KIDNEY	48.8	0.52	62.4	
22-Mar-89	51/8	HEART	85.1	0.91	108.9	High
22-Mar-89	51/8	BRAIN	78.1	0.84	100.0	
22-Mar-89	51/8	OVARIES	1.20	0.013	1.54	Low
22-Mar-89	51/8	ADRENAL GLANDS	1.53	0.016	1.96	
22-Mar-89	51/8	SPLEEN	72.6	0.78	93.0	

Tissue Finding, severity << Gross Observations >>
Gross Free-Text Comments

WHOLE BODY NO LESIONS RECOGNIZED

Tissue Necropsy memos << Necropsy Memos >>

No necropsy memos recorded on animal

Tissue Histopathologic diagnoses / Special histological comments << Pathology Observations >>

TONSIL(S) Required protocol tissue is missing.

LACRIMAL GLAND Acinar Atrophy, Mild, Multifocal.

LIVER Hepatocellular Vacuolation, Coarse Type, Slight.

PANCREAS Acinar (Exocrine) Cell Atrophy, Slight, Multifocal.

MES. LYMPH NODE Congestion and/or Hemorrhage of the Medulla, Slight.

SKIN Required protocol tissue is missing.

MAMMARY GLANDS Required protocol tissue is missing.

PATHOLOGY ANNEX A (cont.)

Appendix I (cont.): PATHOLOGY REPORT

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Individual Animal Data Dump Table
Study Number: 88008F

Study Start Date: 31-Jan-89

SUB-ACUTE/

Animal: 89A00070

Sex: Female

Status: Final sacrifice

Group: 7

Dose level: 12.0 ML/KG/day

9.30

Terminal body weight (kms):

9.30

<< Pathology Observations >>

Histopathologic diagnoses / Special histological comments

Tissue

SKIN, ANTEBRACH.

Inflammation, Subcutaneous, Moderate.

Subcutaneous Hemorrhage, Marked.

Folliculitis, Subacute, Mild, Multifocal.

PARATHYROID

Ultimobranchial Cyst, Ciliated or Non-Ciliated, Mild.

PATHOLOGY ANNEX A (cont.)

Appendix I (cont.): PATHOLOGY REPORT

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Individual Animal Data Dump Table
Study Number: 88008f

Study Start Date: 31-Jan-89

SUB-ACUTE/

Animal: 89A00040		Sex: Female	Group: 8		Dose level: 16.0 ML/KG/day	
Day of death: 15		Status: final sacrifice			Terminal body weight (kms): 13.50	
<< Organ Weights >>						
Date	Day/week of Study	Organ Name	Absolute Organ Weight (gms)	Relative % of Body Weight	Relative % of Brain Weight	Organ Status
15-Feb-89	16/3	LIVER	459.2	3.40	484.8	
15-Feb-89	16/3	KIDNEY	63.3	0.47	66.9	
15-Feb-89	16/3	HEART	106.6	0.79	112.5	High
15-Feb-89	16/3	BRAIN	94.7	0.70	100.0	
15-Feb-89	16/3	OVARIES	0.92	0.007	0.97	Low
15-Feb-89	16/3	ADRENAL GLANDS	1.05	0.008	1.10	
15-Feb-89	16/3	SPLEEN	108.5	0.80	114.5	

Tissue Finding, severity << Gross Observations >>
Gross Free-Text Comments

SKIN DERMATITIS, Moderate ULCERATED, CHRONIC, VENTRAL NECK

LIVER ABNORMAL PIGMENTATION, Trace RED-BROWN

LUNGS PLEURAL ADHESIONS, Trace MULTIFOCAL

Tissue Necropsy memos << Necropsy Memos >>

No necropsy memos recorded on animal

Tissue Histopathologic diagnoses / Special histological comments << Pathology Observations >>

PITUITARY GLAND Cyst(s), Slight.

TONSIL(S) Required protocol tissue is missing.

LIVER Hepatocellular Vacuolation, Coarse Type, Mild. Inflammation, Subacute, Slight, Multifocal.

PANCREAS Acinar (Exocrine) Cell Atrophy, Slight, Focal.

PATHOLOGY ANNEX A (cont.)

Appendix I (cont.): PATHOLOGY REPORT

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Individual Animal Data Dump Table
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Study Start Date: 31-Jan-89 SUB-ACUTE/

Animal: 89A00040 Sex: female
 Day of death: 15 Status: Final sacrifice Group: 8 Dose level: 16.0 ML/KG/day
 Terminal body weight (kms): 13.50

<< P a t h o l o g y O b s e r v a t i o n s >>

Tissue Histopathologic diagnoses / Special histological comments

ADRENAL GLANDS Vacuolar Change, Cortical Cells, Slight, Multifocal.

SKELETAL MUSCLE Fasciitis, Chronic, with Mineralization, Moderate, Focal.

SKIN Dermatitis, Ulcerative, Marked, Focal.

MAMMARY GLANDS Required protocol tissue is missing.

SKIN, ANTEBRACH. Inflammation, Subcutaneous, Moderate.
 Subcutaneous Hemorrhage, Moderate.

Appendix I (cont.): PATHOLOGY REPORT

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Study Start Date: 31-Jan-89 SUB-ACUTE/

Animal: 89A00062 Sex: Female
Day of death: 15 Status: Final sacrifice

Group: 8

Dose level: 16.0 ML/KG/day
Terminal body weight (kms): 9.95

Date	Day/week of Study	Organ Name	Absolute Organ Weight (gms)	Relative % of Body Weight	Relative % of Brain Weight	Organ Status
21-Mar-89	50/8	LIVER	341.5	3.43	478.5	
21-Mar-89	50/8	KIDNEY	45.1	0.45	63.2	
21-Mar-89	50/8	HEART	80.0	0.80	112.1	High
21-Mar-89	50/8	BRAIN	71.4	0.72	100.0	
21-Mar-89	50/8	OVARIES	0.83	0.008	1.17	Low
21-Mar-89	50/8	ADRENAL GLANDS	1.20	0.012	1.69	
21-Mar-89	50/8	SPLEEN	110.7	1.11	155.2	

<< Gross Observations >>
Gross Free-Text Comments

Tissue finding, severity
WHOLE BODY NO LESIONS RECOGNIZED

<< Necropsy Memos >>

Tissue Necropsy memos
No necropsy memos recorded on animal

<< Pathology Observations >>
Histopathologic diagnoses / Special histological comments

Tissue
PITUITARY GLAND Cyst(s), Mild.
LACRIMAL GLAND Required protocol tissue is missing.
SCIATIC NERVE Required protocol tissue is missing.
LIVER Hepatocellular Vacuolation, Coarse Type, Slight.
DIAPHRAGM Required protocol tissue is missing.
MAMMARY GLANDS Required protocol tissue is missing.
SKIN, ANTEBRACH. Inflammation, Subcutaneous, Moderate.

PATHOLOGY ANNEX A (cont.)

Appendix I (cont.): PATHOLOGY REPORT

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Study Start Date: 31-Jan-89

SUB-ACUTE/

Animal: 89A00062

Sex: female

Day of death: 15

Status: Final sacrifice

Group: 8

Terminal body weight (kms):

16.0 ML/KG/day

9.95

<< Pathology Observations >>

Tissue Histopathologic diagnoses / Special histological comments

SKIN, ANTEBRACH. Subcutaneous Hemorrhage, Moderate.

PATHOLOGY ANNEX A (cont.)

Appendix I (cont.): PATHOLOGY REPORT

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Individual Animal Data Dump Table
Study Number: 88008F

Animal: 89A00068 Sex: Female
Day of death: 15 Status: Final sacrifice
Study Start Date: 31-Jan-89 SUB-ACUTE/

Date	Day/week of Study	Organ Name	Absolute Organ Weight (gms)	Relative % of Body Weight	Relative % of Brain Weight	Terminal body weight (kms)	Dose level: 16.0 ML/KG/day
22-Mar-89	51/8	LIVER	374.2	3.74	475.5	10.00	
22-Mar-89	51/8	KIDNEY	49.9	0.50	63.4		
22-Mar-89	51/8	HEART	87.4	0.87	111.0		
22-Mar-89	51/8	BRAIN	78.7	0.79	100.0		
22-Mar-89	51/8	OVARIES	1.06	0.011	1.35		
22-Mar-89	51/8	ADRENAL GLANDS	1.73	0.017	2.20		
22-Mar-89	51/8	SPLEEN	113.1	1.13	143.7		

Tissue Finding, severity << Gross Observations >>
Gross Free-Text Comments

WHOLE BODY NO LESIONS RECOGNIZED

<< Necropsy Memos >>

Tissue Necropsy memos

No necropsy memos recorded on animal

Tissue Histopathologic diagnoses / Special histological comments << Pathology Observations >>

LACRIMAL GLAND Lymphocytic Infiltration, Slight, focal.

LIVER Hepatocellular Vacuolation, Coarse Type, Mild.

THYMUS Ultimobranchial Cyst, Ciliated or Non-Ciliated, Slight.

MES. LYMPH NODE Congestion and/or Hemorrhage of the Medulla, Slight.

MAMMARY GLANDS Required protocol tissue is missing.

STOMACH Lymphocyte Aggregates in Submucosa, Mild.

SKIN, ANTEBRACH. Required protocol tissue is missing.

PATHOLOGY ANNEX A (cont.)

Appendix I (cont.): PATHOLOGY REPORT

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Study Start Date: 31-Jan-89

SUB-ACUTE/

Animal: 89A00068

Sex: Female

Group: 8

Day of death: 15

Status: Final sacrifice

Dose level: 16.0 ML/KG/day

10.00

Terminal body weight (kms):

<< Pathology Observations >>

Histopathologic diagnoses / Special histological comments

PARATHYROID

Ultimobranchial Cyst, Ciliated or Non-Ciliated, Slight.

CEPHALIC VEIN

Required protocol tissue is missing.

PATHOLOGY ANNEX A (cont.)

Appendix I (cont.): PATHOLOGY REPORT

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Individual Animal Data Dump Table
Study Number: 88008F

Study Start Date: 31-Jan-89 SUB-ACUTE/

Animal: 89A00026 Sex: female
Day of death: 15 Status: Final sacrifice
Group: 9 Terminal body weight (kms): 9.80
Dose level: 20.0 ML/KG/day

Date	Day/week of Study	Organ Name	Absolute Organ Weight (gms)	Relative % of Body Weight	Relative % of Brain Weight	Organ Status
14-Feb-89	15/3	LIVER	323.9	3.31	420.1	Low
14-Feb-89	15/3	KIDNEY	55.2	0.56	71.6	High
14-Feb-89	15/3	HEART	77.4	0.79	100.4	High
14-Feb-89	15/3	BRAIN	77.1	0.79	100.0	Low
14-Feb-89	15/3	OVARIES	0.84	0.009	1.09	Low
14-Feb-89	15/3	ADRENAL GLANDS	1.26	0.013	1.64	
14-Feb-89	15/3	SPLEEN	55.4	0.56	71.8	

<< Gross Observations >>
Gross Free-Text Comments

Tissue Finding, severity

TONSIL(S) FOREIGN MATERIAL IN CRYPT, Mild

RIGHT SIDE

<< Necropsy Memos >>

Tissue Necropsy memos

OVARIES CORPUS MEHORRHAGICUM IN LEFT OVARY

<< Pathology Observations >>
Histopathologic diagnoses / Special histological comments

Tissue

BRAIN /needs hippocampus

SALIVARY GLAND Required protocol tissue is missing.

TONSIL(S) Crypt Abscess, Marked, Focal.

LACRIMAL GLAND Required protocol tissue is missing.

LIVER Hepatocellular Vacuolation, Coarse Type, Mild.

PANCREAS Acinar Hypertrophy and Vacuolation, Mild, Multifocal.

PATHOLOGY ANNEX A (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
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DOG/BEAGLE

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Individual Animal Data Dump Table
Study Number: 88008F

Study Start Date: 31-Jan-89

SUB-ACUTE/

Animal: 89A00026 Sex: female Status: Final sacrifice Group: 9 Dose level: 20.0 ML/KG/day
Day of death: 15 Terminal body weight (kms): 9.80

<< Pathology Observations >>

Tissue Histopathologic diagnoses / Special histological comments

MES. LYMPH NODE Sinus Neutrophilia, Mild.

MAMMARY GLANDS Required protocol tissue is missing.

SUBMANDIBULAR LN Miscellaneous.
Sinus Histiocytosis, Mild.

SKIN, ANTEBRACH. Subcutaneous Hemorrhage, Moderate.

PARATHYROID Ultimobranchial Cyst, Ciliated or Non-Ciliated, Slight, Focal.

CEPHALIC VEIN Required protocol tissue is missing.

PATHOLOGY ANNEX A (cont.)

Appendix I (cont.): PATHOLOGY REPORT

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DOG/BEAGLE

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Individual Animal Data Dump Table
Study Number: 88008F

Animal: 89A00037 Sex: Female Status: Final sacrifice Study Start Date: 31-Jan-89 SUB-ACUTE/

Date	Day/week of Study	Organ Name	Absolute Organ Weight (gms)	Relative % of Body Weight	Relative % of Brain Weight	Dose level: 20.0 ML/KG/day	Terminal body weight (kms): 11.45	Organ Status
15-Feb-89	16/3	LIVER	413.5	3.61	502.3			
15-Feb-89	16/3	KIDNEY	46.8	0.41	56.8			
15-Feb-89	16/3	HEART	91.9	0.80	111.6			High
15-Feb-89	16/3	BRAIN	82.3	0.72	100.0			
15-Feb-89	16/3	OVARIES	3.45	0.030	4.19			Low
15-Feb-89	16/3	ADRENAL GLANDS	1.58	0.014	1.91			
15-Feb-89	16/3	SPLEEN	74.5	0.65	90.5			

<< Gross Observations >>
Gross Free-Text Comments

MULTIFOCAL PALE FOCI

<< Necropsy Memos >>

3 FOLLICLES ON ONE OVARY

<< Pathology Observations >>
Histopathologic diagnoses / Special histological comments

PITUITARY GLAND
Histiocytosis, Mild, focal.
/Hemosiderin is present in the macrophages.

TONSIL(S)
Crypt Abscess, Slight.

LUNGS
Inflammation, Interstitial, Subacute, Moderate, focal.

LIVER
Hepatocellular Vacuolation, Coarse Type, Mild.

KIDNEY
Inflammation, Interstitial, Subacute, Slight, focal.

OVARIES
/The corpora lutea are normal.

PATHOLOGY ANNEX A (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
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 DOG/BEAGLE

Individual Animal Data Dump Table
 Study Number: 88008f

Study Start Date: 31-Jan-89

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SUB-ACUTE/

Animal: 89A00037 Sex: Female
 Day of death: 15 Status: Final sacrifice Group: 9

Dose level: 20.0 ML/KG/day
 Terminal body weight (kms): 11.45

Tissue Histopathologic diagnoses / Special histological comments
 PANCREAS Acinar (Exocrine) Cell Atrophy, Mild, Multifocal.

SPLEEN Siderotic Plaque, Slight, Focal.

MAMMARY GLANDS Required protocol tissue is missing.

PARATHYROID Required protocol tissue is missing.

CEPHALIC VEIN Required protocol tissue is missing.

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
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DOG/BEAGLE

Individual Animal Data Dump Table
Study Number: 88008f

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Animal: 89A00060 Sex: female
Status: final sacrifice
Study Start Date: 31-Jan-89
SUB-ACUTE/

Day of death: 15
Day/week of Study
Date
21-Mar-89
21-Mar-89
21-Mar-89
21-Mar-89
21-Mar-89
21-Mar-89
21-Mar-89

Dose level: 20.0 ML/KG/day
Terminal body weight (kms): 10.40

Group: 9

Date	Day/week of Study	Organ Name	<< Organ Weights >>			Organ Status
			Absolute Organ Weight (gms)	Relative % of Body Weight	Relative % of Brain Weight	
21-Mar-89	50/8	LIVER	535.2	5.15	693.5	High
21-Mar-89	50/8	KIDNEY	62.9	0.60	81.5	High
21-Mar-89	50/8	HEART	94.4	0.91	122.3	High
21-Mar-89	50/8	BRAIN	77.2	0.74	100.0	Low
21-Mar-89	50/8	OVARIES	2.60	0.025	3.37	
21-Mar-89	50/8	ADRENAL GLANDS	1.30	0.013	1.69	
21-Mar-89	50/8	SPLEEN	67.9	0.65	88.0	

Tissue Finding, severity << Gross Observations >>
Gross free-text Comments

WHOLE BODY NO LESIONS RECOGNIZED

<< Necropsy Memos >>

Tissue Necropsy memos
No necropsy memos recorded on animal

Tissue << Pathology Observations >>
Histopathologic diagnoses / Special histological comments

LIVER Hepatocellular Vacuolation, Coarse Type, Mild.

PANCREAS Acinar (Exocrine) Cell Atrophy, Slight, Multifocal.

ADRENAL GLANDS Vacuolar Change, Cortical Cells, Slight, Multifocal.

MES. LYMPH NODE Congestion and/or Hemorrhage of the Medulla, Slight.

DIAPHRAGM Required protocol tissue is missing.

STOMACH Lymphocyte Aggregates in Submucosa, Mild, Multifocal.

JEJUNUM Cyst, Glandular, Mucosal, Slight, Focal.

PATHOLOGY ANNEX A (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH		Individual Animal Data Dump Table		PRINTED: 04-Oct-89
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PRESIDIO OF SAN FRANCISCO, CA 94129		Study Start Date: 31-Jan-89		
DOG/BEAGLE				SUB-ACUTE/
Animal: 89A00060	Sex: Female	Group: 9	Dose level: 20.0 ML/KG/day	
Day of death: 15	Status: Final sacrifice		Terminal body weight (kms): 10.40	
<< Pathology observations >>				
Tissue	Histopathologic diagnoses / Special histological comments			
SKIN, ANTEBRACH.	Inflammation, Subcutaneous, Marked.			

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
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 DOG/BEAGLE

Animal: 89A00034 Sex: female
 Day of death: 15 Status: final sacrifice

Individual Animal Data Dump Table
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SUB-ACUTE/

Group: 10 Dose level: 20.0 ML/KG/day
 Terminal body weight (kms): 10.15

<< P a t h o l o g y O b s e r v a t i o n s >>

Tissue Histopathologic diagnoses / Special histological comments

PARATHYROID Ultimobranchial Cyst, Ciliated or Non-Ciliated, Mild.

CEPHALIC VEIN Endophlebitis, Mild, Focal.

PATHOLOGY ANNEX A (cont.)

Appendix I (cont.): PATHOLOGY REPORT

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DOG/BEAGLE

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Individual Animal Data Dump Table
Study Number: 88008f

Study Start Date: 31-Jan-89 SUB-ACUTE/

Animal: 89A00059 Sex: Female Status: Final sacrifice Group: 10 Dose level: 20.0 ML/KG/day
Day of death: 15 Terminal body weight (kms): 8.70

Date	Day/week of Study	Organ Name	Absolute Organ Weight (gms)	Relative % of Body Weight	Relative % of Brain Weight	Organ Status
21-Mar-89	50/8	LIVER	359.6	4.13	430.4	
21-Mar-89	50/8	KIDNEY	51.6	0.59	61.7	High
21-Mar-89	50/8	HEART	91.5	1.05	109.5	High
21-Mar-89	50/8	BRAIN	83.5	0.96	100.0	High
21-Mar-89	50/8	OVARIES	0.93	0.011	1.11	Low
21-Mar-89	50/8	ADRENAL GLANDS	1.03	0.012	1.24	
21-Mar-89	50/8	SPLEEN	75.6	0.87	90.5	

Tissue Finding, severity << GROSS Observations >>
Gross Free-Text Comments

LUNGS CONSOLIDATION, Trace 1 X 1 MM WHITE FOCI

Tissue Necropsy memos << Necropsy Memos >>

No necropsy memos recorded on animal

Tissue Histopathologic diagnoses / Special histological comments << Pathology Observations >>

LACRIMAL GLAND Duct Ectasia, Slight.
Acinar Atrophy, Slight, Multifocal.
Lymphocytic Infiltration, Mild, focal.

LUNGS Inflammation, Interstitial, Subacute, Slight, Multifocal.

LIVER Hepatocellular Vacuolation, Coarse Type, Mild.
Extramedullary Hematopoiesis, Slight, Multifocal.

PANCREAS Acinar (Exocrine) Cell Atrophy, Slight.

THYMUS Ultimobranchial Cyst, Ciliated or Non-Ciliated, Slight.

URETER Required protocol tissue is missing.

PATHOLOGY ANNEX A (cont.)

Appendix I (cont.): PATHOLOGY REPORT

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DOE/BEAGLE

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Individual Animal Data Dump Table
Study Number: 88008F

Study Start Date: 31-Jan-89

SUB-ACUTE/

Animal: 89A00059 Sex: Female
Day of death: 15 Status: Final sacrifice

Group: 10

Dose level: 20.0 ML/KG/day
Terminal body weight (kms): 8.70

<< P a t h o l o g y O b s e r v a t i o n s >>

Histopathologic diagnoses / Special histological comments

SKELETAL MUSCLE Required protocol tissue is missing.

DIAPHRAGM Required protocol tissue is missing.

SKIN Folliculitis, Subacute, Slight, Multifocal.

MAMMARY GLANDS Required protocol tissue is missing.

DUODENUM Required protocol tissue is missing.

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
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 DOG/BEAGLE

Animal: 89A00067
 Day of death: 15

Sex: female
 Status: Final sacrifice

Individual Animal Data Dump Table
 Study Number: 88008F

Study Start Date: 31-Jan-89

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SUB-ACUTE/

Date	Day/week of Study	Organ Name	Absolute Organ Weight (gms)	Relative % of Body Weight	Terminal body weight (kms)	Dose level: 20.0 ML/KG/day	Organ Status
22-Mar-89	51/8	LIVER	325.8	3.29	438.9		Low
22-Mar-89	51/8	KIDNEY	46.0	0.46	62.0		
22-Mar-89	51/8	HEART	81.3	0.82	109.5		High
22-Mar-89	51/8	BRAIN	74.2	0.75	100.0		
22-Mar-89	51/8	OVARIES	1.13	0.011	1.52		Low
22-Mar-89	51/8	ADRENAL GLANDS	1.38	0.014	1.86		
22-Mar-89	51/8	SPLEEN	50.0	0.51	67.4		

Tissue Finding, severity
 WHOLE BODY NO LESIONS RECOGNIZED

Tissue Necropsy memos
 No necropsy memos recorded on animal

Tissue Histopathologic diagnoses / Special histological comments

SALIVARY GLAND Inflammation, Chronic, Slight, Focal.

THYROID GLAND Cyst, Ciliated or Non-Ciliated, Slight.

LIVER Hepatocellular Vacuolation, Coarse Type, Slight.

MAMMARY GLANDS Required protocol tissue is missing.

SKIN, ANTEBRACH. Subcutaneous Hemorrhage, Slight.

PARATHYROID Required protocol tissue is missing.

PATHOLOGY ANNEX A (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
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DOG/BEAGLE

Individual Animal Data Dump Table
Study Number: 88008M

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Study Start Date: 07-Feb-89 SUB-ACUTE/

Animal: 89A00012 Sex: Male Status: Final sacrifice Group: 1 Dose level: 12.0 ML/KG/day
Day of death: 15 Terminal body weight (kms): 13.00

Date	Day/week of Study	Organ Name	Absolute Organ Weight (gms)	Relative % of Body Weight	Relative % of Brain Weight	Organ Status
22-Feb-89	15/3	LIVER	461.0	3.55	518.8	
22-Feb-89	16/3	KIDNEY	69.6	0.54	78.3	
22-Feb-89	16/3	HEART	98.9	0.76	111.3	High
22-Feb-89	16/3	BRAIN	88.9	0.68	100.0	
22-Feb-89	16/3	ADRENAL GLANDS	1.54	0.012	1.73	
22-Feb-89	16/3	TESTIS	21.34	0.164	24.02	Low
22-Feb-89	16/3	SPLEEN	114.1	0.88	128.4	

Tissue finding, severity << Gross Observations >>
Gross free-text Comments

LUNGS CONSOLIDATION, Marked ONLY IN L. CARDIAC LOBE

SPLEEN ACCESSORY SPLEENS, Mild 15 - 20, IN OMENTUM

PANCREAS CONGESTION, Mild DIFFUSE DARK PINK

<< Necropsy Memos >>

Tissue Necropsy memos

No necropsy memos recorded on animal

Tissue << Pathology Observations >>
Histopathologic diagnoses / Special histological comments

LUNGS Inflammation, Hemorrhagic, Acute, Moderate, Multifocal.

LIVER Hepatocellular Vacuolation, Coarse Type, Mild.

KIDNEY Inflammation, Interstitial, Subacute, Slight, Focal.

THYMUS Ultimobronchial Cyst, Ciliated or Non-Ciliated, Mild.

SPLEEN Accessory Spleens, Slight, Multifocal.

PATHOLOGY ANNEX B

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
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DOG/BEAGLE

Individual Animal Data Dump Table
Study Number: 88008M

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Study Start Date: 07-Feb-89 SUB-ACUTE/

Animal: 89A00012 Sex: Male Status: Final sacrifice Group: 1 Dose level: 12.0 ML/KG/day
Day of death: 15 Terminal body weight (kms): 13.00

Tissue Histopathologic diagnoses / Special histological comments
MUS. LYMPH NODE Congestion and/or Hemorrhage of the Medulla, Slight.

MAMMARY GLANDS Required protocol tissue is missing.

SKIN, ANTEBRACH. folliculitis, Subacute, Slight, Focal.

PARATHYROID Cartilaginous Rest(s), Slight, Multifocal.

PATHOLOGY ANNEX B (cont.)

Appendix I (cont.): PATHOLOGY REPORT

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DOG/BEAGLE

Individual Animal Data Dump Table
Study Number: 88008M

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Animal: 89A00042 Sex: Male Study Start Date: 07-Feb-89 SUB-ACUTE/
Day of death: 15 Status: Final sacrifice Group: 1 Terminal body weight (kms): 11.70 Dose level: 12.0 ML/KG/day

Date	Day/week of Study	Organ Name	<< Organ Weights >>		Relative % of Brain Weight	Organ Status
			Absolute Organ Weight (gms)	Relative % of Body Weight		
28-Mar-89	50/8	LIVER	465.2	3.98	507.0	
28-Mar-89	50/8	KIDNEY	65.3	0.56	71.1	
28-Mar-89	50/8	HEART	107.6	0.92	117.3	High
28-Mar-89	50/8	BRAIN	91.8	0.78	100.0	
28-Mar-89	50/8	ADRENAL GLANDS	1.43	0.012	1.56	
28-Mar-89	50/8	TESTIS	21.24	0.182	23.14	Low
28-Mar-89	50/8	SPLEEN	51.0	0.44	55.5	

<< Gross Observations >>
Gross Free-Text Comments

Tissue Finding, severity

WHOLE BODY NO LESIONS RECOGNIZED

<< Necropsy Memos >>

Tissue Necropsy memos

No necropsy memos recorded on animal

<< Pathology Observations >>
Histopathologic diagnoses / Special histological comments

LIVER Hepatocellular Vacuolation, Coarse Type, Mild.

SPLEEN Hemorrhage, Acute, Slight.

CEPHALIC VEIN Endophlebitis, Slight.

PATHOLOGY ANNEX B (cont.)

Appendix I (cont.): PATHOLOGY REPORT

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DOG/BEAGLE

Individual Animal Data Dump Table
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Study Start Date: 07-Feb-89 SUB-ACUTE/

Animal: 89A00058 Sex: Male Status: Final sacrifice Group: 1 Dose level: 12.0 ML/KG/day
Day of death: 15 Terminal body weight (kms): 10.80

Date	Day/week of Study	Organ Name	Absolute Organ Weight (gms)	Relative % of Body Weight	Relative % of Brain Weight	Organ Status
29-Mar-89	51/8	LIVER	492.6	4.56	580.6	High
29-Mar-89	51/8	KIDNEY	65.5	0.61	77.2	High
29-Mar-89	51/8	HEART	86.6	0.80	102.1	High
29-Mar-89	51/8	BRAIN	84.8	0.79	100.0	
29-Mar-89	51/8	ADRENAL GLANDS	1.91	0.018	2.25	Low
29-Mar-89	51/8	TESTIS	14.35	0.133	16.92	
29-Mar-89	51/8	SPLEEN	111.5	1.03	131.4	

Tissue Finding, severity << Gross Observations >>
Gross Free-Text Comments

WHOLE BODY NO LESIONS RECOGNIZED

Tissue Necropsy memos

No necropsy memos recorded on animal

Tissue Histopathologic diagnoses / Special histological comments << Pathology Observations >>

LIVER Hepatocellular Vacuolation, Coarse Type, Mild. Extramedullary Hematopoiesis, Slight, Multifocal.

KIDNEY Proteinaceous Casts, Slight.

ADRENAL GLANDS Vacuolar Change, Cortical Cells, Slight.

MES. LYMPH NODE Congestion and/or Hemorrhage of the Medulla, Moderate.

DUODENUM Cyst, Glandular, Mucosal, Slight, Focal.

PARATHYROID Required protocol tissue is missing.

PATHOLOGY ANNEX B (cont.)

Appendix I (cont.): PATHOLOGY REPORT

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DOG/BEAGLE

Individual Animal Data Dump Table
Study Number: 88008M
SUB-ACUTE/
Study Start Date: 07-Feb-89

Animal: 89A00003 Sex: Male
Day of death: 15 Status: final sacrifice
Group: 2
Terminal body weight (kms): 11.80
Dose level: 16.0 ML/KG/day

Date	Day/week of Study	Organ Name	<< Organ Weights >>		Relative % of Brain Weight	Organ Status
			Absolute Organ Weight (gms)	Relative % of Body Weight		
21-Feb-89	15/3	LIVER	492.4	4.17	649.6	High
21-Feb-89	15/3	KIDNEY	72.2	0.61	95.3	High
21-Feb-89	15/3	HEART	111.9	0.95	147.6	
21-Feb-89	15/3	BRAIN	75.8	0.64	100.0	
21-Feb-89	15/3	ADRENAL GLANDS	1.01	0.009	1.33	
21-Feb-89	15/3	TESTIS	18.69	0.158	24.66	Low
21-Feb-89	15/3	SPLEEN	103.8	0.88	136.9	

<< Gross Observations >>

Gross Free-Text Comments

Tissue Finding, severity
SKIN DERMATITIS, Trace 0.5 CM DIAMETER, CHRONIC, L. VENTRAL NECK (INJECTION SITE)

<< Necropsy Memos >>

Tissue Necropsy memos

No necropsy memos recorded on animal

<< Pathology Observations >>

Histopathologic diagnoses / Special histological comments

LIVER Hepatocellular Vacuolation, Coarse Type, Moderate.

MES. LYMPH NODE Congestion and/or Hemorrhage of the Medulla, Slight.

SKIN Folliculitis, Subacute, Moderate, focal.
/The subacute folliculitis is in the skin of the neck.

MAMMARY GLANDS Required protocol tissue is missing.

SKIN, ANTEBRACH. Hemorrhage, Moderate.

PATHOLOGY ANNEX B (cont.)

Appendix I (cont.): PATHOLOGY REPORT

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 DOG/BEAGLE

Individual Animal Data Dump Table
 Study Number: 88008M

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Animal: 89A00009 Sex: Male
 Status: Final sacrifice

Study Start Date: 07-Feb-89

Group: 2

Dose level: 16.0 ML/KG/day
 Terminal body weight (kms): 13.10

SUB-ACUTE/

Date	Day/week of Study	Organ Name	Absolute Organ Weight (gms)	Relative % of Body Weight	Relative % of Brain Weight	Organ Status
22-Feb-89	16/3	LIVER	599.0	4.57	658.2	High
22-Feb-89	16/3	KIDNEY	76.9	0.59	84.5	High
22-Feb-89	16/3	HEART	101.8	0.78	111.9	High
22-Feb-89	16/3	BRAIN	91.0	0.69	100.0	
22-Feb-89	16/3	ADRENAL GLANDS	1.37	0.010	1.51	
22-Feb-89	16/3	TESTIS	26.11	0.199	28.69	Low
22-Feb-89	16/3	SPLEEN	68.4	0.52	75.2	

Tissue finding, severity

WHOLE BODY NO LESIONS RECOGNIZED

Organ Weights

Relative % of Body Weight

Relative % of Brain Weight

Organ Status

Gross Observations

Gross Free-Text Comments

Tissue Necropsy memos

No necropsy memos recorded on animal

Necropsy

Memos

Tissue Histopathologic diagnoses / Special histological comments

LIVER Hepatocellular Vacuolation, Coarse Type, Moderate.

KIDNEY Inflammation, Interstitial, Subacute, Mild, Focal.

MES. LYMPH NODE Congestion and/or Hemorrhage of the Medulla, Mild.

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
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DOG/BEAGLE

Individual Animal Data Dump Table
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Study Start Date: 07-Feb-89 SUB-ACUTE/

Animal: 89A00047 Sex: Male Group: 2 Dose level: 16.0 ML/KG/day
Day of death: 15 Status: Final sacrifice Terminal body weight (kms): 11.00

Date	Day/week of Study	Organ Name	Absolute Organ Weight (gms)	Relative % of Body Weight	Relative % of Brain Weight	Organ Status
28-Mar-89	50/8	LIVER	480.4	4.37	572.5	High
28-Mar-89	50/8	KIDNEY	57.5	0.52	68.5	
28-Mar-89	50/8	HEART	88.9	0.81	105.9	High
28-Mar-89	50/8	BRAIN	83.9	0.76	100.0	
28-Mar-89	50/8	ADRENAL GLANDS	1.29	0.012	1.54	Low
28-Mar-89	50/8	TESTIS	15.88	0.144	18.93	
28-Mar-89	50/8	SPLEEN	85.6	0.78	102.1	

Tissue Finding, severity << Gross Observations >>
Gross Free-Text Comments

WHOLE BODY NO LESIONS RECOGNIZED

Tissue Necropsy memos << Necropsy Memos >>

No necropsy memos recorded on animal

Tissue Histopathologic diagnoses / Special histological comments << Pathology Observations >>

LUNGS Alveolar Proteinosis, Slight, focal.

URINARY BLADDER Thrombosis, Slight, Focal.

MAMMARY GLANDS Required protocol tissue is missing.

SKIN, ANTEBRACH. Hemorrhage, Mild.
Folliculitis, Subacute, Slight, Multifocal.

PATHOLOGY ANNEX B (cont.)

Appendix I (cont.): PATHOLOGY REPORT

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Individual Animal Data Dump Table
Study Number: 88008M

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BE/GLE

Study Start Date: 07-Feb-89 SUB-ACUTE/

Dose level: 20.0 ML/KG/day
Terminal body weight (kms): 10.95

Animal: 89A00002 Sex: Male
Status: Final sacrifice

Day of death: 15

Group: 3

Date	Day/week of Study	Organ Name	Absolute Organ Weight (gms)	Relative % of Body Weight	Relative % of Brain Weight	Organ Status
21-Feb-89	15/3	LIVER	522.8	4.77	698.0	High
21-Feb-89	15/3	KIDNEY	52.0	0.47	69.4	High
21-Feb-89	15/3	HEART	84.6	0.77	113.0	High
21-Feb-89	15/3	BRAIN	74.9	0.68	100.0	Low
21-Feb-89	15/3	ADRENAL GLANDS	1.34	0.012	1.79	Low
21-Feb-89	15/3	TESTIS	17.00	0.155	22.70	Low
21-Feb-89	15/3	SPLEEN	66.6	0.61	88.9	Low

Tissue Finding, severity << Gross Observations >>
Gross Free-Text Comments

WHOLE BODY NO LESIONS RECOGNIZED

<< Necropsy Memos >>

Tissue Necropsy memos

No necropsy memos recorded on animal

<< Pathology Observations >>
Histopathologic diagnoses / Special histological comments

KIDNEY Nephrocalcinosis, Slight, Focal.

ADRENAL GLANDS Vacuolar Change, Cortical Cells, Mild, Multifocal.

MES. LYMPH NODE Congestion and/or Hemorrhage of the Medulla, Slight.

SKIN Folliculitis, Subacute, Slight, Multifocal.

MAMMARY GLANDS Required protocol tissue is missing.

SKIN, ANTEBRACH. Inflammation, Chronic, Mild.

Hemorrhage, Mild.

Folliculitis, Subacute, Slight, Multifocal.

PATHOLOGY ANNEX B (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH		Individual Animal Data Dump Table		PRINTED: 26-Oct-89
DIV OF RES SUPP, PATH SERV GP		Study Number: 83008M		Page: 9
PRESIDIO OF SAN FRANCISCO, CA 94129		Study Start Date: 07-Feb-89		SUB-ACUTE/
DOG/BEAGLE				
Animal: 89A00002	Sex: Male	Group: 3	Dose level: 20.0 ML/KG/day	
Day of death: 15	Status: Final sacrifice		Terminal body weight (kms): 10.95	
<< P a t h o l o g y O b s e r v a t i o n s >>				
Tissue	Histopathologic diagnoses / Special histological comments			
CEPHALIC VEIN	Endophlebitis, Slight.			
PARATHYROID	Cyst, Ciliated or Non-Ciliated, Mild.			

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Individual Animal Data Dump Table
Study Number: 88008M

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Study Start Date: 07-Feb-89 SUB-ACUTE/

Animal: 89A00045 Sex: Male Status: Final sacrifice Group: 3 Dose level: 20.0 ML/KG/day
Day of death: 15 Terminal body weight (kms): 11.10

Date	Day/week of Study	Organ Name	Absolute Organ Weight (gms)	Relative % of Body Weight	Relative % of Brain Weight	Organ Status
28-Mar-89	50/8	LIVER	536.1	4.83	642.0	High
28-Mar-89	50/8	KIDNEY	64.6	0.58	77.3	High
28-Mar-89	50/8	HEART	90.6	0.82	108.4	High
28-Mar-89	50/8	BRAIN	83.5	0.75	100.0	
28-Mar-89	50/8	ADRENAL GLANDS	1.47	0.013	1.75	
28-Mar-89	50/8	TESTIS	17.57	0.158	21.04	Low
28-Mar-89	50/8	SPLEEN	69.3	0.62	82.9	

Tissue Finding, severity << Gross Observations >>
Gross Free-Text Comments

WHOLE BODY NO LESIONS RECOGNIZED

Tissue Necropsy memos << Necropsy Memos >>

No necropsy memos recorded on animal

Tissue Histopathologic diagnoses / Special histological comments << Pathology Observations >>

PITUITARY GLAND Cysts(s), Mild.

LIVER Hepatocellular Vacuolation, Coarse Type, Moderate.

MES. LYMPH NODE Congestion and/or Hemorrhage of the Medulla, Slight.

MAMMARY GLANDS Required protocol tissue is missing.

PATHOLOGY ANNEX B (cont.)

Appendix I (cont.): PATHOLOGY REPORT

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LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129

Animal: 89A00052 Sex: Male Status: Final sacrifice
Day of death: 15
Study Start Date: 07-Feb-89
SUB-ACUTE/
Study Number: 88008M

Date	Day/week of Study	Organ Name	Absolute Organ Weight (gms)	Relative % of Body Weight	Relative % of Brain Weight	Organ Status
29-Mar-89	51/8	LIVER	381.8	3.71	442.8	
29-Mar-89	51/8	KIDNEY	48.0	0.47	55.7	
29-Mar-89	51/8	HEART	86.4	0.84	100.3	High
29-Mar-89	51/8	BRAIN	86.2	0.84	100.0	
29-Mar-89	51/8	ADRENAL GLANDS	1.23	0.012	1.42	
29-Mar-89	51/8	TESTIS	15.81	0.153	18.33	Low
29-Mar-89	51/8	SPLEEN	88.2	0.86	102.3	

Tissue Finding, severity
WHOLE BODY NO LESIONS RECOGNIZED
Gross free-Text Comments

<< Necropsy Memos >>

Tissue Necropsy memos

No necropsy memos recorded on animal

<< Pathology Observations >>
Histopathologic diagnoses / Special histological comments

BRAIN Inflammation, Subacute, Choroid Plexus, Mild.

LIVER Hepatocellular Vacuolation, Coarse Type, Moderate.

MES. LYMPH NODE Congestion and/or Hemorrhage of the Medulla, Mild.

SKIN Required protocol tissue is missing.

MAMMARY GLANDS Required protocol tissue is missing.

PATHOLOGY ANNEX B (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
 DIV OF RES SUPP, PATH SERV GP
 PRESIDIO OF SAN FRANCISCO, CA 94129
 DOG/BEAGLE

Animal: 89A00018
 Day of death: 15

Sex: Male
 Status: Final sacrifice

Individual Animal Data Dump Table
 Study Number: 88008M

Study Start Date: 07-Feb-89

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SUB-ACUTE/

Date	Day/week of Study	Organ Name	Absolute Organ Weight (gms)	Relative % of Body Weight	Relative % of Brain Weight	Organ Status
22-Feb-89	16/3	LIVER	439.8	3.34	464.9	Low
22-Feb-89	16/3	KIDNEY	65.1	0.50	68.8	
22-Feb-89	16/3	HEART	91.8	0.70	97.0	High
22-Feb-89	16/3	BRAIN	94.6	0.72	100.0	
22-Feb-89	16/3	ADRENAL GLANDS	1.38	0.010	1.46	
22-Feb-89	16/3	TESTIS	19.22	0.146	20.32	Low
22-Feb-89	16/3	SPLEEN	45.5	0.35	48.1	

Tissue Finding, severity

WHOLE BODY NO LESIONS RECOGNIZED

Tissue Necropsy memos

LYMPH NODES L. RETROPHARYNGEAL L.N. HAS BRIGHT GREEN COLOR IN CRANIAL POLE

Tissue Histopathologic diagnoses / Special histological comments

LIVER Hepatocellular Vacuolation, Coarse Type, Mild.

CERVICAL LN Miscellaneous.
 Green Pigment in Macrophages, Mild.

PARATHYROID Required protocol tissue not examined.

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Individual Animal Data Dump Table

Study Number: 88008M

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Study Start Date: 07-Feb-89 SUB-ACUTE/

Animal: 89A00048 Sex: Male Status: Final sacrifice Group: 4 Dose level: 12.0 ML/KG/day
Day of death: 15 Terminal body weight (kms): 11.00

Date	Day/week of Study	Organ Name	Absolute Organ Weight (gms)	Relative % of Body Weight	Relative % of Brain Weight	Organ Status
28-Mar-89	50/8	LIVER	372.3	3.38	501.0	Low
28-Mar-89	50/8	KIDNEY	58.0	0.53	78.1	
28-Mar-89	50/8	HEART	79.2	0.72	106.5	High
28-Mar-89	50/8	BRAIN	74.3	0.68	100.0	
28-Mar-89	50/8	ADRENAL GLANDS	1.73	0.016	2.32	
28-Mar-89	50/8	TESTIS	6.91	0.063	9.31	Exclude
28-Mar-89	50/8	SPLEEN	79.4	0.72	106.9	

Tissue Finding, severity << Gross Observations >>
Gross Free-Text Comments

TRACHEA DEFORMED TRACHEAL RING(S), Moderate HYPOPLASTIC

Tissue Necropsy memos << Necropsy Memos >>

No necropsy memos recorded on animal

Tissue Histopathologic diagnoses / Special histological comments << Pathology Observations >>

TRACHEA Cartilaginous Hypoplasia, Moderate.

LIVER Hepatocellular Vacuolation, Coarse Type, Mild.

PANCREAS Acinar (Exocrine) Cell Atrophy, Mild, Multifocal.

THYMUS Required protocol tissue is missing.

SKIN, ANTEBRACH. Required protocol tissue is missing.

CEPHALIC VEIN Required protocol tissue is missing.

PATHOLOGY ANNEX B (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
 DIV OF RES SUPP, PATH SERV GP
 PRESIDIO OF SAN FRANCISCO, CA 94129
 DOG/BEAGLE

Animal: 89A00056 Sex: Male
 Status: Final sacrifice

Day of death: 15

Individual Animal Data Dump Table
 Study Number: 88008M

Study Start Date: 07-Feb-89 SUB-ACUTE/

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Date	Day/week of Study	Organ Name	Absolute Organ Weight (gms)	Relative % of Body Weight	Terminal body weight (kms)	Dose level: 12.0 ML/KG/day	Organ Status
<< Organ Weights >>							
29-Mar-89	51/8	LIVER	473.2	4.42	563.2		High
29-Mar-89	51/8	KIDNEY	73.5	0.69	87.5		High
29-Mar-89	51/8	HEART	97.1	0.91	115.6		High
29-Mar-89	51/8	BRAIN	84.0	0.79	100.0		
29-Mar-89	51/8	ADRENAL GLANDS	1.58	0.015	1.89		Low
29-Mar-89	51/8	TESTIS	15.63	0.146	18.61		
29-Mar-89	51/8	SPLEEN	59.6	0.56	70.9		

Tissue Finding, severity << Gross Observations >>
 WHOLE BODY NO LESIONS RECOGNIZED Gross Free-Text Comments

Tissue Necropsy memos << Necropsy Memos >>

No necropsy memos recorded on animal

Tissue Histopathologic diagnoses / Special histological comments << Pathology Observations >>

LIVER Hepatocellular Vacuolation, Coarse Type, Mild.

SKIN, ANTEBRACH. Inflammation, Chronic, Slight.

CEPHALIC VEIN Endophlebitis, Mild.

Appendix I (cont.): PATHOLOGY REPORT

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LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEALLE

Animal: 89A00064 Sex: Male Status: Final sacrifice Group: 5 Study Start Date: 07-Feb-89 SUB-ACUTE/

Day of death: 15 Dose level: 16.0 ML/KG/day Terminal body weight (kms): 15.45

Date	Day/week of Study	Organ Name	<< Organ Weights >>		Relative % of Brain Weight	Organ Status
			Absolute Organ Weight (gms)	Relative % of Body Weight		
21-Feb-89	15/3	LIVER	551.5	3.57	658.1	
21-Feb-89	15/3	KIDNEY	71.4	0.46	85.2	
21-Feb-89	15/3	HEART	128.0	0.83	152.7	High
21-Feb-89	15/3	BRAIN	83.8	0.54	100.0	
21-Feb-89	15/3	ADRENAL GLANDS	1.54	0.010	1.84	
21-Feb-89	15/3	TESTIS	28.02	0.181	33.44	Low
21-Feb-89	15/3	SPLEEN	82.4	0.53	98.3	

Tissue Finding, severity << Gross Observations >>
WHOLE BODY NO LESIONS RECOGNIZED Gross Free-Text Comments

Tissue Necropsy memos << Necropsy Memos >>

No necropsy memos recorded on animal

Tissue Histopathologic diagnoses / Special histological comments << Pathology Observations >>

BRAIN Inflammation, Subacute, Choroid Plexus, Mild, Focal.
Hemorrhage, Acute, Slight, Focal.

PITUITARY GLAND Cysts(s), Slight.

LIVER Hepatocellular Vacuolation, Coarse Type, Mild.

PANCREAS Acinar (Exocrine) Cell Atrophy, Slight.

ADRENAL GLANDS Vacuolar Change, Cortical Cells, Mild.

MES. LYMPH NODE Congestion and/or Hemorrhage of the Medulla, Mild.

MAMMARY GLANDS Required protocol tissue is missing.

PATHOLOGY ANNEX B (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH		Individual Animal Data Dump Table		PRINTED: 26-Oct-89
DIV OF RES SUPP, PATH SERV GP		Study Number: 88008M		Page: 16
PRESIDIO OF SAN FRANCISCO, CA 94129		Study Start Date: 07-Feb-89		
DOG/BEAGLE				SUB-ACUTE/
Animal: 89A00004	Sex: Male	Group: 5	Dose level: 16.0 ML/KG/day	
Day of death: 15	Status: Final sacrifice		Terminal body weight (kms): 15.45	
Tissue		<< P a t h o l o g y O b s e r v a t i o n s >>		
SKIN, ANTEBRACH. Folliculitis, Subacute, Mild, Focal.		Histopathologic diagnoses / Special histological comments		

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
 DIV OF RES SUPP, PATH SERV GP
 PRESIDIO OF SAN FRANCISCO, CA 94129
 DOG/BEAGLE

Animal: 89A00011 Sex: Male
 Day of death: 15 Status: Final sacrifice

Individual Animal Data Dump Table
 Study Number: 88008M
 Study Start Date: 07-Feb-89 SUB-ACUTE/

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Date	Day/week of Study	Organ Name	Absolute Organ Weight (gms)	Relative % of Body Weight	Relative % of Brain Weight	Dose level: 16.0 ML/KG/day	Terminal body weight (kms): 13.05	Organ Status
22-Feb-89	16/3	LIVER	373.1	2.86	464.6			Low
22-Feb-89	16/3	KIDNEY	65.8	0.50	81.9			
22-Feb-89	16/3	HEART	103.8	0.80	129.3			High
22-Feb-89	16/3	BRAIN	80.3	0.62	100.0			
22-Feb-89	16/3	ADRENAL GLANDS	1.51	0.012	1.88			Low
22-Feb-89	16/3	TESTIS	14.39	0.110	17.92			
22-Feb-89	16/3	SPLEEN	82.1	0.63	102.2			

<< Gross Observations >>
 Gross Free-text Comments

Tissue finding, severity

WHOLE BODY NO LESIONS RECOGNIZED

<< Necropsy Memos >>

Tissue Necropsy memos

No necropsy memos recorded on animal

<< Pathology Observations >>
 Histopathologic diagnoses / Special histological comments

Tissue

LIVER Hepatocellular Vacuolation, Coarse Type, Slight. Extramedullary Hematopoiesis, Slight, Multifocal.

MAMMARY GLANDS Required protocol tissue is missing.

SKIN, ANTEBRACH. Inflammation, Chronic, Mild, Focal. Hemorrhage, Moderate.

CEPHALIC VEIN Endophlebitis, Mild.

PATHOLOGY ANNEX B (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
 DIV OF RES SUPP, PATH SERV GP
 PRESIDIO OF SAN FRANCISCO, CA 94129
 DOG/BEAGLE

Animal: 89A00046 Sex: Male
 Day of death: 15 Status: Final sacrifice
 Study Start Date: 07-Feb-89 Group: 5 Dose level: 16.0 ML/KG/day
 Study Number: 88008M SUB-ACUTE/

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Date	Day/week of Study	Organ Name	Absolute Organ Weight (gms)	Relative % of Body Weight	Terminal body weight (kms)	Relative % of Brain Weight	Organ Status
28-Mar-89	50/8	LIVER	457.4	4.12	583.8	583.8	
28-Mar-89	50/8	KIDNEY	51.6	0.46	65.8	65.8	
28-Mar-89	50/8	HEART	88.8	0.80	113.3	113.3	High
28-Mar-89	50/8	BRAIN	78.4	0.71	100.0	100.0	
28-Mar-89	50/8	ADRENAL GLANDS	1.38	0.012	1.77	1.77	Low
28-Mar-89	50/8	TESTIS	19.74	0.178	25.19	25.19	
28-Mar-89	50/	SPLEEN	83.9	0.76	107.1	107.1	

<< GROSS Observations >>

Gross Free-Text Comments

Tissue Finding, severity

WHOLE BODY NO LESIONS RECOGNIZED

<< Necropsy Memos >>

Tissue Necropsy memos

No necropsy memos recorded on animal

<< Pathology Observations >>

Histopathologic diagnoses / Special histological comments

BONE MARROW Required protocol tissue is missing.

LIVER Hepatocellular Vacuolation, Coarse Type, Mild.

KIDNEY Inflammation, Interstitial, Subacute, Slight, Focal.

MAMMARY GLANDS Required protocol tissue is missing.

DUODENUM Cyst, Glandular, Mucosal, Slight, Focal.

SKIN, ANTEBRACH. Inflammation, Chronic, Moderate.
 Hemorrhage, Moderate.

PATHOLOGY ANNEX B (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Individual Animal Data Dump Table
Study Number: 88008M

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Study Start Date: 07-Feb-89

SUB-ACUTE/

Animal: 89A00046 Sex: Male Dose level: 16.0 ML/KG/day
Day of death: 15 Status: Final sacrifice Terminal body weight (kms): 11.10

<< Pathology Observations >>

Tissue Histopathologic diagnoses / Special histological comments

CEPHALIC VEIN Endophlebitis, Mild.

PATHOLOGY ANNEX B (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDIO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Individual Animal Data Dump Table
Study Number: 88008M

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Study Start Date: 07-Feb-89

SUB-ACUTE/

Animal: 89A00007		Sex: Male	Group: 6		Dose level: 20.0 ML/KG/day	
Day of death: 15		Status: Final sacrifice	Terminal body weight (kms):		11.95	
Date	Day/week of Study	Organ Name	Absolute Organ Weight (gms)	Relative % of Body Weight	Relative % of Brain Weight	Organ Status
21-Feb-89	15/3	LIVER	528.8	4.43	521.0	High
21-Feb-89	15/3	KIDNEY	54.6	0.45	53.8	
21-Feb-89	15/3	HEART	93.1	0.78	91.7	High
21-Feb-89	15/3	BRAIN	101.5	0.85	100.0	
21-Feb-89	15/3	ADRENAL GLANDS	1.33	0.011	1.31	Low
21-Feb-89	15/3	TESTIS	15.38	0.129	15.15	
21-Feb-89	15/3	SPLEEN	39.4	0.33	38.8	

<< Gross Observations >>

Gross Free-Text Comments

Tissue Finding, severity
WHOLE BODY NO LESIONS RECOGNIZED

<< Necropsy Memos >>

Tissue Necropsy memos
JEJUNUM FOREIGN BODY (ADHESIVE TAPE) IN LUMEN

<< Pathology Observations >>

Histopathologic diagnoses / Special histological comments

BONE MARROW Required protocol tissue is missing.

PITUITARY GLAND Cysts(s), Slight.

TONSIL(S) Hemorrhage/Congestion, Slight.

LIVER Hepatocellular Vacuolation, Coarse Type, Moderate.

MES. LYMPH NODE Required protocol tissue is missing.

SKIN Folliculitis, Subacute, Slight.

MAMMARY GLANDS Required protocol tissue is missing.

PATHOLOGY ANNEX B (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
 DIV OF RES SUPP, PATH SERV GP
 PRESIDIO OF SAN FRANCISCO, CA 94129
 DOG/BEAGLE

Individual Animal Data Dump Table
 Study Number: 88008M

Study Start Date: 07-feb-89

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SUB-ACUTE/

Animal: 89A00007 Sex: Male
 Day of death: 15 Status: Final sacrifice

Group: 6

Dose level: 20.0 ML/KG/day
 Terminal body weight (kms): 11.95

<< Pathology Observations >>

Histopathologic diagnoses / Special histological comments

SKIN, ANTEBRACH. Inflammation, Chronic, Slight.
 Hemorrhage, Mild.

CEPHALIC VEIN Endophlebitis, Mild.

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
DIV OF RES SUPP, PATH SERV GP
PRESIDJO OF SAN FRANCISCO, CA 94129
DOG/BEAGLE

Individual Animal Data Dump Table
Study Number: 88008M

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Study Start Date: 07-Feb-89 SUB-ACUTE/

Animal: 89A00050 Sex: Male Status: Final sacrifice Group: 6 Terminal body weight (kms): 20.0 ML/KG/day
Day of death: 15

Date	Day/week of Study	Organ Name	<< Organ Weights >>			Relative % of Brain Weight	Organ Status
			Absolute Organ Weight (gms)	Relative % of Body Weight	Dose level: 20.0 ML/KG/day		
28-Mar-89	50/8	LIVER	464.1	3.87	500.5		
28-Mar-89	50/8	KIDNEY	59.1	0.49	63.7		
28-Mar-89	50/8	HEART	87.4	0.73	94.2		High
28-Mar-89	50/8	BRAIN	92.7	0.77	100.0		
28-Mar-89	50/8	ADRENAL GLANDS	2.68	0.022	2.90		Low
28-Mar-89	50/8	TESTIS	19.30	0.161	20.81		
28-Mar-89	50/8	SPLEEN	77.4	0.64	83.4		

Tissue Finding, severity << Gross Observations >>
Gross free-text Comments

WHOLE BODY NO LESIONS RECOGNIZED

Tissue Necropsy memos << Necropsy Memos >>

No necropsy memos recorded on animal

Tissue Histopathologic diagnoses / Special histological comments << Pathology Observations >>

TONSIL(S) Crypt Abscess, Slight.

LUNGS Inflammation, Interstitial, Subacute, Slight, Focal.

LIVER Hepatocellular Vacuolation, Coarse Type, Mild.

ADRENAL GLANDS Vacuolar Change, Cortical Cells, Slight.

MES. LYMPH NODE Congestion and/or Hemorrhage of the Medulla, Slight.

SKIN, ANTEBRACH. Hemorrhage, Moderate.
Folliculitis, Subacute, Slight, Multifocal.

PATHOLOGY ANNEX B (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
 DIV OF RES SUPP, PATH SERV GP
 PRESIDIO OF SAN FRANCISCO, CA 94129
 DOG/BEAGLE

Animal: 89A00050 Sex: Male
 Day of death: 15 Status: Final sacrifice

Study Start Date: 07-Feb-89 Group: 6

Individual Animal Data Dump Table
 Study Number: 88008M

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SUB-ACUTE/

Dose level: 20.0 ML/KG/day
 Terminal body weight (kms): 12.00

<< Pathology Observations >>

Tissue Histopathologic diagnoses / Special histological comments

CEPHALIC VEIN Endophlebitis, Moderate.

PATHOLOGY ANNEX B (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
 DIV OF RES SUPP, PATH SERV GP
 PRESIDIO OF SAN FRANCISCO, CA 94129
 DOG/BEAGLE

Animal: 89A00019 Sex: Male
 Day of death: 15 Status: Final sacrifice

Individual Animal Data Dump Table
 Study Number: 88008M

Study Start Date: 07-Feb-89 SUB-ACUTE/

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Date	Day/week of Study	Organ Name	Absolute Weight (gms)	Relative % of Body Weight	Relative % of Brain Weight	Dose level: 12.0 ML/KG/day	Terminal body weight (kms): 14.65
22-Feb-89	16/3	LIVER	631.4	4.31	684.1		
22-Feb-89	16/3	KIDNEY	82.9	0.57	89.8		
22-Feb-89	16/3	HEART	106.1	0.72	115.0		
22-Feb-89	16/3	BRAIN	92.3	0.63	100.0		
22-Feb-89	16/3	ADRENAL GLANDS	1.76	0.012	1.91		
22-Feb-89	16/3	TESTIS	18.36	0.125	19.89		
22-Feb-89	16/3	SPLEEN	79.3	0.54	85.9		

<< Gross Observations >>
 Gross Free-Text Comments

Tissue Finding, severity
 WHOLE BODY NO LESIONS RECOGNIZED

<< Necropsy Memos >>

Tissue Necropsy memos

LYMPH NODES L. RETROPHARYNGEAL L.N. HAS BRIGHT GREEN COLOR IN CRANIAL POLE

<< Pathology Observations >>
 Histopathologic diagnoses / Specie's histological comments

LIVER Hepatocellular Vacuolation, Coarse Type, Mild.
 Extramedullary Hematopoiesis, Slight.

KIDNEY Nephrocalcinosis, Slight.
 Proteinaceous Casts, Slight, Multifocal.

PANCREAS Acinar (Exocrine) Cell Atrophy, Moderate, Diffuse.

MES. LYMPH NODE Congestion and/or Hemorrhage of the Medulla, Mild.
 Sinus Neutrophilia, Mild.

MAMMARY GLANDS Required protocol tissue is missing.

PATHOLOGY ANNEX B (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
 DIV OF RES SUPP, PATH SERV GP
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 DOG/BEAGLE

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Individual Animal Data Dump Table
 Study Number: 88008M

Study Start Date: 07-Feb-89 SUB-ACUTE/

Animal: 89A00019 Sex: Male
 Day of death: 15 Status: Final sacrifice
 Group: 7 Dose level: 12.0 ML/KG/day
 Terminal body weight (kms): 14.65

<< Pathology Observations >>

Tissue Histopathologic diagnoses / Special histological comments

JEJUNUM Enteritis, Acute, Slight, Multifocal.

CERVICAL LN Miscellaneous.
 Green Pigment in Macrophages, Slight.

PARATHYROID Required protocol tissue is missing.

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
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DOG/BEAGLE

Individual Animal Data Dump Table
Study Number: 88008M

Animal: 89A00043
Day of death: 15

Sex: Male
Status: Final sacrifice

Study Start Date: 07-Feb-89

Dose level: 12.0 ML/KG/day
Terminal body weight (kms): 10.80

SUB-ACUTE/

Group: 7

Date	Day/week of Study	Organ Name	<< Organ Weights >>		Relative % of Brain Weight	Organ Status
			Absolute Organ Weight (gms)	Relative % of Body Weight		
21-Feb-89	15/3	LIVER	429.3	3.97	586.5	High
21-Feb-89	15/3	KIDNEY	67.9	0.63	92.8	
21-Feb-89	15/3	HEART	98.0	0.91	133.9	High
21-Feb-89	15/3	BRAIN	73.2	0.68	100.0	
21-Feb-89	15/3	ADRENAL GLANDS	1.45	0.013	1.98	Low
21-Feb-89	15/3	TESTIS	16.58	0.154	22.65	
21-Feb-89	15/3	SPLEEN	128.2	1.19	175.1	

<< Gross Observations >>
Gross Free-Text Comments

Tissue Finding, severity

WHOLE BODY NO LESIONS RECOGNIZED

<< Necropsy Memos >>

Tissue Necropsy memos

No necropsy memos recorded on animal

<< Pathology Observations >>
Histopathologic diagnoses / Special histological comments

Tissue

HEART Endocarditis, Valvular, Slight.

LUNG Inflammation, Interstitial, Subacute, Mild, Focal.

LIVER Hepatocellular Vacuolation, Coarse Type, Mild.
Inflammation, Subacute Slight, Multifocal.

PANCREAS Acinar (Exocrine) Cell Atrophy, Slight, Focal.

SPLEEN Hemorrhage, Acute, Mild.

MES. LYMPH NODE Sinus Neutrophilia, Slight.

PATHOLOGY ANNEX B (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
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Animal: 89A00054 Sex: Male
 Day of death: 15 Status: final sacrifice

Individual Animal Data Dump Table
 Study Number: 88008M

Study Start Date: 07-Feb-89 SUB-ACUTE/

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Date	Day/week of Study	Organ Name	Absolute Organ Weight (gms)	Relative % of Body Weight	Terminal body weight (kms)	Dose level: 12.0 ML/KG/day	Organ Status
<< Organ Weights >>							
29-Mar-89	51/8	LIVER	535.2	4.02	608.4		
29-Mar-89	51/8	KIDNEY	69.8	0.53	79.4		
29-Mar-89	51/8	HEART	111.3	0.84	126.5		High
29-Mar-89	51/8	BRAIN	88.0	0.66	100.0		
29-Mar-89	51/8	ADRENAL GLANDS	0.95	0.007	1.08		
29-Mar-89	51/8	TESTIS	16.80	0.126	19.10		Low
29-Mar-89	51/8	SPLEEN	112.7	0.85	128.1		

<< Gross Observations >>
 Gross Free-Text Comments

finding, severity

WHOLE BODY NO LESIONS RECOGNIZED

<< Necropsy Memos >>

Tissue Necropsy memos

No necropsy memos recorded on animal

<< Pathology Observations >>
 Histopathologic diagnoses / Special histological comments

Tissue

LIVER Hepatocellular Vacuolation, Coarse Type, Mild.

MES. LYMPH NODE Congestion and/or Hemorrhage of the Medulla, Slight.

MAMMARY GLANDS Required protocol tissue is missing.

SKIN, ANTEBRACH. Inflammation, Chronic, Mild.

CEPHALIC VEIN Endophlebitis, Slight.

PATHOLOGY ANNEX B (cont.)

Appendix I (cont.): PATHOLOGY REPORT

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DOG/BEAGLE

Individual Animal Data Dump Table
Study Number: 88008M

SUB-ACUTE/

Study Start Date: 07-Feb-89

Animal: 89A00001 Sex: Male Dose level: 16.0 ML/KG/day
Day of death: 15 Status: Final sacrifice Terminal body weight (kms): 14.75

Group: 8

Date	Day/week of Study	Organ Name	Organ Weights		Relative % of Brain Weight	Organ Status
			Absolute Organ Weight (gms)	Relative % of Body Weight		
21-Feb-89	15/3	LIVER	716.9	4.86	863.7	High
21-Feb-89	15/3	KIDNEY	84.6	0.57	101.9	High
21-Feb-89	15/3	HEART	121.1	0.82	145.9	High
21-Feb-89	15/3	BRAIN	83.0	0.56	100.0	
21-Feb-89	15/3	ADRENAL GLANDS	1.86	0.013	2.24	
21-Feb-89	15/3	TESTIS	28.53	0.193	34.37	Low
21-Feb-89	15/3	SPLEEN	179.6	1.22	216.4	

Tissue Finding, severity << Gross Observations >>
WHOLE BODY NO LESIONS RECOGNIZED Gross Free-Text Comments

Tissue Necropsy memos << Necropsy Memos >>
No necropsy memos recorded on animal

Tissue Histopathologic diagnoses / Special histological comments << Pathology Observations >>

LUNGS Thrombosis, Slight, Focal.
Inflammation, Interstitial, Subacute, Slight, Multifocal.

LIVER Inflammation, Subacute, Slight, Focal.

THYMUS Ultimobranchial Cyst, Ciliated or Non-Ciliated, Slight.

MES. LYMPH NODE Congestion and/or Hemorrhage of the Medulla, Mild.
Sinus Neutrophilia, Slight.

MAMMARY GLANDS Required protocol tissue is missing.

JEJUNUM Enteritis, Acute, Slight, Focal.

PATHOLOGY ANNEX B (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
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DOG/BEAGLE

Individual Animal Data Dump Table
Study Number: 88008M

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Study Start Date: 07-Feb-89

SUB-ACUTE/

Animal: 89A000(1

Sex: Male

Group: 8

Dose level: 16.0 ML/KG/day

Day of death: 15

Status: Final sacrifice

Terminal body weight (kms): 14.75

<< Pathology Observations >>

Histopathologic diagnoses / Special histological comments:

SKIN, ANTEBRACH. Inflammation, Chronic, Mild, Diffuse.

CEPHALIC VEIN Endophlebitis, Mild.

PATHOLOGY ANNEX B (cont.)

Appendix I (cont.): PATHOLOGY REPORT

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DOG/BEAGLE

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Individual Animal Data Dump Table
Study Number: 88008M

Study Start Date: 07-Feb-89 SUB-ACUTE/

Animal: 89A00013 Sex: Male Status: Final sacrifice Group: 8 Terminal body weight (kms): 12.65 Dose level: 16.0 ML/KG/day
Day of death: 15

Date	Day/week of Study	Organ Name	Absolute Organ Weight (gms)	Relative % of Body Weight	Relative % of Brain Weight	Organ Status
22-Feb-89	16/3	LIVER	435.9	3.45	481.7	
22-Feb-89	16/3	KIDNEY	59.3	0.47	65.5	
22-Feb-89	16/3	HEART	92.7	0.73	102.4	High
22-Feb-89	16/3	BRAIN	90.5	0.72	100.0	
22-Feb-89	16/3	ADRENAL GLANDS	1.78	0.014	1.97	
22-Feb-89	16/3	TESTIS	----	----	----	Missing
22-Feb-89	16/3	SPLEEN	104.7	0.83	115.7	

Tissue Finding, severity << Gross Observations >>
WHOLE BODY NO LESIONS RECOGNIZED Gross Free-Text Comments

Tissue Necropsy memos << Necropsy Memos >>

No necropsy memos recorded on animal

Tissue Histopathologic diagnoses / Special histological comments << Pathology Observations >>

LIVER Hepatocellular Vacuolation, Coarse Type, Mild. Extramedullary Hematopoiesis, Slight.

PROSTATE Interstitial Lymphocyte Infiltration, Slight, Focal.

TESTIS Required protocol tissue is missing.

EPIDIDYMUS Required protocol tissue is missing.

THYMUS Required protocol tissue is missing.

MAMMARY GLANDS Required protocol tissue is missing.

PARATHYROID Required protocol tissue is missing.

PATHOLOGY ANNEX B (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
 DIV OF RES SUPP, PATH SERV GP
 PRESIDIO OF SAN FRANCISCO, CA 94129
 DOG/BEAG.E

Animal: 89A00053 Sex: Male
 Day of death: 15 Status: Final sacrifice

Individual Animal Data Dump Table
 Study Number: 88008M

Study Start Date: 07-Feb-89 Group: 8 Dose level: 16.0 ML/KG/day
 SUB-ACUTE/ Terminal body weight (kms): 11.70

Date	Day/week of Study	Organ Name	Absolute Organ Weight (gms)	Relative % of Body Weight	Relative % of Brain Weight	Organ Status
29-Mar-89	51/8	LIVER	496.4	4.24	574.4	High
29-Mar-89	51/8	KIDNEY	74.8	0.64	86.6	High
29-Mar-89	51/8	HEART	98.1	0.84	113.5	High
29-Mar-89	51/8	BRAIN	86.4	0.74	100.0	
29-Mar-89	51/8	ADRENAL GLANDS	1.41	0.012	1.63	
29-Mar-89	51/8	TESTIS	23.96	0.205	27.73	Low
29-Mar-89	51/8	SPLEEN	94.1	0.80	108.8	

<< Gross Observations >>
 Gross Free-Text Comments

Tissue finding, severity
 WHOLE BODY NO LESIONS RECOGNIZED

<< Necropsy Memos >>

Tissue Necropsy memos
 No necropsy memos recorded on animal

<< Pathology Observations >>
 Histopathologic diagnoses / Special histological comments

P TUITARY GLAND Cysts(s), Slight.

LIVER Hepatocellular Vacuolation, Coarse Type, Slight.

MES. LYMPH NODE Congestion and/or Hemorrhage of the Medulla, Mild.

THYMARY GLANDS Required protocol tissue is missing.

PATHOLOGY ANNEX B (cont.)

Appendix I (cont.): PATHOLOGY REPORT

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LETTERMAN ARMY INSTITUTE OF RESEARCH
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DOG/BEAGLE

Individual Animal Data Dump Table
Study Number: 88008M

Study Start Date: 07-Feb-89 SUB-ACUTE/

Animal: 89A00005 Sex: Male Status: Final sacrifice Group: 9 Dose level: 20.0 ML/KG/day
Day of death: 15 Terminal body weight (kms): 13.05

Date	Day/week of Study	Organ Name	Absolute Organ Weight (gms)	Relative % of Body Weight	Relative % of Brain Weight	Organ Status
21-Feb-89	15/3	LIVER	565.6	4.33	635.5	High
21-Feb-89	15/3	KIDNEY	81.9	0.63	92.0	High
21-Feb-89	15/3	HEART	99.2	0.76	111.5	High
21-Feb-89	15/3	BRAIN	89.0	0.68	100.0	
21-Feb-89	15/3	ADRENAL GLANDS	1.94	0.015	2.18	
21-Feb-89	15/3	TESTIS	30.09	0.231	33.81	Low
21-Feb-89	15/3	SPLEEN	102.5	0.79	115.2	

Tissue Finding, severity << Gross Observations >>
Gross Free-Text Comments

KIDNEY FIBROUS SCAR(S), Moderate BILATERAL

Tissue Necropsy memos << Necropsy Memos >>

No necropsy memos recorded on animal

Tissue Histopathologic diagnoses / Special histological comments << Pathology Observations >>

BONE MARROW Required protocol tissue is missing.

PITUITARY GLAND Required protocol tissue is missing.

LIVER Hepatocellular Vacuolation, Coarse Type, Moderate. Extramedullary Hematopoiesis, Slight.

KIDNEY Inflammation, Interstitial, Subacute, Mild. Infarct, Mild, focal, Subacute.

PROSTATE Inflammation, subacute, Moderate, Multifocal.

URINARY BLADDER Hemorrhage, Submucosal, Acute, Mild, Multifocal.

PATHOLOGY ANNEX B (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH		Individual Animal Data Dump Table		PRINTED: 26-Oct-89
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PRESIDIO OF SAN FRANCISCO, CA 94129		Study Start Date: 07-Feb-89		
DOG/BEAGLE				SUB-ACUTE/
Animal: 89A00005	Sex: Male	Group: 9	Dose level: 20.0 ML/KG/day	
Day of death: 15	Status: Final sacrifice		Terminal body weight (kms): 13.05	
Tissue	<< Pathology Observations >>			
URINARY BLADDER	Histopathologic diagnoses / Special histological comments			
	Lymphocyte Infiltration, Mild, focal.			
URETER	Lymphocyte Infiltration, Mild, Multifocal.			
MAMMARY GLANDS	Required protocol tissue is missing.			

PATHOLOGY ANNEX B (cont.)

Appendix I (cont.): PATHOLOGY REPORT

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Individual Animal Data Dump Table
Study Number: 88008M

Animal: 89A00049 Sex: Male
Status: Final sacrifice
Study Start Date: 07-Feb-89
SUB-ACUTE/

Date	Day/week of Study	Organ Name	Absolute Organ Weight (gms)	Relative % of Body Weight	Relative % of Brain Weight	Dose level: 20.0 ML/KG/day	Terminal body weight (kms): 12.00
<< Organ Weights >>							
28-Mar-89	50/8	LIVER	448.0	3.73	606.6		
28-Mar-89	50/8	KIDNEY	58.7	0.49	79.5		
28-Mar-89	50/8	HEART	87.6	0.73	118.6		High
28-Mar-89	50/8	BRAIN	73.9	0.62	100.0		
28-Mar-89	50/8	ADRENAL GLANDS	1.35	0.011	1.82		Low
28-Mar-89	50/8	TESTIS	13.76	0.115	18.64		
28-Mar-89	50/8	SPLEEN	85.9	0.72	116.3		

Tissue Finding, severity << Gross Observations >>
Gross Free-Text Comments

WHOLE BODY NO LESIONS RECOGNIZED

<< Necropsy Memos >>

Tissue Necropsy memos

No necropsy memos recorded on animal

<< Pathology Observations >>
Histopathologic diagnoses / Special histological comments

Tissue TONSIL(S) Crypt Abscess, Mild, Multifocal.

LACRIMAL GLAND Duct Ectasia, Mild, Multifocal.

LIVER Hepatocellular Vacuolation, Coarse Type, Mild.

MAMMARY GLANDS Required protocol tissue is missing.

JEJUNUM Required protocol tissue is missing.

SKIN, ANTEBRACH. Required protocol tissue is missing.

CEPHALIC VEIN Required protocol tissue is missing.

PATHOLOGY ANNEX B (cont.)

Appendix I (cont.): PATHOLOGY REPORT

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DOG/BEAGLE

Individual Animal Data Dump Table
Study Number: 88008M

Study Start Date: 07-Feb-89

SUB-ACUTE/

Animal: 89A00055 Sex: Male Status: Final sacrifice Group: 9 Dose level: 20.0 ML/KG/day
Day of death: 15 Terminal body weight (kms): 11.00

Date	Day/week of Study	Organ Name	<< Organ Weights >>			Relative % of Brain Weight	Organ Status
			Absolute Organ Weight (gms)	Relative % of Body Weight			
29-Mar-89	51/8	LIVER	384.7	3.50	423.1		
29-Mar-89	51/8	KIDNEY	58.7	0.53	64.6		
29-Mar-89	51/8	HEART	99.8	0.91	109.8		High
29-Mar-89	51/8	BRAIN	90.9	0.83	100.0		
29-Mar-89	51/8	ADRENAL GLANDS	1.51	0.014	1.66		
29-Mar-89	51/8	TESTIS	22.11	0.201	24.32		Low
29-Mar-89	51/8	SPLEEN	125.7	1.14	138.3		

Tissue Finding, severity << Gross Observations >>
Gross Free-Text Comments

WHOLE BODY NO LESIONS RECOGNIZED

Tissue Necropsy memos << Necropsy Memos >>

No necropsy memos recorded on animal

Tissue Histopathologic diagnoses / Special histological comments << Pathology Observations >>

LACRIMAL GLAND Duct Ectasia, Slight.

LIVER Hepatocellular Vacuolation, Coarse Type, Mild.

KIDNEY Inflammation, Interstitial, Subacute, Slight, Focal.

MES. LYMPH NODE Congestion and/or Hemorrhage of the Medulla, Slight.

MAMMARY GLANDS Required protocol tissue is missing.

PATHOLOGY ANNEX B (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
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DOG/BEAGLE

Individual Animal Data Dump Table
Study Number: 88008M

Animal: 89A00006
Day of death: 15
Sex: Male
Status: Final sacrifice

Study Start Date: 07-Feb-89
SUB-ACUTE/

Dose level: 20.0 ML/KG/day
Terminal body weight (kms): 11.95

Group: 10

Date	Day/week of Study	Organ Name	<< Organ Weights >>			Relative % of Brain Weight	Organ Status
			Absolute Weight (gms)	Relative % of Body Weight	Relative % of Brain Weight		
21-Feb-89	15/3	LIVER	416.8	3.49	476.3		
21-Feb-89	15/3	KIDNEY	64.2	0.54	73.4		
21-Feb-89	15/3	HEART	91.1	0.76	104.		High
21-Feb-89	15/3	BRAIN	87.5	0.73	100.0		
21-Feb-89	15/3	ADRENAL GLANDS	1.26	0.011	1.44		Low
21-Feb-89	15/3	TESTIS	23.58	0.197	26.94		
21-Feb-89	15/3	SP. EEN	42.8	0.36	48.9		

<< Gross Observations >>
Gross free-Text Comments

Tissue Finding, severity
HEART HEMATOCTYST(S), Trace
ENDOCARDIOSIS, Mild
MULTIFOCAL
MURAL LEAFLET, TRICUSPID VALVE

<< Necropsy Memos >>

Tissue Necropsy memos
No necropsy memos recorded on animal

<< Pathology Observations >>
Tissue Histopathologic diagnoses / Special histological comments

HEART Endocardiosis, Valvular, Mild.
LIVER Hepatocellular Vacuolation, Coarse Type, Mild.
SKIN, ANTEBRACH. Inflammation, Chronic, Moderate.
Hemorrhage, Moderate.
Folliculitis, Subacute, Mild.

PATHOLOGY ANNEX B (cont.)

Appendix I (cont.): PATHOLOGY REPORT

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Individual Animal Data Dump Table
 Study Number: 88008M

Animal: 89A00044 Sex: Male
 Day of death: 15 Status: Final sacrifice

Study Start Date: 07-Feb-89

SUB-ACUTE/

Group: 10 Terminal body weight (kms): 20.0 ML/KG/day
 Dose level: 12.80

Date	Day/week of Study	Organ Name	Absolute Organ Weight (gms)	Relative % of Body Weight	Relative % of Brain Weight	Organ Status
28-Mar-89	50/8	LIVER	413.0	3.23	474.0	Low
28-Mar-89	50/8	KIDNEY	55.5	0.43	63.7	
28-Mar-89	50/8	HEART	100.2	0.78	115.0	High
28-Mar-89	50/8	BRAIN	87.1	0.68	100.0	
28-Mar-89	50/8	ADRENAL GLANDS	1.42	0.011	1.63	
28-Mar-89	50/8	TESTIS	19.42	0.152	22.29	Low
28-Mar-89	50/8	SPLEEN	103.6	0.81	118.9	

<< GROSS Observations >>
 Gross Free-Text Comments

Tissue Finding, severity

WHOLE BODY NO LESIONS RECOGNIZED

Tissue Necropsy memos

No necropsy memos recorded on animal

<< Necropsy Memos >>

Tissue Histopathologic diagnoses / Special histological comments

SALIVARY GLAND Atrophy, Acinar, Slight, focal.

LUNGS Granuloma, Mild, focal.

/The granuloma contains a particle of plant material and is considered to be a foreign body granuloma.

LIVER Hepatocellular Vacuolation, Coarse Type, Mild.

PANCREAS Acinar (Exocrine) Cell Atrophy, Slight.

MAMMARY GLANDS Required protocol tissue is missing.

SKIN, ANTEBRACH. Inflammation, Chronic, Slight.

PATHOLOGY ANNEX B (cont.)

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
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DOG/BEAGLE

Individual Animal Data Dump Table
Study Number: 88008M

Study Start Date: 07-feb-89

Animal: 89A00044
Sex: Male
Status: Final sacrifice

Day of death: 15

Group: 10

Dose level: 20.0 ML/KG/day

Terminal body weight (kms): 12.80

SUB-ACUTE/

<< Pathology Observations >>

Tissue Histopathologic diagnoses / Special histological comments

CEPHALIC VEIN Endophlebitis, Moderate, focal.

Appendix I (cont.): PATHOLOGY REPORT

LETTERMAN ARMY INSTITUTE OF RESEARCH
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 DOG/BEAGLE

Animal: 89A00057 Sex: Male Status: Final sacrifice
 Day of death: 15

Individual Animal Data Dump Table
 Study Number: 88008M

Study Start Date: 07-Feb-89 SUB-ACUTE/

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Date	Day/week of Study	Organ Name	Absolute Organ Weight (gms)	Relative % of Body Weight	Terminal body weight (kms)	Dose level: 20.0 ML/KG/day	Organ Status
<< Organ Weights >>							
29-Mar-89	51/8	LIVER	312.7	2.84	403.4	Low	Low
29-Mar-89	51/8	KIDNEY	56.5	0.51	72.8		
29-Mar-89	51/8	HEART	80.0	0.73	103.2	High	High
29-Mar-89	51/8	BRA N	77.5	0.70	100.0		
29-Mar-89	51/8	ADRENAL GLANDS	1.30	0.012	1.68		
29-Mar-89	51/8	TESTIS	13.19	0.120	17.02	Low	Low
29-Mar-89	51/8	SPIREN	133.2	1.21	171.8		

Tissue finding, severity << Gross Observations >>
 Gross free-text Comments

WHOLE BODY NO LESIONS RECOGNIZED

Tissue Necropsy memos << Necropsy Memos >>

No necropsy memos recorded on animal

Tissue Histopathologic diagnoses / Special histological comments << Pathology Observations >>

LUNGS Inflammation, Interstitial, Subacute, Slight, focal.

LIVER Hepatocellular Vacuolation, Coarse Type, Slight.

THYMUS Ultimobranchial Cyst, Ciliated or Non-Ciliated, Slight.

MAMMARY GLANDS Required protocol tissue is missing.

SKIN, ANTEBRACH. Hemorrhage, Moderate.

Appendix I (cont.): PATHOLOGY REPORT

Pathology Annex C: GLOSSARY

Adrenal

--Inflammation, Subacute: Multifocal aggregates of lymphocytes, occasionally with a few neutrophils and macrophages, are present in the cortex and/or medulla.

--Vacuolar Change, Cortical Cells: Cells in the cortex, primarily the zona fasciculata, are distended by an intracytoplasmic accumulation of discrete round vacuoles.

Brain

--Hemorrhage, Acute: Self-Explanatory.

--Hemosiderin in Macrophages: Perivascular spaces contain a few macrophages laden with golden-brown, isotropic, globular pigment. This is considered evidence of hemorrhage occurring at least several days previously.

--Inflammation, Subacute: Aggregates of lymphocytes, with a few macrophages, are present in the choroid plexus.

Cephalic Vein

--Endophlebitis: The endothelial surface is disrupted, usually with an adherent mass of fibrin. Neutrophils are locally present subjacent to the endothelium. Adjacent endothelium may be hypertrophic and/or hyperplastic.

Cervical Lymph Node

--Green Pigment in Macrophages: The pigment is very dark green, and is isotropic. It is considered to originate from ear tattoo ink. The macrophages are predominantly located in the medullary sinuses.

Colon

--Granuloma, Submucosal, Foreign-Body: An aggregate of macrophages and lymphocytes is located in the submucosa. Foreign material is located in the center of the granuloma.

Appendix I (cont.): PATHOLOGY REPORT

Pathology Annex C (cont.): GLOSSARY

Duodenum

--Cyst, Glandular, Mucosal: One or more crypts is dilated and filled with proteinaceous material. Although the cyst may contain epithelial cell debris, no infiltration of neutrophils has occurred.

Esophagus

--Inflammation of Submucosal Glands, Acute: Neutrophils surround and infiltrate the mucous glands in the esophageal submucosa.

Heart

--Endocardiosis, Valvular: One or more of the atrio-ventricular valves is thickened by an increase in stellate mesenchymal cells, by increased amounts of eosinophilic fibers (collagen), and by an increase in pale amphophilic background material (matrix).

--Endocarditis, Valvular: One or more of the valves is infiltrated by neutrophils.

--Epicarditis, Subacute: The epicardial connective tissue and fat is infiltrated by lymphocytes and a few macrophages.

--Thrombosis, Valvular: A mass of fibrin is adherent to one of the valves.

Jejunum

--Cyst, Glandular, Mucosal: See Duodenum.

--Enteritis, Acute: Mucosal glandular cysts are surrounded by and infiltrated by neutrophils.

--Nematodiasis: Cross-sections of nematode larvae are present in the intestinal lumen between villi.

Kidney

--Infarct: A well-demarcated wedge-shaped area of the cortex is undergoing coagulative necrosis.

Appendix I (cont.): PATHOLOGY REPORT

Pathology Annex C (cont.): GLOSSARY

--Inflammation, Interstitial, Subacute: Cortical and/or medullary interstitial aggregates of leukocytes, predominantly lymphocytes, but with some macrophages, eosinophils, and neutrophils. A few adjacent tubule epithelial cells may be undergoing necrosis.

--Nephrocalcinosis: Small mineralized foci, often intratubular, are present in the renal papilla.

--Proteinaceous Casts: Renal tubules in the cortex and/or medulla contain homogeneous eosinophilic material.

Lacrimal Gland

--Acinar Atrophy: One or more acini are composed of basophilic cells with decreased cytoplasmic volume. Acinar ductules may be slightly dilated.

--Duct Ectasia: Ducts and ductules are dilated and contain faintly-stained, amphophilic, fibrillar material (secretion).

--Lymphocytic Infiltration: Lymphocytes are present in increased numbers in the interstitial connective tissue.

Liver

--Extramedullary Hematopoiesis: Small sinusoidal and occasionally periportal clusters of immature leukocytes and, occasionally, erythrocytes.

--Hepatocellular Vacuolation, Coarse Type: Hepatocytes are distended by numerous, poorly defined irregular clear spaces. This appearance is compatible with the intracellular accumulation of glycogen. 1 - Slightly more than normal. 2 - Hepatocytes are distended sufficiently to cause narrowing of the sinusoids. 3 - Sinusoids are collapsed.

--Inflammation, Subacute: Multifocal infiltration of the connective tissue of portal triads and/or sinusoids by a mixed population of mononuclear cells.

--Pigment-Laden Macrophages, Predominantly Periportal: The pigment is yellow-brown, isotropic, and in waxy-appearing intracellular masses. A few hepatocytes contain similar material. Based on these characteristics the pigment is

Appendix I (cont.): PATHOLOGY REPORT

Pathology Annex C (cont.): GLOSSARY

presumed to be bile.

--Thrombosis, Portal Vein: An acute fibrin thrombus is present in one of the larger portal veins.

Lungs

--Alveolar Proteinosis: Dense eosinophilic masses are present in the lumens of alveoli, with a scant local increase in alveolar macrophages.

--Granuloma: A focal aggregate of macrophages and lymphocytes, with or without multinucleated giant cells.

--Inflammation, Hemorrhagic, Acute: Alveoli contain a mixture of neutrophils, erythrocytes, and fibrin. The adjacent interstitial is thickened with increased numbers of neutrophils.

--Inflammation, Interstitial, Subacute: Multifocal, interstitial aggregates of macrophages and neutrophils, with a few lymphocytes, are randomly scattered through the parenchyma.

--Thrombosis: Masses of fibrin are present in pulmonary arteries.

Mesenteric Lymph Node

--Congestion and/or Hemorrhage of the Medulla: Self-explanatory.

--Sinus Neutrophilia: Increased numbers of neutrophils are present in the medullary and/or subcapsular sinus.

Pancreas

--Acinar (Exocrine) Atrophy: Decreased numbers of exocrine acini result in prominence of ducts. Fibrous connective tissue may also be locally increased due to the loss of acini.

--Acinar Hypertrophy and Vacuolation: All cells comprising individual acini are increased in size, and have pale, eosinophilic, vacuolated cytoplasm.

Appendix I (cont.): PATHOLOGY REPORT

Pathology Annex C (cont.): GLOSSARY

Parathyroid

--Cartilaginous Rest(s): One or more small foci of normal cartilage is present in the parathyroid.

--Cyst(s), Ciliated or Non-Ciliated: Self-Explanatory.

Pituitary Gland

--Cyst(s): Ciliated or non-ciliated, in any portion of the gland.

--Histiocytosis: Accumulation of vacuolated macrophages in the interstitial connective tissue.

Prostate Gland

--Inflammation, Subacute: The interstitium and, to a lesser extent, the acinar or ductular epithelium is infiltrated by lymphocytes, with fewer macrophages and neutrophils also present.

--Interstitial Lymphocyte Infiltration: Lymphocyte, individually and in aggregates, are confined to the interstitial connective tissue.

Salivary Gland

--Atrophy, Acinar: See Lacrimal Gland.

--Duct Ectasia: See Lacrimal Gland.

--Inflammation, Chronic: Interstitial fibrosis is accompanied by aggregates of macrophages, lymphocytes and/or plasma cells.

Skeletal Muscle

--Fasciitis, Chronic, with Mineralization: The epimysial fascia is fibrotic, mineralized, and infiltrated by macrophages and lymphocytes.

Appendix I (cont.): PATHOLOGY REPORT

Pathology Annex C (cont.): GLOSSARY

Skin

--Dermatitis, Ulcerative: The epidermis is ulcerated and covered by necrotic debris mixed with proteinaceous exudate. The dermis is infiltrated by neutrophils, macrophages and lymphocytes. Neovascularization and fibrosis is present.

--Ectasia, Apocrine Glands: Apocrine glands in the dermis are abnormally dilated.

--Folliculitis, Subacute: Dermal hair follicles and adnexa are surrounded by and infiltrated by macrophages and lymphocytes, with and occasional neutrophil.

Spleen

--Accessory Spleens: Small, normally organized spleens are present in the mesentery, separated from the main body of the organ.

--Hemorrhage, Acute: Extravasated erythrocytes are present in trabeculae, or within splenic corpuscles.

--Siderotic Plaque: Thickening and fibrosis of the splenic capsule accompanied by mineralization, accumulation of varying numbers of hemosiderin-laden macrophages, and occasionally extramedullary hematopoiesis.

Stomach

--Lymphocyte Aggregates in Submucosa: Self-Explanatory.

Submandibular Lymph Node

--Sinus Histiocytosis: Subcapsular and/or medullary sinus contain increased numbers of "foamy" macrophages.

Thymus

--Atrophy: The cortex and medulla are decreased in diameter, with relative prominence of Hassall's Corpuscles.

--Ultimobranchial Cyst, Ciliated or Non-Ciliated: Cyst(s) lined by ciliated or squamous epithelium is(are) present in the thymus, usually in the medulla.

Appendix I (cont.): PATHOLOGY REPORT

Pathology Annex C (cont.): GLOSSARY

Thyroid

--Cyst, Ciliated or Non-Ciliated: Self-Explanatory. Does not include follicular cysts.

Tonsil(s)

--Crypt Abscess: One or more of the tonsillar crypts is dilated contains increased numbers of neutrophils usually surrounding foreign material. The adjacent epithelium is similarly infiltrated.

--Hemorrhage/Congestion: Self-Explanatory.

Trachea

--Cartilaginous Hypoplasia: Cartilage rings are decreased in width, with decreased space separating chondrocytes. More sections of rings/histologic section of trachea are present than usual.

Ureter

--Lymphocyte Infiltration: The submucosa contains increased numbers of lymphocytes, some of which are organized into follicles.

Urinary Bladder

--Hemorrhage, Submucosal, Acute: Self-Explanatory.

--Lymphocyte Infiltration: The submucosa and, to a lesser extent, the mucosa contain increased numbers of lymphocytes, some of which are organized into follicles.

--Thrombosis: One or more submucosal vessels contains a fibrin thrombus.

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